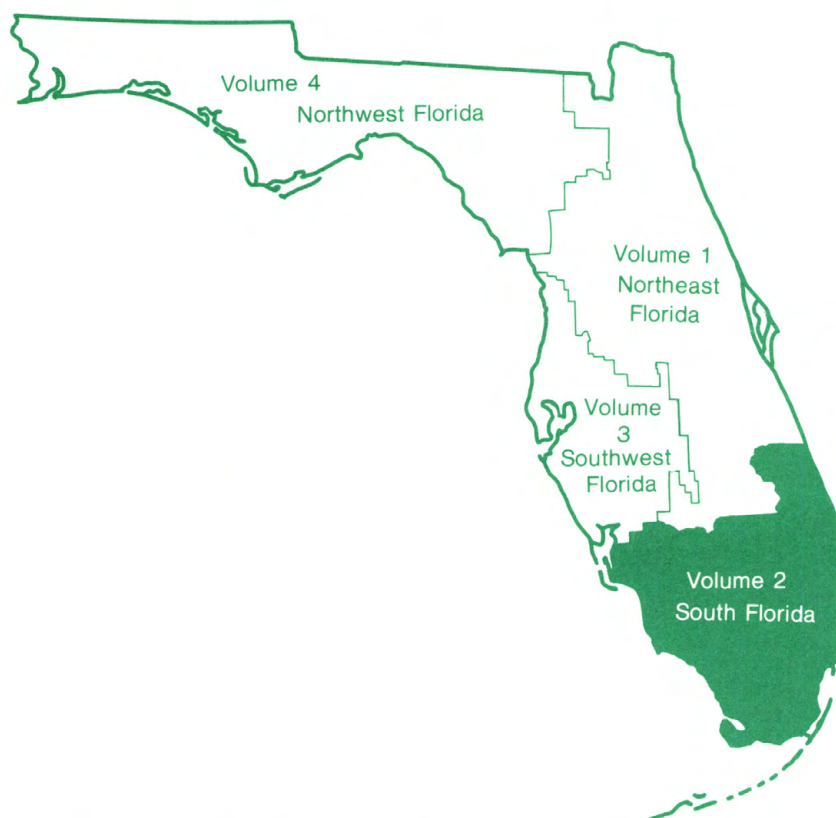


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Water Resources Data Florida Water Year 1990

Volume 2A. South Florida Surface Water



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-90-2A
Prepared in cooperation with the State of Florida
and with other agencies

CALENDAR FOR WATER YEAR 1990

1989

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
														31						

1990

JANUARY							FEBRUARY							MARCH						
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14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28				25	26	27	28	29	30	31

APRIL							MAY							JUNE						
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22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30						27	28	29	30	31			24	25	26	27	28	29	30

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4							1
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15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						



Water Resources Data Florida Water Year 1990

Volume 2A. South Florida Surface Water

by W.J. Haire and C. Price



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-90-2A
Prepared in cooperation with the State of Florida
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

Prepared in cooperation with the
State of Florida
and with other agencies as listed
under cooperation

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WATER RESOURCES DATA - FLORIDA, 1990
Volume 2A: South Florida

III

PREFACE

This volume of the annual hydrologic data report of Florida is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Florida are contained in four volumes.

Volume 1. Northeast Florida
Volume 2. South Florida
Volume 3. Southwest Florida
Volume 4. Northwest Florida

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. This report was prepared for publication by N. D. Verjano under the supervision of W. J. Haire, and E. Price. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data.

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This report was prepared in cooperation with the State of Florida and with other agencies under the general supervision of I. H. Kantrowitz, District Chief, Florida.

Hydrologic data for south Florida are contained in two volumes:

Volume 2A: Surface Water
Volume 2B: Ground Water

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7. Author(s) W.J. Haire, C. Price			8. Performing Organization Rept. No. USGS-WDR-FL-90-2A	
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			14.	
15. Supplementary Notes Prepared in cooperation with the State of Florida and other agencies.				
16. Abstract (Limit: 200 words) Water resources data for the 1990 water year in Florida consists of continuous or daily discharge for 349 streams, periodic discharge for 40 streams, miscellaneous discharge for 75 streams, continuous or daily stage for 105 streams, periodic stage for 25 streams, peak discharge for 41 streams, continuous daily tide stage for 12 streams, and peak stage for 40 streams, continuous or daily elevations for 70 lakes, periodic elevations for 70 lakes; continuous ground-water levels for 441 wells, periodic ground-water levels for 1,229 wells, and miscellaneous water level measurements for 1,908 wells; quality of water data for 145 surface-water sites and 799 wells. The data for South Florida included continuous or daily discharge for 75 streams, continuous or daily stage for 84 streams, continuous elevation for 2 lake; continuous ground-water levels for 184 wells, periodic ground-water levels for 873 wells, and miscellaneous water-level measurements for 317 wells; quality-of-water for 15 surface-water sites and 541 wells. This data represent the National Water Data System records collected by the U.S. Geological Survey and cooperating local, state, and federal agencies in Florida.				
17. Document Analysis a. Descriptors *Florida, *Hydrologic data, *Surface Water, *Ground Water, *Water Quality, Flow rate, Gaging Stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures Sampling sites, Water levels, Water analyses, Elevations, Water wells b. Identifiers/Open-Ended Terms c. COSATI Field/Group				
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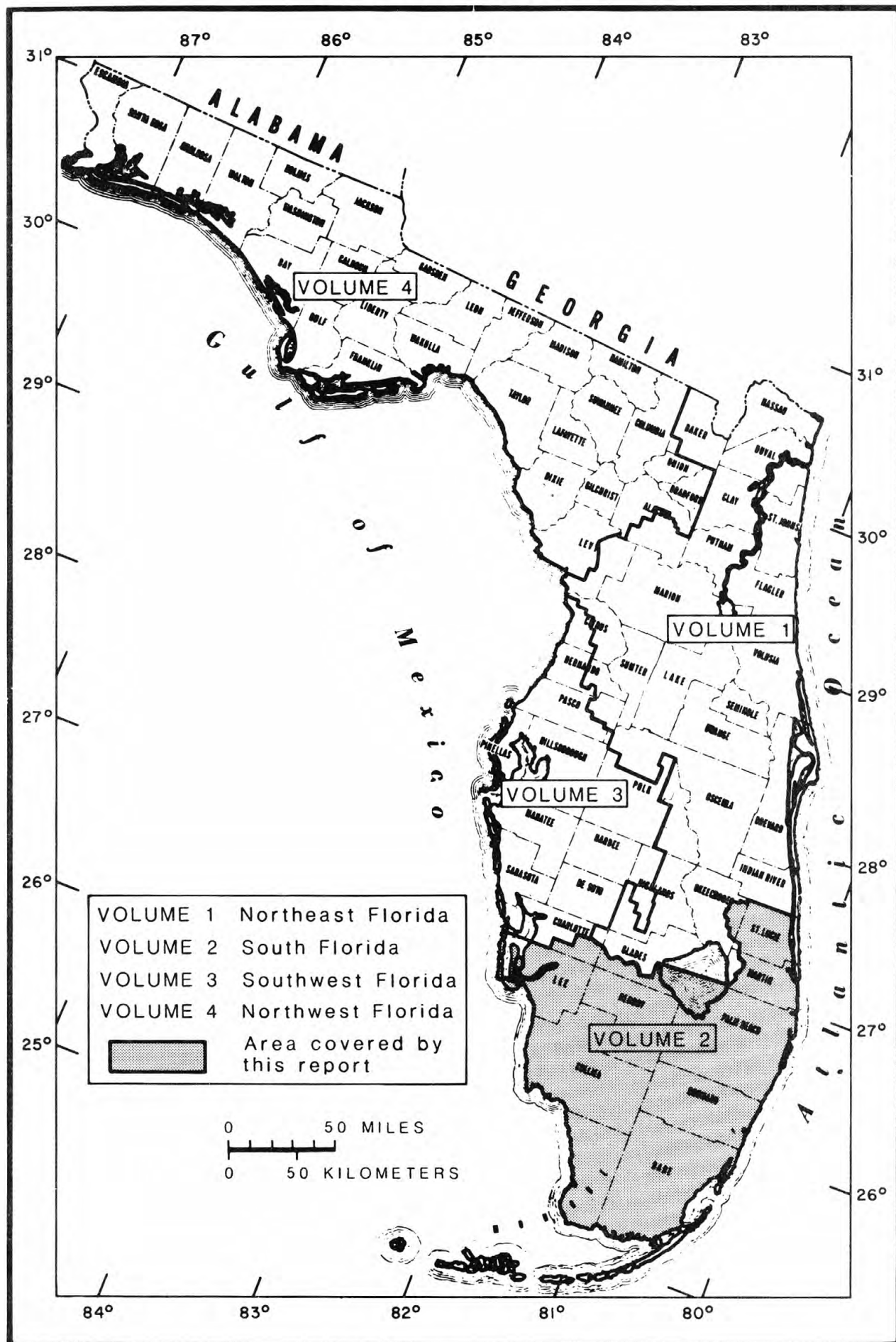


Figure 1. Geographic area covered by this report

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WATER RESOURCES DATA FOR FLORIDA, 1990
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IX

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(Letters after station names designate type of data: (d) discharge,
(g) gage height, (b) biological, (q) quality, (e) elevation, (r) rainfall)

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WATER RESOURCES DATA - FLORIDA, 1990
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INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State, County, and other Federal agencies, obtains a large amount of data pertaining to the water resources of Florida each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State.

The data for south Florida include continuous or daily discharge for 75 streams, periodic discharge for 3 streams, continuous or daily stage for 84 streams, and peak stage for 3 streams; continuous elevations for 1 lake; continuous ground-water levels for 184 wells, periodic ground-water levels for 873 wells, and miscellaneous water-level measurements for 329 wells; quality-of-water data for 15 surface-water sites and 541 wells.

This series of annual reports for Florida began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Florida were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report FL-90-2A." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on the back of the title page or by telephone (305) 648-6191.

COOPERATION

The U.S. Geological Survey and agencies of the State of Florida have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data in this report through cooperative agreement with the Survey are:

Broward County Environmental Quality Control Board
Broward County Utilities Division
City of Boca Raton
City of Cape Coral
City of Fort Lauderdale
City of Hallandale
City of Hollywood
City of Pompano Beach
City of Stuart
Corps of Engineers, U.S. Army
County of Broward
County of Dade
County of Lee
County of Palm Beach

Florida Department of Environmental Regulation
Florida Department of Transportation
Florida Division of Parks and Recreation
Florida Keys Aquaduct Authority
Miami-Dade Water and Sewer Authority
National Aeronautics and Space Administration
National Park Service, U.S. Department of the Interior
Palm Beach County Solid Waste Authority
Reedy Creek Improvement District
South Dade Soil and Waste Conservation District
South Florida Water Management District
Town of Highland Beach
U.S. Air Force
U.S. Environmental Protection Agency

Assistance with funds or services was given by the U.S. Army Corps of Engineers, Jacksonville District, in collecting records at hydrologic stations throughout the Subdistrict.

Organizations that provided data are acknowledged in station descriptions.

WATER RESOURCES DATA - FLORIDA, 1990
Volume 2A: South Florida

SUMMARY OF HYDROLOGIC CONDITIONS

The 1990 water year started under very dry conditions with the wet season ending in October with below normal rainfall. November, the first month of the dry season, experienced normal rainfall with 2-4 inches in the Ft. Myers area to across Lake Okeechobee. Lake Okeechobee had declined 1 foot from an elevation of 16 feet starting in October to November. The rainfall and Tropical Storm Keith brought the decline in Lake elevation to a halt until the end of November. Dry conditions prevailed during December, necessitating releases from Lake Okeechobee to the Everglades Agricultural Area south of Lake Okeechobee. Near the end of December releases to Everglades National Park were reduced to zero. Below normal rainfall continued through January. Dry conditions during February caused Lake Okeechobee to decline over 1/2 foot by the end of the month. Heavy releases were made from Lake Okeechobee to alleviate conditions in the Everglades Agricultural Area. During March some relief from normal rainfall expected and releases from Lake Okeechobee helped maintain canal water levels in spite of Conservation Areas being very dry.

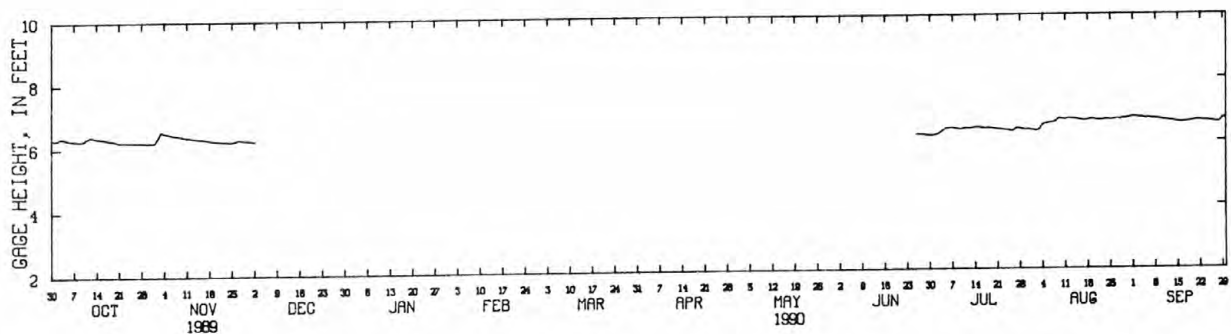
Most areas of South Florida received above normal rainfall during April except Ft. Myers. Most coastal structures were forced to make moderate to heavy releases to tide water but nearby well fields remained under drought stressed conditions. May brought less than normal rainfall and Lake Okeechobee continued to decline. The three water Conservation Areas No. 1, 2A and 3A remained extremely low. June, the first month that is normally the rainy season experienced low rainfall. Lake Okeechobee approached the 11 foot level and Conservation Areas remained dry. During May and June fires raged through the Everglades damaging more the 150,000 acres and destroying several gaging stations. No flow occurred at any of the Tamiami Canal Outlets from Miami to Carnestown from February to late June. The S-12 structures were closed completely from the end of December to beginning of September except for a few days in May when water was released for the fires. Abundant rainfall occurred in some areas of South Florida during July. The Water Conservation Areas recovered substantially but in Lake Okeechobee area little changed. Two tropical waves later in July moved near but produced no relief. Tropical Storm Chantal formed in northwestern Gulf of Mexico on July 31. During August the three Conservation Areas continued to recover thanks to rainfall but Lake Okeechobee changed little.

At the end of August, Hurricane Gabrielle loomed about 3,000 miles to the east. This was the first time since 1936 that seven tropical storms have developed before September. Hurricane Dean formed in the Atlantic and turned north to Bermuda instead of heading to South Florida. Two more storms, Hurricane Erin and tropical storm Felix formed in the Atlantic but were no threat to Florida. Normal rainfall during August occurred except in the Everglades Agricultural Area. Lake Okeechobee remained at a low level of around 11.50 feet by the end of August. September had lower than normal rainfall except around Conservation Areas, which continued to recover. The first back pumping to be allowed into Lake for a long time occurred during the last half of September. Back pumping was suspended due to higher than expected nutrient level. Hurricane Garbrielle intensified to a category 4 hurricane but missed South Florida.

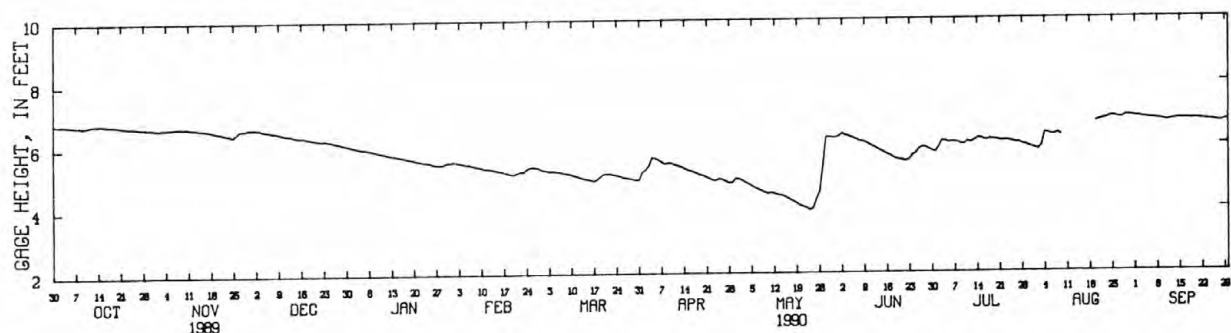
The dry conditions during the 1990 water year caused concern for the supply of ground water in the aquifers. Water level readings were taken twice a month to allow South Florida Management District to monitor for possible salt water intrusion near the coastal areas. Many wells had water levels that exceeded the period of record lowest daily maximum water level.

Below are some selected surface water sites in the Everglades and around Lake Okeechobee:

253753080393600 N.E. SHARK RIVER SLOUGH NO. 5, SOUTH OF GROSSMAN
INSTANTANEOUS GAGE HEIGHT (FEET)



253753080393600 N.E. SHARK RIVER SLOUGH NO. 5, SOUTH OF GROSSMAN
MEAN DAILY GAGE HEIGHT (FEET)

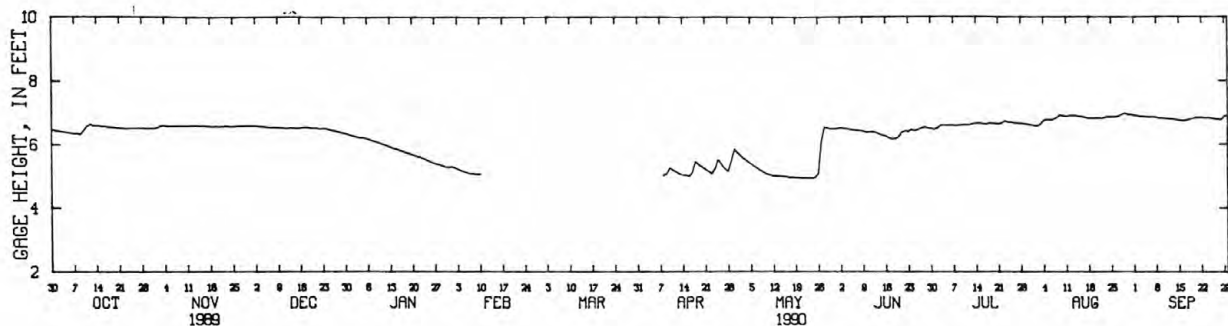


254754080344300 SHARK RIVER SLOUGH NO.1 IN CONS.3B NR COOPERTOWN
MEAN DAILY GAGE HEIGHT (FEET)

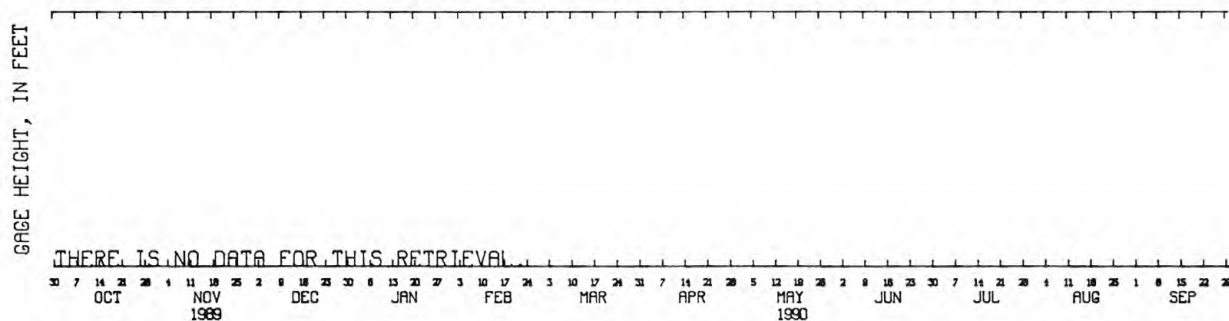
WATER RESOURCES DATA - FLORIDA, 1990
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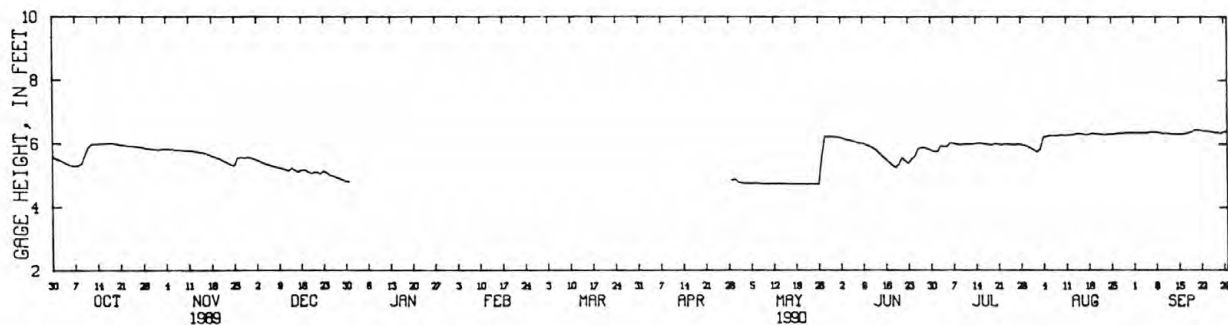
SUMMARY OF HYDROLOGIC CONDITIONS (Continued)



254130080380500 NORTHEAST SHARK RVR SLOUGH NO1 NR COOPERTOWN, FL
MEAN DAILY GAGE HEIGHT (FEET)



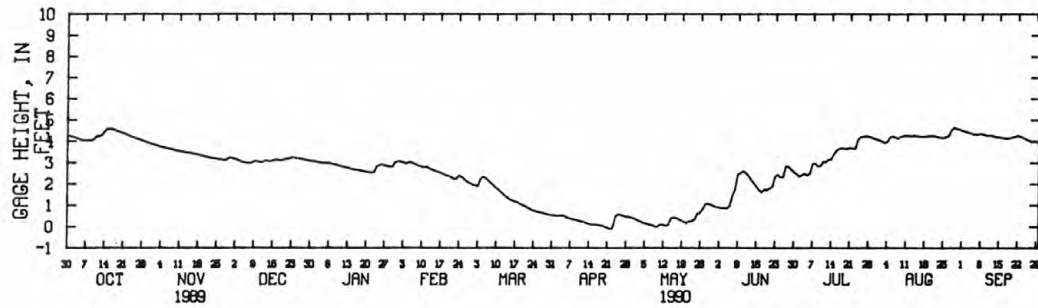
254315080331500 NORTHEAST SHARK RVR SLOUGH NO2 NR COOPERTOWN, FL
INSTANTANEOUS GAGE HEIGHT (FEET)



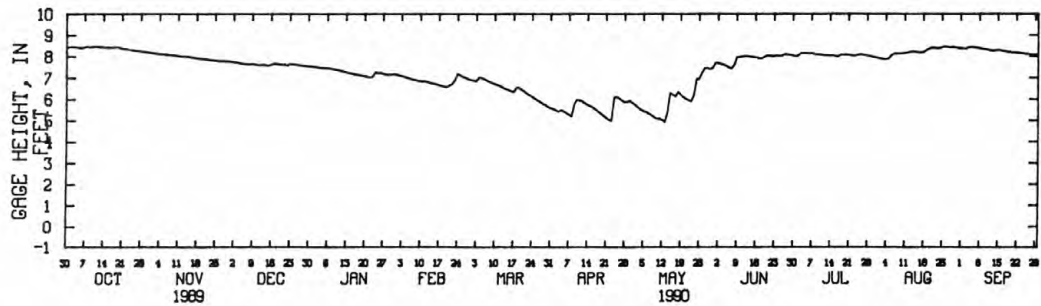
254315080331500 NORTHEAST SHARK RVR SLOUGH NO2 NR COOPERTOWN, FL
MEAN DAILY GAGE HEIGHT (FEET)

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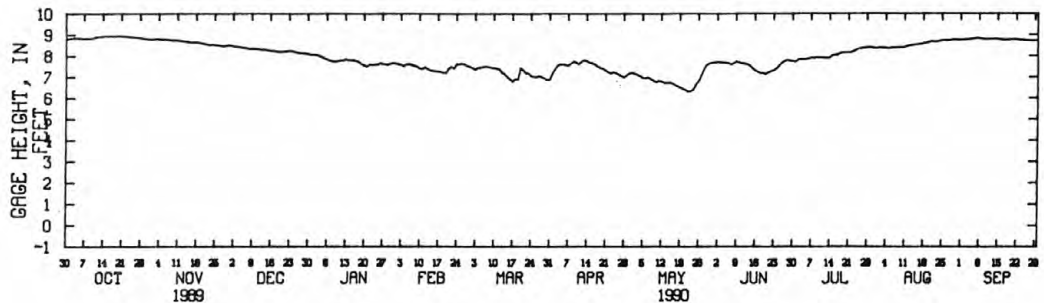
SUMMARY OF HYDROLOGIC CONDITIONS (Continued)



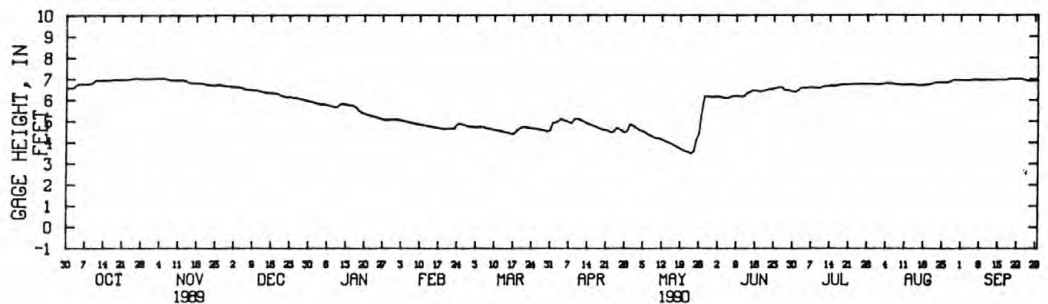
02288800 TAMIAAMI CANAL OUTLETS, MONROE TO CARNESTOWN, FLA
MEAN DAILY GAGE HEIGHT (FEET)



02288900 TAMIAAMI CANAL OUTLETS, 40-MILE BEND TO MONROE, F
MEAN DAILY GAGE HEIGHT (FEET)



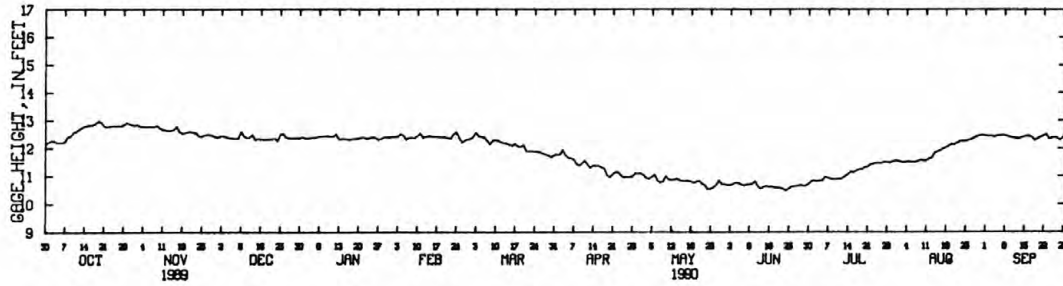
02289040 TAMIAAMI C OUTLETS L67A TO 40 MI BND NR MIAMI, FL
MEAN DAILY GAGE HEIGHT (FEET)



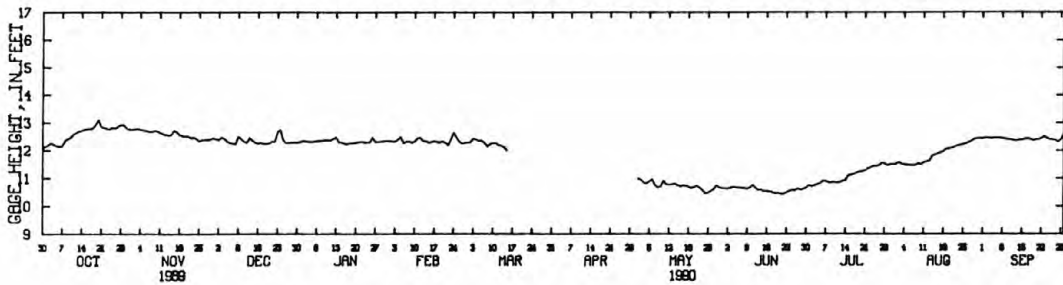
02289060 TAMIAAMI CANAL OUTLETS L-30 TO L-67A NR MIAMI, FL
MEAN DAILY GAGE HEIGHT (FEET)

SUMMARY OF HYDROLOGIC CONDITIONS (Continued)

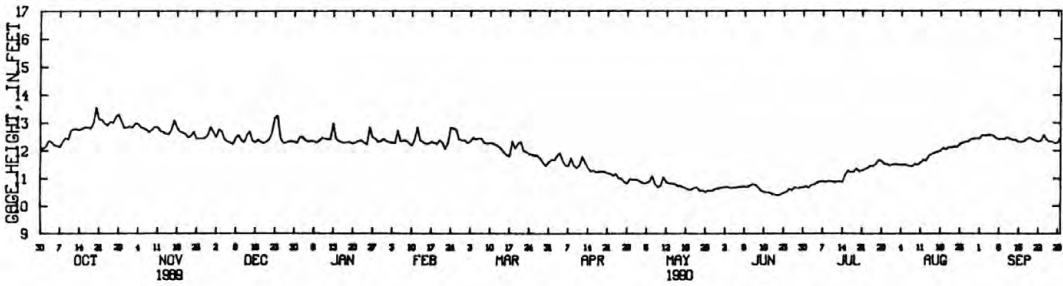
The following hydrographs display levels around Lake Okeechobee during the 1990 water year.



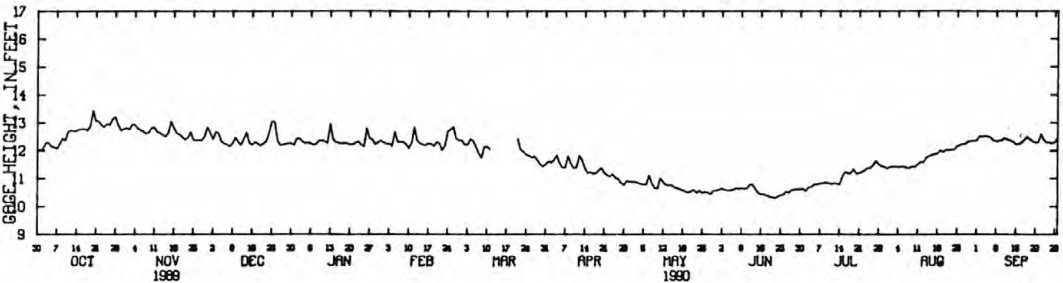
02276870 ST. LUCIE CANAL AT LAKE OKEECHOBEE, FLA.
MEAN DAILY GAGE HEIGHT (FEET)



02278000 WEST PALM BEACH CANAL AT S352 AT CANAL POINT FLA
MEAN DAILY GAGE HEIGHT (FEET)



02283498 N NEW RIVER CA AT S-2 AND S351 NR SOUTH BAY FL
MEAN DAILY GAGE HEIGHT (FEET)



02286399 MIAMI CA ABOVE HGS-3 AND S-3 AT LAKE HARBOR, FLA
MEAN DAILY GAGE HEIGHT (FEET)

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SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council.

The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research. The NASQAN stations in Florida are shown in figure 6.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.



Figure 2. NASQAN stations in the State of Florida.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1990 water year that began October 1, 1989, and ended September 30, 1990. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and for surface-water stations where only miscellaneous observations are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 02228500, which appears just to the left of the station name, includes the 2-digit part number "02" plus the 6- to 12-digit downstream-order number "228500." The part number designates the major river basin; for example, part "02" is the South Atlantic Slope and eastern Gulf of Mexico basins.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)

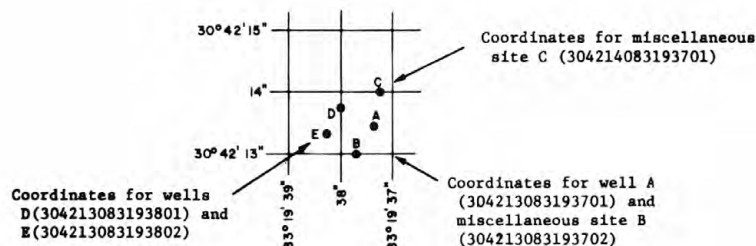


Figure 3. System for numbering wells and miscellaneous sites.
(latitude and longitude)

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Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake elevation, similarly, are those for which stage may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a stage-recording device or daily or weekly observations, but need not be. Because daily mean discharges and lake elevations commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Location of all complete-record and partial-record stations for which data are given in this report are shown in figures preceding each sub-basin.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily mean discharges.

Records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as the lapsed time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location, period of record, average discharge, historical extremes, record accuracy, and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate base maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given.

DRAINAGE AREA.--Drainage areas are delineated and measured using the most accurate topographic maps available, and are updated as necessary.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see DEFINITION OF TERMS), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development. The median of yearly mean discharges also is given under this heading for stations having 10 or more water years of record, if the median differs from the average given by more than 10 percent.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the offices whose addresses are given on the back of the title page of this report to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate

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discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage- discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

In March 1990 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1990. Sulfate values in this report have not been corrected for this bias.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Miami Subdistrict Office of the Florida District. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the offices whose addresses are given on the back of the title page of this report.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where water-quality data are collected systematically over a period of years, usually less frequently than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records," as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

Arrangement of Records

Water-quality records collected at a surface-water daily record station or a periodic observation station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water

quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the quality of the water in its natural state. To assure this, certain measurements, such as water temperature, pH, alkalinity, specific conductance, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the natural water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For stations equipped with water-quality monitors, the records consist of daily mean values for each constituent measured and are based upon unit values (hourly or 15-minute recordings).

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and

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extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a recording or sampling device, which may be time- or event-activated, is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

Printed output	Remark
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water Levels

Ground-water level data from a statewide network of observation wells are published herein. The records include data from wells equipped with water-level recorders and data from wells where water levels are measured periodically.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table.

Water-level records are obtained from direct measurements with a steel tape, pressure gage, manometer, or from the graph or punched tape of a water-level recorder. The measurements in this report are given in feet above National Geodetic Vertical Datum of 1929 or in some tables as feet below land-surface datum. Land-surface datum is a datum plane that is approximately at land surface at each well. The elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on hourly, daily, weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of record, with reference to National Geodetic Vertical Datum of 1929, and the dates of their occurrence.

A table of water levels follows the station description for each well. For wells equipped with recorders, only abbreviated tables are published; generally, daily maximums are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality in the report area. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published immediately following the ground-water-level records of each county. Data for quality of ground water are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. The Remark Codes listed for surface-water-quality records are also applicable to ground-water-quality records.

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ACCESS TO WATSTORE DATA

The National Water Data Storage and Retrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square mile (g/m²).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day (cubic feet per second per day) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.

CFSM (cubic foot per second per square mile) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloro-platinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (ft^3/s or cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic foot per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 μm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Micrograms per gram ($\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter ($\mu\text{g/L}$, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L , mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one millionth of the amount of radioactivity represented by a micro-curie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegrations per minute.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

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Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total-sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Surface area of a lake is that area outlined on the latest USGS topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45 µm filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	<u>Hexagenia</u>
Species.....	<u>Hexagenia limbata</u>

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1990, is called the "1990 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

PUBLICATION OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
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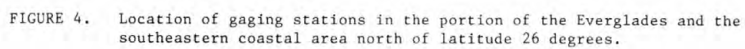
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STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS



EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277000 ST. LUCIE CANAL AT LOCK, NEAR STUART, FL

LOCATION.--Lat 27°06'39", long 80°17'06", in Hanson Grant, T.39 S., R.41 E., Martin County, Hydrologic Unit 03090202, at upstream end of right lock wall, 6.3 mi southwest of Stuart.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1952 to current year. Gage height records collected at same site since December 1924 are contained in files of the South Florida Water Management District and U.S. Army Corps of Engineers.

REVISED RECORDS.--WRD FL-80-2A: 1978-1979.

GAGE.--Water-stage recorders. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 3, 1948, nonrecording gage at same site and at various datums. Sept. 5, 1952, to Jan. 1, 1955, auxiliary water-stage recorder at Arundel Bridge, 1.9 mi upstream, NGVD.

REMARKS.--Estimated daily discharge for July 21 - Aug. 3. Records good except for that of estimated daily discharges which are fair. Flow regulated by lock near Stuart.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--38 years, 774 ft³/s, 560,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 11,500 ft³/s Mar. 26, 1970; lock closed and flow consists of leakage and lockage estimated as 4.0 ft³/s many days during 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 64 ft³/s Oct. 6; minimum daily discharge, 5.1 ft³/s Sept. 20, estimated leakage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	33	26	36	31	21	25	15	15	13	10	14
2	28	35	33	23	28	23	21	14	15	13	15	23
3	19	43	35	36	50	27	18	13	16	13	16	22
4	20	41	22	29	49	24	16	19	15	13	14	42
5	24	41	29	33	29	23	16	14	16	13	14	10
6	64	22	22	30	37	20	19	13	16	13	13	22
7	40	28	34	35	39	27	26	21	15	13	15	29
8	42	28	33	30	42	21	21	17	15	13	16	22
9	39	32	23	35	37	26	21	17	16	13	13	22
10	21	34	25	33	50	27	26	16	16	11	15	19
11	20	37	33	33	35	27	25	21	16	9.8	15	8.5
12	19	39	32	32	23	22	23	21	16	13	15	13
13	21	34	27	31	25	26	21	21	15	15	15	12
14	31	37	17	19	29	20	21	21	15	15	19	13
15	38	39	26	28	20	23	23	21	15	13	18	13
16	24	46	35	32	20	20	29	21	15	8.3	14	14
17	16	32	32	38	26	25	23	20	15	12	14	19
18	33	37	29	40	24	19	18	20	15	12	14	15
19	31	50	31	40	24	26	21	20	15	10	14	15
20	24	30	25	34	51	23	18	20	15	10	15	5.1
21	40	34	26	48	27	26	22	20	15	13	15	12
22	34	31	19	32	26	27	20	20	15	13	15	23
23	32	37	14	31	22	23	17	19	16	12	14	23
24	27	46	13	36	18	24	22	18	16	12	12	36
25	38	39	13	38	20	25	31	19	16	8.3	14	19
26	44	47	19	26	22	24	22	20	16	13	14	10
27	30	29	31	40	27	22	21	20	16	16	16	17
28	24	32	35	34	28	22	20	20	16	13	18	21
29	33	29	38	40	---	17	26	20	16	13	14	23
30	23	28	44	35	---	22	14	20	16	13	16	23
31	24	---	44	35	---	23	---	20	---	11	14	---
TOTAL	947	1070	865	1042	859	725	646	581	465	383.4	456	559.6
MEAN	30.5	35.7	27.9	33.6	30.7	23.4	21.5	18.7	15.5	12.4	14.7	18.7
MAX	64	50	44	48	51	27	31	21	16	16	19	42
MIN	16	22	13	19	18	17	14	13	15	8.3	10	5.1
AC-FT	1880	2120	1720	2070	1700	1440	1280	1150	922	760	904	1110

CAL YR 1989 TOTAL 79542.4 MEAN 218 MAX 1830 MIN 5.0 AC-FT 157800
WTR YR 1990 TOTAL 8599.0 MEAN 23.6 MAX 64 MIN 5.1 AC-FT 17060

02277000 ST. LUCIE CANAL AT LOCK, NEAR STUART, FL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.30	12.83	12.37	12.48	11.89	12.51	11.56	9.85	10.80	10.89	11.46	12.75
2	12.33	12.90	12.46	12.21	11.65	12.38	11.47	10.29	10.67	10.96	11.18	12.58
3	12.26	12.78	12.45	11.94	11.48	12.37	11.18	10.48	10.59	10.93	10.99	12.51
4	12.20	12.78	12.27	11.63	11.62	12.24	10.96	10.52	10.37	10.97	11.13	12.52
5	12.17	12.77	12.03	11.53	11.32	11.86	10.95	10.53	10.47	10.96	11.33	12.52
6	12.18	12.76	11.59	11.95	11.21	12.05	11.02	10.64	10.49	11.09	11.48	12.49
7	12.22	12.76	11.26	11.91	11.51	12.18	11.01	10.42	10.39	11.07	11.59	12.55
8	12.90	12.77	11.42	11.71	11.54	12.10	11.18	10.15	10.32	11.03	11.64	12.54
9	12.72	12.87	12.21	11.76	11.55	11.98	11.16	10.05	10.36	10.90	11.83	12.48
10	12.75	12.72	12.52	11.85	11.75	11.85	11.17	10.28	10.32	10.94	11.83	12.40
11	12.75	12.68	12.49	11.77	12.17	11.95	11.10	10.68	10.25	10.92	11.72	12.33
12	12.75	12.64	12.47	11.89	12.43	11.77	10.72	10.91	10.47	10.95	11.73	12.29
13	12.81	12.58	12.44	11.97	12.47	11.42	10.36	11.07	10.61	11.01	11.76	12.27
14	12.84	12.62	12.22	12.19	12.41	11.19	10.42	11.01	10.46	11.19	12.26	12.24
15	12.83	12.67	11.79	12.32	12.32	11.19	11.06	10.84	10.40	11.32	12.56	12.25
16	12.82	12.86	11.93	12.27	12.32	11.20	11.29	10.66	10.38	11.18	12.14	12.39
17	12.86	12.62	12.16	12.00	12.40	11.41	11.18	10.18	10.44	11.19	12.32	12.50
18	12.91	12.52	12.10	11.78	12.43	11.85	10.91	9.90	10.34	11.27	12.33	12.36
19	13.05	12.55	12.04	11.56	12.35	11.88	10.52	10.28	10.09	11.25	12.39	12.47
20	13.01	12.58	11.93	11.48	12.33	12.10	10.28	10.25	10.04	11.38	12.43	13.09
21	12.81	12.64	11.73	11.72	12.72	12.29	10.19	10.05	9.90	11.41	12.52	12.85
22	12.74	12.59	11.06	11.65	12.82	12.29	10.70	9.78	10.34	11.39	12.43	12.83
23	12.76	12.61	11.15	11.42	12.80	12.26	10.63	9.69	10.79	11.40	12.49	12.83
24	12.81	12.39	11.35	11.28	12.96	12.20	10.32	9.55	10.88	11.37	12.49	12.61
25	12.79	12.39	11.37	11.60	12.63	12.28	9.98	9.90	10.82	11.37	12.50	12.53
26	12.82	12.51	12.36	11.58	12.26	12.02	9.89	10.52	10.78	11.40	12.60	12.55
27	12.80	12.49	12.81	11.35	12.22	11.56	10.25	10.59	10.83	11.49	12.54	12.51
28	12.84	12.49	12.52	11.67	12.39	11.12	10.35	10.63	10.85	11.46	12.66	12.43
29	12.97	12.48	12.41	11.73	---	10.85	10.14	10.95	10.73	11.43	12.79	12.64
30	12.90	12.39	12.42	11.83	---	10.94	9.97	10.89	10.80	11.45	12.80	13.14
31	12.83	---	12.48	11.84	---	11.14	---	10.87	---	11.52	12.80	---

EVERGLADES AND SOUTHEASTERN COASTAL AREA

270022080094600 KITCHINGS CREEK NEAR HOBE SOUND, FL

LOCATION.--Lat 27°00'22", long 80°09'46", in NE¼ sec.8, T.40 S., R.42 E., Martin County, Hydrologic Unit 03090202, in Jonathan Dickinson State Park, near left bank on foot bridge 1.5 mi upstream from mouth, 2.2 mi south of State Highway 708, and 4.0 mi southwest of Hobe Sound.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1979 to September 1981, October 1984 to current year. Prior to October 1988 gage heights and discharge only.

GAGE.--Water-stage and rainfall recorders. Elevation of gage is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily stage and discharge. Records good.

AVERAGE DISCHARGE.--6 years (water years 1981, 1985-88, 1990), 8.15 ft³/s, 5,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 229 ft³/s Nov. 24, 1984, gage height, 6.16 ft; no flow for some days in 1989, 1990; minimum gage height, 1.06 ft, May 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45 ft³/s Sept. 28, gage height, 4.22 ft; no flow June 20, July 31 - Aug. 3; minimum gage height, 1.21 ft, May 22, June 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	2.9	1.0	1.2	.89	1.6	1.7	.24	.51	.23	.03	.15
2	.66	2.6	1.1	1.2	.88	1.7	1.7	.21	.52	.43	.04	.13
3	.64	2.3	1.0	1.1	.82	1.8	1.7	.19	.67	.35	.14	.11
4	.60	2.2	.88	1.1	.76	1.7	1.6	.17	.74	.38	.18	.15
5	.56	2.0	.84	1.4	.72	1.5	1.4	.16	.68	.43	.13	.30
6	.49	1.8	.78	1.5	.64	1.3	1.3	.18	.63	.36	.12	.23
7	.47	1.6	.74	1.6	.65	1.2	1.1	.15	.55	.33	.10	.17
8	.86	1.5	.76	1.7	.63	1.0	1.1	.12	.47	.28	.17	.17
9	.99	1.4	.84	1.7	.59	.91	1.2	.11	.39	.23	.29	.19
10	1.5	1.2	.78	1.6	.56	.79	1.2	.18	.32	.19	.26	.14
11	2.4	1.1	.74	1.4	.83	.71	1.1	.21	.32	.14	.24	.12
12	2.6	1.1	.73	1.4	.86	.61	1.0	.16	.38	.26	.30	.17
13	2.4	.96	.77	1.2	.80	.54	.91	.13	.28	.30	.36	.13
14	2.1	.90	.68	1.2	.77	.49	.81	.13	.21	.45	.41	.11
15	1.9	.89	.62	1.1	.73	.46	.88	.12	.18	.38	.39	.11
16	1.7	.87	.60	1.0	.68	.42	1.1	.10	.14	.33	.44	.16
17	1.4	.83	.57	1.0	.63	.39	.93	.09	.11	.38	.44	.21
18	1.2	.80	.56	.94	.58	.39	.82	.08	.12	.40	.38	.18
19	1.1	.76	.55	.88	.54	.45	.72	.08	.10	.32	.33	1.1
20	.97	.73	.62	.82	.55	.61	.63	.07	.07	.29	.26	2.4
21	.88	.70	.76	.79	.78	.47	.58	.07	.06	.24	.19	2.7
22	.80	.66	.72	.86	.74	.41	.53	.07	.09	.22	.22	2.6
23	.71	.66	1.8	.76	.94	.37	.48	.08	.08	.27	.31	2.7
24	1.0	.62	1.7	.73	1.3	.33	.43	.12	.10	.26	.38	2.7
25	2.2	.58	1.8	.71	1.5	.30	.38	.16	.08	.19	.34	2.7
26	2.2	.68	1.7	.67	1.6	.28	.35	.17	.12	.16	.28	2.6
27	2.7	.66	1.6	.63	1.5	.26	.31	.17	.18	.16	.24	2.5
28	3.6	.63	1.5	.66	1.5	.25	.31	.17	.18	.14	.23	21
29	3.7	1.1	1.4	.96	---	.26	.32	.13	.12	.14	.21	30
30	3.6	1.0	1.3	.93	---	.24	.29	.25	.09	.10	.17	30
31	3.3	---	1.2	.90	---	1.5	---	.81	---	.06	.15	---
TOTAL	49.95	35.73	30.64	33.64	23.97	23.24	26.88	5.08	8.49	8.40	7.73	105.93
MEAN	1.61	1.19	.99	1.09	.86	.75	.90	.16	.28	.27	.25	3.53
MAX	3.7	2.9	1.8	1.7	1.6	1.8	1.7	.81	.74	.45	.44	30
MIN	.47	.58	.55	.63	.54	.24	.29	.07	.06	.06	.03	.11
AC-FT	99	71	61	67	48	46	53	10	17	17	15	210

WTR YR 1990 TOTAL 359.68 MEAN .99 MAX 30 MIN .03 AC-FT 713

EVERGLADES AND SOUTHEASTERN COASTAL AREA

270022080094600 KITCHINGS CREEK NEAR HOBE SOUND, FL

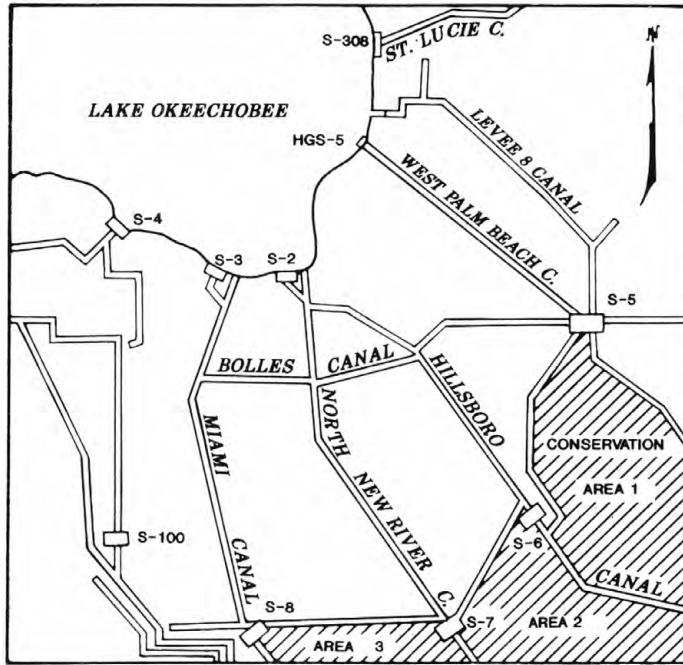
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.61	2.08	1.68	1.78	1.69	1.85	1.85	1.39	1.50	1.37	1.26	1.43
2	1.59	2.03	1.69	1.78	1.68	1.86	1.87	1.37	1.51	1.52	1.31	1.41
3	1.58	1.98	1.67	1.77	1.66	1.88	1.86	1.35	1.56	1.48	1.36	1.40
4	1.57	1.95	1.64	1.75	1.65	1.85	1.83	1.34	1.59	1.50	1.39	1.44
5	1.55	1.91	1.63	1.82	1.63	1.82	1.79	1.33	1.57	1.52	1.35	1.54
6	1.53	1.88	1.61	1.86	1.61	1.78	1.76	1.35	1.55	1.48	1.35	1.50
7	1.52	1.84	1.60	1.88	1.61	1.75	1.73	1.32	1.52	1.47	1.33	1.46
8	1.65	1.81	1.60	1.90	1.60	1.71	1.73	1.29	1.49	1.44	1.38	1.45
9	1.68	1.79	1.64	1.90	1.59	1.67	1.75	1.29	1.46	1.41	1.48	1.46
10	1.81	1.76	1.62	1.88	1.57	1.64	1.75	1.34	1.43	1.38	1.46	1.42
11	1.98	1.73	1.61	1.85	1.65	1.61	1.73	1.36	1.42	1.35	1.46	1.40
12	2.02	1.70	1.61	1.83	1.67	1.57	1.70	1.32	1.45	1.43	1.50	1.43
13	1.99	1.68	1.62	1.80	1.65	1.54	1.67	1.29	1.40	1.45	1.52	1.40
14	1.94	1.66	1.59	1.78	1.64	1.53	1.64	1.29	1.37	1.54	1.55	1.38
15	1.91	1.66	1.58	1.76	1.63	1.51	1.66	1.28	1.34	1.51	1.54	1.38
16	1.85	1.65	1.57	1.74	1.61	1.49	1.72	1.26	1.31	1.48	1.57	1.41
17	1.79	1.64	1.56	1.73	1.59	1.48	1.68	1.25	1.28	1.50	1.57	1.45
18	1.75	1.63	1.55	1.71	1.57	1.48	1.64	1.25	1.29	1.51	1.54	1.43
19	1.72	1.61	1.55	1.69	1.56	1.50	1.61	1.25	1.28	1.47	1.52	1.78
20	1.70	1.60	1.58	1.67	1.56	1.57	1.58	1.24	1.26	1.46	1.48	2.06
21	1.67	1.59	1.64	1.66	1.64	1.52	1.56	1.24	1.25	1.43	1.44	2.11
22	1.65	1.57	1.62	1.69	1.63	1.49	1.54	1.24	1.28	1.41	1.46	2.09
23	1.62	1.57	1.88	1.66	1.69	1.47	1.52	1.24	1.27	1.44	1.52	2.10
24	1.70	1.56	1.87	1.65	1.79	1.45	1.50	1.28	1.28	1.44	1.55	2.10
25	1.97	1.54	1.89	1.64	1.83	1.43	1.47	1.32	1.28	1.39	1.54	2.09
26	1.96	1.57	1.88	1.62	1.84	1.42	1.45	1.32	1.31	1.37	1.51	2.07
27	2.04	1.56	1.86	1.60	1.83	1.41	1.43	1.33	1.36	1.38	1.49	2.05
28	2.18	1.55	1.84	1.61	1.81	1.40	1.43	1.32	1.36	1.36	1.48	3.20
29	2.18	1.68	1.82	1.71	---	1.41	1.44	1.28	1.31	1.36	1.47	3.75
30	2.17	1.68	1.79	1.70	---	1.40	1.41	1.34	1.29	1.32	1.44	3.74
31	2.13	---	1.78	1.69	---	1.69	---	1.61	---	1.29	1.43	---
TOTAL	56.01	51.46	52.07	54.11	46.48	49.18	49.30	40.68	41.57	44.46	45.25	54.93
MEAN	1.81	1.72	1.68	1.75	1.66	1.59	1.64	1.31	1.39	1.43	1.46	1.83
MAX	2.18	2.08	1.89	1.90	1.84	1.88	1.87	1.61	1.59	1.54	1.57	3.75
MIN	1.52	1.54	1.55	1.60	1.56	1.40	1.41	1.24	1.25	1.29	1.26	1.38

WTR YR 1990 TOTAL 585.50 MEAN 1.60 MAX 3.75 MIN 1.24

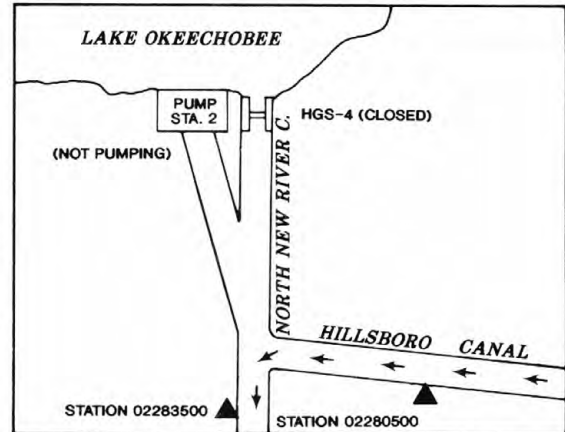
RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
SUM VALUES

[illegible]



LOCATION

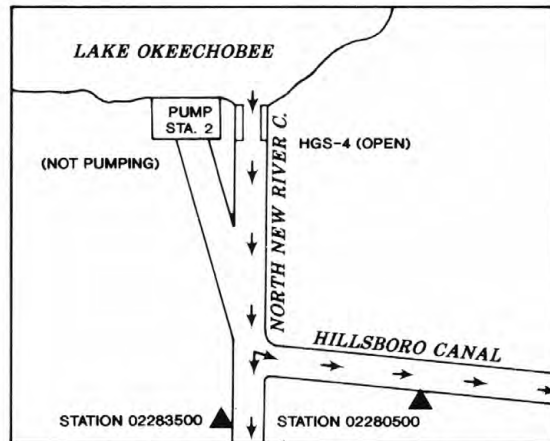
TYPICAL FLOW PATTERNS AT HURRICANE GATE STRUCTURES



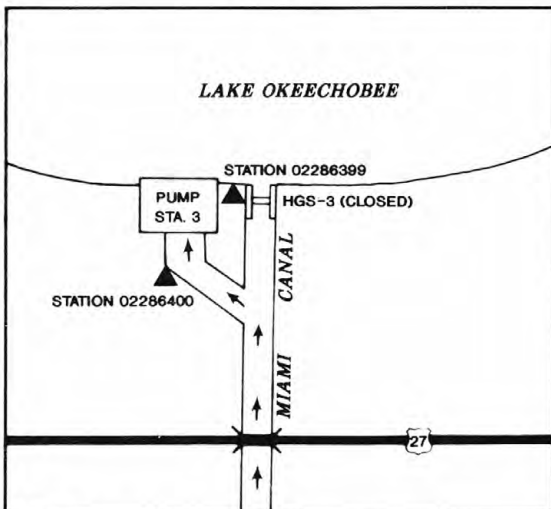
NORTH NEW RIVER CANAL-HILLSBORO CANAL



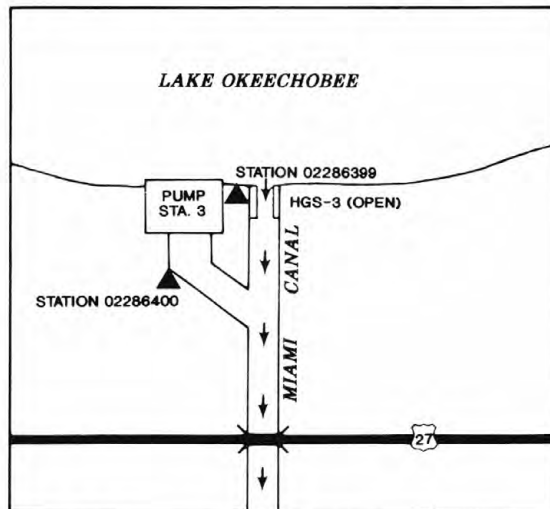
NORTH NEW RIVER CANAL-HILLSBORO CANAL



NORTH NEW RIVER CANAL-HILLSBORO CANAL



MIAMI CANAL



MIAMI CANAL

FIGURE 5. Typical flow patterns at Hurricane Gate Structures.

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02276870 ST. LUCIE CANAL AT LAKE OKEECHOBEE, FL

LOCATION.--Lat 26°59'00", long 80°37'00", in sec.22, T.40 S., R.37 E., Martin County, Hydrologic Unit 03090202, on right bank in control house of structure 308 at Lake Okeechobee, 0.1 mi west of U.S. Highway 441, and 24 mi upstream from control structure 80.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1931 to September 1952, October 1981 to current year. Prior to October 1946, published as St. Lucie Canal at lock 1, at Lake Okeechobee. Previously published as station number 02276500. All data stored under current station number.

GAGE.--Water-stage recorder, and gate-opening indicators. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Jan. 17, 1934, staff gage at site 0.4 mi downstream at different datum. Jan. 17, 1934, to Mar. 15, 1951, water-stage recorder at site 0.8 mi downstream at datum 1.56 ft lower. Mar. 16, 1951, to September 1952, water-stage recorder at bridge on U.S. Highway 441 at present datum. Jan. 17, 1934, to September 1952, auxiliary water-stage recorder 10.9 mi downstream. Aug. 1, 1986 to June 20, 1989, electromagnetic velocity meter recorder.

REMARKS.--Estimated daily discharge Oct. 6 to Nov. 7. Records poor. Flow regulated by control structure 308 gates and lock at Lake Okeechobee. Flow frequently reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades (negative figures indicate reverse flow towards Lake Okeechobee). Discharge computed from relations between discharge, head, gate openings, and slope.

COOPERATION.--Lockage and gate-operation record provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--29 years (Water years 1932-52, 1982-88, 1990), 1,013 ft³/s, 733,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8,150 ft³/s Feb. 26, 1983; maximum gage height, 18.80 ft Mar. 24, 1983; maximum daily reverse flow, 3,370 ft³/s Oct. 8, 1989 estimated; minimum gage height, 9.63 ft June 22, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,280 ft³/s Nov. 6; maximum gage height, 13.34 ft Oct. 19; maximum daily reverse flow, 3,370 ft³/s Oct. 8 estimated; no flow for many days; minimum gage height, 9.63 ft June 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-1390	963	814	-38	58	.00	63	309	.00	.00	-344	-561
2	-491	769	742	.00	.00	.00	.00	294	.00	.00	.00	-325
3	-741	715	720	.00	127	.00	.00	216	.00	.00	.00	-225
4	-757	577	525	.00	52	.00	80	166	.00	.00	.00	-144
5	-410	977	170	121	104	136	147	133	.00	.00	.00	-122
6	1240	1280	24	47	340	307	91	96	.00	.00	.00	-36
7	1230	26	209	.00	238	41	68	51	.00	.00	.00	-144
8	-3370	901	254	.00	110	.00	32	112	.00	.00	.00	-278
9	-2630	578	47	.00	94	.00	10	203	.00	.00	-451	-157
10	-1410	510	-123	.00	91	.00	.00	228	.00	.00	-457	-48
11	-1620	488	-132	.00	67	.00	.00	59	.00	.00	-535	-31
12	-334	464	187	.00	-12	.00	.00	-20	.00	.00	-392	311
13	-322	536	.00	.00	-23	.00	.00	-34	.00	.00	-232	-233
14	1.0	510	.00	.00	1.7	101	123	-10	.00	.00	-718	48
15	-40	621	.00	.00	56	163	91	.00	.00	.00	-2500	.00
16	150	607	.00	.00	75	160	13	.00	.00	.00	-853	.00
17	328	273	.00	.00	34	152	.00	34	.00	.00	-638	.00
18	734	691	.00	.00	-24	56	37	271	.00	.00	-510	-247
19	-168	582	.00	.00	61	.00	100	224	.00	.00	-584	-76
20	126	518	.00	.00	132	.00	121	188	.00	.00	-631	-2610
21	521	696	.00	.00	-345	.00	153	169	.00	.00	-706	-886
22	928	602	306	.00	-440	.00	90	255	.00	.00	-494	-899
23	1120	248	598	.00	-285	.00	61	263	.00	.00	-272	-503
24	734	632	279	176	-336	.00	68	303	.00	.00	-307	-653
25	644	525	.00	196	-328	.00	155	195	.00	.00	-493	-367
26	771	562	.00	.00	-200	.00	461	.00	.00	.00	-539	-341
27	616	693	-1080	.00	-46	.00	489	.00	.00	.00	-383	-452
28	744	612	-63	.00	21	.00	282	.00	.00	.00	-653	-266
29	616	202	267	.00	---	122	101	.00	.00	.00	-1170	-326
30	874	720	70	.00	---	145	183	.00	.00	.00	-1430	-1270
31	602	---	-15	.00	---	138	---	.00	.00	.00	-942	---
TOTAL	-1704.0	18078	3799.00	502.00	-377.30	1521.00	3019.00	3705.00	0.00	0.00	-16234.00	-10841.00
MEAN	-55.0	603	123	16.2	-13.5	49.1	101	120	.000	.000	-524	-361
MAX	1240	1280	814	196	340	307	489	309	.00	.00	.00	311
MIN	-3370	26	-1080	-38	-440	.00	.00	-34	.00	.00	-2500	-2610
AC-FT	-3380	35860	7540	996	-748	3020	5990	7350	.00	.00	-32200	-21500

WTR YR 1990 TOTAL 1467.70 MEAN 4.02 MAX 1280 MIN -3370 AC-FT 2910

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.21	12.81	12.39	12.35	12.41	12.33	11.76	11.09	10.67	10.81	11.53	12.46
2	12.26	12.84	12.44	12.35	12.41	12.40	11.76	11.04	10.67	10.84	11.51	12.44
3	12.26	12.78	12.42	12.37	12.41	12.55	11.94	10.92	10.71	10.81	11.49	12.45
4	12.20	12.77	12.38	12.38	12.51	12.42	11.74	10.90	10.75	10.83	11.51	12.42
5	12.20	12.77	12.36	12.40	12.45	12.40	11.65	10.97	10.74	10.85	11.51	12.44
6	12.20	12.77	12.35	12.41	12.31	12.38	11.62	11.05	10.69	10.96	11.50	12.46
7	12.23	12.77	12.34	12.43	12.37	12.25	11.59	10.83	10.65	10.93	11.50	12.47
8	12.42	12.76	12.35	12.44	12.38	12.13	11.42	10.76	10.69	10.90	11.53	12.46
9	12.43	12.81	12.60	12.43	12.37	12.27	11.37	10.80	10.70	10.88	11.58	12.44
10	12.56	12.72	12.42	12.42	12.44	12.28	11.45	11.00	10.72	10.89	11.55	12.40
11	12.60	12.66	12.37	12.42	12.53	12.26	11.54	10.87	10.81	10.89	11.56	12.38
12	12.67	12.65	12.38	12.50	12.38	12.20	11.40	10.85	10.62	10.91	11.62	12.36
13	12.74	12.62	12.48	12.31	12.41	12.17	11.29	10.87	10.55	10.99	11.66	12.36
14	12.78	12.64	12.29	12.33	12.43	12.16	11.37	10.89	10.60	11.06	11.84	12.38
15	12.81	12.67	12.33	12.33	12.41	12.11	11.35	10.84	10.63	11.15	11.88	12.43
16	12.83	12.78	12.32	12.31	12.41	12.08	11.36	10.82	10.61	11.13	11.92	12.44
17	12.84	12.58	12.31	12.31	12.41	12.15	11.30	10.82	10.61	11.19	11.98	12.44
18	12.89	12.53	12.31	12.33	12.39	12.05	11.26	10.82	10.58	11.23	12.03	12.38
19	12.97	12.55	12.32	12.34	12.39	12.04	11.02	10.79	10.58	11.24	12.09	12.28
20	12.93	12.57	12.32	12.35	12.39	12.10	10.95	10.75	10.56	11.31	12.14	12.36
21	12.79	12.60	12.35	12.38	12.36	11.88	11.06	10.79	10.53	11.33	12.14	12.41
22	12.76	12.56	12.26	12.38	12.34	11.88	11.14	10.82	10.48	11.41	12.19	12.45
23	12.78	12.54	12.49	12.33	12.50	11.88	11.12	10.71	10.55	11.43	12.25	12.51
24	12.81	12.42	12.52	12.37	12.57	11.86	11.01	10.66	10.62	11.47	12.26	12.35
25	12.80	12.42	12.39	12.39	12.37	11.86	10.94	10.52	10.64	11.46	12.26	12.37
26	12.81	12.48	12.36	12.37	12.20	11.84	10.96	10.54	10.64	11.46	12.29	12.39
27	12.80	12.48	12.35	12.30	12.27	11.79	10.96	10.59	10.67	11.50	12.32	12.37
28	12.83	12.47	12.36	12.33	12.31	11.75	10.98	10.68	10.65	11.50	12.37	12.29
29	12.92	12.44	12.36	12.39	---	11.72	11.09	10.84	10.65	11.47	12.43	12.39
30	12.88	12.39	12.36	12.39	---	11.67	11.08	10.70	10.71	11.52	12.46	12.59
31	12.84	---	12.39	12.39	---	11.75	---	10.70	---	11.56	12.47	---
TOTAL	392.05	378.85	383.67	383.53	347.13	374.61	339.48	335.23	319.28	345.91	369.37	372.37
MEAN	12.65	12.63	12.38	12.37	12.40	12.08	11.32	10.81	10.64	11.16	11.92	12.41
MAX	12.97	12.84	12.60	12.50	12.57	12.55	11.94	11.09	10.81	11.56	12.47	12.59
MIN	12.20	12.39	12.26	12.30	12.20	11.67	10.94	10.52	10.48	10.81	11.49	12.28
CAL YR 1989	TOTAL 4587.17		MEAN 12.57	MAX 14.55		MIN 11.15						
WTR YR 1990	TOTAL 4341.48		MEAN 11.89	MAX 12.97		MIN 10.48						

LOCATION.--Lat 26°59'00", long 80°37'00", in sec.22, T.40 S., R.37 E., Martin County, Hydrologic Unit 03090202, on right bank in control house downstream of structure 308 at Lake Okeechobee, 0.1 mi west of U.S. Highway 441, and 24 mi upstream from control structure 80.

PERIOD OF RECORD.--October 1981 to current year.

REMARKS.--Estimated daily stage: Oct. 5 to Nov. 7. Water level affected by regulation of control structure 308 gates and lock at Lake Okeechobee, and structure 80.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.52 ft Sept. 20; minimum gage height, 9.45 ft May 24.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.26	12.49	12.38	12.39	11.87	12.54	11.52	9.82	10.75	10.79	11.54	12.62
2	12.28	12.52	12.43	12.25	11.63	12.36	11.39	10.29	10.67	10.83	11.26	12.51
3	12.28	12.46	12.41	11.93	11.46	12.21	11.04	10.52	10.55	10.84	11.01	12.46
4	12.22	12.45	12.23	11.62	11.52	12.18	10.87	10.55	10.30	10.83	11.05	12.47
5	12.21	12.45	11.99	11.51	11.30	11.83	10.92	10.47	10.39	10.87	11.25	12.46
6	12.21	12.45	11.54	11.88	11.26	12.06	10.97	10.54	10.46	10.97	11.40	12.44
7	12.23	12.60	11.26	11.83	11.51	12.29	10.96	10.47	10.35	10.99	11.52	12.49
8	12.54	12.75	11.38	11.63	11.54	12.24	11.21	10.21	10.28	11.00	11.54	12.49
9	12.54	12.80	12.08	11.70	11.54	11.99	11.20	10.07	10.32	10.90	11.70	12.45
10	12.64	12.71	12.45	11.80	11.66	11.87	11.20	10.20	10.25	10.92	11.69	12.40
11	12.61	12.65	12.43	11.70	12.09	11.97	11.01	10.71	10.14	10.90	11.63	12.33
12	12.66	12.65	12.41	11.77	12.42	11.80	10.73	10.93	10.48	10.90	11.67	12.28
13	12.69	12.62	12.35	11.95	12.49	11.44	10.41	11.04	10.63	10.95	11.69	12.30
14	12.70	12.63	12.19	12.19	12.41	11.20	10.41	10.98	10.46	11.08	12.12	12.23
15	12.69	12.66	11.75	12.32	12.31	11.21	11.00	10.84	10.34	11.24	12.38	12.17
16	12.69	12.77	11.87	12.32	12.30	11.21	11.26	10.63	10.33	11.19	12.02	12.31
17	12.69	12.59	12.14	12.03	12.37	11.36	11.16	10.12	10.38	11.14	12.15	12.43
18	12.67	12.52	12.08	11.79	12.41	11.84	10.92	9.87	10.28	11.26	12.18	12.35
19	12.66	12.54	11.98	11.55	12.29	11.85	10.66	10.25	10.00	11.24	12.23	12.33
20	12.54	12.56	11.89	11.48	12.29	12.03	10.44	10.21	9.95	11.32	12.30	12.78
21	12.37	12.59	11.67	11.66	12.66	12.30	10.26	9.98	9.82	11.36	12.34	12.64
22	12.31	12.55	11.07	11.60	12.76	12.32	10.69	9.67	10.27	11.45	12.30	12.64
23	12.28	12.54	11.14	11.42	12.73	12.27	10.60	9.66	10.67	11.46	12.34	12.66
24	12.26	12.41	11.28	11.27	12.85	12.20	10.38	9.54	10.75	11.43	12.35	12.53
25	12.10	12.41	11.30	11.57	12.60	12.28	10.07	9.93	10.73	11.43	12.39	12.46
26	11.99	12.47	12.27	11.55	12.34	12.00	9.97	10.51	10.69	11.47	12.44	12.48
27	12.31	12.47	12.66	11.37	12.30	11.53	10.30	10.56	10.75	11.56	12.41	12.45
28	12.52	12.47	12.46	11.65	12.43	11.12	10.33	10.55	10.77	11.53	12.51	12.35
29	12.60	12.44	12.40	11.67	---	10.84	10.10	10.79	10.69	11.50	12.66	12.51
30	12.56	12.38	12.39	11.80	---	10.95	9.95	10.80	10.75	11.53	12.67	12.90
31	12.52	---	12.42	11.82	---	11.10	---	10.80	---	11.59	12.67	---
T												

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277600 LOXAHATCHEE RIVER NEAR JUPITER, FL

LOCATION.--Lat 26°56'20", long 80°10'31", in NE¼ sec.6, T.41 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, near left bank, 0.2 mi downstream from State Highway 706, 1.3 mi upstream from Florida's Turnpike and 5.2 mi west of Jupiter.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharge and stage. Records good.

AVERAGE DISCHARGE.--19 years, 64.8 ft³/s, 46,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,040 ft³/s Nov. 17, 1982; maximum gage height, 14.80 ft Sept. 25, 1983; no flow on May 4-7, 1974, minimum gage height, 7.70 ft June 21, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 409 ft³/s Sept. 29; maximum gage height, 13.14 ft Sept. 29; minimum daily discharge, 6.4 ft³/s May 23, 24; minimum gage height, 10.50 ft May 22-25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	84	22	25	16	20	17	15	23	14	13	225
2	53	77	21	44	15	20	15	13	21	16	14	225
3	66	50	20	26	15	22	14	12	20	16	13	229
4	43	51	18	20	14	26	13	11	18	21	13	247
5	42	52	17	57	14	23	13	9.9	17	19	13	240
6	48	52	17	42	14	22	12	9.5	16	18	30	194
7	28	51	16	27	14	22	12	13	16	17	56	156
8	64	50	16	26	14	22	12	12	15	17	76	92
9	109	44	36	25	14	21	13	11	15	16	33	81
10	122	42	50	20	14	20	17	12	14	15	72	58
11	158	40	21	50	15	19	17	13	13	14	66	25
12	191	39	17	22	16	18	16	13	13	14	86	77
13	125	39	17	19	16	18	15	12	12	14	55	38
14	137	39	16	18	16	17	14	11	12	16	110	56
15	69	38	16	18	16	16	14	14	11	16	99	37
16	46	38	16	18	16	15	15	11	11	15	110	37
17	118	36	16	18	16	15	16	9.7	10	16	118	54
18	80	25	16	17	16	15	15	9.0	10	16	141	35
19	80	23	16	17	16	16	14	8.3	9.9	16	186	89
20	101	27	15	17	16	21	14	7.6	9.4	15	196	263
21	36	27	18	17	21	21	13	7.4	9.0	15	158	293
22	54	28	18	17	21	19	13	7.1	9.4	15	141	295
23	58	27	22	17	20	18	12	6.4	9.1	25	110	306
24	79	23	23	16	20	17	12	6.4	9.6	21	110	227
25	91	19	23	16	20	17	12	7.0	11	16	125	175
26	61	18	22	15	20	16	11	8.1	13	15	141	154
27	70	18	52	15	20	15	11	9.0	20	15	141	113
28	73	17	46	15	20	14	11	13	20	15	133	261
29	89	20	38	16	---	14	11	12	16	15	110	409
30	75	22	47	36	---	13	14	11	15	14	140	371
31	72	---	36	19	---	16	---	24	---	14	204	---
TOTAL	2517	1116	744	725	465	568	408	338.4	418.4	501	3013	5062
MEAN	81.2	37.2	24.0	23.4	16.6	18.3	13.6	10.9	13.9	16.2	97.2	169
MAX	191	84	52	57	21	26	17	24	23	25	204	409
MIN	28	17	15	15	14	13	11	6.4	9.0	14	13	25
AC-FT	4990	2210	1480	1440	922	1130	809	671	830	994	5980	10040

CAL YR 1989 TOTAL 11901.7 MEAN 32.6 MAX 191 MIN 1.2 AC-FT 23610
WTR YR 1990 TOTAL 15875.8 MEAN 43.5 MAX 409 MIN 6.4 AC-FT 31490

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.35	11.39	10.79	10.88	10.73	10.73	10.76	10.71	10.84	10.65	10.69	12.35
2	11.14	11.34	10.78	11.13	10.71	10.73	10.73	10.68	10.81	10.69	10.69	12.35
3	11.31	11.10	10.77	10.90	10.69	10.76	10.72	10.66	10.79	10.70	10.68	12.37
4	11.10	11.11	10.74	10.80	10.68	10.82	10.71	10.63	10.76	10.78	10.68	12.45
5	11.10	11.10	10.73	11.19	10.67	10.77	10.69	10.61	10.74	10.75	10.67	12.42
6	11.16	11.10	10.72	11.09	10.67	10.76	10.68	10.60	10.73	10.73	10.95	12.20
7	10.92	11.10	10.72	10.91	10.67	10.75	10.67	10.68	10.72	10.71	11.25	12.00
8	11.28	11.09	10.72	10.90	10.67	10.75	10.67	10.64	10.71	10.71	11.43	11.57
9	11.66	11.03	10.94	10.88	10.67	10.74	10.70	10.63	10.70	10.70	11.00	11.49
10	11.75	11.00	11.15	10.80	10.66	10.73	10.77	10.65	10.68	10.68	11.40	11.27
11	11.96	10.99	10.81	11.17	10.68	10.71	10.77	10.68	10.66	10.67	11.35	10.89
12	12.14	10.98	10.74	10.84	10.70	10.71	10.75	10.66	10.66	10.67	11.52	11.44
13	11.75	10.98	10.74	10.78	10.70	10.70	10.72	10.64	10.65	10.67	11.25	11.05
14	11.84	10.98	10.73	10.78	10.70	10.69	10.71	10.62	10.63	10.71	11.70	11.25
15	11.32	10.98	10.73	10.78	10.70	10.67	10.71	10.69	10.61	10.70	11.62	11.05
16	11.10	10.98	10.73	10.77	10.70	10.66	10.73	10.63	10.60	10.70	11.70	11.05
17	11.70	10.95	10.72	10.76	10.69	10.67	10.74	10.59	10.59	10.71	11.75	11.23
18	11.40	10.81	10.72	10.76	10.69	10.68	10.72	10.57	10.58	10.72	11.90	11.02
19	11.40	10.78	10.72	10.76	10.68	10.70	10.71	10.55	10.58	10.71	12.15	11.47
20	11.56	10.84	10.72	10.76	10.68	10.79	10.70	10.54	10.57	10.70	12.20	12.49
21	10.97	10.85	10.75	10.75	10.77	10.78	10.69	10.53	10.55	10.70	12.00	12.62
22	11.15	10.86	10.76	10.74	10.77	10.76	10.68	10.52	10.55	10.70	11.90	12.63
23	11.19	10.86	10.84	10.74	10.75	10.75	10.66	10.50	10.55	10.85	11.70	12.67
24	11.38	10.80	10.85	10.73	10.74	10.73	10.67	10.50	10.56	10.82	11.70	12.34
25	11.47	10.73	10.84	10.72	10.74	10.73	10.66	10.52	10.59	10.73	11.80	12.08
26	11.22	10.72	10.83	10.71	10.74	10.72	10.65	10.55	10.63	10.71	11.90	11.96
27	11.28	10.72	11.20	10.71	10.73	10.71	10.64	10.57	10.74	10.71	11.90	11.69
28	11.30	10.71	11.14	10.70	10.73	10.70	10.63	10.66	10.76	10.71	11.85	12.41
29	11.43	10.76	11.05	10.73	---	10.69	10.63	10.63	10.69	10.71	11.70	13.03
30	11.32	10.80	11.16	11.02	---	10.68	10.70	10.61	10.67	10.70	11.90	12.90
31	11.28	---	11.03	10.78	---	10.73	---	10.84	---	10.69	12.25	---
TOTAL	352.93	328.44	335.87	335.97	299.71	332.50	320.97	329.09	319.90	332.09	357.18	357.74
MEAN	11.38	10.95	10.83	10.84	10.70	10.73	10.70	10.62	10.66	10.71	11.52	11.92
MAX	12.14	11.39	11.20	11.19	10.77	10.82	10.77	10.84	10.84	10.85	12.25	13.03
MIN	10.92	10.71	10.72	10.70	10.66	10.66	10.63	10.50	10.55	10.65	10.67	10.89
CAL YR 1989	TOTAL 3967.63		MEAN	10.87	MAX 12.14	MIN 10.06						
WTR YR 1990	TOTAL 4002.39		MEAN	10.97	MAX 13.03	MIN 10.50						

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277738 INTRACOASTAL WATERWAY AT SR 706 AT JUPITER, FL

LOCATION.--Lat 26°56'02", long 80°05'03", in NE¼ sec.6, T.41 S., R.43 E., Palm Beach County, Hydrologic Unit 03090202, on east fender of bridge on State Road 706, 0.2 mi west of U.S. Highway 1, and 1.0 mi south of Loxahatchee River at Jupiter, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1980 to May 1981, September 1988 to current year (gage heights only). Records of gage heights prior to October 1988 are available in the files of the Geological Survey.

GAGE.--Water-stage recorder and electromagnetic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929. June 1980 to May 1981 water-stage recorder only.

REMARKS.--Tidal stage. The stage record published is the maximum and minimum tide event for each calendar day. Discharge could not be determined for the 1990 water year at time of publication.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 1.87 ft Mar. 10, 1989; minimum -2.98 ft July 18, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 1.85 ft Oct. 29; minimum -2.98 ft July 18.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL HIGH (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	1.23	.84	-.13	-.12	.63	.34	.07	.54	.07	.27	.45
2	.54	1.00	.58	.08	.09	.60	.54	.16	.35	.08	.33	.85
3	.57	1.03	.46	.09	-.19	.45	.53	.12	.45	.12	.58	1.10
4	.61	.89	.72	.07	-.28	.32	.60	.08	.39	.26	.69	.94
5	.60	.88	.41	-.27	-.24	.46	.62	.08	.46	.39	.79	.98
6	.49	.92	.33	-.13	.35	.56	.33	.28	.47	.43	.71	1.14
7	.36	.74	.19	.16	.23	.76	.16	.51	.59	.44	.72	1.13
8	.30	.70	.28	.19	.31	1.20	.42	.54	.47	.19	.55	1.00
9	.55	.73	.28	.16	.38	.87	.54	.46	.39	.09	.68	.85
10	.81	.77	.50	.39	.26	.67	.23	.47	.33	.24	.75	.62
11	1.21	.85	.98	.29	.33	.52	.27	.31	.27	.29	.64	.80
12	1.21	.92	.85	.27	.32	.37	.56	.32	.30	.24	.50	.88
13	1.34	.90	.52	.53	.11	.15	.53	.31	.39	.07	.46	.94
14	1.56	1.00	.48	.43	-.11	.25	.54	.09	.51	.07	.41	1.03
15	1.38	.74	.55	.17	-.25	.15	.33	.09	.72	.07	.30	1.00
16	1.26	.67	.30	.09	-.52	.13	.23	.09	.49	.09	.56	1.00
17	1.04	.61	.29	.07	-.89	.08	.10	.07	.40	.06	.56	.81
18	.70	.29	.11	-.24	-.84	-.36	.09	.07	.90	.05	.58	.98
19	.48	.10	.14	-.45	-.65	.09	.09	.09	1.14	.26	.89	1.25
20	.41	.16	.09	-.29	-.58	.09	.37	.27	1.01	.34	.85	1.24
21	.35	.25	.14	-.58	.09	.09	.45	.36	.76	.41	.68	1.24
22	.22	.16	.11	-.65	.25	.32	.73	.70	.86	.48	.61	.80
23	.26	.07	.54	-.39	.13	.30	.91	.97	.92	.55	.58	.70
24	.48	.06	.55	-.16	.14	.45	.95	1.05	.52	.55	.62	.63
25	.84	.26	1.04	.09	.22	.38	.83	1.00	.83	.35	.37	.72
26	1.03	.29	.84	.07	.65	.63	.83	1.03	.55	.36	.08	.63
27	1.24	.31	.44	.25	.69	.95	.65	1.03	.32	.61	.08	.42
28	1.64	.21	.17	.08	.65	.98	.63	1.03	.32	.85	.39	.22
29	1.85	.24	.16	.14	---	.87	.56	.91	.10	.82	.49	.35
30	1.74	.54	.25	.10	---	.80	.31	.68	.08	.63	.39	.50
31	1.38	---	.26	-.15	---	.43	---	.57	---	.34	.22	---
TOTAL	27.20	17.52	13.40	0.28	0.53	14.19	14.27	13.81	15.83	9.80	16.33	25.20
MEAN	.88	.58	.43	.01	.02	.46	.48	.45	.53	.32	.53	.84
MAX	1.85	1.23	1.04	.53	.69	1.20	.95	1.05	1.14	.85	.89	1.25
MIN	.22	.06	.09	-.65	-.89	-.36	.09	.07	.08	.05	.08	.22

WTR YR 1990 TOTAL 168.36 MEAN .46 MAX 1.85 MIN -.89

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277738 INTRACOASTAL WATERWAY AT SR 706 AT JUPITER, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL LOW (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-1.63	-1.13	-1.71	-2.39	-2.46	-2.12	-2.08	-2.16	-1.69	-2.26	-1.97	-2.02
2	-1.79	-1.33	-1.80	-2.23	-2.61	-2.23	-1.87	-1.99	-1.86	-2.29	-2.08	-1.82
3	-1.83	-1.25	-1.99	-2.27	-2.72	-2.28	-1.67	-1.98	-1.97	-2.26	-1.90	-1.54
4	-1.60	-1.16	-1.57	-2.59	-2.81	-2.08	-1.50	-2.14	-2.06	-2.26	-1.86	-1.69
5	-1.55	-1.31	-1.69	-2.67	-2.40	-1.92	-1.61	-2.24	-2.15	-2.20	-1.76	-1.71
6	-1.56	-1.12	-1.88	-2.63	-2.24	-1.71	-1.91	-2.23	-2.17	-2.23	-2.00	-1.54
7	-1.66	-1.25	-2.25	-2.67	-2.38	-1.61	-2.13	-1.99	-2.08	-2.43	-1.97	-1.63
8	-1.82	-1.50	-2.51	-2.67	-2.49	-1.30	-2.09	-2.04	-2.17	-2.62	-2.00	-1.88
9	-1.71	-1.86	-2.63	-2.79	-2.31	-1.54	-1.86	-2.11	-2.30	-2.55	-1.88	-2.07
10	-1.36	-1.88	-2.64	-2.72	-2.37	-1.69	-2.28	-2.09	-2.30	-2.34	-1.79	-2.19
11	-1.27	-2.03	-2.08	-2.73	-2.31	-1.88	-2.25	-2.24	-2.32	-2.25	-1.92	-2.08
12	-1.28	-2.25	-2.31	-2.66	-2.04	-1.97	-1.98	-2.23	-2.19	-2.26	-2.11	-1.75
13	-1.42	-2.45	-2.52	-2.40	-2.10	-2.27	-1.83	-2.40	-1.82	-2.30	-2.21	-1.76
14	-1.58	-2.37	-2.61	-2.05	-2.38	-2.12	-1.91	-2.30	-1.58	-2.33	-2.34	-1.63
15	-1.80	-2.41	-2.32	-2.05	-2.45	-2.07	-1.86	-2.23	-1.51	-2.50	-2.44	-1.67
16	-2.02	-2.32	-2.32	-1.99	-2.62	-2.09	-1.93	-2.17	-1.82	-2.63	-2.43	-1.68
17	-2.17	-2.23	-2.19	-2.13	-2.79	-2.21	-1.98	-2.00	-2.12	-2.84	-2.36	-1.81
18	-2.38	-2.10	-1.96	-2.36	-2.50	-2.05	-1.95	-2.09	-1.99	-2.98	-2.44	-1.77
19	-2.33	-1.94	-1.86	-2.29	-2.56	-1.94	-1.52	-2.19	-1.91	-2.89	-2.13	-1.24
20	-2.38	-1.79	-1.82	-2.47	-2.31	-1.86	-1.61	-2.23	-2.28	-2.90	-2.01	-1.29
21	-1.89	-1.69	-1.84	-2.67	-2.19	-1.69	-1.66	-2.60	-2.63	-2.78	-2.00	-1.31
22	-1.95	-2.01	-1.60	-2.64	-2.08	-1.88	-1.89	-2.58	-2.60	-2.69	-1.97	-1.68
23	-1.87	-2.22	-1.60	-2.63	-2.34	-1.90	-1.98	-2.51	-2.48	-2.47	-1.91	-1.76
24	-1.57	-2.22	-1.57	-2.56	-2.35	-2.08	-2.23	-2.47	-2.48	-2.36	-1.89	-1.66
25	-1.39	-2.04	-1.38	-2.53	-2.50	-2.23	-2.43	-2.42	-2.40	-2.24	-1.89	-1.40
26	-1.01	-2.05	-1.49	-2.64	-2.11	-2.38	-2.54	-2.38	-2.34	-2.14	-2.16	-1.27
27	-.90	-2.28	-2.03	-2.29	-1.95	-2.14	-2.62	-2.19	-2.24	-1.76	-2.03	-1.62
28	-.42	-2.38	-2.51	-2.46	-2.16	-2.16	-2.47	-1.81	-2.12	-1.39	-1.80	-1.68
29	-.48	-2.37	-2.45	-2.45	---	-2.09	-2.40	-1.85	-2.20	-1.34	-1.61	-1.78
30	-.44	-2.12	-2.49	-2.50	---	-2.46	-2.53	-1.73	-2.19	-1.44	-1.69	-1.83
31	-.94	---	-2.30	-2.71	---	-2.40	---	-1.66	---	-1.76	-1.97	---
TOTAL	-48.00	-57.06	-63.92	-76.84	-66.53	-62.35	-60.57	-67.25	-63.97	-71.69	-62.52	-50.76
MEAN	-1.55	-1.90	-2.06	-2.48	-2.38	-2.01	-2.02	-2.17	-2.13	-2.31	-2.02	-1.69
MAX	-.42	-1.12	-1.38	-1.99	-1.95	-1.30	-1.50	-1.66	-1.51	-1.34	-1.61	-1.24
MIN	-2.38	-2.45	-2.64	-2.79	-2.81	-2.46	-2.62	-2.60	-2.63	-2.98	-2.44	-2.19

WTR YR 1990 TOTAL -751.46 MEAN -2.06 MAX -.42 MIN -2.98

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277747 INTRACOASTAL WATERWAY AT SR 707 AT JUPITER, FL

LOCATION.--Lat 26°57'07", long 80°04'44", in NE¼ sec. 31, T.40 S., R.43 E., Palm Beach County, Hydrologic Unit 03090202, on east fender of draw bridge on State Highway 707, 1,900 ft north of Jupiter Lighthouse, 0.4 mi north of the Loxahatchee River at Jupiter, and 0.4 mi east of U.S. Highway 1.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1980 to May 1981, September 1988 to current year (gage heights). Records of gage heights June 1980 to May 1981 available in the files of the Geological Survey.

GAGE.--Water-stage recorder and electromagnetic velocity meter. June 1980 to May 1981, tidal stage recorder at site 300 ft southeast of present site. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily gage heights: Jan. 20 to Feb. 3, 6-9, 11, 13-18, 22-24, 27, Mar. 12, 14, 17, 23-26, 28 to Apr. 26. The stage record published is the maximum and minimum tide event for each calendar day. Discharge record not computed for the 1990 water year.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 3.03 ft Mar. 11; minimum, -2.60 ft Jan. 6

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.34 ft Sept. 19; minimum, -1.76 ft July 18.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL HIGH (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.78	---	1.85	.90	.90	1.64	1.36	1.06	1.57	1.03	1.34	1.50
2	1.59	---	1.62	1.04	.99	1.62	1.56	1.19	1.41	.98	1.41	1.88
3	1.66	---	1.53	.98	.83	1.45	1.55	1.13	1.45	1.14	1.71	2.12
4	1.70	---	1.76	1.02	.76	1.38	1.66	.96	1.43	1.31	1.79	1.97
5	1.29	---	1.46	.77	.81	1.47	1.67	.99	1.46	1.43	1.83	2.05
6	---	---	1.34	.89	1.38	1.61	1.36	1.28	1.46	1.45	1.77	2.16
7	---	---	1.24	1.14	1.28	1.80	1.17	1.52	1.63	1.21	1.79	2.15
8	---	---	1.28	1.18	1.35	2.19	1.43	1.53	1.46	1.11	1.65	2.00
9	---	1.51	1.32	1.18	1.38	1.84	1.50	1.40	1.38	1.27	1.77	1.84
10	---	1.76	1.56	1.40	1.29	1.70	1.24	1.43	1.31	1.38	1.81	1.70
11	---	1.83	2.01	1.28	1.33	1.52	1.29	1.33	1.31	1.34	1.71	1.85
12	---	1.89	1.81	1.28	1.37	1.38	1.63	1.30	1.33	1.31	1.59	1.92
13	---	1.86	1.53	1.60	1.15	1.18	1.59	1.31	1.42	1.12	1.48	1.99
14	---	1.94	1.50	1.42	.89	1.24	1.57	.97	1.53	1.07	1.46	2.06
15	---	1.71	1.60	1.19	.76	1.13	1.34	.97	1.76	1.03	1.34	2.01
16	---	1.72	1.30	1.10	.48	1.13	1.28	1.02	1.55	1.10	1.56	2.04
17	---	1.66	1.33	1.02	.15	1.03	1.07	.99	1.42	1.06	1.61	1.85
18	---	1.31	1.16	.81	.21	.69	1.08	.99	1.90	1.07	1.64	2.03
19	---	1.13	1.20	.60	.40	.97	1.12	1.02	2.09	1.32	1.93	2.33
20	---	1.22	1.06	.76	.50	1.10	1.46	1.26	1.98	1.33	1.88	2.29
21	---	1.31	1.22	.53	1.00	1.18	1.47	1.33	1.76	1.46	1.74	2.25
22	---	1.21	1.18	.43	1.27	1.37	1.76	1.69	1.89	1.54	1.65	1.84
23	---	1.02	1.66	.69	1.16	1.32	1.89	1.93	1.89	1.55	1.61	1.79
24	---	1.08	1.70	.88	1.23	1.43	1.89	2.03	1.79	1.38	1.70	1.75
25	---	1.29	2.18	.93	1.30	1.38	1.78	1.96	1.76	1.37	1.41	1.83
26	---	1.34	1.93	1.05	1.68	1.60	1.77	1.99	1.57	1.43	1.13	1.75
27	---	1.32	1.46	1.26	1.73	1.90	1.58	1.98	1.35	1.76	1.09	1.51
28	---	1.25	1.19	1.07	1.65	1.95	1.61	2.03	1.35	1.93	1.46	1.31
29	---	1.27	1.16	1.14	---	1.83	1.55	1.92	1.14	1.88	1.56	1.39
30	---	1.59	1.24	.96	---	1.74	1.31	1.73	1.03	1.74	1.47	1.56
31	---	---	1.25	.93	---	1.41	---	1.64	---	1.43	1.32	---
TOTAL	---	---	45.63	31.43	29.23	45.18	44.54	43.88	46.38	41.53	49.21	56.72
MEAN	---	---	1.47	1.01	1.04	1.46	1.48	1.42	1.55	1.34	1.59	1.89
MAX	---	---	2.18	1.60	1.73	2.19	1.89	2.03	2.09	1.93	1.93	2.33
MIN	---	---	1.06	.43	.15	.69	1.07	.96	1.03	.98	1.09	1.31

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277747 INTRACOASTAL WATERWAY AT SR 707 AT JUPITER, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL LOW (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-.42	---	-.55	-1.23	-1.29	-.95	-.91	-.97	-.50	-1.10	-.75	-.80
2	-.61	---	-.62	-1.04	-1.47	-1.05	-.72	-.82	-.67	-1.14	-.86	-.57
3	-.60	---	-.82	-1.10	-1.56	-1.13	-.53	-.81	-.79	-1.11	-.70	-.30
4	-.38	---	-.40	-1.43	-1.63	-.89	-.32	-.98	-.86	-1.05	-.62	-.46
5	---	---	-.57	-1.52	-1.08	-.75	-.51	-1.08	-.95	-1.01	-.52	-.46
6	---	---	-.73	-1.49	-1.15	-.54	-.75	-1.04	-.98	-1.04	-.76	-.28
7	---	---	-1.06	-1.52	-1.26	-.35	-.95	-.79	-.93	-1.26	-.73	-.40
8	---	---	-1.40	-1.57	-1.32	-.13	-.90	-.87	-.96	-1.48	-.76	-.69
9	---	---	-1.49	-1.63	-1.14	-.36	-.69	-.96	-1.12	-1.33	-.70	-.84
10	---	-.82	-1.46	-1.55	-1.22	-.53	-1.11	-.95	-1.13	-1.10	-.55	-.96
11	---	-.85	-.92	-1.58	-1.12	-.72	-1.08	-1.04	-1.11	-1.04	-.72	-.87
12	---	-1.09	-1.14	-1.51	-.85	-.77	-.78	-1.06	-1.00	-1.07	-.92	-.53
13	---	-1.31	-1.36	-1.22	-.93	-1.09	-.63	-1.23	-.61	-1.10	-1.00	-.55
14	---	-1.22	-1.44	-.87	-1.21	-.95	-.75	-1.14	-.39	-1.12	-1.14	-.40
15	---	-1.25	-1.16	-.87	-1.30	-.94	-.67	-1.05	-.31	-1.29	-1.26	-.45
16	---	-1.14	-1.15	-.81	-1.50	-.96	-.76	-1.00	-.61	-1.43	-1.25	-.45
17	---	-1.06	-1.01	-.96	-1.66	-1.07	-.81	-.84	-.94	-1.64	-1.12	-.59
18	---	-.93	-.78	-1.19	-1.35	-.88	-.79	-.94	-.78	-1.76	-1.21	-.52
19	---	-.79	-.67	-1.13	-1.40	-.78	-.33	-1.02	-.75	-1.70	-.91	.00
20	---	-.62	-.67	-1.31	-1.13	-.67	-.43	-1.04	-1.09	-1.74	-.82	-.06
21	---	-.54	-.67	-1.50	-.92	-.53	-.50	-1.44	-1.46	-1.62	-.81	.02
22	---	-.85	-.44	-1.50	-1.01	-.71	-.73	-1.41	-1.41	-1.54	-.73	-.43
23	---	-1.04	-.42	-1.44	-1.17	-.86	-.78	-1.32	-1.29	-1.29	-.72	-.52
24	---	-1.00	-.26	-1.41	-1.16	-.91	-1.03	-1.27	-1.31	-1.14	-.70	-.41
25	---	-.87	-.22	-1.36	-1.33	-1.04	-1.26	-1.24	-1.22	-1.04	-.66	-.16
26	---	-.89	-.57	-1.46	-.95	-1.20	-1.35	-1.20	-1.18	-.91	-.96	-.02
27	---	-1.12	-.86	-1.13	-.76	-.95	-1.43	-1.00	-1.03	-.53	-.84	-.40
28	---	-1.21	-1.34	-1.31	-.97	-.97	-1.31	-.67	-.94	-.13	-.60	-.49
29	---	-1.17	-1.29	-1.27	---	-.90	-1.22	-.64	-1.00	-.10	-.41	-.59
30	---	-.94	-1.33	-1.34	---	-1.29	-1.36	-.53	-1.00	-.20	-.50	-.57
31	---	---	-1.14	-1.55	---	-1.21	---	-.50	---	-.54	-.76	---
TOTAL	---	---	-27.94	-40.80	-33.84	-26.08	-25.39	-30.85	-28.32	-34.55	-24.99	-13.75
MEAN	---	---	-.90	-1.32	-1.21	-.84	-.85	-1.00	-.94	-1.11	-.81	-.46
MAX	---	---	-.22	-.81	-.76	-.13	-.32	-.50	-.31	-.10	-.41	.02
MIN	---	---	-1.49	-1.63	-1.66	-1.29	-1.43	-1.44	-1.46	-1.76	-1.26	-.96

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278000 WEST PALM BEACH CANAL AT S352, AT CANAL POINT, FL
(Formerly published as West Palm Beach Canal at HGS-5, at Canal Point)

LOCATION.--Lat 26°51'05", long 80°37'55", in NE¼ sec.33, T.41 S., R.37 E., Palm Beach County, Hydrologic Unit 03090202, on right bank in gate structure S352 at Lake Okeechobee, 200 ft upstream from bridge on U.S. Highway 441 at Canal Point.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to current year.

GAGE.--Water-stage recorder, and gate-opening indicator. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Jan. 14, 1954, nonrecording gage at site 550 ft downstream at same datum. Jan. 14, 1954 to Feb. 24, 1956, water-stage recorder, and Feb. 25, 1956, to Sept. 30, 1967, water-stage and deflection vane recorders all at present site and datum. May 1940, auxiliary water-stage recorder at old lock, 700 ft downstream from gate structure. August, 1986 to December, 1989, electromagnetic velocity meter.

REMARKS.--Records fair except for those estimated daily discharges May 1-4, 7-9, 11, 14-16 and stage May 1-16, which are poor. Flow regulated at station by operation of gates. Flow occasionally reversed after periods of considerable rainfall because of downstream natural drainage and pumpage from agricultural lands in the Everglades (negative figures indicate flow reversed). Discharge computed from relations between discharge, head, and gate openings at gate structure S352 or from continuous velocity record obtained from recording electromagnetic velocity meter.

COOPERATION.--Gate record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--49 years (water years 1940-89), 153 ft³/s, 110,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,610 ft³/s Oct. 2, 1959; maximum gage height, 18.99 ft Mar. 10, 1983; maximum daily reverse flow, 1,760 ft³/s June 15, 1942; minimum gage height observed, 8.48 ft June 15-17, 1952, at former site.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 638 ft³/s Mar. 15; maximum gage height, 13.95 ft Sept. 29; no flow for many days; minimum gage height, 10.23 ft July 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	194	---	116	.00	.00	.00	.00
2	.00	.00	.00	.00	154	194	---	52	.00	.00	.00	.00
3	.00	.00	.00	.00	276	170	---	110	.00	.00	.00	.00
4	.00	.00	.00	.00	291	144	---	200	.00	---	.00	.00
5	.00	.00	.00	.00	313	150	---	.00	.00	---	.00	.00
6	.00	.00	98	.00	285	242	---	.00	.00	.00	.00	.00
7	.00	.00	131	.00	242	170	---	210	.00	.00	.00	.00
8	.00	.00	170	.00	198	102	---	238	.00	.00	.00	.00
9	.00	.00	.00	.00	126	306	---	238	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	206	---	.00	.00	.00	.00	.00
11	.00	.00	120	.00	.00	216	---	94	.00	.00	.00	.00
12	.00	.00	.00	68	.00	478	---	.00	.00	.00	.00	.00
13	.00	.00	164	.00	.00	544	---	.00	.00	.00	.00	.00
14	.00	.00	.00	110	166	594	---	234	90	.00	.00	.00
15	.00	.00	266	126	302	638	---	284	290	---	.00	.00
16	.00	.00	140	198	250	---	---	248	.00	.00	.00	.00
17	.00	.00	.00	230	191	---	---	256	.00	.00	.00	.00
18	.00	.00	102	124	187	---	---	138	334	.00	.00	.00
19	.00	.00	.00	206	206	---	.00	.00	552	.00	.00	.00
20	.00	286	116	.00	300	---	---	108	198	.00	.00	.00
21	.00	438	.00	144	127	---	---	208	274	.00	.00	.00
22	.00	428	48	226	.00	---	.00	226	170	.00	.00	.00
23	.00	414	.00	24	28	---	---	348	.00	.00	.00	.00
24	.00	396	.00	.00	.00	---	---	192	.00	.00	.00	.00
25	.00	384	.00	.00	.00	---	---	320	---	.00	.00	.00
26	.00	390	.00	.00	.00	---	---	.00	---	.00	.00	.00
27	.00	146	.00	.00	.00	---	---	.00	---	.00	.00	.00
28	.00	.00	.00	.00	116	---	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	---	.00	204	.00	.00	.00	.00
30	.00	.00	.00	.00	---	---	---	56	.00	.00	.00	.00
31	.00	---	.00	.00	---	---	---	.00	---	170	.00	---
TOTAL	0.00	2882.00	1355.00	1456.00	3758.00	---	---	4080.00	---	---	0.00	0.00
MEAN	.000	96.1	43.7	47.0	134	---	---	132	---	---	.000	.000
MAX	.00	438	266	230	313	---	---	348	---	---	.00	.00
MIN	.00	.00	.00	.00	.00	---	---	.00	---	---	.00	.00
AC-FT	.00	5720	2690	2890	7450	---	---	8090	---	---	.00	.00

CAL YR 1989 TOTAL 78803.00 MEAN 216 MAX 1100 MIN .00 AC-FT 156300

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278000 WEST PALM BEACH CANAL AT S352, AT CANAL POINT, FL
(Formerly published as West Palm Beach Canal at HGS-5, at Canal Point)

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.13	12.75	12.40	12.34	12.34	12.29	---	10.98	10.63	10.75	11.51	12.44
2	12.19	12.77	12.38	12.33	12.32	12.30	---	10.95	10.63	10.71	11.58	12.47
3	12.26	12.78	12.48	12.31	12.32	12.44	---	10.83	10.66	10.75	11.52	12.46
4	12.20	12.75	12.42	12.30	12.39	12.39	---	10.81	10.69	10.78	11.49	12.45
5	12.15	12.73	12.31	12.32	12.50	12.35	---	10.88	10.67	10.82	11.49	12.46
6	12.14	12.71	12.27	12.34	12.25	12.35	---	10.96	10.66	10.91	11.47	12.47
7	12.15	12.68	12.25	12.35	12.31	12.27	---	10.74	10.64	10.89	11.46	12.46
8	12.35	12.66	12.23	12.36	12.32	12.14	---	10.67	10.64	10.85	11.47	12.44
9	12.41	12.72	12.52	12.38	12.28	12.23	---	10.71	10.63	10.85	11.54	12.42
10	12.46	12.69	12.41	12.37	12.32	12.26	---	10.91	10.66	10.86	11.50	12.40
11	12.58	12.64	12.30	12.37	12.45	12.27	---	10.78	10.76	10.84	11.57	12.40
12	12.64	12.59	12.28	12.42	12.46	12.19	---	10.76	10.65	10.86	11.61	12.37
13	12.69	12.56	12.46	12.48	12.34	12.17	---	10.78	10.57	10.91	11.63	12.35
14	12.72	12.55	12.35	12.29	12.33	12.12	---	10.80	10.58	10.93	11.81	12.38
15	12.75	12.56	12.27	12.28	12.29	12.00	---	10.75	10.53	11.11	11.85	12.39
16	12.78	12.72	12.25	12.24	12.30	---	---	10.71	10.53	11.13	11.89	12.42
17	12.78	12.67	12.27	12.23	12.34	---	---	10.73	10.52	11.16	11.93	12.43
18	12.80	12.55	12.24	12.26	12.30	---	---	10.72	10.49	11.20	11.98	12.41
19	12.94	12.52	12.24	12.26	12.29	---	---	10.69	10.45	11.25	12.07	12.36
20	13.11	12.51	12.26	12.27	12.32	---	---	10.64	10.47	11.25	12.07	12.39
21	12.84	12.51	12.32	12.30	12.28	---	---	10.68	10.43	11.29	12.10	12.41
22	12.81	12.45	12.32	12.31	12.18	---	---	10.72	10.43	11.36	12.14	12.44
23	12.78	12.46	12.68	12.29	12.40	---	---	10.65	10.49	11.40	12.19	12.51
24	12.77	12.42	12.75	12.29	12.65	---	---	10.57	10.54	11.45	12.20	12.44
25	12.82	12.33	12.36	12.29	12.48	---	---	10.45	10.58	11.44	12.23	12.40
26	12.80	12.38	12.26	12.48	12.31	---	---	10.48	10.57	11.47	12.26	12.39
27	12.87	12.39	12.27	12.29	12.25	---	---	10.55	10.63	11.55	12.31	12.37
28	12.93	12.39	12.29	12.31	12.28	---	---	10.61	10.59	11.53	12.35	12.30
29	12.92	12.40	12.29	12.32	---	---	---	10.74	10.62	11.47	12.42	12.40
30	12.79	12.45	12.29	12.33	---	---	---	10.66	10.66	11.50	12.44	12.59
31	12.76	---	12.30	12.35	---	---	---	10.64	---	11.52	12.45	---
TOTAL	391.32	377.29	382.72	382.06	345.60	---	---	332.55	317.60	344.79	368.53	372.62
MEAN	12.62	12.58	12.35	12.32	12.34	---	---	10.73	10.59	11.12	11.89	12.42
MAX	13.11	12.78	12.75	12.48	12.65	---	---	10.98	10.76	11.55	12.45	12.59
MIN	12.13	12.33	12.23	12.23	12.18	---	---	10.45	10.43	10.71	11.46	12.30

CAL YR 1989 TOTAL 4566.02 MEAN 12.51 MAX 14.46 MIN 11.07

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278002 WEST PALM BEACH CANAL BELOW S352, AT CANAL POINT, FL
(Formerly published as West Palm Beach Canal Below HGS-5, at Canal Point)

LOCATION.--Lat 26°51'45", long 80°37'50", in NE¼ sec.33, T.41 S., R.37 E., Palm Beach County, Hydrologic Unit 03090202, at northwest corner of old lock, 500 ft downstream from bridge on U.S. Highway 441 at Canal Point.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1940 to current year (gage heights). Records of gage heights prior to October 1962 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to June 30, 1940 nonrecording gage at same site at datum 1.21 ft lower.

REMARKS.--No estimated daily stage. Water level materially affected by operation of gate structure S352, 700 ft upstream and pumping at structure 5-A, 20 mi downstream, and to lesser degree by local pumping and drainage for agricultural purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 18.70 ft Oct. 12, 1947; minimum 6.90 ft observed, October 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.99 ft June 26; minimum, 7.87 ft May 22, 24.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.07	10.40	11.95	11.85	11.25	11.07	11.68	9.79	11.47	10.81	10.71	---
2	10.96	10.94	11.84	11.74	11.15	11.06	11.67	9.37	11.77	10.36	10.60	---
3	10.83	10.48	11.23	11.72	11.21	11.47	11.73	9.13	11.51	9.23	10.54	---
4	10.68	10.04	10.66	10.61	11.16	11.71	11.79	9.12	11.41	11.22	10.19	---
5	10.48	10.13	10.20	9.74	11.07	11.61	11.61	8.50	11.21	10.59	11.01	---
6	10.13	11.35	9.86	11.25	11.07	11.61	11.49	8.59	11.06	10.71	10.41	10.48
7	9.77	10.34	9.98	11.45	10.95	11.46	11.49	9.02	11.10	11.23	10.28	9.99
8	11.14	10.57	10.37	11.32	11.04	11.20	11.49	9.56	10.45	11.42	10.43	10.12
9	11.01	10.75	10.81	11.32	11.01	11.15	11.32	9.31	10.84	11.20	10.71	---
10	9.27	10.74	11.35	11.28	10.74	10.88	11.36	8.63	10.82	11.19	11.06	---
11	11.74	10.63	11.58	11.18	10.89	10.75	11.44	9.38	10.66	11.01	11.21	---
12	9.78	10.67	11.60	10.96	11.63	11.04	11.51	9.48	10.09	10.68	11.07	---
13	10.76	10.67	11.60	10.72	11.35	11.56	11.31	9.62	10.18	10.59	11.02	---
14	11.39	10.44	11.40	10.86	11.48	11.58	11.32	9.48	10.23	10.96	10.61	---
15	11.06	10.35	11.40	11.04	11.54	11.79	11.28	9.47	9.94	11.23	10.00	---
16	9.61	10.58	11.63	11.11	11.47	11.88	11.04	9.39	9.30	9.77	9.97	---
17	11.05	10.38	11.27	11.02	11.15	11.94	10.55	9.41	9.09	9.62	10.57	---
18	10.76	10.31	10.98	10.69	11.15	12.09	10.80	8.89	9.53	9.33	11.49	---
19	11.08	10.13	10.78	10.92	10.91	11.96	9.55	8.17	9.82	10.66	11.53	---
20	10.97	10.48	10.68	10.81	10.99	12.09	9.93	8.41	9.64	10.71	11.63	---
21	10.92	10.95	11.24	10.71	11.59	11.98	10.16	8.56	9.57	10.15	11.30	---
22	11.11	10.96	11.36	11.04	11.51	11.87	9.43	8.49	9.56	10.36	10.87	---
23	11.08	11.07	11.60	11.01	11.46	11.85	9.91	9.04	10.00	10.71	---	---
24	11.18	11.14	11.64	11.75	11.88	11.79	10.01	8.50	11.21	10.64	---	---
25	11.44	11.12	11.95	10.71	11.64	11.80	9.05	9.18	11.37	10.64	---	---
26	11.35	11.14	12.05	11.28	11.41	11.75	8.78	8.69	11.59	10.75	---	---
27	10.99	10.96	11.50	10.99	11.05	11.73	8.98	8.82	10.14	10.73	---	---
28	10.83	10.61	9.65	10.90	11.03	11.64	8.25	8.71	9.65	10.76	---	---
29	10.69	10.81	10.98	11.05	---	11.59	8.69	9.35	10.50	10.59	---	---
30	10.60	11.78	11.65	11.21	---	11.49	9.43	10.57	10.44	10.44	---	---
31	10.45	---	11.80	11.20	---	11.61	---	11.16	---	10.81	---	---
TOTAL	334.18	320.92	346.39	343.44	314.78	359.00	317.05	283.79	314.15	329.10	---	---
MEAN	10.78	10.70	11.17	11.08	11.24	11.58	10.57	9.15	10.47	10.62	---	---
MAX	11.74	11.78	12.05	11.85	11.88	12.09	11.79	11.16	11.77	11.42	---	---
MIN	9.27	10.04	9.65	9.74	10.74	10.75	8.25	8.17	9.09	9.23	---	---

CAL YR 1989 TOTAL 4082.45 MEAN 11.18 MAX 13.08 MIN 9.16

EVERGLADES AND SOUTHEASTERN COASTAL AREA

265501080364900 LEVEE 8 CANAL NEAR CANAL POINT, FL

LOCATION.--Lat 26°55'01", long 80°36'49", in SE¼ sec.10, T.41S., R.37 E., Palm Beach County, Hydrologic Unit 03090202, on west side of U.S. Highway 441 bridge, 3.6 mi northeast of Canal Point, and 4.8 mi south of Port Mayaca.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Digital water-stage recorder and electromagnetic velocity meter recorder connected in tandem with satellite data collection platform. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharge March 17-20, Sept. 5, no estimated daily stage. Records poor. Flow regulated by gated structure at Lake Okeechobee. Flow reverses during and after periods of heavy rainfall because of pumpage into the canal from agricultural lands in the Everglades (negative figures indicate flow towards Lake Okeechobee). Discharge computed from continuous velocity record obtained from recording electromagnetic velocity meter. Data collection platform installed May, 1990.

AVERAGE DISCHARGE.--13 years (water years 1977-1989), 13.5 ft³/s, 9,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 766 ft³/s Apr. 25, 1983; maximum gage height, 17.55 ft Oct. 5, 1983; maximum daily reverse flow, 1,130 ft³/s Sept. 21, 1985; no flow for many days most years; minimum gage height, 8.80 ft Nov. 1, 4, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 55 ft³/s Mar. 26; maximum gage height, 13.54 ft Oct. 20; maximum daily reverse flow, 376 ft³/s Oct. 30; minimum gage height, 9.36 ft May 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-46	-348	-32	-11	-12	-5.9	---	---	-102	-11	-15	---
2	-24	-319	-16	-11	-10	-10	---	---	-101	-37	-64	---
3	-1.3	-334	-14	-11	-9.6	-14	---	---	-66	16	-12	---
4	36	-310	-15	-11	-12	-13	---	---	-61	-43	-19	---
5	17	-280	-15	-11	-4.2	-14	---	---	-19	-61	-34	-290
6	-8.6	-266	-15	-43	-6.3	-12	---	---	-57	-129	-50	-274
7	-32	-303	-12	-16	3.4	4.4	---	---	-42	-99	-11	-211
8	-259	-321	-11	-7.7	1.4	-3.9	---	---	50	-131	-45	-194
9	-281	-300	-15	-11	-1.8	4.5	---	---	-7.9	-59	-61	-130
10	-250	-218	-11	-14	-5.7	-4.7	---	---	-31	-166	-103	-182
11	-221	-193	-9.5	-15	-13	-16	---	---	-.40	-76	-177	-78
12	-266	-191	-11	-14	-33	3.5	---	---	11	-19	-186	-57
13	-238	-188	-14	-12	-24	11	---	---	-4.4	5.5	-133	-51
14	-272	-177	-12	-12	-2.6	12	---	---	-65	24	-65	-53
15	-330	-146	7.3	9.4	-4.4	10	---	---	24	-48	-106	-38
16	-317	-91	.04	5.5	-5.5	10	---	---	39	-144	-12	-44
17	-319	-90	-12	8.1	-8.1	5.0	---	---	38	-91	-14	-32
18	-337	-22	-8.2	1.8	-13	5.0	---	---	3.9	-82	-20	-6.3
19	-266	-16	-14	12	9.5	5.0	---	---	8.0	-54	-161	-28
20	-226	-17	-18	2.6	2.8	5.0	---	---	11	-56	-168	-7.5
21	-187	-19	-14	-13	-46	1.2	---	---	23	-66	-176	-9.0
22	-135	-34	13	-4.7	-17	1.7	---	---	6.6	-55	-177	-23
23	-242	-27	-2.3	-4.4	-7.9	18	---	---	-67	-31	-184	-54
24	-187	-14	-18	-13	-6.7	11	---	---	-65	-32	-110	-24
25	-141	-13	-12	-12	-11	30	---	---	-154	-60	-217	-8.6
26	-122	-13	-77	-9.7	-5.9	55	---	9.8	-105	-89	-164	-15
27	-170	-12	-167	-8.5	-6.4	26	---	-18	.63	-38	-130	-65
28	-230	-11	-159	-9.1	-4.7	53	---	8.4	14	-87	-214	-68
29	-226	-9.8	-20	-2.0	---	28	---	33	15	-40	-192	-75
30	-376	-12	-9.7	-4.7	---	37	---	12	33	-65	-145	-155
31	-369	---	-10	-13	---	47	---	14	---	-23	-49	---
TOTAL	-6025.9	-4294.8	-723.36	-254.4	-253.7	289.8	---	---	-670.57	-1846.5	-3214	---
MEAN	-194	-143	-23.3	-8.21	-9.06	9.35	---	---	-22.4	-59.6	-104	---
MAX	36	-9.8	13	12	9.5	55	---	---	50	24	-11	---
MIN	-376	-348	-167	-43	-46	-16	---	---	-154	-166	-217	---
AC-FT	-11950	-8520	-1430	-505	-503	575	---	---	-1330	-3660	-6370	---

CAL YR 1989 TOTAL 6264.04 MEAN 17.2 MAX 492 MIN -629 AC-FT 12420

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.21	13.15	12.45	11.68	11.38	11.50	11.73	10.66	10.81	10.91	11.66	12.79
2	12.27	13.16	12.36	11.91	11.40	11.21	11.72	10.65	10.82	10.97	11.63	12.81
3	12.32	13.15	12.17	11.81	11.35	11.15	11.88	10.69	10.84	10.93	11.54	12.80
4	12.25	13.11	12.08	11.81	11.34	11.41	11.73	10.50	10.86	10.91	11.58	12.77
5	12.19	13.08	12.01	11.81	11.32	11.58	11.66	10.58	10.64	11.00	11.62	12.77
6	12.06	13.05	11.90	12.35	11.37	11.57	11.53	10.55	10.80	11.14	11.61	12.78
7	12.22	13.05	11.82	12.42	11.33	11.35	11.56	10.42	10.77	11.10	11.52	12.76
8	12.65	13.03	11.65	12.30	11.46	11.45	11.49	10.58	10.44	11.07	11.61	12.73
9	12.72	13.07	11.57	12.22	11.44	11.22	11.35	10.45	10.76	11.02	11.67	12.70
10	12.80	12.96	11.70	11.94	11.42	11.32	11.43	10.62	10.79	11.09	11.68	12.66
11	12.94	12.89	11.73	11.68	11.38	11.24	11.47	10.48	10.85	11.02	11.75	12.59
12	12.98	12.86	11.73	11.27	11.87	11.05	11.50	10.68	10.39	11.01	11.83	12.57
13	12.97	12.83	11.50	10.98	12.31	11.30	11.33	10.57	10.42	11.06	11.87	12.55
14	13.04	12.83	11.33	10.87	12.01	11.34	11.38	10.42	10.46	11.10	12.06	12.52
15	13.14	12.82	11.18	10.78	11.94	11.46	11.35	10.59	9.93	11.33	12.15	12.56
16	13.16	12.91	11.40	10.97	11.83	11.43	11.32	10.42	9.93	11.39	12.19	12.56
17	13.13	12.79	11.76	10.86	11.74	11.49	11.30	10.39	10.30	11.39	12.24	12.57
18	13.19	12.61	12.02	10.92	11.56	11.46	11.23	10.36	10.54	11.40	12.31	12.43
19	13.28	12.55	11.88	11.04	11.54	11.43	11.07	10.40	10.11	11.46	12.37	12.44
20	13.37	12.49	11.70	11.36	11.65	11.41	10.95	10.38	10.00	11.52	12.39	12.51
21	13.12	12.50	11.42	11.46	12.38	11.58	11.06	10.29	10.10	11.54	12.41	12.49
22	13.05	12.63	11.22	11.40	12.20	11.66	11.14	10.33	10.14	11.59	12.44	12.57
23	13.03	12.57	11.67	11.48	12.08	11.73	11.08	10.30	10.67	11.60	12.48	12.64
24	13.00	12.37	11.89	11.60	12.26	11.83	11.04	10.28	10.75	11.60	12.44	12.55
25	13.00	12.09	12.09	11.46	12.33	11.83	10.89	10.08	10.84	11.65	12.53	12.47
26	12.98	11.76	12.42	11.37	11.97	11.74	10.80	10.43	10.85	11.66	12.57	12.50
27	13.05	11.54	12.48	11.26	11.75	11.77	10.57	10.38	10.80	11.71	12.61	12.48
28	13.25	11.30	12.51	11.13	11.56	11.68	10.62	10.35	10.76	11.71	12.66	12.40
29	13.29	11.06	12.36	11.10	---	11.67	10.71	9.94	10.77	11.65	12.77	12.46
30	13.21	11.56	12.16	11.30	---	11.59	10.66	10.66	10.82	11.68	12.79	12.73
31	13.18	---	11.96	11.35	---	11.68	---	10.70	---	11.70	12.80	---</

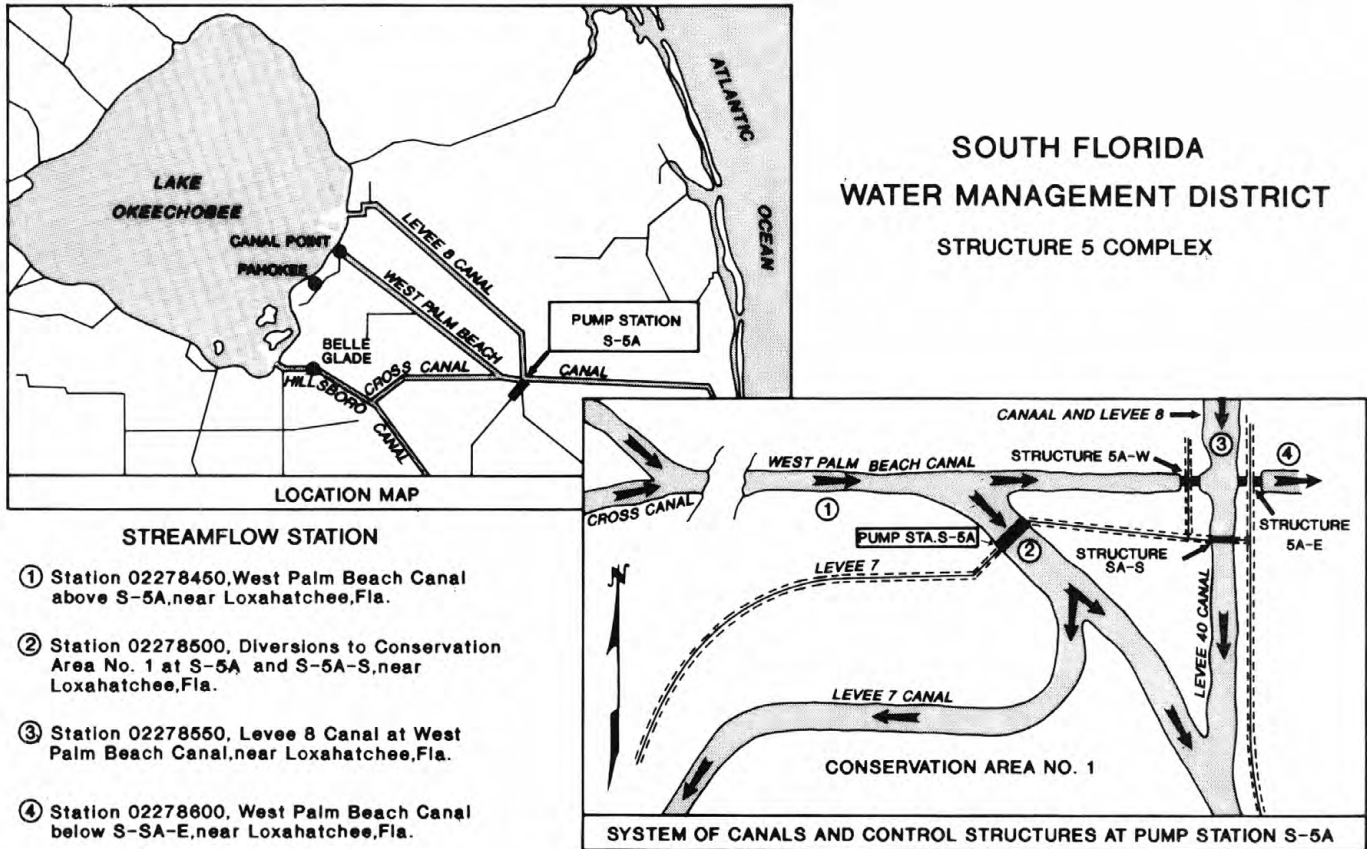


FIGURE 6. South Florida Water Management District, Structure 5 Complex.

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278450 WEST PALM BEACH CANAL ABOVE S-5A, NEAR LOXAHATCHEE, FL

LOCATION.--Lat 26°41'05", long 80°22'15", in SW¼ sec.32, T.43 S., R.43 E., Palm Beach County, Hydrologic Unit 03090202, near south bank, 500 ft upstream from pump station S-5A, 0.3 mi upstream from Levee 8 Canal, 1.1 mi downstream from bridge on U.S. Highway 441 and Cross Canal, and 6 mi west of Loxahatchee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Dual water-stage recorder, gate-opening indicator, and pump tachometer. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District bench mark). Prior to Sept. 30, 1967, deflection vane recorder at same site and auxiliary water-stage recorder at control structure 5A-W, 0.3 mi downstream. Prior to October 1981, all gages at datum 0.24 ft higher.

REMARKS.--Estimated daily discharge: Jan. 29, Apr. 6, 7, June 27-29, July 2, 3, 10, 11. Records fair, except for those estimated discharges, which are poor. Flow regulated primarily by pumpage at S-5A and to a lesser extent by operation of control structure 5A-W. Major regulation above the station occurs in Cross Canal, 1.5 mi upstream, and at Lake Okeechobee, 20 mi upstream. Discharge is the difference between pumpage at S-5A and gate discharge at S-5A-W. Negative figures indicate flow to the west. See records on Diversions to Conservation Area No. 1 at S-5A, near Loxahatchee (station 02278500; pump station S-5A, upper), for table of daily gage height.

COOPERATION.--Gate-opening and pump records provided by South Florida Water Management District.

AVERAGE DISCHARGE.--33 years, 387 ft³/s, 280,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,230 ft³/s Mar. 27, 1970; maximum gage height, 14.26 ft present datum, Oct. 3, 1957; maximum daily reverse flow, 954 ft³/s June 7, 1984; minimum gage height, 6.86 ft Oct. 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,510 ft³/s Oct. 9; maximum gage height, 12.83 ft Aug. 21; maximum daily reverse flow, 832 ft³/s Nov. 5; no flow for many days during the year; minimum gage height, 8.05 ft May 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	-319	.00	.00	175	112	127	.00	-67	-58	-150	.00
2	.00	-396	.00	.00	115	106	110	.00	-54	1360	-295	683
3	.00	.00	.00	.00	134	156	138	.00	-49	708	-308	.00
4	.00	.00	.00	806	75	112	199	.00	-77	-204	.00	.00
5	.00	-832	.00	-215	70	137	273	.00	-30	518	.00	626
6	-44	-437	-14	-261	77	195	107	.00	.00	802	713	663
7	-154	-210	.00	.00	45	199	368	.00	.00	-189	.00	.00
8	433	-421	.00	.00	.00	200	272	.00	.00	-53	.00	.00
9	2510	-392	.00	.00	.00	305	305	.00	.00	-74	.00	.00
10	646	-363	.00	.00	.00	291	346	.00	.00	-102	.00	-216
11	2030	-365	.00	.00	.00	205	322	.00	.00	-127	.00	-257
12	665	-363	-1.0	.00	173	144	320	.00	.00	-122	.00	.00
13	752	-360	.00	.00	117	193	115	.00	.00	-96	.00	-119
14	.00	-367	.00	.00	103	203	.00	.00	.00	-22	1160	-340
15	1620	-474	.00	.00	135	259	126	.00	.00	1440	668	.00
16	353	-379	.00	.00	157	239	.00	.00	.00	1720	723	.00
17	769	-279	.00	.00	97	282	.00	.00	.00	1370	781	-112
18	753	-285	.00	.00	95	245	.00	.00	.00	505	.00	-196
19	667	-292	.00	.00	89	452	.00	.00	.00	.00	1390	.00
20	629	-287	.00	.00	106	656	.00	.00	.00	545	1060	.00
21	.00	-185	.00	.00	638	302	.00	.00	.00	.00	1350	.00
22	.00	-143	.00	.00	71	263	.00	.00	.00	.00	1110	.00
23	.00	-63	25	43	76	376	.00	.00	.00	.00	621	.00
24	.00	.00	25	1760	76	230	.00	.00	-118	.00	1000	.00
25	.00	.00	34	466	12	225	.00	.00	830	-162	1420	.00
26	.00	.00	1590	770	52	221	.00	.00	1670	588	774	.00
27	.00	.00	1890	.00	52	230	.00	.00	1420	-146	748	.00
28	.00	.00	324	.00	73	218	.00	.00	741	-163	812	667
29	.00	277	.00	320	---	255	.00	.00	624	-145	725	.00
30	.00	27	.00	172	---	48	.00	.00	-72	-194	566	.00
31	.00	---	.00	122	---	243	---	33	---	-363	397	---
TOTAL	11629.00	-6908.00	3873.00	3983.00	2813.00	7302	3128.00	33.00	4818.00	7336.00	15265.00	1399.00
MEAN	375	-230	125	128	100	236	104	1.06	161	237	492	46.6
MAX	2510	277	1890	1760	638	656	368	33	1670	1720	1420	683
MIN	-154	-832	-14	-261	.00	48	.00	.00	-118	-363	-308	-340
AC-FT	23070	-13700	7680	7900	5580	14480	6200	65	9560	14550	30280	2770

CAL YR 1989 TOTAL 77254.10 MEAN 212 MAX 2540 MIN -832 AC-FT 153200
WTR YR 1990 TOTAL 54671.00 MEAN 150 MAX 2510 MIN -832 AC-FT 108400

LOCATION.--Lat 26°41'00", long 80°22'10", in S½ sec.32, T.43 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, at pump station S-5A, 1.5 mi downstream from Cross Canal, and 6 mi west of Loxahatchee.

PERIOD OF RECORD.--October 1957 to current year. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

REMARKS.--Estimated daily discharge: Jan. 15-18, Apr. 23, 24, 26, 27, June 15, 20. Records fair, except for those estimated daily discharges, which are poor. Normal flow is considered as that to the south into Conservation Area No. 1. Flow is controlled by S-5A pumpage, syphoning and regulation of Cross Canal, 1.5 mi upstream, and gate structure S352, 20 mi upstream. Negative figures indicate releases from gate S-5A-S.

AVERAGE DISCHARGE.--33 years, 364 ft³/s, 263,700 acre-ft/yr.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,510 ft³/s Oct. 9; maximum gage height, 12.83 ft Aug. 21; maximum daily reverse flow, 839 ft³/s Nov. 5; no flow for many days during the year; minimum gage height, 8.05 ft May 22.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	-570	.00	.00	.00	.00	.00	.00	.00	.00	.00	273
2	.00	-554	.00	.00	.00	.00	.00	.00	.00	1600	-218	873
3	.00	-248	.00	.00	.00	.00	.00	.00	.00	1150	-281	278
4	.00	176	.00	806	.00	.00	.00	.00	.00	.00	.00	268
5	.00	-839	.00	-351	.00	.00	.00	.00	.00	903	.00	834
6	-88	-460	-5.6	-432	.00	.00	.00	.00	.00	1290	801	851
7	-232	-228	.00	.00	-140	.00	.00	.00	.00	.00	.00	260
8	403	-574	.00	.00	-150	.00	.00	.00	.00	.00	.00	261
9	2510	-565	.00	.00	-113	.00	.00	.00	.00	.00	.00	257
10	646	-614	.00	.00	-113	.00	.00	.00	.00	.00	.00	142
11	2030	-617	.00	.00	-40	.00	.00	.00	.00	.00	.00	-176
12	665	-603	-48	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	752	-601	-109	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	-605	-115	.00	.00	.00	.00	.00	.00	.00	1160	-346
15	1620	-655	-119	-7.7	.00	.00	.00	.00	-72	1670	668	.00
16	353	-493	-110	-27	.00	25	.00	.00	-68	1860	723	.00
17	769	-336	-101	-27	.00	.00	.00	.00	-44	1370	781	-144
18	753	-379	-34	-105	.00	.00	.00	.00	-45	505	87	-255
19	667	-386	.00	-190	.00	238	.00	.00	-47	.00	1390	.00
20	629	-384	.00	-197	.00	473	.00	.00	-18	545	1060	.00
21	.00	-363	.00	-190	590	.00	.00	.00	.00	.00	1430	.00
22	.00	-348	-27	-171	.00	.00	.00	.00	.00	.00	1260	.00
23	.00	-158	-25	-95	.00	174	-94	.00	.00	.00	621	.00
24	.00	.00	.00	1670	.00	.00	-74	.00	.00	.00	1150	.00
25	.00	.00	.00	375	.00	.00	.00	.00	1170	.00	1790	.00
26	.00	.00	1590	706	.00	.00	-92	.00	1960	751	975	.00
27	-283	.00	1890	.00	.00	.00	-76	.00	1800	.00	956	.00
28	-351	.00	324	.00	.00	.00	.00	.00	1100	.00	1050	667
29	-185	242	.00	.00	---	.00	.00	.00	737	.00	932	.00
30	-11	.00	.00	.00	---	.00	.00	.00	.00	-49	770	.00
31	-269	---	.00	.00	---	.00	---	.00	---	-228	620	---
TOTAL	10378.00	-10162.00	3110.40	1764.30	34.00	910.00	-336.00	0.00	6473.00	11367.00	17725.00	4043.00
MEAN	335	-339	100	56.9	1.21	29.4	-11.2	.000	216	367	572	135
MAX	2510	242	1890	1670	590	473	.00	.00	1960	1860	1790	873
MIN	-351	-839	-119	-432	-150	.00	-94	.00	-72	-228	-281	-346
AC-FT	20580	-20160	6170	3500	67	1800	-666	.00	12840	22550	35160	8020

CAL YR 1989	TOTAL 56703.40	MEAN 155	MAX 2540	MIN -839	AC-FT 112500
WTR YR 1990	TOTAL 45306.70	MEAN 124	MAX 2510	MIN -839	AC-FT 89870

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278500 DIVERSIONS TO CONSERVATION AREA NO. 1 AT S-5A-S. NEAR LOXAHATCHEE. FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.38	10.75	12.24	12.15	11.44	11.19	11.58	9.95	11.72	11.04	11.04	10.82
2	11.28	11.26	11.93	12.00	11.27	11.14	11.49	9.58	12.00	10.16	10.90	10.40
3	11.20	10.78	11.58	11.99	11.28	11.62	11.62	9.14	11.77	9.56	10.91	10.53
4	11.00	10.32	11.00	10.44	11.34	12.01	11.58	9.04	11.69	11.75	10.50	10.81
5	10.75	10.69	10.53	9.99	11.30	11.88	11.39	8.73	11.64	10.93	11.29	10.92
6	10.40	11.67	10.10	11.54	11.18	11.77	11.05	8.88	11.33	10.59	10.44	10.40
7	10.06	10.64	10.13	11.69	11.12	11.62	11.22	8.95	11.34	11.56	10.69	10.34
8	11.15	10.86	10.42	11.61	11.15	11.27	11.43	9.37	10.87	11.62	10.71	10.40
9	9.53	11.05	11.16	11.62	11.15	11.11	11.17	9.20	11.07	11.43	10.98	10.38
10	9.57	11.06	11.69	11.61	11.00	11.00	11.06	8.92	11.08	11.42	11.34	10.47
11	10.38	10.94	11.77	11.49	11.19	10.93	11.01	9.53	10.97	11.22	11.49	11.04
12	9.84	10.96	11.87	11.22	11.69	10.80	11.36	9.70	10.55	10.88	11.36	10.83
13	10.56	10.97	11.81	11.10	11.54	11.17	11.02	9.86	10.45	10.83	11.29	10.61
14	11.59	10.78	11.72	11.01	11.51	11.09	11.14	9.62	10.43	11.27	10.44	10.78
15	10.50	10.70	11.48	11.21	11.54	11.15	11.23	9.69	9.99	11.03	10.06	10.58
16	9.93	10.96	11.81	11.14	11.45	11.11	11.04	9.25	9.56	9.23	10.03	10.28
17	11.02	10.73	11.56	11.10	11.26	11.26	10.47	9.33	9.36	9.26	10.57	10.29
18	10.72	10.62	11.22	10.79	11.22	11.72	10.52	9.02	9.23	9.66	11.78	10.76
19	11.02	10.43	11.05	10.96	11.01	11.50	9.76	8.39	9.23	11.03	11.42	10.77
20	10.81	10.49	10.90	11.01	10.99	11.40	9.33	8.42	9.61	10.58	11.64	11.01
21	11.23	10.79	11.56	10.85	10.93	11.85	10.00	8.52	9.44	10.44	10.99	10.90
22	11.43	10.81	11.65	11.17	11.60	11.79	9.73	8.19	9.81	10.67	10.67	10.98
23	11.39	10.94	12.02	11.26	11.58	11.51	9.38	8.72	10.29	11.02	10.86	11.21
24	11.48	11.02	12.15	11.04	12.20	11.42	9.84	8.24	11.55	10.92	11.03	11.74
25	11.75	10.98	12.28	10.86	11.96	11.54	9.07	8.78	11.59	11.00	10.87	12.13
26	11.66	11.07	11.48	11.13	11.68	11.41	8.72	8.88	11.31	10.80	10.30	11.79
27	11.34	11.12	10.81	11.27	11.28	11.39	8.83	9.06	10.42	11.09	10.78	11.37
28	11.20	10.89	9.89	11.19	11.17	11.09	8.47	9.00	9.93	11.08	10.43	10.34
29	11.08	11.05	11.24	11.30	---	11.00	8.93	9.52	10.53	10.88	10.32	11.03
30	10.90	12.11	11.87	11.46	---	10.81	9.43	10.85	10.71	10.75	10.13	11.66
31	10.75	---	12.03	11.47	---	11.01	---	11.44	---	11.01	10.13	---
TOTAL	336.90	327.44	352.95	348.67	318.03	351.56	312.87	285.77	319.47	334.71	335.39	325.57
MEAN	10.87	10.91	11.39	11.25	11.36	11.34	10.43	9.22	10.65	10.80	10.82	10.85
MAX	11.75	12.11	12.28	12.15	12.20	12.01	11.62	11.44	12.00	11.75	11.78	12.13
MIN	9.53	10.32	9.89	9.99	10.93	10.80	8.47	8.19	9.23	9.23	10.03	10.28
CAL YR 1989	TOTAL 4037.27		MEAN 11.06	MAX 12.36		MIN 9.01						
WTR YR 1990	TOTAL 3949.33		MEAN 10.82	MAX 12.28		MIN 8.19						

LOCATION.--Lat 26°41'00", long 80°22'10", in S½ sec.32, T.43 S., R40 E., Palm Beach County, Hydrologic Unit 03090202, at pump station S-5A, 1.5 mi downstream from Cross Canal, and 6 mi west of Loxahatchee.

PERIOD OF RECORD.--January 1955 to current year (gage heights). Records of gage height prior to October 1962 are available from the files of the Geological Survey.

REMARKS.--No estimated daily gage heights. Gage records water level in Conservation Area No. 1 at structure 5 complex. Stage is affected by pumping at S-5A and S-6 and the operation of gated-control structures in levees 39 and 40.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 16.60 ft Aug. 24; minimum, 11.53 ft Apr. 8.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.14	15.89	14.90	14.85	14.59	13.88	12.25	13.11	14.06	14.87	15.31	16.01
2	16.10	15.83	14.91	14.84	14.56	13.94	12.38	13.12	14.09	15.12	15.27	15.97
3	16.04	15.85	14.85	14.85	14.54	13.90	12.36	13.09	14.09	15.27	15.27	15.93
4	16.01	15.82	14.83	15.05	14.52	13.88	12.35	13.06	14.13	15.18	15.40	15.88
5	16.00	15.73	14.83	14.87	14.34	13.88	12.31	13.05	14.16	15.34	15.47	15.87
6	15.96	15.66	14.82	14.82	14.37	13.82	12.10	13.00	14.16	15.49	15.67	15.89
7	15.92	15.68	14.81	14.86	14.31	13.75	11.89	12.87	14.17	15.32	15.62	15.89
8	15.99	15.61	14.84	14.82	14.24	13.72	11.66	12.89	14.18	15.27	15.61	15.87
9	16.26	15.56	14.81	14.76	14.21	13.66	11.92	12.91	14.22	15.25	15.66	15.86
10	16.21	15.49	14.74	14.72	14.19	13.59	12.35	12.91	14.20	15.25	15.73	15.84
11	16.26	15.42	14.74	14.72	14.11	13.53	12.57	12.91	14.17	15.25	15.83	15.78
12	16.20	15.35	14.76	14.70	14.00	13.45	12.66	12.95	14.17	15.25	15.85	15.80
13	16.24	15.29	14.70	14.59	14.05	13.35	12.84	12.95	14.16	15.30	15.85	15.81
14	16.18	15.24	14.65	14.63	14.02	13.23	12.97	12.91	14.16	15.44	15.98	15.74
15	16.27	15.18	14.66	14.60	13.99	13.13	12.98	12.89	14.15	15.60	16.07	15.75
16	16.23	15.12	14.66	14.57	13.94	13.03	13.07	12.88	14.14	15.71	16.17	15.75
17	16.25	15.01	14.60	14.56	13.83	12.91	13.17	12.83	14.11	15.84	16.12	15.73
18	16.25	15.00	14.58	14.51	13.76	12.69	13.17	12.77	14.08	15.91	16.09	15.67
19	16.26	15.00	14.58	14.47	13.70	12.83	13.13	12.75	14.08	15.83	16.15	15.66
20	16.18	14.95	14.52	14.43	13.63	13.26	13.16	12.72	14.08	15.83	16.23	15.68
21	16.13	14.89	14.47	14.40	14.05	13.20	13.18	12.65	14.06	15.72	16.21	15.70
22	16.08	14.87	14.39	14.38	14.03	13.18	13.19	12.60	14.06	15.64	16.22	15.71
23	16.06	14.87	14.38	14.38	13.96	13.14	13.14	12.59	14.10	15.57	16.21	15.71
24	16.05	14.81	14.37	14.86	13.95	13.03	13.05	12.62	14.18	15.52	16.34	15.74
25	16.07	14.83	14.48	14.86	13.95	12.87	13.06	12.79	14.56	15.49	16.33	15.72
26	16.06	14.85	14.95	14.73	13.93	12.76	13.02	12.99	14.97	15.51	16.34	15.71
27	15.97	14.88	15.20	14.62	13.94	12.58	12.94	13.26	15.12	15.48	16.30	15.69
28	15.94	14.87	15.17	14.61	13.92	12.42	12.96	13.54	15.12	15.46	16.28	15.81
29	15.94	14.96	14.98	14.64	---	12.31	13.10	13.76	14.96	15.45	16.26	15.84
30	15.96	14.90	14.96	14.62	---	12.18	13.14	13.83	14.87	15.44	16.18	15.81
31	15.95	---	14.97	14.59	---	12.00	---	13.97	---	15.39	16.12	

CAL YR 1989	TOTAL 5002.49	MEAN 13.71	MAX 16.36	MIN 10.08
WTR YR 1990	TOTAL 5333.27	MEAN 14.61	MAX 16.34	MIN 11.66

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278550 LEVEE 8 CANAL AT WEST PALM BEACH CANAL, NEAR LOXAHATCHEE, FL

LOCATION.--Lat 26°41'05", long 80°21'35", in SE¼ sec.32, T.43 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, at upstream side in center of span of bridge on U.S. Highway 441, 50 ft upstream from mouth and West Palm Beach Canal, 0.2 mi east of pump station S-5A, and 6 mi west of Loxahatchee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1957 to current year. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

REVISED RECORDS.--WRD FL-84-2A: 1982(m).

GAGE.--Water-stage recorder and gate-opening indicators. Datum of gage is National Geodetic Vertical Datum of 1929. (South Florida Water Management District bench mark). Prior to Sept. 30, 1967, deflection vane recorder at same site. Auxiliary water-stage recorders upstream from S-5A and downstream from S-5A-E. Prior to October 1981 all gages at datum 0.24 ft higher.

REMARKS.--Estimated daily discharge Jan. 15-18, 29, Apr. 6, 7, 23, 24, 26, 27, May 29; estimated gage heights, Jan. 13-18, 27-29, Apr. 6, 7, 18-27, May 2, 17-20, 25-29. Records fair, except those for estimated daily discharges and gage heights, which are poor. Flow regulated by operation of S-5A-E, S-5A-S, S-5A-W just downstream and pumpage at S-5A. Gate operation and pumpage occasionally reverses the flow (negative figures indicate flow reversed). Discharge is summation of flows at S-5A-E, S-5A-S and S-5A-W. Discharge computed from relation between discharge, head, and gate openings.

COOPERATION.--Gate-opening record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--32 years, 143 ft³/s, 103,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,190 ft³/s Mar. 31, 1970; maximum gage height, 19.34 ft present datum, Sept. 27, 1960, from floodmark; maximum daily reverse flow, 2,540 ft³/s Apr. 27, 1982; minimum gage height, 8.29 ft present datum, Mar. 17, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 529 ft³/s June 28; maximum gage height, 17.52 ft Aug. 21; maximum daily reverse flow, 351 ft³/s Oct. 28; no flow for many days during the year; minimum gage height, indeterminate well ran dry.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	-251	.00	.00	-175	-112	-91	.00	67	124	150	273
2	.00	-158	.00	.00	-115	-106	-110	.00	54	165	77	190
3	.00	-248	.00	.00	-134	-156	-138	.00	49	241	27	278
4	.00	176	.00	.00	-75	-112	-152	.00	77	53	.00	268
5	.00	-7.0	.00	-136	-70	-137	-172	.00	30	234	.00	208
6	-44	-23	8.4	-171	-77	-97	-50	.00	.00	227	88	188
7	-78	-18	.00	.00	-141	-146	-327	.00	.00	155	.00	260
8	-30	-153	.00	.00	-86	-169	-226	.00	.00	101	.00	261
9	.00	-173	.00	.00	-60	-261	-291	.00	.00	150	.00	257
10	.00	-251	.00	.00	-98	-244	-346	.00	.00	135	.00	358
11	.00	-252	.00	.00	-40	-164	-322	---	.00	129	.00	137
12	.00	-240	-47	.00	-122	-127	-320	---	.00	110	.00	59
13	.00	-241	-109	.00	-88	-159	-115	---	13	104	.00	153
14	.00	-238	-115	.00	-86	-88	.00	---	7.1	54	.00	33
15	.00	-181	-96	-7.7	-70	-145	-104	---	-21	194	.00	.00
16	.00	-114	-49	-27	-106	-108	.00	.00	16	123	.00	.00
17	.00	-5.0	-52	-27	-54	-171	.00	.00	33	.00	.00	.00
18	.00	-16	-18	-105	-58	-129	.00	.00	38	.00	87	-59
19	.00	-29	.00	-137	-55	-98	.00	.00	37	.00	.00	.00
20	.00	-34	.00	-131	-81	-112	.00	.00	8.0	.00	.00	.00
21	.00	-105	.00	-119	-92	-177	.00	.00	.00	.00	84	.00
22	.00	-89	-4.0	-111	-71	-132	.00	.00	.00	.00	150	.00
23	.00	-39	-13	-106	-76	-86	164	.00	.00	.00	.00	.00
24	.00	.00	10	-87	-76	-111	18	.00	139	.00	147	.00
25	.00	.00	-17	-123	-12	-94	.00	.00	280	162	375	.00
26	.00	.00	.00	-64	-52	-93	107	.00	275	163	201	.00
27	-283	.00	.00	.00	-52	-113	-142	.00	387	146	208	.00
28	-351	.00	.00	.00	-73	-100	.00	.00	529	163	236	.00
29	-185	-35	.00	-320	---	-125	.00	-146	41	145	207	.00
30	-11	-27	.00	-131	---	83	.00	-47	120	145	204	.00
31	-269	---	.00	-102	---	-121	---	-33	---	135	223	---
TOTAL	-1251.00	-2751.00	-501.60	-1904.70	-2295	-3910	-2617.00	---	2179.10	3358.00	2464.00	2864.00
MEAN	-40.4	-91.7	-16.2	-61.4	-82.0	-126	-87.2	---	72.6	108	79.5	95.5
MAX	.00	176	10	.00	-12	83	164	---	529	241	375	358
MIN	-351	-252	-115	-320	-175	-261	-346	---	-21	.00	.00	-59
AC-FT	-2480	-5460	-995	-3780	-4550	-7760	-5190	---	4320	6660	4890	5680

CAL YR 1989 TOTAL -11366.40 MEAN -31.1 MAX 723 MIN -678 AC-FT -22550

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278550 LEVEE 8 CANAL AT WEST PALM BEACH CANAL, NEAR LOXAHATCHEE, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.26	15.83	12.79	11.78	11.37	11.07	11.54	---	11.76	11.06	11.09	16.06
2	12.17	15.76	12.46	12.07	11.19	11.03	11.44	9.85	12.02	11.12	11.14	16.08
3	11.99	15.84	12.42	11.78	11.24	11.40	11.57	---	11.78	11.35	11.65	15.97
4	11.83	15.83	12.32	11.91	11.32	11.90	11.44	---	11.70	11.84	12.15	15.93
5	11.60	15.56	12.21	11.93	11.28	11.71	11.22	---	11.86	11.38	12.58	15.98
6	11.54	15.56	12.07	12.79	11.17	11.43	11.00	---	11.79	11.25	12.24	16.01
7	12.58	15.66	11.92	12.45	11.19	11.27	10.90	---	11.40	11.65	12.16	15.93
8	13.25	15.55	11.77	12.38	11.30	11.12	11.27	---	11.33	11.63	12.31	15.92
9	13.33	15.12	11.92	12.31	11.04	10.90	10.97	---	11.06	11.45	12.74	15.90
10	13.45	14.55	11.94	11.95	11.00	10.82	10.80	---	11.23	11.44	13.98	15.39
11	13.83	14.47	11.86	11.65	11.49	10.83	10.79	---	11.29	11.25	14.98	13.19
12	13.83	14.45	11.79	11.04	11.47	10.73	11.14	---	10.97	10.92	15.24	14.01
13	13.59	14.40	11.74	10.64	11.51	11.08	10.82	---	10.69	10.85	15.33	14.30
14	13.64	14.33	11.35	10.25	11.36	10.99	10.52	---	10.32	11.27	16.07	12.93
15	14.37	14.11	11.16	9.93	11.37	11.00	10.82	---	10.65	11.33	16.54	13.33
16	14.30	13.88	11.65	10.18	11.24	11.05	10.54	---	11.15	10.34	16.48	13.67
17	14.08	13.25	12.07	9.93	11.17	11.09	10.55	9.84	11.06	12.61	16.73	13.51
18	14.06	12.77	12.23	10.46	11.14	11.59	10.86	10.08	10.93	13.30	16.93	13.22
19	14.16	12.69	11.99	11.12	10.93	11.30	10.48	9.87	10.70	13.57	16.75	12.93
20	14.35	12.67	11.94	11.45	10.88	11.39	10.33	9.81	10.53	13.74	16.79	12.97
21	14.11	12.84	11.24	11.63	11.38	11.65	9.85	---	10.37	13.69	17.02	12.58
22	13.99	12.99	11.37	11.69	11.47	11.64	10.06	---	11.16	13.62	16.35	12.41
23	14.07	12.88	12.16	11.56	11.52	11.35	9.79	---	12.29	13.54	16.85	12.37
24	13.50	12.39	12.15	11.62	12.14	11.30	10.18	---	12.31	13.55	16.86	12.33
25	13.17	11.88	12.18	11.04	12.01	11.43	10.12	9.87	12.00	13.51	16.44	12.13
26	12.99	11.57	12.87	11.49	11.51	11.31	9.78	9.97	11.74	12.48	16.44	12.11
27	14.58	11.32	13.40	10.78	11.16	11.27	10.02	10.17	11.24	12.62	16.42	12.06
28	15.92	11.11	13.02	10.41	10.80	10.98	---	10.30	10.34	12.33	16.42	11.89
29	15.93	11.03	12.41	10.76	---	10.86	---	10.41	10.75	11.87	16.38	12.89
30	15.96	12.29	12.10	11.39	---	10.80	---	10.81	10.89	11.52	16.28	13.42
31	15.94	---	11.74	11.43	---	10.88	---	10.98	---	11.30	16.23	---
TOTAL	424.37	412.58	374.24	351.80	316.65	347.17	---	---	337.31	373.38	465.57	417.42
MEAN	13.69	13.75	12.07	11.35	11.31	11.20	---	---	11.24	12.04	15.02	13.91
MAX	15.96	15.84	13.40	12.79	12.14	11.90	---	---	12.31	13.74	17.02	16.08
MIN	11.54	11.03	11.16	9.93	10.80	10.73	---	---	10.32	10.34	11.09	11.89

CAL YR 1989 TOTAL 4554.95 MEAN 12.48 MAX 15.96 MIN 10.05

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278600 WEST PALM BEACH CANAL BELOW S-5A-E, NEAR LOXAHATCHEE, FL

LOCATION.--Lat26°41'05", long 80°21'50", in SE¼ sec.32, T.43 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, near left bank, 350 ft downstream from control structure 5A-E, and 6 mi west of Laxahatchee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--September 1955 to current year. Monthly discharge only for September 1955, published in WSP 1724. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

GAGE.--Water-stage recorder and gate opening indicator. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District bench mark). Auxiliary water-stage recorder in Levee 8 Canal 50 ft upstream from S-5A-E. Prior to October 1981 all gages at datum 0.24 ft higher.

REMARKS.--Estimated daily discharge: Apr. 6, 7, 23, 24, 26, 27, May 29. No estimated daily stage. Records good, except those for estimated daily discharge, which are fair. Normal flow to east regulated at S-5A-E for irrigation and drainage. Flow diverted upstream from station through S-5A-S and by pumpage at S-5A. Flow materially affected by regulation of Cross Canal 1.5 mi upstream and gate structures S352, 20 mi upstream. Negative figures indicate flow to the west. Discharge computed from relation between discharge, head, and gate openings at S-5A-E.

COOPERATION.--Gate-opening record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--34 years (water years 1956-89), 168 ft³/s, 121,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,150 ft³/s June 26, 1984; maximum gage height, 16.38 ft present datum, Oct. 23, 1983; maximum daily reverse flow, 930 ft³/s Mar. 29, 1982; no flow for many days each year; minimum gage height, 6.24 ft present datum, Sept. 9, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 258 ft³/s Apr. 23; maximum gage height, 12.83 ft Aug. 21; maximum daily reverse flow, 261 ft³/s July 6; no flow for many days; minimum gage height, 7.58 ft May 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	36	.00	.00	66	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	-75	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	-201	.00	.00
4	.00	.00	.00	.00	.00	.00	47	.00	.00	-151	.00	.00
5	.00	.00	.00	.00	.00	.00	101	.00	.00	-151	.00	.00
6	.00	.00	.00	.00	.00	98	57	.00	.00	-261	.00	.00
7	.00	.00	.00	.00	44	53	41	.00	.00	-34	.00	.00
8	.00	.00	.00	.00	64	31	46	.00	.00	48	.00	.00
9	.00	.00	.00	.00	53	44	14	.00	.00	76	.00	.00
10	.00	.00	.00	.00	15	47	.00	.00	.00	33	.00	.00
11	.00	.00	.00	.00	.00	41	.00	---	.00	1.8	.00	56
12	.00	.00	.00	.00	51	17	.00	---	.00	-12	.00	59
13	.00	.00	.00	.00	29	34	.00	---	13	8.0	.00	34
14	.00	.00	.00	.00	17	115	.00	---	7.1	32	.00	39
15	.00	.00	23	.00	65	114	22	---	51	-40	.00	.00
16	.00	.00	61	.00	51	106	.00	.00	84	-20	.00	.00
17	.00	52	49	.00	43	111	.00	.00	77	.00	.00	32
18	.00	78	16	.00	37	116	.00	.00	83	.00	.00	.00
19	.00	65	.00	53	34	116	.00	.00	84	.00	.00	.00
20	.00	63	.00	66	25	71	.00	.00	26	.00	.00	.00
21	.00	73	.00	71	-44	125	.00	.00	.00	.00	.00	.00
22	.00	116	23	60	.00	131	.00	.00	.00	.00	.00	.00
23	.00	56	37	32	.00	116	258	.00	.00	.00	.00	.00
24	.00	.00	35	.00	.00	119	92	.00	21	.00	.00	.00
25	.00	.00	17	-32	.00	131	.00	.00	-60	.00	.00	.00
26	.00	.00	.00	.00	.00	128	199	.00	-11	.00	.00	.00
27	.00	.00	.00	.00	.00	117	-66	.00	10	.00	.00	.00
28	.00	.00	.00	.00	.00	118	.00	.00	170	.00	.00	.00
29	.00	.00	.00	.00	---	130	.00	-146	-72	.00	.00	.00
30	.00	.00	.00	41	---	131	.00	-47	48	.00	.00	.00
31	.00	---	.00	20	---	122	---	.00	---	.00	.00	---
TOTAL	0.00	503.00	261.00	311.00	484.00	2482.00	847.00	---	531.10	-680.20	0.00	220.00
MEAN	.000	16.8	8.42	10.0	17.3	80.1	28.2	---	17.7	-21.9	.000	7.33
MAX	.00	116	61	71	65	131	258	---	170	76	.00	59
MIN	.00	.00	.00	-32	-44	.00	-66	---	-72	-261	.00	.00
AC-FT	.00	998	518	617	960	4920	1680	---	1050	-1350	.00	436

CAL YR 1989 TOTAL 9179.60 MEAN 25.1 MAX 239 MIN .00 AC-FT 18210

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.96	10.84	11.66	10.75	11.09	9.58	9.94	8.96	10.04	11.04	9.32	8.90
2	10.78	10.73	11.06	10.54	10.83	9.44	9.43	8.80	10.45	11.17	9.47	8.78
3	10.25	10.79	10.81	10.55	10.56	9.42	10.27	8.57	10.38	11.51	9.45	8.74
4	10.10	10.88	10.67	10.59	10.16	9.78	9.04	8.37	10.79	11.89	10.23	8.73
5	10.09	11.10	10.67	10.81	9.98	9.59	10.14	8.73	11.16	11.46	10.96	8.67
6	9.55	10.67	10.37	10.94	9.57	8.72	10.21	8.68	10.49	11.44	10.90	8.49
7	9.23	10.41	10.17	10.82	9.03	10.22	10.17	8.70	10.65	11.67	9.08	8.34
8	10.07	10.50	10.14	10.81	9.54	10.00	10.37	8.50	10.72	11.62	9.44	8.29
9	11.41	10.67	10.90	10.82	9.83	10.08	10.62	8.52	8.76	11.43	11.06	8.32
10	11.51	10.26	11.37	10.67	10.24	9.87	10.30	8.62	8.59	11.44	11.00	8.51
11	11.46	9.80	10.99	10.53	10.43	10.11	9.43	9.32	8.73	11.25	10.52	8.77
12	11.05	9.72	10.69	10.35	10.46	10.30	9.46	9.55	9.20	10.92	10.60	9.47
13	10.73	10.05	10.67	10.45	10.89	9.54	9.73	9.60	8.92	10.85	10.41	9.59
14	10.84	10.79	10.32	10.28	10.15	8.85	9.23	9.62	10.01	11.26	10.40	9.31
15	10.74	10.37	9.65	10.21	9.57	9.63	9.21	8.96	8.92	11.36	10.25	9.00
16	10.71	10.24	10.07	10.06	10.12	9.85	9.87	8.43	9.83	10.03	9.92	8.53
17	10.85	9.22	11.06	9.51	10.38	9.78	9.64	8.42	9.94	11.19	10.56	8.78
18	11.38	10.21	11.10	9.03	10.56	10.17	9.02	8.19	9.62	11.01	9.67	9.00
19	11.51	10.90	10.53	8.94	10.44	9.86	8.86	8.35	9.36	9.79	10.02	9.03
20	11.18	10.98	9.85	9.58	10.60	9.88	9.00	8.29	9.83	9.50	10.88	9.35
21	10.83	10.59	9.82	9.47	11.49	10.00	9.00	8.13	9.67	8.84	11.07	8.72
22	10.69	10.00	9.37	10.19	11.30	9.82	8.96	7.93	10.03	8.72	10.80	8.64
23	10.70	11.27	9.87	10.69	11.30	9.91	9.25	8.00	10.25	8.88	10.63	8.63
24	10.67	10.97	10.11	11.41	11.12	9.81	9.59	8.03	11.20	9.16	10.39	8.80
25	11.13	10.73	10.40	11.21	10.75	9.62	8.76	8.58	12.06	9.33	10.52	8.70
26	11.19	10.64	11.37	11.02	10.50	9.58	8.56	9.12	11.76	9.12	10.15	8.56
27	11.19	10.65	11.75	9.94	10.27	9.83	9.57	9.74	11.27	8.93	9.76	8.48
28	11.29	10.53	11.06	10.66	9.93	9.51	8.89	10.10	10.30	8.78	9.55	8.97
29	10.95	11.21	10.91	10.57	---	9.08	9.12	10.37	10.81	8.73	10.43	9.51
30	10.81	11.75	10.90	9.52	---	8.97	9.17	10.80	10.88	8.59	10.21	9.40
31	10.91	---	10.83	10.59	---	9.30	---	10.32	---	8.59	9.66	---
TOTAL	334.76	317.47	329.14	321.51	291.09	300.10	284.81	276.30	304.62	319.50	317.31	265.01
MEAN	10.											

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL

LOCATION.--Lat 26°38'40", long 80°03'22", in NW¼ sec.15, T.44 S., R.34 E., Palm Beach County, Hydrologic Unit 03090202, on left bank in concrete control house north of control structure, 200 ft downstream from bridge on U.S. Highway 1, and 4.9 mi south of courthouse in West Palm Beach.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to current year. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

GAGE.--Digital stage and gate recorders. Datum of gage is National Geodetic Vertical Datum of 1929. (State Department of Transportation bench mark). Prior to May 1, 1984, digital upstream stage recorder, and gate-opening indicator at site 200 ft upstream at same datum. Prior to April 26, 1940, nonrecording gage, April 26, 1940 to December 20, 1949, water-stage record, at same site at datum 0.25 ft higher, and December 20, 1949 to June 3, 1959, at same site and present datum. June 3, 1959 to September 30, 1985, water-stage and deflection vane recorder at site 800 ft upstream at present datum.

REMARKS.--Estimated daily discharge: Oct. 3 to Nov. 2, Jan. 9. Records fair, except for those estimated daily discharges, which are poor. Flow regulated by operation of control structure. Since January 1954, flow affected by control structures 20 mi upstream. Discharge computed from relations between discharge and gate openings.

COOPERATION.--Gate-operation log provided by South Florida Water Management District.

AVERAGE DISCHARGE.--49 years (water years 1941-84, 1986-90), 686 ft³/s, 497,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,640 ft³/s, Mar. 29, 1982; maximum gage height, 10.89 ft Oct. 13, 1947, present datum; minimum flow consists of leakage estimated as 10 ft³/s for many days in 1967-1984; no flow for some days during 1984 - 1990; minimum gage height, 2.85 ft Dec. 3, 1953; Oct. 9, 1963, and Sept. 9, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,060 ft³/s July 14; maximum gage height, 8.95 ft Oct. 19, 20; no flow for some days; minimum gage height, 6.89 ft Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	.30	.00	163	.00	.00	.00	.00	447	357	307	428
2	243	7.1	.00	12	.00	.00	.00	.00	403	1560	374	452
3	105	137	.00	.00	.00	.00	.00	.20	91	859	732	452
4	82	3.5	.00	.10	.00	.00	.00	.00	372	580	403	451
5	8.0	.00	.00	286	.00	.00	.00	.00	504	391	751	452
6	104	.00	.00	68	.00	.00	.00	.00	91	699	751	451
7	.00	.00	.00	157	.00	.00	.00	.00	203	528	405	450
8	.00	.00	.00	166	.00	.00	.00	.00	450	387	453	450
9	21	.00	.00	71	.00	.00	.00	.00	199	415	623	197
10	201	.00	.00	.00	.00	.00	.00	.00	275	371	497	166
11	563	.00	.00	.00	.00	.00	.00	.00	.00	341	966	39
12	492	.00	.00	.00	.00	.00	.00	.00	239	379	1220	.00
13	256	.00	.00	.00	.00	.00	.00	.00	.00	933	1040	307
14	129	.00	.00	.00	.00	.00	.00	.00	1.5	2060	1330	113
15	167	.00	.00	.00	.00	.00	.00	.00	.00	1250	985	232
16	167	.00	.00	.00	.00	.00	.00	.00	.00	342	798	182
17	32	.00	.00	.00	.00	.00	.00	.00	.00	1490	891	87
18	167	.00	.00	.00	.00	.00	.00	.10	.00	1550	891	88
19	228	.00	.00	.00	.00	.00	.00	.00	.00	758	629	854
20	81	.00	.00	.00	.00	.00	.00	.00	.00	635	899	700
21	141	.00	.00	4.3	.00	.00	.00	.00	.00	673	898	463
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	542	897	565
23	.00	.00	.00	.00	.00	.00	.00	.00	91	635	897	524
24	95	.00	.00	.00	.00	.00	.00	.00	349	515	897	454
25	269	.00	.00	.00	.00	.00	.00	.00	541	420	897	235
26	172	.00	.00	.00	.00	.00	.00	.00	883	544	897	287
27	313	.00	190	.00	.00	.00	.00	842	686	568	644	355
28	200	.00	137	.00	.00	.00	.00	512	609	661	889	1310
29	155	.00	93	.00	---	.00	.00	443	432	438	886	1360
30	80	.00	90	.00	---	.00	.00	634	418	339	887	858
31	.00	---	52	.00	---	.00	---	540	---	372	611	---
TOTAL	4738.00	147.90	562.00	927.40	0.00	0.00	0.00	2971.30	7284.50	21592	24245	12962.00
MEAN	153	4.93	18.1	29.9	.000	.000	.000	95.8	243	697	782	432
MAX	563	137	190	286	.00	.00	.00	842	883	2060	1330	1360
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	339	307	.00
AC-FT	9400	293	1110	1840	.00	.00	.00	5890	14450	42830	48090	25710

CAL YR 1989 TOTAL 45242.10 MEAN 124 MAX 1380 MIN .00 AC-FT 89740
WTR YR 1990 TOTAL 75430.10 MEAN 207 MAX 2060 MIN .00 AC-FT 149600

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.32	8.75	8.66	8.71	8.55	7.91	7.73	8.80	8.32	8.24	8.17	8.21
2	8.33	8.82	8.59	8.66	8.58	7.89	7.79	8.71	8.19	7.92	8.21	8.32
3	8.32	8.77	8.51	8.68	8.57	7.89	7.91	8.62	8.47	7.82	8.13	8.31
4	8.37	8.71	8.37	8.70	8.54	7.91	7.86	8.53	8.38	8.20	8.23	8.26
5	8.33	8.82	8.29	8.65	8.50	7.92	7.73	8.53	8.01	8.17	8.16	8.05
6	8.23	8.76	8.17	8.73	8.42	7.90	7.66	8.54	8.26	8.20	8.15	8.09
7	8.22	8.65	8.11	8.75	8.38	7.86	7.59	8.54	8.19	8.19	8.13	8.03
8	8.33	8.58	8.11	8.71	8.33	7.76	7.56	8.48	8.23	8.33	8.16	7.97
9	8.49	8.54	8.23	8.73	8.31	7.67	7.89	8.36	8.19	8.31	8.18	8.01
10	8.63	8.51	8.33	8.71	8.29	7.57	8.38	8.42	8.21	8.20	8.21	8.32
11	8.76	8.43	8.32	8.72	8.28	7.50	8.47	8.59	8.36	8.25	8.22	8.14
12	8.73	8.38	8.25	8.72	8.22	7.44	8.55	8.60	8.18	8.19	7.81	8.29
13	8.71	8.33	8.32	8.71	8.17	7.39	8.55	8.61	8.20	8.14	8.16	8.18
14	8.86	8.30	8.31	8.69	8.07	7.35	8.56	8.62	8.16	7.30	8.07	8.32
15	8.88	8.23	8.19	8.67	7.95	7.36	8.58	8.61	8.15	7.48	8.19	8.26
16	8.77	8.18	8.12	8.65	7.89	7.41	8.71	8.57	8.13	8.20	8.22	8.21
17	8.78	8.18	8.15	8.61	7.84	7.43	8.78	8.48	8.09	7.93	8.08	8.23
18	8.85	8.12	8.17	8.59	7.78	7.55	8.77	8.28	8.03	7.44	8.10	8.37
19	8.84	8.06	8.14	8.57	7.72	7.59	8.74	8.15	8.02	8.31	8.18	8.04
20	8.90	8.03	8.12	8.55	7.63	7.79	8.72	8.09	8.04	8.15	8.27	8.16
21	8.73	7.97	8.15	8.53	7.72	7.83	8.72	8.00	8.01	8.17	8.13	8.20
22	8.71	7.89	8.08	8.53	7.83	7.79	8.71	7.97	7.99	8.19	8.05	8.24
23	8.71	7.92	8.48	8.53	7.96	7.76	8.70	7.88	8.12	8.17	8.10	8.23
24	8.78	7.91	8.52	8.60	8.14	7.72	8.72	7.90	8.25	8.19	8.15	8.31
25	8.84	7.84	8.53	8.65	8.14	7.68	8.69	8.26	8.24	8.14	8.10	8.27
26	8.90	7.94	8.60	8.66	8.09	7.62	8.64	8.52	8.14	8.14	8.11	8.19
27	8.83	8.17	8.74	8.59	8.01	7.60	8.64	8.30	8.07	8.15	8.16	8.17
28	8.82	8.30	8.72	8.55	7.96	7.56	8.64	8.39	8.26	8.15	8.11	7.75
29	8.79	8.47	8.74	8.55	---	7.46	8.77	8.32	8.23	8.21	8.07	8.14
30	8.79	8.62	8.74	8.55	---	7.42	8.85	8.14	8.15	8.16	8.10	8.23
31	8.76	---	8.73	8.54	---	7.42	---	8.21	---	8.21	8.12	---
TOTAL	268.31	250.18	259.49	267.79	227.87	236.95	251.61	260.02	245.27	250.85	252.23	245.50
MEAN	8.66	8.34	8.37	8.64	8.14	7.64	8.39	8.39	8.18	8.09	8.14	8.18
MAX	8.90	8.82	8.74	8.75	8.58	7.92	8.85	8.80	8.47	8.33	8.27	8.37
MIN	8.22	7.84	8.08	8.53	7.63	7.35	7.56	7.88	7.99	7.30	7.81	7.75
CAL YR 1989	TOTAL 3004.95		MEAN 8.23	MAX 8.90	MIN 7.41							
WTR YR 1990	TOTAL 3016.07		MEAN 8.26	MAX 8.90	MIN 7.30							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02280500 HILLSBORO CANAL BELOW S351, NEAR SOUTH BAY, FL

LOCATION.--Lat 26°42'00", long 80°42'45", in SW¼ sec.35, T.43 S., R.36 E., Palm Beach County, Hydrologic Unit 03090202, 15 ft from south bank, 200 ft downstream from North New River Canal, 1,000 ft downstream from gate structure S351 and pump station 2 at Lake Okeechobee, and 2.5 mi north of South Bay.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1957 to current year.

GAGE.--Digital water stage recorder and electromagnetic velocity meter. Prior to Oct. 1, 1986 water stage recorder at pump station 2 used for gage heights at this station. Prior to August 1982 deflection meter. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--All negative discharge prior to May 15, 1990 considered to be estimated. Records poor. Flow regulated by vertical lift gates and pump station at Lake Okeechobee. Flow frequently reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades, by the operation of pump station 2 or by gravity flow through gates on periods of negative head (negative figures indicate flow reversed). Discharge computed from continuous velocity record obtained from electromagnetic velocity meter.

AVERAGE DISCHARGE.--31 years (1958-1988), -20.8 ft³/s, -15,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 948 ft³/s May 5, 1966; maximum gage height, 14.09 ft Sept. 28, 1962; maximum daily reverse flow, 1,760 ft³/s Mar. 30, 1970; minimum gage height, 6.98 ft observed Oct. 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 643 ft³/s Apr. 4; maximum gage height, 12.63 ft Dec. 27; maximum daily reverse flow, 1,160 ft³/s Oct. 11; minimum gage height, 7.54 ft May 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20	-103	-49	120	124	---	35	-343	-74	-264	6.6
2	---	-58	-35	-2.3	247	148	---	-5.4	-136	-290	-163	-71
3	---	-83	-11	-52	172	18	375	16	-50	-179	-38	-51
4	---	-20	-21	-87	188	27	643	139	-29	-462	-31	-36
5	94	10	-1.1	-72	273	62	491	-48	-206	-109	-291	-199
6	59	-71	57	-111	203	166	532	-11	-60	-169	-256	-109
7	77	-68	13	-140	304	187	457	173	75	-109	-198	-41
8	-551	-127	103	-184	329	213	440	64	-216	-118	-178	-117
9	-809	-181	-36	-130	312	333	354	74	-226	-103	-258	-94
10	-660	-88	-39	142	216	274	326	-47	-212	-61	-138	-59
11	-1160	-81	87	264	105	---	472	3.1	-42	-77	-193	-65
12	-435	-67	-132	268	-62	---	469	68	14	-38	-232	-89
13	-270	-143	198	346	-22	---	383	100	59	-44	-184	-40
14	-665	-153	-73	233	130	---	322	-19	62	-105	-142	-28
15	-880	-68	159	179	121	---	267	33	126	-514	82	-36
16	-261	65	-29	341	94	---	166	38	-12	-228	74	-39
17	-40	64	-83	297	86	---	---	47	-.89	28	-142	-23
18	-168	113	-48	316	107	---	---	53	168	92	-232	17
19	-225	114	-73	293	113	---	-54	-1.4	339	-169	-275	-22
20	-218	212	-34	293	145	---	386	35	69	-112	-180	-8.0
21	26	351	-102	255	64	---	235	95	101	-74	-121	6.8
22	-18	345	-30	236	-66	---	2.5	42	145	-45	-89	11
23	-5.9	291	-365	-6.9	-75	---	467	97	-17	-54	-126	29
24	-25	221	-27	-352	-14	---	244	77	-118	-72	-107	21
25	-86	191	-29	-210	44	---	149	137	-284	-90	-127	-158
26	-60	190	-155	-253	47	---	67	12	-106	-95	-86	-144
27	-34	142	4.9	-226	48	---	129	-3.0	-33	-86	-114	-81
28	-38	60	282	-60	122	---	-8.3	-6.1	34	-85	-88	-204
29	8.5	-47	89	-129	---	---	-49	-176	35	-81	-56	-133
30	14	-238	43	132	---	---	99	-196	.41	-128	-90	-82
31	36	---	33	167	---	---	---	-369	---	-42	-4.3	---
TOTAL	---	896	-357.2	1697.8	3351	---	---	456.2	-863.48	-3693	-4247.3	-1837.6
MEAN	---	29.9	-11.5	54.8	120	---	---	14.7	-28.8	-119	-137	-61.3
MAX	---	351	282	346	329	---	---	173	339	92	82	29
MIN	---	-238	-365	-352	-75	---	---	-369	-343	-514	-291	-204
AC-FT	---	1780	-709	3370	6650	---	---	905	-1710	-7330	-8420	-3640

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.16	10.20	11.85	11.76	11.24	11.29	11.58	9.47	10.96	10.56	10.53	10.60
2	11.08	10.00	11.62	11.72	11.26	11.24	11.53	8.95	10.84	10.92	10.30	10.49
3	11.00	9.93	11.18	11.70	11.05	11.60	11.42	8.49	10.77	11.07	10.11	10.10
4	10.84	9.78	10.61	11.61	10.97	11.70	11.72	8.70	11.17	11.07	10.40	10.26
5	10.88	9.62	10.23	11.61	11.12	11.54	11.48	8.03	11.53	11.27	11.45	10.95
6	10.47	9.84	10.00	11.55	11.15	11.44	11.27	8.18	11.02	11.33	11.37	10.71
7	10.05	10.17	9.96	11.41	11.14	11.48	11.30	8.45	11.28	10.89	10.87	10.16
8	10.65	10.15	10.25	11.37	11.23	11.42	11.56	8.84	11.32	10.52	10.61	10.06
9	11.47	10.26	11.13	11.39	11.33	11.42	11.31	8.69	11.06	10.34	11.18	10.15
10	11.18	10.40	11.33	11.38	11.12	11.24	11.24	9.06	10.87	10.60	11.23	10.19
11	11.69	10.42	11.45	11.47	11.18	11.18	11.21	10.83	10.88	10.54	11.29	10.76
12	11.68	10.54	11.39	11.48	10.78	11.35	11.52	11.06	11.05	10.37	10.52	10.51
13	11.55	10.52	11.75	11.57	10.59	11.63	11.36	10.66	10.82	10.42	11.01	10.36
14	11.00	10.33	11.40	11.46	11.09	11.45	11.26	10.26	10.44	11.20	12.00	10.77
15	11.38	10.21	11.24	11.33	11.31	11.52	11.15	9.92	10.21	11.44	11.78	10.32
16	11.21	10.51	11.45	11.47	11.24	11.62	10.83	9.47	9.52	11.65	11.09	10.06
17	11.65	10.57	11.11	11.40	11.18	11.59	9.86	9.15	9.14	10.67	11.59	10.17
18	11.44	10.23	10.92	11.18	11.14	12.02	10.26	8.81	9.26	10.64	11.37	11.04
19	11.42	10.07	10.70	11.17	10.96	11.82	8.91	8.06	9.74	10.79	11.46	11.40
20	11.31	10.11	10.50	11.18	11.04	12.01	9.56	8.04	9.36	10.63	11.38	11.24
21	11.11	10.53	10.69	11.09	11.59	12.16	10.17	8.33	9.01	10.07	11.28	11.01
22	11.07	10.71	10.67	11.01	11.35	11.84	9.27	7.77	9.63	10.28	11.15	11.40
23	11.01	10.79	10.92	11.09	11.11	11.76	9.67	8.22	9.70	10.60	11.22	11.77
24	10.84	10.96	10.95	11.25	11.87	11.68	9.93	8.17	10.46	10.53	11.37	11.70
25	11.07	10.91	11.17	10.41	11.53	11.68	9.16	9.50	11.13	10.31	11.06	11.69
26	11.03	11.02	11.83	10.64	11.41	11.59	8.60	9.63	10.86	10.07	10.58	11.34
27	10.95	11.33	12.16	10.29	11.23	11.59	8.72	9.50	11.02	9.72	10.78	10.99
28	10.76	11.14	11.34	10.65	11.17	11.47	8.04	9.44	10.88	9.45	10.82	10.90
29	10.73	11.62	11.62	11.22	---	11.37	8.38	10.26	11.07	9.24	10.78	11.03
30	10.65	12.13	11.77	11.33	---	11.27	8.97	11.01	10.61	9.18	10.78	11.21
31	10.54	---	11.78	11.33	---	11.43	---	11.52	---	10.43	10.51	---
TOTAL	342.87	315.00	344.97	349.52	313.38	358.40	311.24	286.47	315.61	326.80	341.87	323.34
MEAN	11.06	10.50	11.13	11.27	11.19	11.56	10.37	9.24	10.52	10.54	11.03	10.78
MAX	11.69	12.13	12.16	11.76	11.87	12.16	11.72	11.52	11.53	11.65	12.00	11.77
MIN	10.05	9.62	9.96	10.29	10.59	11.18	8.04	7.77	9.01	9.18	10.11	10.06
CAL YR 1989	TOTAL 4094.71		MEAN	11.22	MAX 12.74	MIN 9.29						
WTR YR 1990	TOTAL 3929.47		MEAN	10.77	MAX 12.16	MIN 7.77						

EVERGLADES AND SOUTHEASTERN COASTAL AREA

262358080055700 E-4 CANAL, CLINT-MOORE RD., BOCA RATON, FL

LOCATION.--Lat 26°23'58", long 80°05'57", in NW¼NW¼ sec.6, T.47 S., R.43 E., Palm Beach County, Hydrologic Unit 03090202, .5 mi west of Clint Moore Road from I-95 overpass in Boca Raton.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily stage: Aug. 29, 30. Records fair. Station is part of a canal system operated and controlled by Lake Worth Drainage District.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 6.00 ft Nov. 4, 1987; minimum, 2.33 ft May 14-16, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.19 ft Apr. 28; minimum 3.24 ft Apr. 8.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.27	4.21	4.27	4.23	3.95	3.79	3.63	4.54	4.66	4.61	4.72	4.75
2	4.28	4.23	4.27	4.20	3.94	3.80	3.63	4.50	4.63	4.66	4.93	4.69
3	4.27	4.23	4.26	4.19	3.93	3.81	3.54	4.47	4.60	4.72	4.95	4.68
4	4.24	4.23	4.25	4.17	3.91	3.83	3.48	4.45	4.57	4.71	4.96	4.68
5	4.21	4.23	4.27	4.29	3.88	3.82	3.39	4.44	4.55	4.68	4.90	4.68
6	4.19	4.24	4.26	4.28	3.86	3.76	3.36	4.44	4.53	4.65	4.88	4.67
7	4.15	4.24	4.23	4.26	3.85	3.70	3.34	4.42	4.50	4.64	4.84	4.66
8	4.10	4.23	4.22	4.26	3.81	3.61	3.27	4.40	4.51	4.61	4.80	4.65
9	4.13	4.21	4.24	4.22	3.81	3.58	3.95	4.40	4.51	4.62	4.77	4.63
10	4.20	4.21	4.23	4.20	3.82	3.56	4.25	4.44	4.49	4.61	4.77	4.63
11	4.28	4.26	4.22	4.17	3.80	3.51	4.41	4.43	4.46	4.60	4.79	4.62
12	4.28	4.26	4.24	4.20	3.79	3.49	4.45	4.43	4.42	4.61	4.91	4.63
13	4.26	4.23	4.27	4.18	3.77	3.44	4.43	4.41	4.40	4.72	4.86	4.62
14	4.23	4.22	4.22	4.15	3.74	3.42	4.44	4.40	4.37	4.76	4.86	4.62
15	4.19	4.21	4.23	4.15	3.71	3.36	4.48	4.38	4.37	4.79	4.83	4.60
16	4.19	4.20	4.25	4.11	3.70	3.35	4.59	4.38	4.37	4.78	4.79	4.58
17	4.12	4.16	4.24	4.10	3.69	3.35	4.56	4.37	4.36	4.89	4.77	4.58
18	4.08	4.13	4.23	4.06	3.64	3.34	4.51	4.37	4.35	4.88	4.80	4.57
19	4.14	4.12	4.21	4.07	3.61	3.45	4.51	4.35	4.33	4.82	4.93	4.57
20	4.12	4.08	4.20	4.08	3.57	3.75	4.55	4.34	4.33	4.77	5.00	4.54
21	4.12	4.04	4.21	4.04	3.63	3.77	4.51	4.32	4.30	4.75	4.91	4.52
22	4.11	4.03	4.21	4.02	3.59	3.71	4.47	4.32	4.31	4.74	4.85	4.55
23	4.10	3.99	4.32	4.03	3.63	3.70	4.45	4.32	4.46	4.75	4.82	4.55
24	4.11	3.96	4.28	4.01	3.90	3.69	4.43	4.40	4.59	4.72	4.86	4.55
25	4.28	3.92	4.29	3.96	3.94	3.64	4.42	4.54	4.63	4.70	4.89	4.53
26	4.26	4.17	4.30	3.94	3.92	3.61	4.39	4.55	4.60	4.69	4.85	4.52
27	4.26	4.31	4.29	3.93	3.87	3.53	4.40	4.62	4.65	4.77	4.82	4.51
28	4.27	4.28	4.27	3.92	3.84	3.50	4.48	4.68	4.69	4.72	4.79	4.62
29	4.26	4.33	4.26	4.00	---	3.42	4.73	4.71	4.70	4.69	4.79	4.83
30	4.25	4.30	4.26	3.98	---	3.41	4.59	4.69	4.65	4.66	4.80	4.78
31	4.23	---	4.26	3.94	---	3.45	---	4.68	---	4.66	4.80	---
TOTAL	130.18	125.46	131.76	127.34	106.10	111.15	125.64	138.19	134.89	145.98	150.24	138.61
MEAN	4.20	4.18	4.25	4.11	3.79	3.59	4.19	4.46	4.50	4.71	4.85	4.62
MAX	4.28	4.33	4.32	4.29	3.95	3.83	4.73	4.71	4.70	4.89	5.00	4.83
MIN	4.08	3.92	4.20	3.92	3.57	3.34	3.27	4.32	4.30	4.60	4.72	4.51

WTR YR 1990 TOTAL 1565.54 MEAN 4.29 MAX 5.00 MIN 3.27

LOCATION.--Lat 26°23'37", long 80°07'48", in NE¼NW¼ sec.11, T.47 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, 2.2 mi west of I-95, Yamato Rd. exit in Boca Raton.

PERIOD OF RECORD.--March 1982 to current year.

REMARKS.--Estimated daily gage heights: Nov. 19 - Dec. 12. Records fair. Station is part of a canal system operated by Lake Worth Drainage District.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.98 ft Aug. 19; minimum, 8.40 ft Dec. 9 (estimated).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.19	9.26	8.57	9.34	9.23	9.18	9.09	9.59	9.99	9.70	10.05	9.83
2	9.13	9.21	8.55	9.30	9.25	9.22	9.10	9.55	10.12	9.73	10.11	9.79
3	9.07	9.14	8.52	9.27	9.24	9.23	9.06	9.49	10.07	10.00	10.17	9.77
4	9.03	9.10	8.50	9.26	9.23	9.26	9.02	9.44	10.02	9.98	10.18	9.86
5	8.98	9.05	8.48	9.29	9.21	9.27	8.98	9.40	10.00	9.97	10.18	9.84
6	8.94	9.00	8.46	9.32	9.21	9.25	8.97	9.35	9.96	9.99	10.12	9.80
7	8.90	8.95	8.44	9.32	9.20	9.21	8.93	9.33	9.92	9.94	9.97	9.79
8	8.88	8.90	8.42	9.30	9.19	9.18	8.90	9.29	10.08	9.89	9.97	9.83
9	8.86	8.88	8.40	9.27	9.17	9.19	9.40	9.25	10.09	9.94	9.96	9.77
10	8.95	8.84	8.58	9.25	9.15	9.17	9.68	9.29	9.97	9.94	10.03	9.72
11	9.18	8.84	8.75	9.24	9.13	9.15	9.79	9.45	9.91	9.90	10.29	9.66
12	9.41	8.81	8.93	9.24	9.10	9.11	9.87	9.46	9.92	9.90	10.32	9.65
13	9.51	8.76	9.10	9.22	9.09	9.07	9.79	9.43	9.88	10.06	10.24	9.62
14	9.49	8.71	9.15	9.21	9.06	9.05	9.67	9.38	9.82	10.18	10.20	9.58
15	9.46	8.69	9.19	9.18	9.01	9.02	9.63	9.33	9.79	10.40	10.23	9.54
16	9.41	8.66	9.24	9.13	8.99	9.00	9.69	9.27	9.83	10.31	10.24	9.55
17	9.36	8.66	9.26	9.07	8.96	8.98	9.67	9.22	9.82	10.67	10.23	9.55
18	9.34	8.61	9.26	9.07	8.93	8.97	9.64	9.16	9.79	10.32	10.20	9.55
19	9.36	8.58	9.24	9.14	8.91	9.00	9.61	9.10	9.76	10.23	10.40	9.57
20	9.29	8.56	9.29	9.16	8.90	9.13	9.67	9.04	9.72	10.42	10.40	9.59
21	9.23	8.55	9.33	9.18	8.97	9.12	9.61	8.98	9.67	10.37	9.96	9.77
22	9.18	8.54	9.37	9.20	8.98	9.11	9.56	8.95	9.65	10.37	9.96	9.87
23	9.13	8.52	9.35	9.22	9.00	9.12	9.49	8.91	9.81	10.05	10.00	9.91
24	9.18	8.56	9.25	9.21	9.20	9.10	9.45	9.08	10.05	10.31	10.15	9.88
25	9.33	8.60	9.29	9.20	9.23	9.09	9.44	9.77	10.04	10.29	10.11	9.76
26	9.38	8.63	9.41	9.18	9.22	9.07	9.44	9.98	9.98	10.23	9.92	9.67
27	9.36	8.66	9.43	9.17	9.20	9.04	9.43	10.08	10.05	10.14	9.83	9.72
28	9.36	8.70	9.41	9.19	9.18	9.01	9.46	10.27	10.11	10.08	9.94	9.93
29	9.37	8.65	9.39	9.24	---	9.00	9.69	10.22	10.07	10.08	9.90	10.38
30	9.35	8.60	9.36	9.22	---	8.99	9.67	10.04	9.98	10.06	9.84	10.08
31	9.31	---	9.36	9.22	---	8.99	---	10.10	---	10.06	9.87	---
TOTAL	285.92	263.22	279.28	285.81	255.14	282.28	283.40	293.20	297.87	313.51	312.97	292.83
MEAN	9.22	8.77	9.01	9.22	9.11	9.11	9.45	9.46	9.93	10.11	10.10	9.76
MAX	9.51	9.26	9.43	9.34	9.25	9.27	9.87	10.27	10.12	10.67	10.40	10.38
MIN	8.86	8.52	8.40	9.07	8.90	8.97	8.90	8.91	9.65	9.70	9.83	9.54
CAL YR 1989	TOTAL 3418.79		MEAN 9.37	MAX 10.25	MIN 8.40							
WTR YR 1990	TOTAL 3445.43		MEAN 9.44	MAX 10.67	MIN 8.40							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

261952080074500 E-3 CANAL, SW 18TH ST., BOCA RATON, FL

LOCATION.--Lat 26°19'52", long 80°07'45", in NW¼ sec.35, T.47 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, .7 mi west, 1.5 mi south of I-95, Palmetto Park Rd. exit in Boca Raton.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily stage: Mar. 9-21, Aug. 23-27. Records good. Station is part of a canal system operated and controlled by Lake Worth Drainage District.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 11.79 ft May 4, 1982; minimum, 6.66 ft May 30, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.53 ft Aug. 19; minimum, 8.22 ft Dec. 12.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.05	9.13	8.54	9.18	9.04	9.02	8.93	9.44	9.74	9.46	9.84	9.63
2	9.00	9.07	8.50	9.15	9.05	9.03	8.92	9.39	9.90	9.50	9.90	9.61
3	8.97	9.03	8.46	9.11	9.04	9.05	8.90	9.33	9.88	9.76	9.95	9.60
4	8.94	8.98	8.41	9.09	9.03	9.09	8.86	9.29	9.84	9.75	9.97	9.67
5	8.89	8.93	8.37	9.11	9.03	9.10	8.81	9.23	9.83	9.75	9.97	9.64
6	8.84	8.88	8.34	9.14	9.01	9.09	8.77	9.20	9.79	9.78	9.88	9.62
7	8.79	8.83	8.30	9.14	9.00	9.06	8.75	9.20	9.76	9.72	9.74	9.61
8	8.77	8.76	8.27	9.12	8.99	9.02	8.74	9.14	9.92	9.68	9.74	9.65
9	8.75	8.74	8.28	9.11	8.97	8.95	9.23	9.08	9.90	9.73	9.73	9.60
10	8.80	8.71	8.27	9.09	8.93	8.90	9.53	9.12	9.79	9.73	9.81	9.55
11	9.04	8.71	8.24	9.08	8.92	8.89	9.60	9.31	9.75	9.70	10.08	9.49
12	9.25	8.69	8.30	9.08	8.91	8.87	9.71	9.31	9.78	9.69	10.07	9.46
13	9.36	8.65	8.66	9.07	8.86	8.86	9.64	9.28	9.74	9.82	10.01	9.44
14	9.35	8.60	8.81	9.05	8.83	8.84	9.52	9.24	9.68	9.94	9.94	9.39
15	9.32	8.59	8.89	9.02	8.77	8.83	9.46	9.19	9.64	10.16	10.01	9.35
16	9.28	8.60	8.97	8.98	8.74	8.81	9.53	9.12	9.69	10.10	10.03	9.37
17	9.23	8.59	9.00	8.92	8.72	8.80	9.51	9.07	9.68	10.21	10.02	9.37
18	9.20	8.56	9.02	8.89	8.68	8.85	9.49	9.02	9.65	9.85	9.98	9.38
19	9.22	8.54	9.01	8.93	8.65	8.90	9.46	8.96	9.62	9.94	10.13	9.39
20	9.17	8.52	9.04	8.96	8.64	8.92	9.54	8.90	9.59	10.18	10.07	9.41
21	9.10	8.50	9.10	8.98	8.74	8.94	9.46	8.85	9.55	10.15	9.65	9.59
22	9.06	8.48	9.15	9.01	8.72	8.95	9.41	8.81	9.51	10.09	9.71	9.69
23	9.02	8.46	9.23	9.04	8.77	8.97	9.34	8.78	9.66	9.72	9.80	9.72
24	9.05	8.44	9.14	9.02	9.03	8.94	9.31	8.95	9.88	10.10	9.90	9.70
25	9.20	8.38	9.13	9.00	9.08	8.92	9.29	9.63	9.85	10.09	9.88	9.58
26	9.24	8.42	9.23	9.01	9.08	8.89	9.28	9.82	9.81	10.01	9.82	9.49
27	9.23	8.51	9.26	8.99	9.05	8.87	9.27	9.87	9.87	9.90	9.78	9.56
28	9.23	8.55	9.25	9.01	9.03	8.83	9.28	9.93	9.90	9.86	9.72	9.74
29	9.23	8.59	9.23	9.04	---	8.79	9.52	9.78	9.85	9.86	9.66	10.12
30	9.20	8.59	9.20	9.03	---	8.78	9.50	9.78	9.75	9.84	9.63	9.81
31	9.17	---	9.17	9.04	---	8.79	---	9.86	---	9.84	9.65	---
TOTAL	281.95	260.03	272.77	280.39	249.31	276.55	278.56	287.88	292.80	305.91	306.07	287.23
MEAN	9.10	8.67	8.80	9.04	8.90	8.92	9.29	9.29	9.76	9.87	9.87	9.57
MAX	9.36	9.13	9.26	9.18	9.08	9.10	9.71	9.93	9.92	10.21	10.13	10.12
MIN	8.75	8.38	8.24	8.89	8.64	8.78	8.74	8.78	9.51	9.46	9.63	9.35

CAL YR 1989 TOTAL 3376.80 MEAN 9.25 MAX 10.06 MIN 8.24
WTR YR 1990 TOTAL 3379.45 MEAN 9.26 MAX 10.21 MIN 8.24

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281400 HILLSBORO CANAL NEAR MARGATE, FL

LOCATION.--Lat 26°19'48", long 80°12'45", in NW¼ sec.36, T.47 S., R.41 E., Broward County, Hydrologic Unit 03090202, on north side of Hillsboro Road, 0.7 mi west of U.S. Highway 441, and 5.1 mi north of Margate.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1975 to current year.

GAGE.--Water-stage and electromagnetic velocity meter recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated stage and discharge. Records fair. Flow affected by regulation downstream at Deerfield Beach and upstream storage releases at control structure S-39.

AVERAGE DISCHARGE.--13 years (1977-89), 205 ft³/s, 148,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 956 ft³/s Mar. 11, 1986 (estimated); maximum gage height, 12.88 ft Apr. 25, 1979; maximum daily reverse flow, 247 ft³/s Apr. 25, 1979; minimum gage height, 4.15 ft May 20, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 464 ft³/s July 18; maximum gage height, 9.50 ft Apr. 9; minimum daily discharge, 6.5 ft³/s Oct. 28; minimum gage height, 5.69 ft May 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	43	95	40	82	83	47	49	217	194	17	82
2	116	37	75	73	94	55	48	74	193	168	82	90
3	106	29	78	79	92	15	15	84	162	244	79	88
4	112	29	41	69	83	24	59	75	174	210	136	114
5	113	36	23	47	86	74	94	46	171	193	102	124
6	123	64	30	42	101	76	110	22	170	201	101	77
7	113	63	37	61	93	87	65	43	101	162	47	104
8	109	49	30	95	94	91	76	61	186	153	74	115
9	113	28	17	101	88	87	154	81	159	114	176	89
10	129	55	43	100	75	88	164	72	158	161	---	84
11	130	118	72	99	79	87	108	71	106	144	---	64
12	140	86	81	106	79	88	125	74	120	112	---	90
13	153	69	32	102	93	94	99	88	111	146	---	68
14	76	54	46	116	106	99	80	67	105	175	---	45
15	73	41	77	115	108	97	76	85	70	249	---	13
16	75	19	83	112	101	97	94	96	66	156	---	12
17	64	31	48	114	95	86	91	111	49	284	---	31
18	59	38	40	109	91	67	82	95	24	464	---	60
19	26	37	68	107	81	55	55	87	26	244	---	50
20	39	27	68	106	75	41	86	82	63	192	---	40
21	39	23	45	89	89	51	79	64	79	165	---	57
22	53	38	71	59	97	57	61	60	83	198	---	42
23	57	24	18	72	64	84	48	70	54	229	---	34
24	37	44	46	100	130	104	44	72	143	244	---	84
25	95	45	76	87	94	86	57	88	165	235	---	55
26	21	26	63	94	80	77	52	129	185	216	---	30
27	8.6	37	55	122	86	92	47	250	216	264	---	62
28	6.5	29	54	128	85	104	30	242	219	173	---	128
29	33	79	48	78	---	97	39	279	252	124	---	410
30	26	152	53	69	---	108	59	255	178	72	115	234
31	31	---	71	91	---	85	---	261	---	121	109	---
TOTAL	2402.1	1450	1684	2782	2521	2436	2244	3233	4005	6007	---	2576
MEAN	77.5	48.3	54.3	89.7	90.0	78.6	74.8	104	133	194	---	85.9
MAX	153	152	95	128	130	108	164	279	252	464	---	410
MIN	6.5	19	17	40	64	15	15	22	24	72	---	12
AC-FT	4760	2880	3340	5520	5000	4830	4450	6410	7940	11910	---	5110

CAL YR 1989 TOTAL 45465.1 MEAN 125 MAX 280 MIN 6.5 AC-FT 90180

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281400 HILLSBORO CANAL NEAR MARGATE, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.90	7.52	8.05	8.18	7.24	7.55	8.56	8.66	8.71	8.30	8.06	7.60
2	7.66	7.53	7.41	8.15	7.30	7.36	8.49	8.68	8.57	8.13	8.08	7.59
3	7.43	7.52	7.20	7.80	7.45	7.62	8.26	8.58	8.86	8.14	7.78	7.45
4	7.18	7.31	7.32	7.48	7.47	8.17	7.91	8.46	8.68	7.89	7.92	7.60
5	7.14	7.26	7.44	7.62	7.45	8.13	7.25	7.98	8.66	8.07	8.18	8.06
6	7.56	7.02	7.50	7.77	7.37	7.59	7.52	7.90	8.45	7.66	7.91	7.77
7	7.21	7.17	7.59	7.42	7.32	7.26	7.29	7.94	8.76	7.90	7.91	7.86
8	7.53	7.34	7.72	7.50	7.28	7.29	7.40	7.55	8.50	7.79	8.15	8.03
9	7.90	7.68	7.76	7.62	7.20	7.22	8.90	7.04	8.35	7.97	8.23	7.90
10	8.64	7.71	7.55	7.58	7.08	7.18	9.27	6.93	8.33	8.03	7.85	7.83
11	8.81	7.69	7.06	7.49	7.26	7.17	9.19	7.74	8.35	8.21	7.78	8.04
12	9.16	7.64	7.49	7.49	7.68	7.12	9.23	7.94	8.10	8.13	7.86	8.08
13	8.98	7.98	8.07	7.44	7.31	7.12	9.08	8.01	8.12	8.20	7.90	7.91
14	8.29	7.99	7.86	7.41	7.14	7.35	8.98	8.05	8.01	8.43	7.64	7.93
15	7.76	7.71	7.32	7.43	7.15	7.54	8.94	7.99	8.04	8.73	7.58	8.01
16	7.51	7.64	7.40	7.44	7.17	7.57	9.05	7.89	8.41	8.30	8.34	8.08
17	7.58	7.53	7.57	7.49	7.17	7.54	8.93	7.36	8.43	8.96	7.74	7.86
18	7.57	7.33	7.46	7.61	7.17	7.73	8.82	6.83	8.28	8.53	7.65	7.95
19	7.79	7.25	7.29	7.60	7.28	7.42	8.73	6.31	7.89	8.27	7.54	7.10
20	8.09	7.25	7.43	7.63	7.36	8.16	9.02	5.88	7.86	8.20	7.46	7.62
21	7.72	7.40	7.43	7.67	8.41	8.16	8.84	5.76	8.01	8.19	7.42	7.67
22	7.50	7.39	7.09	8.02	8.62	7.77	8.62	5.96	7.94	8.25	7.61	7.58
23	7.43	7.36	7.73	8.59	8.51	7.40	8.47	5.93	7.87	8.48	7.87	7.71
24	7.73	7.36	7.80	8.31	9.18	7.62	8.61	6.38	8.19	8.51	7.74	7.84
25	8.88	7.29	7.41	7.65	9.02	7.58	8.64	7.74	8.16	8.02	7.73	7.49
26	8.45	7.48	7.85	7.31	8.71	7.22	8.53	8.82	8.06	8.11	7.65	7.53
27	7.70	8.00	8.37	7.31	8.31	7.42	8.51	9.02	8.29	7.79	7.93	7.47
28	7.54	8.13	8.31	7.42	7.97	7.41	8.51	9.17	8.58	7.50	8.13	7.81
29	7.29	8.72	8.28	7.78	---	7.37	8.82	9.15	8.13	7.54	7.47	8.41
30	7.35	8.80	8.31	7.88	---	7.36	8.76	9.13	7.98	7.70	7.54	7.79
31	7.19	---	8.34	7.46	---	7.81	---	8.90	---	7.64	7.64	---
TOTAL	242.47	228.00	237.41	237.55	214.58	233.21	257.13	239.68	248.57	251.57	242.29	233.57
MEAN	7.82	7.60	7.66	7.66	7.66	7.52	8.57	7.73	8.29	8.12	7.82	7.79
MAX	9.16	8.80	8.37	8.59	9.18	8.17	9.27	9.17	8.86	8.96	8.34	8.41
MIN	7.14	7.02	7.06	7.31	7.08	7.12	7.25	5.76	7.86	7.50	7.42	7.10

WTR YR 1990 TOTAL 2866.03 MEAN 7.85 MAX 9.27 MIN 5.76

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281468 LATERAL 47 CANAL AT BOCA RATON, FL

LOCATION.--Lat 26°21'26", long 80°09'14", in SW¼ sec.32, T.47 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, on south bank at Powerline Road, 1.2 mi south of State Highway 808 and 1.9 mi west of Interstate Highway 95 in Boca Raton, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder and electromagnetic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Only gage-heights published for 1990 water year. Records fair. Canal system operated by Lake Worth Drainage District along with backpumps operated by City of Boca Raton, FL.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 63 ft³/s May 2, 1989; maximum gage height, 10.76 ft Aug. 19, 1990; maximum daily reverse flow, 32 ft³/s Aug. 12, 1989; minimum gage height, 8.69 ft Oct. 27, 29, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.76 ft Aug. 19; minimum gage height, 8.75 ft Dec. 11.

DISCHARGE COULD NOT BE DETERMINED DUE TO EQUIPMENT PROBLEMS

EVERGLADES AND SOUTHEASTERN COASTAL AREA
02281468 LATERAL 47 CANAL AT BOCA RATON, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.17	9.22	8.88	9.29	9.12	9.11	9.06	9.52	9.99	9.59	9.92	9.75
2	9.12	9.18	8.86	9.27	9.14	9.13	9.02	9.48	10.09	9.63	9.99	9.72
3	9.08	9.13	8.83	9.22	9.13	9.13	8.98	9.43	10.03	9.88	10.04	9.71
4	9.05	9.08	8.82	9.18	9.11	9.17	8.95	9.39	9.98	9.86	10.04	9.79
5	9.01	9.04	8.81	9.20	9.10	9.19	8.92	9.35	9.96	9.84	10.06	9.74
6	8.97	9.00	8.79	9.23	9.09	9.16	8.90	9.32	9.92	9.86	10.00	9.72
7	8.93	8.97	8.78	9.22	9.08	9.15	8.88	9.32	9.87	9.81	9.86	9.70
8	8.91	8.92	8.77	9.20	9.06	9.13	8.86	9.28	10.06	9.77	9.85	9.74
9	8.91	8.90	8.77	9.19	9.05	9.11	9.39	9.25	10.06	9.82	9.85	9.68
10	8.97	8.89	8.77	9.17	9.03	9.10	9.61	9.28	9.92	9.82	9.93	9.63
11	9.15	8.89	8.76	9.16	9.01	9.08	9.69	9.44	9.86	9.77	10.21	9.58
12	9.35	8.88	8.77	9.16	8.99	9.04	9.81	9.45	9.89	9.76	10.22	9.56
13	9.45	8.86	8.90	9.15	8.97	9.01	9.71	9.43	9.85	9.91	10.13	9.54
14	9.44	8.83	8.96	9.14	8.95	8.97	9.58	9.40	9.78	10.04	10.09	9.48
15	9.41	8.83	9.03	9.12	8.91	8.94	9.53	9.36	9.74	10.25	10.12	9.43
16	9.36	8.82	9.10	9.09	8.89	8.92	9.62	9.30	9.78	10.19	10.14	9.45
17	9.31	8.82	9.13	9.04	8.87	8.89	9.58	9.22	9.77	10.49	10.13	9.44
18	9.29	8.81	9.14	9.01	8.84	8.90	9.54	9.17	9.75	10.12	10.09	9.44
19	9.30	8.80	9.14	9.04	8.82	8.95	9.53	9.11	9.71	10.08	10.27	9.45
20	9.26	8.79	9.16	9.07	8.82	9.08	9.62	9.06	9.67	10.25	10.28	9.48
21	9.19	8.79	9.21	9.08	8.92	9.06	9.54	9.02	9.63	10.22	9.85	9.65
22	9.15	8.78	9.27	9.12	8.89	9.05	9.48	9.00	9.60	10.22	9.86	9.76
23	9.11	8.78	9.36	9.12	8.92	9.05	9.41	8.98	9.75	9.90	9.92	9.78
24	9.16	8.78	9.26	9.10	9.17	9.03	9.39	9.16	10.00	10.16	10.05	9.77
25	9.30	8.78	9.26	9.08	9.16	9.01	9.38	9.78	9.97	10.14	10.00	9.64
26	9.33	8.84	9.34	9.07	9.16	8.99	9.37	9.98	9.91	10.09	9.83	9.54
27	9.32	8.88	9.35	9.07	9.15	8.97	9.37	10.12	10.00	10.01	9.75	9.59
28	9.32	8.85	9.34	9.09	9.12	8.95	9.35	10.30	10.04	9.93	9.86	9.85
29	9.32	8.90	9.32	9.14	---	8.93	9.60	10.22	9.95	9.93	9.81	10.30
30	9.30	8.91	9.30	9.11	---	8.92	9.59	10.04	9.86	9.91	9.76	9.96
31	9.26	---	9.29	9.11	---	8.94	---	10.10	---	9.92	9.77	---
TOTAL	285.20	266.95	280.47	283.24	252.47	280.06	281.26	293.26	296.39	309.17	309.68	289.87
MEAN	9.20	8.90	9.05	9.14	9.02	9.03	9.38	9.46	9.88	9.97	9.99	9.66
MAX	9.45	9.22	9.36	9.29	9.17	9.19	9.81	10.30	10.09	10.49	10.28	10.30
MIN	8.91	8.78	8.76	9.01	8.82	8.89	8.86	8.98	9.60	9.59	9.75	9.43
CAL YR 1989	TOTAL 3501.55		MEAN 9.59	MAX 10.28	MIN 8.76							
WTR YR 1990	TOTAL 3428.02		MEAN 9.39	MAX 10.49	MIN 8.76							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281490 C-2 CANAL ABOVE S-4 NEAR DEERFIELD BEACH, FL

LOCATION.--Lat 26°19'39", long 80°08'02", in NW¼ sec.35, T.47 S., R.42 E., Broward County, Hydrologic Unit 03090202, (West-Dixie Bend quadrangle), on Hillsboro Canal at S-4 control structure, 2.2 mi east of junction of Florida Turnpike over Hillsboro Canal, 2.2 mi west of Deerfield Beach, and 4.2 mi east of State Highway 7.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1989 to current year (gage heights).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily stage. Records good. Gage records water levels in Hillsboro Canal above S-4 control structure. Complete discharge for water years 1989-90 could not be determined at time of publication.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.96 ft Apr. 9, 1990; minimum gage height, 5.20 ft May 21, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.96 ft Apr. 9; minimum gage height, 5.20 ft May 21.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	6.05	7.44	6.95	7.21
2	---	---	---	---	---	---	---	---	6.86	7.67	6.56	7.50
3	---	---	---	---	---	---	---	7.04	7.22	7.93	6.50	7.89
4	---	---	---	---	---	---	---	7.08	7.31	7.86	6.97	8.05
5	---	---	---	---	---	---	---	7.12	7.22	7.87	7.17	8.02
6	---	---	---	---	---	---	---	7.18	7.20	7.84	7.15	8.16
7	---	---	---	---	---	---	---	7.22	7.57	7.82	7.27	8.03
8	---	---	---	---	---	---	---	7.13	7.96	7.62	7.62	7.61
9	---	---	---	---	---	---	---	7.13	7.93	7.51	7.49	7.42
10	---	---	---	---	---	---	---	7.12	8.03	7.41	7.52	7.51
11	---	---	---	---	---	---	---	7.03	7.77	7.23	7.74	7.51
12	---	---	---	---	---	---	---	7.01	6.87	6.81	7.93	7.41
13	---	---	---	---	---	---	---	7.34	6.32	6.01	7.95	6.78
14	---	---	---	---	---	---	---	7.33	6.66	6.61	7.95	6.82
15	---	---	---	---	---	---	---	7.11	7.35	6.96	7.96	7.11
16	---	---	---	---	---	---	---	7.30	7.27	7.05	7.85	7.02
17	---	---	---	---	---	---	---	7.00	7.30	7.20	7.89	7.12
18	---	---	---	---	---	---	---	6.83	7.41	7.48	7.76	7.54
19	---	---	---	---	---	---	---	6.96	7.37	7.90	7.88	7.73
20	---	---	---	---	---	---	---	7.01	7.07	7.61	7.75	7.41
21	---	---	---	---	---	---	---	7.24	7.12	7.65	7.77	7.53
22	---	---	---	---	---	---	---	7.19	7.43	7.87	7.74	7.47
23	---	---	---	---	---	---	---	7.07	7.34	7.72	7.87	6.99
24	---	---	---	---	---	---	---	6.95	7.38	7.54	7.90	6.83
25	---	---	---	---	---	---	---	6.66	7.24	7.66	7.83	6.73
26	---	---	---	---	---	---	---	6.50	7.01	7.42	8.01	7.67
27	---	---	---	---	---	---	---	6.37	7.08	7.22	7.95	7.93
28	---	---	---	---	---	---	---	6.32	6.85	6.76	7.79	7.17
29	---	---	---	---	---	---	---	6.20	6.74	6.82	7.51	6.91
30	---	---	---	---	---	---	---	6.07	6.97	6.83	7.44	7.57
31	---	---	---	---	---	---	---	5.95	---	7.23	7.33	---
TOTAL	---	---	---	---	---	---	---	---	215.90	228.55	235.00	222.65
MEAN	---	---	---	---	---	---	---	---	7.20	7.37	7.58	7.42
MAX	---	---	---	---	---	---	---	---	8.03	7.93	8.01	8.16
MIN	---	---	---	---	---	---	---	---	6.05	6.01	6.50	6.73

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281490 C-2 CANAL ABOVE S-4 NEAR DEERFIELD BEACH, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.61	7.21	7.71	7.83	6.87	7.16	8.15	8.24	8.01	---	---	7.02
2	7.37	7.20	7.07	7.79	6.93	6.97	8.09	8.26	7.94	---	---	7.01
3	7.14	7.21	6.85	7.43	7.08	7.25	7.89	8.15	8.32	---	---	6.93
4	6.88	6.99	6.99	7.11	7.11	7.80	7.55	8.03	8.13	---	7.23	7.26
5	6.82	6.91	7.10	7.26	7.08	7.75	6.86	7.56	8.12	---	7.58	7.26
6	7.26	6.66	7.16	7.42	6.98	7.20	7.10	7.47	7.90	---	7.35	7.27
7	6.91	6.82	7.24	7.06	6.95	6.85	6.92	7.50	8.28	---	7.38	7.47
8	7.24	7.01	7.38	7.14	6.91	6.87	6.97	7.10	7.73	---	7.62	7.37
9	7.61	7.36	7.43	7.26	6.83	6.82	8.26	6.59	7.72	---	7.57	7.25
10	8.30	7.38	7.22	7.22	6.71	6.78	8.77	6.49	7.70	---	7.03	7.30
11	8.49	7.35	6.71	7.13	6.88	6.77	8.75	7.29	7.83	---	7.03	7.55
12	8.77	7.30	7.14	7.14	7.32	6.72	8.77	7.49	7.58	---	6.98	7.38
13	8.60	7.65	7.74	7.09	6.93	6.71	8.67	7.56	7.63	---	7.20	7.36
14	7.99	7.66	7.53	7.04	6.75	6.94	8.57	7.60	7.51	---	6.80	7.33
15	7.46	7.39	6.97	7.06	6.75	7.13	8.53	7.53	7.55	---	6.95	7.48
16	7.19	7.33	7.05	7.05	6.78	7.15	8.63	7.43	7.93	---	7.79	7.55
17	7.27	7.21	7.23	7.11	6.78	7.13	8.52	6.90	7.95	---	7.13	7.27
18	7.26	7.00	7.11	7.24	6.77	7.33	8.41	6.36	7.80	---	7.08	7.24
19	7.48	6.92	6.94	7.22	6.89	7.03	8.29	5.82	7.41	---	6.97	6.50
20	7.79	6.93	7.09	7.26	6.97	7.78	8.57	5.39	7.37	---	6.91	7.09
21	7.42	7.08	7.09	7.30	7.99	7.78	8.43	5.28	7.53	---	6.87	7.04
22	7.19	7.06	6.74	7.67	8.22	7.37	8.22	5.50	---	---	7.08	7.00
23	7.11	7.03	7.40	8.24	8.11	7.00	8.06	5.46	---	---	7.27	7.14
24	7.43	7.01	7.47	7.93	8.76	7.21	8.19	5.92	---	---	6.98	7.09
25	8.55	6.94	7.06	7.29	8.63	7.18	8.23	7.27	---	---	7.08	6.83
26	8.14	7.15	7.51	6.95	8.32	6.82	8.12	8.33	---	---	6.96	6.96
27	7.40	7.67	8.02	6.93	7.91	7.02	8.09	8.07	---	---	7.37	6.91
28	7.24	7.80	7.96	7.04	7.58	7.01	8.09	8.29	---	---	7.55	7.05
29	6.99	8.37	7.94	7.42	---	6.96	8.39	8.15	---	---	6.83	7.03
30	7.04	8.44	7.96	7.53	---	6.95	8.35	8.27	---	---	6.85	6.91
31	6.88	---	7.98	7.10	---	7.40	---	8.05	---	---	7.20	---
TOTAL	232.83	218.04	226.79	226.26	203.79	220.84	244.44	223.35	---	---	---	214.85
MEAN	7.51	7.27	7.32	7.30	7.28	7.12	8.15	7.20	---	---	---	7.16
MAX	8.77	8.44	8.02	8.24	8.76	7.80	8.77	8.33	---	---	---	7.55
MIN	6.82	6.66	6.71	6.93	6.71	6.71	6.86	5.28	---	---	---	6.50

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281491 C-2 CANAL BELOW S-4 NEAR DEERFIELD BEACH, FL

LOCATION.--Lat 26°19'38", long 80°08'02", in NW¼ sec.35, T.47 S., R.42 E., Broward County, Hydrologic Unit 03090202, (West-Dixie Bend quadrangle), on downstream side of S-4 control structure, 2.2 mi east of junction of Florida Turnpike over Hillsboro Canal, 2.2 mi west of Deerfield Beach, and 4.2 mi east of State Highway 7.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 2, 1989 to current year (gage heights).

GAGE.--Digital water-stage recorder.

REMARKS.--No estimated daily stage. Gage records water levels below S-4.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 11.13 ft Aug. 28, 1990; minimum gage height, 6.64 ft May 9, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 11.13 ft Aug. 28; minimum gage height, 6.64 ft May 9.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	6.86	7.79	7.27	7.71
2	---	---	---	---	---	---	---	---	6.90	7.87	7.23	7.77
3	---	---	---	---	---	---	---	6.75	6.92	7.88	7.20	7.83
4	---	---	---	---	---	---	---	6.76	6.92	7.88	7.24	7.86
5	---	---	---	---	---	---	---	6.89	6.88	7.90	7.23	7.80
6	---	---	---	---	---	---	---	7.02	6.89	7.88	7.21	7.74
7	---	---	---	---	---	---	---	6.98	7.10	7.84	7.16	7.69
8	---	---	---	---	---	---	---	6.95	7.48	7.77	7.18	7.68
9	---	---	---	---	---	---	---	7.02	7.88	7.67	7.25	7.65
10	---	---	---	---	---	---	---	7.05	7.61	7.55	7.34	7.63
11	---	---	---	---	---	---	---	7.06	7.44	7.43	7.37	7.58
12	---	---	---	---	---	---	---	7.09	7.33	7.34	7.36	7.55
13	---	---	---	---	---	---	---	7.11	7.24	7.27	7.39	7.48
14	---	---	---	---	---	---	---	7.09	7.17	7.37	7.58	7.45
15	---	---	---	---	---	---	---	7.19	7.18	7.58	7.93	7.47
16	---	---	---	---	---	---	---	7.37	7.30	7.57	7.84	7.49
17	---	---	---	---	---	---	---	7.36	7.21	7.61	7.88	7.50
18	---	---	---	---	---	---	---	7.31	7.09	7.78	7.77	7.61
19	---	---	---	---	---	---	---	7.30	7.09	7.78	7.89	8.01
20	---	---	---	---	---	---	---	7.27	7.23	7.76	8.20	8.05
21	---	---	---	---	---	---	---	7.14	7.02	7.78	8.26	8.02
22	---	---	---	---	---	---	---	7.05	7.04	7.74	8.34	7.95
23	---	---	---	---	---	---	---	7.05	7.07	7.66	8.37	7.90
24	---	---	---	---	---	---	---	7.04	7.22	7.57	8.36	7.81
25	---	---	---	---	---	---	---	7.04	7.25	7.51	8.31	7.74
26	---	---	---	---	---	---	---	7.07	7.22	7.47	8.25	7.67
27	---	---	---	---	---	---	---	7.06	7.23	7.42	8.17	7.62
28	---	---	---	---	---	---	---	6.93	7.23	7.41	8.10	7.55
29	---	---	---	---	---	---	---	6.88	7.27	7.37	8.02	7.53
30	---	---	---	---	---	---	---	6.92	7.42	7.31	7.94	7.50
31	---	---	---	---	---	---	---	6.89	---	7.27	7.79	---
TOTAL	---	---	---	---	---	---	---	---	215.69	236.03	239.43	230.84
MEAN	---	---	---	---	---	---	---	---	7.19	7.61	7.72	7.69
MAX	---	---	---	---	---	---	---	---	7.88	7.90	8.37	8.05
MIN	---	---	---	---	---	---	---	---	6.86	7.27	7.16	7.45

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281491 C-2 CANAL BELOW S-4 NEAR DEERFIELD BEACH, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.47	7.69	7.87	7.78	6.95	7.45	8.01	8.24	9.15	9.27	9.19	10.33
2	7.42	7.63	7.65	7.61	6.94	7.39	8.10	8.26	9.17	9.44	9.26	10.25
3	7.44	7.63	7.46	7.44	6.93	7.32	7.90	8.16	9.08	9.78	9.41	10.20
4	7.40	7.62	7.31	7.32	6.90	7.29	7.70	8.04	9.03	9.79	9.39	10.27
5	7.33	7.55	7.22	7.31	6.86	7.41	7.44	7.57	9.03	9.71	9.34	10.18
6	7.32	7.47	7.16	7.27	6.81	7.35	7.33	7.48	8.89	9.64	9.27	10.12
7	7.29	7.41	7.11	7.22	6.83	7.21	7.18	7.51	8.86	9.58	9.20	10.07
8	7.24	7.36	7.11	7.18	6.81	7.11	7.15	7.13	9.33	9.43	9.16	10.01
9	7.21	7.32	7.18	7.13	6.80	7.06	8.00	6.76	9.61	9.41	9.12	9.95
10	7.61	7.34	7.13	7.10	6.78	7.01	8.67	6.98	9.48	9.46	9.31	9.88
11	8.46	7.37	7.06	7.07	6.81	6.95	8.45	7.33	9.36	9.50	9.90	9.78
12	8.73	7.31	7.05	7.07	6.83	6.91	8.60	7.34	9.34	9.45	10.21	9.76
13	8.62	7.24	7.29	7.04	6.78	6.86	8.68	7.26	9.26	9.55	10.26	9.80
14	8.24	7.31	7.31	7.01	6.75	6.84	8.36	7.25	9.14	9.70	10.32	9.77
15	8.08	7.29	7.29	6.99	6.76	6.84	8.15	7.24	9.06	9.90	10.27	9.71
16	7.89	7.22	7.30	6.96	6.79	7.00	8.35	7.13	8.94	9.87	10.22	9.65
17	7.76	7.22	7.27	6.92	6.78	7.12	8.51	7.05	8.93	10.08	10.18	9.65
18	7.63	7.23	7.24	6.90	6.76	7.32	8.23	7.08	8.95	10.24	10.10	9.66
19	7.58	7.20	7.22	6.91	6.74	7.09	8.03	7.15	8.96	10.15	10.21	9.61
20	7.59	7.16	7.20	6.89	6.77	7.49	8.28	7.20	8.88	10.05	10.53	9.56
21	7.54	7.14	7.20	6.87	7.81	7.78	8.43	7.27	8.77	9.98	10.50	9.68
22	7.42	7.12	7.21	6.83	8.18	7.40	8.23	7.36	8.77	9.98	10.42	9.83
23	7.34	7.13	7.39	6.82	8.09	7.05	8.10	7.48	8.84	9.98	10.37	9.96
24	7.43	7.12	7.34	7.21	8.67	6.99	8.02	7.71	9.06	9.92	10.62	10.04
25	7.98	7.12	7.30	7.33	8.62	6.93	7.95	8.54	9.16	9.82	10.65	10.02
26	8.32	7.24	7.27	7.18	8.32	6.94	7.79	8.85	9.19	9.72	10.58	9.97
27	8.17	7.32	7.52	7.11	7.92	6.94	7.73	9.16	9.33	9.66	10.48	9.90
28	8.09	7.32	7.92	7.07	7.62	6.85	7.64	9.27	9.36	9.59	10.56	10.19
29	7.99	7.34	7.90	7.05	---	6.79	7.64	9.34	9.39	9.49	10.79	10.96
30	7.87	7.77	7.71	7.02	---	6.79	7.96	9.28	9.34	9.36	10.57	10.98
31	7.77	---	7.88	6.99	---	6.90	---	9.20	---	9.26	10.44	---
TOTAL	240.23	220.19	228.07	220.60	201.61	220.38	240.61	241.62	273.66	300.76	310.83	299.74
MEAN	7.75	7.34	7.36	7.12	7.20	7.11	8.02	7.79	9.12	9.70	10.03	9.99
MAX	8.73	7.77	7.92	7.78	8.67	7.78	8.68	9.34	9.61	10.24	10.79	10.98
MIN	7.21	7.12	7.05	6.82	6.74	6.79	7.15	6.76	8.77	9.26	9.12	9.56

WTR YR 1990 TOTAL 2998.30 MEAN 8.21 MAX 10.98 MIN 6.74

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281500 HILLSBORO CANAL NEAR DEERFIELD BEACH, FL

LOCATION.--Lat 26°19'39", long 80°07'52", SW¼ sec.35, T.47 S., R.42 E., Broward County, Hydrologic Unit 03090202, at upstream end of lock chamber, 2 mi west of Deerfield Beach, and 4.4 mi east of State Highway 7.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to current year. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

REVISED RECORDS.--WDR FL-78-2A: 1974-1975.

GAGE.--Water-stage recorder, sharp crested weir, and gate-opening indicator. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Auxiliary water-stage recorder at downstream end of lock. See WSP 1905 volume 2 for history of changes.

REMARKS.--Estimated daily discharge May 12 to Sept. 30, estimated daily stage June 19 - Sept. 30. Records poor. Flow regulated at station for irrigation and drainage and by flood-control levee, 11 mi upstream of station. Lock chamber not used for navigation. Pumps upstream of station divert water for irrigation during growing season. Since September 1952, flow materially affected by control structure 39, 11 mi upstream. Discharge computed from relation between discharge, head, submergence, and gate openings.

COOPERATION.--Stoplog and sluice-gate operation records provided by South Florida Water Management District.

AVERAGE DISCHARGE.--49 years (water years 1941-86, 1988-90), 298 ft³/s, 215,900 acre-ft/yr. (Revised).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,880 ft³/s May 4, 1983; maximum gage height, 12.58 ft Dec. 24, 1957; no flow for several days in 1939, 1940, and 1959; minimum gage height, 0.77 ft Aug. 17, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 795 ft³/s July 18; maximum gage height, 8.94 ft Oct. 2, Apr. 10; minimum daily discharge, 20 ft³/s, estimated leakage, many days during year; minimum gage height, 5.23 ft May 21.

REVISIONS.--Revised figures of discharge for the waters year 1987 - 1989, superseding those published are given below. Average discharge figures have been revised based on discharge revisions.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	101	---	474	20	---	20	128	128	20	---
2	20	20	57	---	456	20	---	20	20	139	20	---
3	20	20	20	---	450	41	---	20	20	101	20	---
4	20	20	20	---	128	167	---	20	20	91	20	---
5	20	20	20	---	212	249	---	20	20	20	20	---
6	20	20	205	---	167	227	---	20	20	96	54	---
7	20	20	132	---	142	850	---	20	20	101	55	---
8	29	20	---	---	76	400	---	20	20	20	20	---
9	20	154	---	---	95	195	---	146	20	53	20	---
10	54	103	---	---	132	266	---	168	28	20	20	---
11	98	20	---	---	160	---	331	855	22	20	20	---
12	20	20	---	---	155	---	320	565	27	20	20	---
13	20	20	---	---	185	---	346	520	20	20	20	---
14	20	760	---	---	167	---	177	620	20	20	57	---
15	64	294	---	---	179	---	78	325	20	20	53	---
16	302	282	---	---	245	---	229	247	20	99	20	---
17	---	332	---	---	103	---	57	296	20	103	20	---
18	---	196	---	---	106	---	20	316	20	141	20	---
19	---	214	---	---	117	---	20	151	20	387	20	---
20	---	43	---	---	20	---	20	191	20	60	20	---
21	---	154	---	426	20	---	20	181	20	188	20	---
22	---	20	---	135	20	---	20	131	20	143	20	---
23	20	108	---	124	20	---	20	179	20	102	20	530
24	20	105	---	355	20	---	20	110	20	20	20	700
25	20	83	---	104	101	---	20	103	20	53	20	238
26	20	59	---	243	53	---	20	176	20	20	---	185
27	20	60	---	373	20	---	20	20	20	20	---	197
28	213	57	---	468	20	---	20	20	20	20	---	253
29	112	35	---	447	---	---	20	20	130	20	---	372
30	54	113	---	439	---	---	20	20	139	53	---	311
31	20	---	---	453	---	---	---	20	---	20	---	---
TOTAL	---	3392	---	---	4043	---	---	5540	954	2318	---	---
MEAN	---	113	---	---	144	---	---	179	31.8	74.8	---	---
MAX	---	760	---	---	474	---	---	855	139	387	---	---
MIN	---	20	---	---	20	---	---	20	20	20	---	---
AC-FT	---	6730	---	---	8020	---	---	10990	1890	4600	---	---

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281500 HILLSBORO CANAL NEAR DEERFIELD BEACH, FL

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	281	111	20	260	20	20	685	233	355	675	550
2	399	220	50	151	136	20	20	447	247	313	610	305
3	95	434	20	268	20	20	20	195	151	246	645	20
4	52	1540	20	249	20	20	20	100	196	208	635	20
5	96	1590	20	153	20	68	20	20	103	209	404	20
6	20	1070	20	55	20	105	20	20	468	264	20	100
7	20	491	55	106	20	20	20	20	665	550	20	206
8	22	477	164	256	254	20	20	20	700	640	525	471
9	38	885	635	255	202	20	20	20	525	660	760	680
10	530	615	265	368	59	62	20	20	225	560	770	620
11	281	535	99	655	20	20	20	20	448	204	690	630
12	1010	397	104	745	20	20	20	20	555	245	700	720
13	770	189	54	700	20	20	20	20	630	437	835	305
14	485	261	98	715	20	52	20	20	505	785	830	56
15	520	248	54	770	20	20	20	20	284	850	830	52
16	346	225	149	710	214	20	20	20	332	715	695	20
17	232	107	57	655	20	20	20	20	252	640	600	20
18	168	53	20	685	20	20	20	20	198	515	720	20
19	111	279	20	675	20	136	20	20	152	474	615	20
20	104	404	20	615	20	68	100	20	147	472	685	20
21	61	104	20	238	290	20	20	20	203	391	640	20
22	20	20	58	53	105	20	20	20	88	336	660	20
23	62	20	146	20	102	20	20	20	159	265	640	20
24	20	20	201	20	289	20	20	20	156	269	645	20
25	20	54	64	401	496	20	20	20	187	314	630	20
26	20	545	53	343	283	20	20	20	121	205	595	20
27	20	575	20	137	20	20	20	20	163	153	342	20
28	20	223	20	181	20	20	20	20	205	530	488	20
29	20	206	20	308	20	20	20	20	152	760	570	20
30	20	109	20	291	---	20	122	129	272	760	520	20
31	82	---	20	314	---	20	---	194	---	750	484	---
TOTAL	5985	12177	2677	11112	3030	991	782	2250	8722	14075	18478	5055
MEAN	193	406	86.4	358	104	32.0	26.1	72.6	291	454	596	168
MAX	1010	1590	635	770	496	136	122	685	700	850	835	720
MIN	20	20	20	20	20	20	20	20	88	153	20	20
AC-FT	11870	24150	5310	22040	6010	1970	1550	4460	17300	27920	36650	10030

WTR YR 1988 TOTAL 85334 MEAN 233 MAX 1590 MIN 20 AC-FT 169300

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281500 HILLSBORO CANAL NEAR DEERFIELD BEACH, FL

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	20	20	20	73	20	20	20	20	20	20
2	20	20	20	20	20	50	20	20	20	20	20	20
3	20	346	20	20	100	56	20	20	20	59	20	20
4	20	346	20	20	20	95	20	20	20	110	20	52
5	20	196	20	20	20	20	20	20	20	128	20	28
6	190	20	20	20	20	20	20	20	20	114	20	20
7	322	20	20	20	20	20	20	20	20	20	20	20
8	96	20	20	20	20	20	20	20	29	20	20	20
9	20	20	20	20	20	20	20	20	20	20	20	20
10	20	20	20	20	20	20	20	20	20	20	20	20
11	20	20	20	20	20	20	20	20	20	20	20	20
12	20	20	20	20	20	20	20	20	20	20	40	20
13	20	20	20	20	20	20	20	20	20	20	32	20
14	20	20	20	20	20	20	20	20	20	20	56	20
15	20	20	20	20	20	20	20	20	20	20	118	20
16	20	20	20	20	20	20	20	20	20	20	91	20
17	20	20	20	20	20	20	20	20	20	20	60	20
18	20	20	20	20	20	20	104	20	20	20	20	42
19	20	136	20	20	20	20	20	20	20	20	76	212
20	20	20	20	20	20	20	20	20	20	112	294	29
21	20	20	68	20	20	20	20	20	20	20	168	20
22	20	102	102	67	20	20	20	20	20	54	197	20
23	20	142	20	20	20	20	20	20	20	20	116	20
24	20	20	20	20	20	20	20	20	20	20	86	20
25	20	20	20	20	20	20	20	20	20	20	79	20
26	20	20	20	20	20	20	20	20	20	20	46	20
27	20	20	21	20	20	20	20	20	20	20	44	20
28	20	20	20	20	20	20	20	20	20	20	39	20
29	20	20	20	20	---	20	20	20	20	20	20	20
30	20	20	20	20	---	20	20	20	20	20	20	20
31	20	---	20	20	---	20	---	20	---	20	20	---
TOTAL	1168	1748	751	667	640	814	684	620	609	1077	1842	863
MEAN	37.7	58.3	24.2	21.5	22.9	26.3	22.8	20.0	20.3	34.7	59.4	28.8
MAX	322	346	102	67	100	95	104	20	29	128	294	212
MIN	20	20	20	20	20	20	20	20	20	20	20	20
AC-FT	2320	3470	1490	1320	1270	1610	1360	1230	1210	2140	3650	1710
CAL YR 1988	TOTAL	68162	MEAN	186	MAX	850	MIN	20	AC-FT	135200		
WTR YR 1989	TOTAL	11483	MEAN	31.5	MAX	346	MIN	20	AC-FT	22780		

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281500 HILLSBORO CANAL NEAR DEERFIELD BEACH, FL

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	20	20	20	20	22	26	408	232	20	125
2	20	20	20	20	20	20	21	27	320	243	187	121
3	20	20	20	20	20	20	20	21	243	372	161	93
4	20	20	20	20	20	20	20	20	246	309	310	151
5	20	20	20	20	20	20	20	20	244	273	202	236
6	20	20	20	20	20	20	20	20	239	287	192	117
7	20	20	20	20	20	20	20	20	40	220	79	180
8	20	20	20	20	20	20	20	20	290	219	120	172
9	20	20	20	20	20	20	268	20	245	82	233	119
10	45	20	20	20	20	20	161	20	186	163	404	103
11	58	20	20	20	20	20	145	20	188	162	306	69
12	154	20	20	20	20	20	157	20	157	87	443	166
13	181	20	20	20	20	20	91	20	112	217	220	102
14	20	20	20	20	20	20	72	20	111	337	415	73
15	20	20	20	20	20	20	66	20	52	492	189	20
16	20	20	20	20	20	20	84	20	31	242	92	23
17	20	20	20	20	20	20	63	20	33	673	197	68
18	20	20	20	20	20	20	45	20	26	795	157	112
19	20	20	20	20	20	20	32	20	20	413	156	83
20	20	20	20	20	20	20	72	20	20	311	114	84
21	20	20	20	20	23	20	48	20	20	272	146	147
22	20	20	20	20	25	20	24	20	20	434	77	100
23	20	20	20	26	26	20	20	20	20	427	223	104
24	20	20	20	23	110	20	24	20	196	377	396	286
25	70	20	20	20	84	20	25	20	205	336	264	192
26	28	20	20	20	39	20	20	91	223	273	310	60
27	20	20	20	20	20	20	20	551	371	492	110	49
28	20	20	20	20	20	20	20	566	380	344	229	306
29	20	52	20	20	---	20	44	612	369	224	328	703
30	20	58	20	20	---	20	39	558	178	102	212	455
31	20	---	20	20	---	20	---	545	---	177	185	---
TOTAL	1036	670	620	629	747	620	1703	3437	5193	9587	6677	4619
MEAN	33.4	22.3	20.0	20.3	26.7	20.0	56.8	111	173	309	215	154
MAX	181	58	20	26	110	20	268	612	408	795	443	703
MIN	20	20	20	20	20	20	20	20	20	82	20	20
AC-FT	2050	1330	1230	1250	1480	1230	3380	6820	10300	19020	13240	9160
CAL YR 1989	TOTAL 10142	MEAN 27.8	MAX 294	MIN 20	AC-FT 20120							
WTR YR 1990	TOTAL 35538	MEAN 97.4	MAX 795	MIN 20	AC-FT 70490							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281501 HILLSBORO CANAL BELOW DEERFIELD LOCKS, NEAR DEERFIELD BEACH, FL

LOCATION.--Lat 26°19'39", long 80°07'51", in SW¼ sec.35, T.47 S., R.42 E., Broward County, Hydrologic Unit 03090202, at downstream end of lock chamber, 2 mi west of Deerfield Beach, and 4.4 mi east of State Highway 7.

DRAINAGE.--Indeterminate.

PERIOD OF RECORD.--July 1947 to December 1949 (incomplete), January 1950 to January 1958, December 1959 to current year (gage heights). Records of gage heights prior to October 1962 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to June 23, 1950, at site 500 ft downstream at same datum.

REMARKS.--No estimated daily stage. Gage records water levels below lock and control structure. Stage is basically tidal, but is occasionally affected by control structure operation.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 11.70 ft, estimated, Oct 12, 1947; minimum, -1.78 ft Apr. 6, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 3.15 ft Oct. 30; minimum, -1.45 ft Feb. 4.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.03	1.36	.70	.13	.32	.80	.71	.50	1.48	1.04	.90	.91
2	.92	1.25	.62	.13	.10	.75	.91	.64	1.19	.96	.91	1.08
3	.76	1.19	.52	.18	.07	.60	1.02	.63	1.01	1.10	.94	1.29
4	.77	1.09	.69	.28	-.06	.67	.99	.55	.96	.91	1.13	1.33
5	.89	1.12	.71	.23	.00	.77	.88	.64	.96	.76	1.16	1.41
6	.81	1.10	.75	.31	.21	.87	.71	.75	.87	.86	1.12	1.36
7	.74	1.10	.58	.39	.22	.90	.62	.90	.60	.75	1.02	1.44
8	.87	1.31	.53	.37	.28	1.18	.74	.94	1.00	.69	1.00	1.34
9	1.05	1.30	.28	.19	.28	.91	1.09	.96	.93	.51	1.16	1.18
10	1.09	1.13	.27	.19	.35	.83	.90	.86	.83	.65	1.45	1.12
11	1.11	.91	.45	.18	.40	.75	.81	.65	.79	.69	1.37	1.02
12	1.33	.80	.57	.22	.35	.69	.85	.52	.74	.71	1.64	1.23
13	1.35	.76	.37	.37	.33	.56	.79	.48	.69	.90	1.38	1.20
14	1.22	.84	.32	.36	.19	.74	.77	.34	.71	1.02	1.55	1.22
15	1.02	.71	.37	.40	.31	.73	.79	.40	.85	1.32	1.20	1.16
16	.90	.73	.30	.45	.02	.56	.70	.56	.87	.99	1.09	1.19
17	.79	.56	.33	.45	-.29	.45	.68	.72	.74	1.80	1.18	1.17
18	.70	.52	.26	.30	-.15	.27	.69	.66	.74	2.19	1.07	1.06
19	.54	.66	.25	.13	-.22	.35	.81	.62	.84	1.35	1.20	1.23
20	.29	.71	.28	.06	-.15	.44	.91	.68	.74	1.31	1.29	1.37
21	.53	.82	.34	-.18	-.05	.54	.92	.60	.53	1.25	1.26	1.35
22	.65	.74	.35	-.31	.21	.71	.94	.57	.44	1.43	1.15	1.16
23	.70	.62	.59	-.08	.19	.68	1.01	.64	.62	1.54	1.36	1.19
24	.84	.58	.63	.21	.26	.69	.94	.62	1.07	1.33	1.61	1.22
25	1.03	.60	.93	.40	.42	.73	.86	.74	1.07	1.19	1.41	1.20
26	1.14	.58	.85	.40	.72	.54	.79	.86	1.00	1.16	1.29	1.21
27	1.18	.49	.57	.37	.78	.69	.72	1.55	1.18	1.46	1.04	1.11
28	1.42	.36	.39	.35	.77	.60	.72	1.88	1.23	1.31	1.30	1.35
29	1.60	.32	.46	.34	---	.58	.69	2.02	1.19	1.30	1.45	2.02
30	1.72	.57	.45	.27	---	.47	.48	1.81	1.00	1.15	1.07	1.58
31	1.48	---	.39	.19	---	.49	---	1.77	---	1.07	.99	---
TOTAL	30.47	24.83	15.10	7.28	5.86	20.54	24.44	26.06	26.87	34.70	37.69	37.70
MEAN	.98	.83	.49	.23	.21	.66	.81	.84	.90	1.12	1.22	1.26
MAX	1.72	1.36	.93	.45	.78	1.18	1.09	2.02	1.48	2.19	1.64	2.02
MIN	.29	.32	.25	-.31	-.29	.27	.48	.34	.44	.51	.90	.91

WTR YR 1990 TOTAL 291.54 MEAN .80 MAX 2.19 MIN -.31

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02282700 MIDDLE RIVER CANAL AT S-36, NEAR FORT LAUDERDALE, FL

LOCATION.--Lat 26°10'22", long 80°10'47", in NW¼ sec.20, T.49 S., R.42 E., Broward County, Hydrologic Unit 03090202, 20 ft from south bank, 120 ft upstream from salinity-control structure 36, 1.5 mi east of bridge on U.S. Highway 441, and 5 mi west of Fort Lauderdale.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1955 to September 1961 (gage heights), October 1961 to current year. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

GAGE.--Water-stage recorder and gate-opening recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Electromagnetic velocity meter and deflection vane recorder at same site prior to Oct. 1, 1985.

REMARKS.--Records fair except for those estimated daily discharges May 27-29. Flow is at times affected by tide and occasionally reversed. Flow is regulated by operation of salinity-control structure 36. Discharge computed from the relationship of gate opening versus head difference.

COOPERATION.--Gage height and S-36 gate-operation records provided by South Florida Water Management District.

AVERAGE DISCHARGE.--29 years, 59.6 ft³/s, 43,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,490 ft³/s Apr. 25, 1979; maximum gage height, 7.38 ft Dec. 27, 1958; maximum reverse flow, 61 ft³/s Oct. 8, 1963; no flow for many days each year; minimum gage height, -0.53 ft June 28, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 360 ft³/s May 29 (estimated); maximum gage height, 5.37 ft June 8; no flow for many days; minimum gage height, 3.29 ft July 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	45	116
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	143	5.2	73
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	31	38	91
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	62	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	321	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	43	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	276	29	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.30	356	.00	67	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	160	40	103	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	68	.00	153	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	97	.00	211	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	70	.00	230	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	37	170	3.6
15	.00	.00	.00	.00	.00	.00	.00	.00	34	131	154	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	108	.00	106	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	168	110	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	217	129	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	104	28	103	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	12	.00	105	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	106	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	120	27	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	252	99	41
24	.00	.00	.00	.00	.00	.00	.00	.00	120	249	106	24
25	.00	.00	.00	.00	.00	.00	.00	.00	155	143	52	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	162	87	36	.00
27	.00	.00	.00	.00	.00	.00	.00	59	213	94	53	.00
28	.00	.00	.00	.00	.00	.00	.00	206	83	53	88	14
29	.00	.00	19	.00	---	.00	.00	360	.00	.00	138	107
30	.00	.00	.00	.00	---	.00	.00	202	.00	94	64	.00
31	.00	---	.00	.00	---	.00	---	39	---	.00	130	---
TOTAL	0.00	0.00	19.00	0.00	0.00	0.00	0.00	866.30	2018.00	2342.00	2628.20	469.60
MEAN	.000	.000	.61	.000	.000	.000	.000	27.9	67.3	75.5	84.8	15.7
MAX	.00	.00	19	.00	.00	.00	.00	360	356	321	230	116
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	38	.00	.00	.00	.00	1720	4000	4650	5210	931

CAL YR 1989 TOTAL 2216.10 MEAN 6.07 MAX 188 MIN .00 AC-FT 4400
WTR YR 1990 TOTAL 8343.10 MEAN 22.9 MAX 360 MIN .00 AC-FT 16550

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02282700 MIDDLE RIVER CANAL AT S-36, NEAR FORT LAUDERDALE, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.07	3.93	4.07	4.32	4.24	4.55	4.41	4.44	4.73	5.00	4.46	4.38
2	4.11	3.94	4.07	4.24	4.22	4.50	4.41	4.40	4.77	4.64	4.57	4.45
3	4.16	3.96	4.09	4.26	4.20	4.50	4.41	4.34	4.74	4.14	4.62	4.40
4	4.11	3.94	4.09	4.29	4.20	4.47	4.37	4.30	4.73	4.50	4.92	4.77
5	4.05	3.92	4.09	4.36	4.18	4.43	4.31	4.27	4.84	4.70	4.93	4.86
6	4.02	3.91	4.08	4.38	4.12	4.39	4.27	4.27	4.78	3.96	4.93	4.68
7	4.00	3.88	4.07	4.39	4.12	4.32	4.25	4.30	4.71	4.54	4.83	4.52
8	4.01	3.88	4.09	4.40	4.10	4.26	4.22	4.25	4.60	4.59	4.70	4.42
9	4.11	3.97	4.16	4.39	4.09	4.27	4.59	4.23	4.17	4.78	4.42	4.35
10	4.40	4.01	4.17	4.39	4.08	4.25	4.88	4.36	4.32	4.84	4.33	4.34
11	4.55	4.05	4.18	4.38	4.09	4.21	4.97	4.58	4.49	4.80	4.33	4.30
12	4.61	4.04	4.19	4.38	4.06	4.18	4.98	4.58	4.47	4.54	4.09	4.35
13	4.57	4.03	4.26	4.35	4.01	4.15	4.70	4.56	4.27	4.46	4.10	4.39
14	4.48	4.03	4.26	4.33	3.98	4.12	4.48	4.53	4.59	4.65	4.24	4.23
15	4.40	4.03	4.27	4.32	3.95	4.08	4.36	4.48	4.63	4.38	4.22	4.16
16	4.32	4.05	4.31	4.31	3.95	4.04	4.42	4.42	4.22	4.58	4.37	4.15
17	4.26	4.02	4.34	4.31	3.94	4.01	4.44	4.36	4.47	4.49	4.36	4.10
18	4.22	3.99	4.37	4.32	3.91	4.04	4.43	4.29	4.50	4.20	4.31	4.07
19	4.20	3.99	4.39	4.30	3.92	4.20	4.39	4.22	4.36	4.57	4.40	4.19
20	4.14	3.99	4.41	4.29	3.94	4.52	4.37	4.14	4.30	4.58	4.35	4.32
21	4.06	3.97	4.42	4.29	4.24	4.52	4.35	4.08	4.46	4.63	4.42	4.48
22	4.00	3.96	4.42	4.28	4.38	4.48	4.34	4.03	4.48	4.58	4.54	4.60
23	3.94	3.98	4.54	4.26	4.54	4.47	4.32	3.99	4.52	4.29	4.41	4.55
24	3.91	3.98	4.56	4.25	4.71	4.44	4.42	4.02	4.42	4.18	4.32	4.54
25	3.89	3.97	4.57	4.24	4.72	4.43	4.47	4.28	4.38	4.25	4.53	4.48
26	3.90	4.04	4.59	4.25	4.70	4.41	4.46	4.42	4.31	4.47	4.53	4.26
27	3.96	4.07	4.61	4.22	4.65	4.38	4.44	4.67	4.17	4.42	4.51	4.13
28	3.97	4.09	4.63	4.23	4.61	4.33	4.42	4.77	4.47	4.38	4.48	4.26
29	3.97	4.13	4.58	4.26	---	4.32	4.44	4.14	4.83	4.61	4.25	4.33
30	3.95	4.11	4.47	4.26	---	4.29	4.46	4.24	4.95	4.37	4.50	4.63
31	3.94	---	4.38	4.25	---	4.32	---	4.61	---	4.52	4.31	---
TOTAL	128.28	119.86	133.73	133.50	117.85	133.88	133.78	134.57	135.68	139.64	138.28	131.69
MEAN	4.14	4.00	4.31	4.31	4.21	4.32	4.46	4.34	4.52	4.50	4.46	4.39
MAX	4.61	4.13	4.63	4.40	4.72	4.55	4.98	4.77	4.95	5.00	4.93	4.86
MIN	3.89	3.88	4.07	4.22	3.91	4.01	4.22	3.99	4.17	3.96	4.09	4.07
CAL YR 1989	TOTAL 1478.50		MEAN 4.05	MAX 4.63	MIN 3.53							
WTR YR 1990	TOTAL 1580.74		MEAN 4.33	MAX 5.00	MIN 3.88							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02283200 PLANTATION ROAD CANAL AT S-33, NEAR FORT LAUDERDALE, FL

LOCATION.--Lat 26°08'05", long 80°11'42", in SW¼ sec.31, T.49 S., R.42 E., Broward County, Hydrologic Unit 03090202, 15 ft streamward from left bank, 130 ft upstream from salinity-control structure 33, 0.5 mi east of bridge on U.S. Highway 441, 3 mi above mouth, and 4 mi west of Fort Lauderdale.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1955 to February 1962 (gage heights), March 1962 to current year. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

GAGE.--Water-stage recorder, and gate-opening recorder. Datum of gage is National Geodetic Vertical Datum of 1929. (U.S. Army Corps of Engineers bench mark).

REMARKS.--No estimated daily discharge. Records fair except for those estimated daily stages, Oct. 1-13, which are poor. Flow is at times affected by tide and is occasionally reversed. Flow is regulated by operation of salinity-control structure 33.

COOPERATION.--Gage readings were provided by South Florida Water Management District.

AVERAGE DISCHARGE.--26 years (water years 1963 - 86, 88, 89), 19.4 ft³/s, 14,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 748 ft³/s July 3, 4, 1988 estimated; maximum gage height, 6.16 ft Apr. 25, 1979; maximum reverse flow, 157 ft³/s Sept. 8, 1956; no flow on some days each year; minimum gage height, -0.82 ft Mar. 4, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 77 ft³/s Sept. 29; maximum gage height, 4.12 ft May 10; no flow for many days; minimum gage height, 2.25 ft Dec. 15-19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	2.7	.00	16	---
2	.00	.00	.00	.00	.00	.00	.00	.00	4.8	20	10	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.6	16	---
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.0	19	---
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	26	4.3	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.2	8.4	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---
8	.00	.00	.00	.00	.00	.00	.00	.00	59	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	45	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	5.6	10	4.8	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	16	.00	11	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	5.0	5.7	22	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	5.2	.00	21	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	17	28	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	6.0	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	11	17	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	52	5.3	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	32	19	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	27	12	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	19	12	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	22	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	39	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	36	18	---	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	33	17	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	26	23	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	25	50	32	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	13	11	21	.00	12
29	.00	.00	.00	.00	---	.00	.00	17	.00	8.8	.00	77
30	.00	.00	.00	.00	---	.00	.00	11	.00	.00	.00	44
31	.00	---	.00	.00	---	.00	---	6.4	---	6.4	---	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.00	303.70	449.50	---	---
MEAN	.0000	.0000	.0000	.0000	.0000	.0000	.0000	2.52	10.1	14.5	---	---
MAX	.00	.00	.00	.00	.00	.00	.00	25	59	52	---	---
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---
AC-FT	.00	.00	.00	.00	.00	.00	.00	155	602	892	---	---

CAL YR 1989 TOTAL 1431.80 MEAN 3.92 MAX 232 MIN .00 AC-FT 2840

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02283200 PLANTATION ROAD CANAL AT S-33, NEAR FORT LAUDERDALE, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.03	2.77	2.33	2.84	2.76	3.01	3.20	3.54	3.97	3.88	3.82	3.87
2	3.12	2.75	2.32	2.81	2.78	2.99	3.21	3.49	3.86	3.80	3.80	3.92
3	3.33	2.77	2.31	2.80	2.77	2.99	3.22	3.41	3.93	3.89	3.76	3.72
4	3.28	2.75	2.74	2.80	2.75	2.99	3.19	3.35	3.92	3.91	3.69	3.83
5	3.21	2.69	2.73	2.86	2.72	2.96	3.15	3.30	3.89	3.73	3.90	3.84
6	3.14	2.64	2.48	2.89	2.62	2.92	3.10	3.26	3.82	3.87	3.90	3.81
7	3.08	2.60	2.37	2.90	2.57	2.84	3.06	3.27	3.75	3.98	3.87	3.86
8	3.04	2.57	2.79	2.90	2.51	2.71	3.08	3.19	3.60	4.00	3.92	3.81
9	3.08	3.03	2.82	2.89	2.48	2.65	3.67	3.14	3.65	4.00	3.90	3.75
10	3.53	2.99	2.55	2.90	2.46	2.61	3.69	3.38	3.77	3.88	3.88	3.69
11	3.70	2.78	2.43	2.89	2.45	2.56	3.70	3.88	3.79	3.90	3.78	3.65
12	3.71	2.66	2.36	2.89	2.49	2.55	3.69	3.83	3.95	3.88	3.66	3.69
13	3.67	2.58	2.33	2.87	2.87	2.49	3.63	3.77	3.89	3.95	3.72	3.67
14	3.61	2.53	2.28	2.83	2.95	2.98	3.58	3.71	3.96	3.85	3.54	3.61
15	3.54	2.50	2.26	2.81	2.65	3.02	3.53	3.64	3.94	3.79	3.90	3.55
16	3.47	2.48	2.26	2.79	2.51	2.70	3.48	3.56	3.89	3.89	3.75	3.51
17	3.40	2.49	2.26	2.76	2.41	2.51	3.41	3.48	3.82	3.69	3.90	3.46
18	3.32	2.45	2.26	2.75	2.34	2.48	3.34	3.41	3.75	3.70	3.65	3.41
19	3.26	2.40	2.72	2.75	2.30	2.68	3.27	3.33	3.70	3.75	3.75	3.40
20	3.21	2.38	2.78	2.72	2.28	3.29	3.23	3.26	3.65	3.72	3.79	3.36
21	3.14	2.86	2.57	2.70	2.91	3.29	3.18	3.20	3.59	3.77	3.96	3.34
22	3.05	2.87	2.46	2.68	3.04	3.18	3.13	3.18	3.54	3.80	3.95	3.34
23	2.98	2.61	2.62	2.66	2.85	3.13	3.08	3.18	3.52	3.62	3.93	3.39
24	2.95	2.45	2.70	2.63	3.02	3.09	3.52	3.25	3.46	3.77	3.83	3.52
25	2.94	2.36	2.73	2.59	3.07	3.07	3.49	3.59	3.60	3.79	3.81	3.50
26	2.93	2.37	2.77	2.64	3.07	3.05	3.42	3.68	3.70	3.67	3.76	3.46
27	2.91	2.34	2.79	2.59	3.03	3.03	3.37	3.71	3.64	3.61	3.72	3.45
28	2.89	2.32	2.80	2.59	3.01	2.99	3.31	3.84	3.67	3.66	3.69	3.71
29	2.86	2.34	2.81	2.70	---	2.96	3.36	3.78	3.86	3.84	3.75	3.47
30	2.84	2.35	2.81	2.74	---	2.96	3.52	3.82	3.90	3.99	3.71	3.72
31	2.81	---	2.82	2.75	---	3.06	---	3.87	---	3.89	3.58	---
MEAN	3.19	2.59	2.56	2.77	2.70	2.89	3.36	3.49	3.77	3.82	3.79	3.61
MAX	3.71	3.03	2.82	2.90	3.07	3.29	3.70	3.88	3.97	4.00	3.96	3.92
MIN	2.81	2.32	2.26	2.59	2.28	2.48	3.06	3.14	3.46	3.61	3.54	3.34
CAL YR 1989	MEAN 2.99		MAX 3.82	MIN 2.18								
WTR YR 1990	MEAN 3.22		MAX 4.00	MIN 2.26								

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02283498 NORTH NEW RIVER CANAL AT S-2 AND S351, NEAR SOUTH BAY, FL
(Formerly published as North New River Canal at S-2 and HGS-4, near South Bay)

LOCATION.--Lat 26°42'00", long 80°42'55", in SW¼ sec.35, T.43 S., R.36 E., Palm Beach County, Hydrologic Unit 03090202, at pump station 2 and gate structure S351, 500 ft upstream from Hillsboro Canal, and 2.7 mi north of South Bay.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1957 to September 1967 (gage heights), October 1967 to current year. Records of gage heights prior to October 1967 are available in files of the Geological Survey.

REVISED RECORDS.--WDR FL-77-2A: 1974.

GAGE.--Dual graphic water-stage recorder and digital lake recorder in pump station 2, digital canal water-stage recorder in canal, east side of S-2, gate-opening indicator, and pump tachometer. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Jan. 18, 1965, water-stage recorder at site 1,600 ft downstream at same datum. Electromagnetic velocity meter and digital recorder in lock chamber installed 1981 water year were removed October, 1986. Prior to Sept. 8, 1988, digital lake water stage recorder in control house of lock.

REMARKS.--Estimated discharge: May 31, June 1-6, 8-11, 25-28; July 2-5 and 14-16. Record fair. Flow regulated by gates and pump station at Lake Okeechobee. Discharge is summation of gate flow, S-2 pumpage and syphonage. Flow frequently reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades, by the operation of pump station No. 2 (negative figures indicate flow reversed) and by gravity flow through lift gates during periods of negative head. See records for North New River Canal below S351, near South Bay (station 02283500) for table of daily canal gage height. Discharge computed from relation between discharge, head, gate openings, and pump tachometer.

COOPERATION.--S-2 pump record and gate-operation record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--23 years (1968-1990), 98.7 ft³/s, 71,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,840 ft³/s May 12, 1989; maximum gage height, 14.09 ft Sept. 28, 1962; maximum daily reverse flow, 4,900 ft³/s Aug. 19, 1981; no flow for some days each year; minimum gage height, 6.98 ft, observed, Oct. 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,190 ft³/s Mar. 18; maximum gage height, 13.64 ft Dec. 23 and Jan. 26; maximum daily reverse flow, 1,850 ft³/s Oct. 11; no flow for many days; minimum gage height, 9.98 ft June 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	753	1130	1360	189	-750	.00	.00	.00
2	.00	.00	.00	.00	843	1100	1420	150	-400	-500	.00	.00
3	.00	.00	.00	.00	807	930	1200	222	-150	-600	.00	.00
4	.00	.00	133	.00	822	954	1750	435	-100	-1000	.00	.00
5	.00	.00	123	.00	1060	1010	1560	.00	-600	-250	.00	.00
6	.00	.00	285	.00	975	1090	1600	.00	-300	.00	.00	.00
7	.00	.00	150	.00	1070	1060	1490	555	.00	.00	.00	.00
8	-301	.00	357	.00	1150	999	1640	447	-400	.00	.00	.00
9	-1100	.00	.00	.00	1220	1180	1500	306	-950	.00	.00	.00
10	-1090	.00	.00	648	1120	1100	1440	.00	-500	.00	.00	.00
11	-1850	.00	354	1050	780	1130	1820	.00	-50	.00	.00	.00
12	-1200	.00	.00	1040	.00	1390	1920	.00	.00	.00	.00	.00
13	-1360	.00	660	1270	519	1300	1720	.00	.00	.00	.00	.00
14	-1450	.00	.00	1050	1030	1660	1400	87	180	-60	.00	.00
15	-1670	118	561	1090	1050	1900	1320	.00	348	-900	.00	.00
16	-703	161	255	1160	1090	1780	984	270	.00	-200	.00	.00
17	-329	67	.00	1050	1160	1700	744	309	.00	.00	.00	.00
18	-455	194	.00	957	1160	2190	630	306	651	.00	.00	.00
19	-325	194	.00	957	1220	1900	.00	.00	936	.00	.00	.00
20	-314	549	474	936	1240	1860	2020	225	339	.00	.00	.00
21	.00	936	708	990	339	1730	888	417	645	.00	.00	.00
22	.00	954	486	1040	.00	1580	.00	252	410	.00	.00	.00
23	.00	948	.00	855	213	1720	1950	447	109	.00	.00	.00
24	.00	942	.00	.00	696	1670	834	297	6.8	.00	.00	.00
25	.00	885	.00	.00	810	1640	564	462	-500	.00	.00	.00
26	.00	855	.00	.00	834	1780	270	.00	-600	.00	.00	.00
27	.00	276	.00	.00	777	1750	369	.00	-100	.00	.00	.00
28	.00	.00	.00	657	1000	1780	.00	.00	-40	.00	.00	.00
29	.00	.00	.00	423	---	1580	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	729	---	1530	396	.00	.00	.00	.00	.00
31	.00	---	.00	753	---	1490	---	-400	---	774	.00	---
TOTAL	-12147.00	7079.00	4546.00	16655.00	23738.00	45613	32789.00	4976.00	-1815.20	-2736.00	0.00	0.00
MEAN	-392	236	147	537	848	1471	1093	161	-60.5	-88.3	.000	.000
MAX	.00	954	708	1270	1240	2190	2020	555	936	774	.00	.00
MIN	-1850	.00	.00	.00	.00	930	.00	-400	-950	-1000	.00	.00
AC-FT	-24090	14040	9020	33040	47080	90470	65040	9870	-3600	-5430	.00	.00

CAL YR 1989 TOTAL 223639.00 MEAN 613 MAX 3840 MIN -3470 AC-FT 443600
WTR YR 1990 TOTAL 118697.80 MEAN 325 MAX 2190 MIN -1850 AC-FT 235400

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.08	12.86	12.67	12.49	12.34	12.38	11.69	10.96	10.68	10.72	11.50	12.44
2	12.15	12.83	12.47	12.49	12.30	12.28	11.66	10.94	10.69	10.67	11.52	12.56
3	12.36	12.99	12.77	12.38	12.30	12.34	11.82	10.87	10.69	10.77	11.49	12.54
4	12.32	12.97	12.69	12.32	12.28	12.47	11.93	10.83	10.65	10.79	11.49	12.56
5	12.19	12.84	12.40	12.35	12.74	12.41	11.64	10.85	10.67	10.86	11.49	12.56
6	12.18	12.79	12.33	12.34	12.33	12.46	11.46	10.89	10.68	10.89	11.48	12.52
7	12.14	12.75	12.29	12.29	12.37	12.44	11.45	11.09	10.70	10.90	11.45	12.44
8	12.33	12.66	12.23	12.36	12.37	12.27	11.74	10.81	10.69	10.88	11.44	12.41
9	12.47	12.75	12.45	12.46	12.27	12.26	11.46	10.69	10.72	10.91	11.52	12.42
10	12.41	12.86	12.57	12.43	12.18	12.27	11.38	10.75	10.69	10.89	11.49	12.42
11	12.74	12.85	12.38	12.41	12.41	12.27	11.48	11.05	10.75	10.88	11.58	12.47
12	12.78	12.70	12.28	12.41	12.85	12.21	11.80	10.87	10.80	10.88	11.67	12.42
13	12.77	12.66	12.56	12.98	12.38	12.16	11.58	10.83	10.78	10.90	11.66	12.38
14	12.74	12.61	12.70	12.41	12.31	12.07	11.39	10.81	10.68	10.87	11.83	12.38
15	12.79	12.58	12.36	12.34	12.25	11.94	11.26	10.81	10.56	11.14	11.89	12.31
16	12.84	12.77	12.28	12.30	12.25	11.85	11.29	10.74	10.51	11.28	11.93	12.31
17	12.83	13.10	12.40	12.28	12.33	11.80	11.23	10.73	10.50	11.23	11.96	12.35
18	12.80	12.83	12.31	12.31	12.29	12.35	11.25	10.69	10.49	11.24	11.99	12.43
19	12.99	12.67	12.27	12.30	12.24	12.07	11.25	10.65	10.44	11.36	12.09	12.47
20	13.57	12.64	12.33	12.26	12.38	12.24	11.24	10.60	10.42	11.25	12.05	12.40
21	13.11	12.59	12.42	12.30	12.30	12.33	11.19	10.60	10.39	11.29	12.12	12.36
22	13.11	12.47	12.65	12.35	12.06	11.99	11.17	10.67	10.42	11.33	12.12	12.33
23	12.97	12.53	13.18	12.37	12.28	11.96	11.11	10.68	10.48	11.38	12.15	12.37
24	12.90	12.68	13.26	12.29	12.83	11.88	11.16	10.56	10.51	11.45	12.14	12.57
25	13.04	12.42	12.45	12.23	12.80	11.86	11.01	10.57	10.62	11.45	12.24	12.40
26	13.00	12.44	12.27	12.85	12.75	11.83	10.99	10.51	10.58	11.53	12.29	12.32
27	13.21	12.45	12.30	12.47	12.40	11.82	10.88	10.57	10.68	11.67	12.32	12.32
28	13.31	12.45	12.33	12.43	12.38	11.72	10.82	10.56	10.66	11.63	12.33	12.27
29	13.05	12.56	12.34	12.31	---	11.56	10.98	10.59	10.67	11.52	12.42	12.30
30	12.81	12.86	12.32	12.35	---	11.45	10.96	10.65	10.68	11.51	12.43	12.51
31	12.84	---	12.28	12.42	---	11.59	---	10.65	---	11.47	12.44	---
TOTAL	394.83	381.16	386.54	384.28	346.97	374.53	340.27	333.07	318.48	345.54	368.52	372.54
MEAN	12.74	12.71	12.47	12.40	12.39	12.08	11.34	10.74	10.62	11.15	11.89	12.42
MAX	13.57	13.10	13.26	12.98	12.85	12.47	11.93	11.09	10.80	11.67	12.44	12.57
MIN	12.08	12.42	12.23	12.23	12.06	11.45	10.82	10.51	10.39	10.67	11.44	12.27
CAL YR 1989	TOTAL 4591.18		MEAN 12.58	MAX 14.64	MIN 11.02							
WTR YR 1990	TOTAL 4346.73		MEAN 11.91	MAX 13.57	MIN 10.39							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02283500 NORTH NEW RIVER CANAL BELOW S351, NEAR SOUTH BAY, FL

LOCATION.--Lat 26°41'50", long 80°42'50", in SW¼ sec.35, T.43 S., R.36 E., Palm Beach County, Hydrologic Unit 03090202, 30 ft from west bank, 800 ft downstream from Hillsboro Canal, 1,600 ft downstream from gate structure S351 and pump station 2 at Lake Okeechobee, and 2.5 mi north of South Bay.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1957 to current year. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

REVISED RECORD.--WDR FL-77-2A: 1974, 1975.

GAGE.--Digital water stage recorder and electromagnetic velocity meter. Prior to October 1, 1986, water stage recorder at pump station 2 used for gage heights at this station. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Jan. 18, 1954, water-stage and deflection-meter recorder at site 1,600 ft downstream at same datum. Jan. 19, 1965 to Sept. 30, 1967 deflection-meter recorder at site 1,600 ft downstream.

REMARKS.--Estimated daily discharge: Apr. 26 - May 1 and June 30 - July 1. Records poor. Flow regulated by S351 gate and pump station at Lake Okeechobee. Flow occasionally reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades by pumping at structure 2 or by gravity flow through gates during periods of negative heads (negative figures indicate flow reversed). Discharge was the difference in flow between North New River Canal at S-2 and S351 and Hillsboro Canal below S351 October 1967 to June 9, 1987.

AVERAGE DISCHARGE.--33 years, 97.1 ft³/s, 70,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,100 ft³/s June 16, 1977; maximum gage height, 14.09 ft Sept. 28, 1962; maximum daily reverse flow, 3,190 ft³/s Aug. 19, 1981; minimum gage height, 6.98 ft observed Oct. 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,070 ft³/s Apr. 4, 5; maximum gage height, 12.62 ft Dec. 27; maximum daily reverse flow, 1,030 ft³/s Oct. 11; minimum gage height, 7.50 ft May 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-47	-47	22	45	484	481	537	155	-426	25	180	-3.8
2	-48	-20	80	23	598	485	756	140	-303	-237	124	58
3	-50	57	111	62	599	546	899	151	-100	-409	23	48
4	-126	23	165	125	528	769	1070	261	-115	-557	31	37
5	-133	-38	103	77	719	696	1070	-39	-393	-164	195	189
6	-66	49	173	6.1	625	600	1040	17	-274	178	173	96
7	-101	69	135	-35	637	553	883	286	-44	144	169	6.9
8	-3.0	88	210	53	673	362	905	259	-208	194	201	137
9	-616	49	54	63	710	654	520	123	-734	179	171	158
10	-796	55	35	428	572	532	487	-20	-305	155	18	109
11	-1030	69	260	729	479	560	1040	36	-24	119	171	91
12	-673	68	69	620	215	750	890	41	-37	79	208	154
13	-812	104	277	822	379	677	476	-20	-49	50	131	87
14	-498	119	38	656	587	708	384	97	175	40	-8.2	39
15	-469	132	123	521	558	754	409	37	267	-412	-85	89
16	-219	166	70	813	528	747	534	220	68	30	-68	32
17	-112	-6.9	37	770	533	632	294	200	36	.42	150	48
18	-145	-147	21	586	530	689	323	194	462	-79	234	-19
19	-88	-85	20	568	553	562	124	-2.0	543	149	292	19
20	-102	213	56	631	578	594	300	91	251	110	207	-195
21	-41	398	44	593	335	438	136	159	406	47	147	-117
22	-21	370	78	601	339	357	42	117	184	36	46	-3.7
23	-39	317	121	668	408	442	755	235	65	68	119	-54
24	-17	227	68	307	567	345	164	115	256	79	115	-25
25	-4.6	309	46	142	534	389	194	186	-225	79	117	200
26	6.1	295	61	308	597	640	200	-30	-530	107	52	183
27	17	5.4	30	189	546	753	240	6.9	-75	123	117	137
28	23	-42	-63	540	602	857	10	11	-72	118	106	133
29	6.8	38	-21	395	---	793	50	82	76	105	76	86
30	-82	89	16	449	---	842	290	115	50	115	122	10
31	-69	---	30	416	---	808	---	-71	---	262	14	---
TOTAL	-6354.7	2923.5	2469	12171.1	15013	19015	15022	3152.9	-1075	733.42	3547.8	1729.4
MEAN	-205	97.4	79.6	393	536	613	501	102	-35.8	23.7	114	57.6
MAX	23	398	277	822	719	857	1070	286	543	262	292	200
MIN	-1030	-147	-63	-35	215	345	10	-71	-734	-557	-85	-195
AC-FT	-12600	5800	4900	24140	29780	37720	29800	6250	-2130	1450	7040	3430

CAL YR 1989 TOTAL 128063.4 MEAN 351 MAX 1610 MIN -1030 AC-FT 254000
WTR YR 1990 TOTAL 68347.42 MEAN 187 MAX 1070 MIN -1030 AC-FT 135600

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.15	10.18	11.85	11.75	11.23	11.31	11.60	9.47	10.95	10.54	10.51	10.58
2	11.07	9.98	11.61	11.71	11.25	11.25	11.55	8.95	10.82	10.91	10.27	10.48
3	10.99	9.90	11.16	11.69	11.04	11.60	11.42	8.48	10.74	11.06	10.08	10.08
4	10.83	9.76	10.60	11.60	10.95	11.71	11.73	8.70	11.15	11.06	10.37	10.19
5	10.86	9.60	10.22	11.60	11.11	11.54	11.48	8.01	11.52	11.26	11.44	10.90
6	10.45	9.82	9.99	11.54	11.14	11.45	11.27	8.16	11.00	11.33	11.36	10.71
7	10.03	10.15	9.95	11.40	11.13	11.49	11.30	8.43	11.27	10.87	10.84	10.13
8	10.64	10.13	10.25	11.36	11.23	11.43	11.56	8.83	11.31	10.50	10.58	10.03
9	11.45	10.25	11.13	11.38	11.33	11.42	11.31	8.68	11.05	10.31	11.17	10.13
10	11.16	10.39	11.32	11.37	11.12	11.24	11.24	9.03	10.85	10.58	11.22	10.15
11	11.67	10.40	11.45	11.46	11.17	11.19	11.21	10.80	10.86	10.52	11.28	10.72
12	11.66	10.53	11.38	11.47	10.78	11.37	11.53	11.04	11.04	10.34	10.49	10.50
13	11.53	10.51	11.75	11.57	10.59	11.65	11.36	10.64	10.82	10.40	11.00	10.32
14	10.98	10.31	11.39	11.45	11.09	11.48	11.26	10.23	10.41	11.20	12.00	10.76
15	11.35	10.20	11.24	11.32	11.31	11.54	11.15	9.90	10.19	11.44	11.77	10.32
16	11.20	10.50	11.43	11.46	11.24	11.64	10.83	9.44	9.48	11.65	11.08	10.03
17	11.63	10.56	11.10	11.39	11.18	11.61	9.88	9.12	9.10	10.66	11.58	10.10
18	11.41	10.22	10.91	11.17	11.14	12.04	10.29	8.78	9.20	10.62	11.36	10.99
19	11.41	10.05	10.68	11.16	10.96	11.84	8.86	8.02	9.71	10.77	11.45	11.38
20	11.28	10.10	10.49	11.17	11.05	12.03	9.54	8.00	9.34	10.61	11.37	11.26
21	11.09	10.52	10.68	11.08	11.59	12.18	10.14	8.30	8.95	10.04	11.26	11.00
22	11.05	10.70	10.66	11.00	11.35	11.86	9.23	7.72	9.60	10.26	11.14	11.37
23	10.99	10.78	10.91	11.08	11.11	11.78	9.66	8.18	9.66	10.59	11.19	11.77
24	10.82	10.95	10.94	11.24	11.87	11.71	9.91	8.12	10.44	10.51	11.37	11.71
25	11.05	10.90	11.16	10.40	11.53	11.70	9.14	9.47	11.12	10.28	11.07	11.68
26	11.01	11.01	11.84	10.63	11.42	11.61	8.57	9.61	10.85	10.04	10.59	11.33
27	10.93	11.33	12.15	10.27	11.24	11.61	8.69	9.47	11.01	9.68	10.73	10.98
28	10.74	11.13	11.34	10.64	11.18	11.50	8.01	9.40	10.87	9.41	10.81	10.90
29	10.71	11.61	11.61	11.21	---	11.39	8.36	10.24	11.06	9.20	10.77	11.01
30	10.63	12.13	11.76	11.32	---	11.29	8.96	11.01	10.59	9.14	10.77	11.20
31	10.53	---	11.78	11.32	---	11.45	---	11.52	---	10.41	10.49	---
TOTAL	342.30	314.60	344.73	349.21	313.33	358.91	311.04	285.75	314.96	326.19	341.41	322.71
MEAN	11.04	10.49	11.12	11.26	11.19	11.58	10.37	9.22	10.50	10.52	11.01	10.76
MAX	11.67	12.13	12.15	11.75	11.87	12.18	11.73	11.52	11.52	11.65	12.00	11.77
MIN	10.03	9.60	9.95	10.27	10.59	11.19	8.01	7.72	8.95	9.14	10.08	10.03
CAL YR 1989	TOTAL 4094.63		MEAN 11.22	MAX 12.75		MIN 9.60						
WTR YR 1990	TOTAL 3925.14		MEAN 10.75	MAX 12.18		MIN 7.72						

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02285000 NORTH NEW RIVER CANAL NEAR FORT LAUDERDALE, FL

LOCATION.--Lat 26°05'39", long 80°13'48", in SW¼ sec.14, T.50 S., R.41 E., Broward County, Hydrologic Unit 03090202, on left bank 20 ft upstream from lock and salinity-control structure on State Highway 84, and 6 mi southwest of Fort Lauderdale.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May to September 1913 (discharge measurements). November 1939 to current year. Records of gage heights prior to October 1961 are available in files of the Geological Survey.

GAGE.--Water-stage recorder and sharp crested weir. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Apr. 13, 1940, nonrecording gage at same site and datum. Dec. 9, 1959, to Sept. 30, 1967, deflection vane recorder near left bank 20 ft upstream from lock and dam. Auxiliary water-stage recorder at downstream end of lock chamber. Aug. 1, 1947, to July 20, 1950, auxiliary gage at site 300 ft downstream.

REMARKS.--Estimated daily discharge Feb. 16 - Mar. 13. Records poor. Flow regulated at and above station by control structure for irrigation, drainage, and flood and fire control. Several small diversions above station for irrigation. Since February 1952, flow materially affected by control structure at 20-mile bend, 14 mi upstream. Discharge computed from relations between discharge, head, and submergence.

COOPERATION.--Stoplog record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--50 years, 351 ft³/s, 254,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,280 ft³/s Nov. 19, 1947; maximum gage height, 10.83 ft Oct. 17, 1947; no flow May 5, 6, 13, 15-20, 24-26, 1966; minimum gage height, 0.08 ft Aug. 13, 1978, July 19, 1982.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of Oct. 15, 1929, reached a stage of 7.66 ft, present site and datum, discharge, 5,400 ft³/s from records by Everglades Drainage District.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 140 ft³/s, June 9; maximum gage height, 5.44 ft July 22; minimum daily discharge, 3.0 ft³/s (estimated leakage) for some days during the year; minimum gage height, 2.90 ft July 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.0	3.0	19
2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	26
3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	25
4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.8	3.4	14
5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	11	3.4	3.0
6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	7.7	3.1	3.0
7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	38	3.1	3.0
8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	122	48	3.0	3.0
9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	140	29	3.0	8.4
10	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	91	3.0	3.0	11
11	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	27	9.6	3.0	3.0
12	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.2	14	3.0	3.0
13	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	13	3.0	3.0
14	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	40	3.2	3.0
15	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	27	3.0	3.0
16	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	14	3.1	3.0
17	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	19	3.0	3.0
18	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	24	3.0	3.0
19	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.4	5.9	3.0
20	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	14	9.8	3.0
21	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	49	5.1	3.8
22	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	92	3.0	3.0
23	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	119	3.0	3.0
24	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	14	18	3.0	3.0
25	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	21	7.1	3.0	3.0
26	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	52	3.0	3.0
27	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	31	3.0	3.0
28	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.0	18	3.0	4.9
29	3.0	3.0	3.0	3.0	---	3.0	3.0	4.7	3.0	13	3.2	42
30	3.0	3.0	3.0	3.0	---	3.0	3.0	3.0	3.0	9.4	3.0	17
31	3.0	---	3.0	3.0	---	3.0	---	3.0	---	3.0	3.0	---
TOTAL	93.0	90.0	93.0	93.0	84.0	93.0	90.0	95.0	491.3	742.0	106.3	231.1
MEAN	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.06	16.4	23.9	3.43	7.70
MAX	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.7	140	119	9.8	42
MIN	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
AC-FT	184	179	184	184	167	184	179	188	974	1470	211	458

WTR YR 1990 TOTAL 2301.7 MEAN 6.31 MAX 140 MIN 3.0 AC-FT 4570

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02285000 NORTH NEW RIVER CANAL NEAR FORT LAUDERDALE, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.81	3.36	3.39	3.67	3.60	---	3.74	3.64	3.91	3.05	3.84	4.27
2	3.69	3.35	3.41	3.64	3.61	---	3.74	3.75	3.95	3.34	3.88	4.35
3	3.48	3.36	3.43	3.64	3.59	---	3.74	3.71	3.89	3.80	3.87	4.35
4	3.43	3.33	3.41	3.63	3.59	---	3.72	3.66	3.82	4.01	4.01	4.12
5	3.63	3.33	3.39	3.67	3.59	---	3.65	3.64	3.79	4.15	4.01	3.62
6	3.74	3.32	3.38	3.68	3.53	---	3.61	3.62	3.72	4.08	4.00	3.55
7	3.82	3.32	3.37	3.68	3.54	---	3.61	3.60	3.65	4.47	4.01	3.58
8	3.86	3.29	3.37	3.72	3.52	---	3.58	3.52	4.20	4.55	3.97	3.82
9	3.67	3.32	3.41	3.69	3.51	---	3.52	3.48	3.96	4.32	3.89	4.09
10	3.73	3.34	3.42	3.67	3.52	---	3.39	3.54	3.69	3.73	3.80	4.12
11	3.72	3.35	3.42	3.66	3.55	---	3.63	3.76	3.77	4.07	3.77	3.67
12	3.56	3.35	3.42	3.66	3.54	---	3.41	3.80	4.01	4.22	3.91	3.74
13	3.64	3.36	3.47	3.64	3.45	---	3.77	3.82	3.80	4.19	3.82	3.61
14	3.62	3.38	3.46	3.61	3.40	3.32	3.78	3.74	3.51	4.49	3.92	3.63
15	3.57	3.39	3.46	3.62	3.39	3.30	3.71	3.59	3.32	4.36	3.73	3.86
16	3.53	3.43	3.48	3.60	---	3.31	3.65	3.42	3.70	4.22	3.93	3.88
17	3.50	3.41	3.50	3.60	---	3.30	3.47	3.52	3.84	4.28	3.59	3.71
18	3.45	3.37	3.52	3.61	---	3.40	3.56	3.56	3.71	4.29	3.41	3.72
19	3.44	3.37	3.52	3.61	---	3.53	3.52	3.50	3.42	3.80	3.98	3.56
20	3.50	3.38	3.52	3.59	---	3.89	3.51	3.40	3.51	4.22	4.14	3.72
21	3.67	3.38	3.55	3.61	---	3.70	3.49	3.38	3.57	4.55	4.03	3.82
22	3.76	3.34	3.56	3.62	---	3.60	3.46	3.36	3.58	4.82	3.79	3.66
23	3.57	3.35	3.65	3.59	---	3.61	3.44	3.34	3.61	4.97	3.71	3.72
24	3.38	3.33	3.65	3.57	---	3.64	3.50	3.38	3.95	4.20	3.88	3.82
25	3.40	3.31	3.64	3.56	---	3.65	3.55	3.59	4.23	3.87	3.66	3.79
26	3.42	3.36	3.64	3.59	---	3.63	3.54	3.59	3.98	4.58	3.53	3.78
27	3.43	3.37	3.64	3.54	---	3.62	3.51	3.72	3.68	4.41	3.56	3.80
28	3.43	3.37	3.66	3.56	---	3.59	3.50	3.88	3.39	4.27	3.81	4.03
29	3.41	3.36	3.63	3.60	---	3.56	3.64	4.05	3.77	4.21	3.89	4.50
30	3.39	3.38	3.64	3.61	---	3.53	3.76	3.84	3.34	4.12	3.67	4.25
31	3.38	---	3.65	3.61	---	3.58	---	3.71	---	3.89	3.69	---
TOTAL	110.63	100.66	108.66	112.35	---	---	107.70	112.11	112.27	129.53	118.70	116.14
MEAN	3.57	3.36	3.51	3.62	---	---	3.59	3.62	3.74	4.18	3.83	3.87
MAX	3.86	3.43	3.66	3.72	---	---	3.78	4.05	4.23	4.97	4.14	4.50
MIN	3.38	3.29	3.37	3.54	---	---	3.39	3.34	3.32	3.05	3.41	3.55

CAL YR 1989 TOTAL 1284.48 MEAN 3.52 MAX 4.66 MIN 2.82

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02285001 NORTH NEW RIVER CANAL BELOW CONTROL NEAR FORT LAUDERDALE, FL

LOCATION.--Lat 26°05'39", long 80°13'50", in SW¼ sec.14, T.50 S., R.41 E., Broward County, Hydrologic Unit 03090202, on left bank downstream side of salinity-control structure on State Highway 84, and 6 mi southwest of Fort Lauderdale.

DRAINAGE.--Indeterminate.

PERIOD OF RECORD.--October 1943 to July 1947 (fragmentary), August 1974 to current year (gage heights). Record of gage heights prior to October 1962 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Aug. 1, 1947 to July 20, 1950, water-stage recorder at site 300 ft downstream at same datum.

REMARKS.--Estimated daily tidal low stage, Jan. 9-11, 20-23, Feb. 2-4, 17-20. Stage is basically tidal but is occasionally affected by operation of salinity-control structure during high flow. The stage record published is the maximum and minimum tide event for each calendar day.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 10.56 ft Oct. 19, 1947; minimum -1.33 ft Dec. 31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.53 ft Oct. 30; minimum -0.68 ft estimated Feb. 17, 19.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL HIGH (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.98	2.20	1.55	1.13	1.16	1.79	1.62	1.27	1.77	1.47	1.46	1.53
2	1.95	2.07	1.35	1.06	1.09	1.73	1.72	1.38	1.66	1.67	1.42	1.73
3	1.78	2.06	1.39	1.01	.94	1.62	1.77	1.35	1.61	1.51	1.50	2.07
4	1.75	1.94	1.59	1.10	.80	1.49	1.72	1.33	1.57	1.47	1.62	1.94
5	1.76	1.92	1.51	.99	.70	1.47	1.67	1.57	1.63	1.57	1.74	2.07
6	1.66	1.91	1.54	1.05	1.01	1.47	1.55	1.78	1.53	1.57	1.72	2.11
7	1.61	1.99	1.46	1.21	.97	1.57	1.63	1.81	1.46	1.54	1.78	2.24
8	1.70	2.20	1.49	1.26	1.17	1.89	1.87	1.87	1.99	1.49	1.78	2.13
9	1.87	2.22	1.26	1.15	1.25	1.72	1.90	1.70	1.95	1.49	1.69	2.06
10	1.95	2.07	1.21	1.21	1.35	1.73	1.80	1.98	1.73	1.48	1.84	1.89
11	1.86	2.03	1.42	1.20	1.36	1.69	1.64	1.96	1.62	1.44	1.89	1.75
12	2.11	1.96	1.57	1.24	1.31	1.56	1.63	1.70	1.69	1.54	1.94	1.80
13	2.25	1.84	1.52	1.36	1.23	1.59	1.61	1.62	1.57	1.49	1.89	1.81
14	2.35	1.97	1.46	1.32	1.08	1.62	1.59	1.33	1.44	1.41	1.88	1.91
15	2.22	1.90	1.38	1.32	1.08	1.66	1.50	1.26	1.64	1.45	1.76	1.90
16	2.14	1.85	1.29	1.22	.83	1.51	1.46	1.44	1.69	1.37	1.76	2.01
17	2.02	1.61	1.37	1.18	.47	1.34	1.36	1.47	1.57	1.57	1.81	1.96
18	1.86	1.40	1.12	1.05	.44	1.03	1.39	1.39	1.66	1.48	1.79	1.85
19	1.72	1.47	.99	.81	.45	1.07	1.41	1.48	1.80	1.70	1.89	2.00
20	1.23	1.40	.88	.88	.40	1.17	1.51	1.60	1.81	1.86	1.88	2.10
21	1.33	1.54	.93	.54	.60	1.29	1.57	1.54	1.63	1.87	1.82	2.11
22	1.44	1.49	.99	.39	.91	1.49	1.78	1.69	1.68	2.10	1.82	1.91
23	1.53	1.41	1.40	.69	1.08	1.40	2.01	1.84	1.82	2.08	1.96	1.88
24	1.63	1.28	1.29	1.09	1.10	1.67	2.01	1.91	1.95	1.99	1.97	1.66
25	1.82	1.38	1.67	1.32	1.29	1.68	1.98	1.89	2.06	1.79	1.88	1.65
26	1.89	1.50	1.80	1.22	1.64	1.67	1.96	1.89	2.07	1.71	1.61	1.74
27	1.98	1.37	1.68	1.27	1.72	1.81	1.96	1.92	1.82	1.66	1.54	1.79
28	2.11	1.23	1.44	1.35	1.75	1.76	1.79	1.90	1.87	1.67	1.61	1.66
29	2.34	1.19	1.44	1.43	---	1.78	1.74	2.26	1.62	1.76	1.56	1.82
30	2.53	1.30	1.46	1.37	---	1.65	1.54	2.10	1.49	1.68	1.40	1.81
31	2.33	---	1.40	1.23	---	1.52	---	1.98	---	1.49	1.52	---
TOTAL	58.70	51.70	42.85	34.65	29.18	48.44	50.69	52.21	51.40	50.37	53.73	56.89
MEAN	1.89	1.72	1.38	1.12	1.04	1.56	1.69	1.68	1.71	1.62	1.73	1.90
MAX	2.53	2.22	1.80	1.43	1.75	1.89	2.01	2.26	2.07	2.10	1.97	2.24
MIN	1.23	1.19	.88	.39	.40	1.03	1.36	1.26	1.44	1.37	1.40	1.53

CAL YR 1989 TOTAL 561.96 MEAN 1.54 MAX 2.53 MIN .83
WTR YR 1990 TOTAL 580.81 MEAN 1.59 MAX 2.53 MIN .39

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02285001 NORTH NEW RIVER CANAL BELOW CONTROL NEAR FORT LAUDERDALE, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL LOW (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.56	-.21	-.53	-.57	-.21	-.02	-.23	.34	.04	.06	.03
2	.31	.41	-.20	-.55	-.62	-.23	.12	-.11	.22	-.01	-.09	.14
3	.07	.44	-.24	-.51	-.62	-.25	.22	-.14	.15	.08	-.08	.35
4	.14	.39	-.15	-.55	-.64	-.12	.24	-.21	-.01	-.03	-.06	.30
5	.23	.32	-.04	-.56	-.60	-.16	.21	-.04	.01	-.16	.02	.27
6	.20	.48	-.09	-.55	-.60	-.16	-.01	.04	-.14	-.12	.00	.34
7	.11	.45	-.26	-.55	-.60	-.15	-.04	.11	-.30	-.10	.06	.51
8	.26	.65	-.34	-.56	-.60	.08	.04	.06	-.01	-.18	.03	.23
9	.32	.54	-.52	-.60	-.58	.05	.20	-.01	.19	-.16	.00	.14
10	.40	.29	-.56	-.60	-.57	-.01	-.11	.21	.14	-.22	.01	.11
11	.31	.10	-.56	-.60	-.44	-.07	-.03	-.01	.10	-.15	.05	.02
12	.23	-.13	-.53	-.56	-.40	-.12	-.06	-.14	.00	-.09	.21	.15
13	.26	-.30	-.49	-.54	-.40	-.15	-.09	-.20	-.08	-.11	.16	.13
14	.24	-.20	-.56	-.43	-.51	-.01	-.08	-.28	.00	-.11	.28	.25
15	.19	-.09	-.51	-.33	-.49	-.11	.04	-.14	.12	-.13	.04	.18
16	.03	-.06	-.45	-.33	-.60	-.22	-.02	-.04	.13	-.32	-.05	.35
17	-.04	-.30	-.39	-.32	-.68	-.27	.01	.04	-.11	-.11	.07	.30
18	-.10	-.20	-.44	-.47	-.64	-.29	-.15	-.09	-.21	-.30	.02	.17
19	-.13	-.08	-.41	-.51	-.68	-.07	-.11	-.13	-.22	-.18	.05	.24
20	-.47	.04	-.49	-.60	-.64	-.17	.09	-.19	-.22	-.14	.06	.37
21	-.27	.15	-.50	-.65	-.60	-.10	-.02	-.35	-.44	-.09	.09	.42
22	-.08	.06	-.51	-.62	-.60	.06	-.05	-.40	-.45	.00	.05	.25
23	.00	-.05	-.27	-.60	-.60	-.14	.00	-.39	-.19	.33	.22	.26
24	.14	-.20	-.35	-.58	-.59	-.23	-.09	-.30	.07	.10	.23	.20
25	.16	-.23	-.15	-.42	-.57	-.13	-.11	-.13	.20	.07	.34	.17
26	.30	-.18	.08	-.48	-.40	-.38	-.23	-.19	.27	.17	.03	.47
27	.19	-.38	-.10	-.56	-.26	-.27	-.29	.00	.44	.27	.06	.37
28	.43	-.40	-.46	-.46	-.21	-.33	-.22	.38	.23	.30	.13	.27
29	.58	-.48	-.35	-.40	---	-.37	-.21	.69	.11	.27	.28	.64
30	.90	-.51	-.44	-.43	---	-.43	-.44	.67	.14	.25	.00	.40
31	.68	---	-.36	-.57	---	-.23	---	.54	---	.07	.02	---
TOTAL	5.76	1.09	-10.86	-16.02	-15.31	-5.19	-1.21	-0.98	0.48	-0.76	2.29	8.03
MEAN	.19	.04	-.35	-.52	-.55	-.17	-.04	-.03	.02	-.02	.07	.27
MAX	.90	.65	.08	-.32	-.21	.08	.24	.69	.44	.33	.34	.64
MIN	-.47	-.51	-.56	-.65	-.68	-.43	-.44	-.40	-.45	-.32	-.09	.02
CAL YR 1989	TOTAL	-54.21	MEAN	-.15	MAX	.90	MIN	-.61				
WTR YR 1990	TOTAL	-32.68	MEAN	-.09	MAX	.90	MIN	-.68				

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286100 SOUTH NEW RIVER CANAL AT S-13, NEAR DAVIE, FL

LOCATION.--Lat 26°03'57", long 80°12'32", in SW¼ sec.25, T.50 S., R.41 E., Broward County, Hydrologic Unit 03090202, 18 ft from north bank, 150 ft upstream from pump station 13, 300 ft west of U.S. Highway 441, and 1.5 mi east of Davie.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1957 to current year.

REVISED RECORDS.--WDR FL-87-2A: 1962-86 (maximum daily reverse flow).

GAGE.--Dual water-stage recorder, and gate-opening recorder. Prior to September 30, 1984, deflection vane and prior to September 30, 1985, electromagnetic velocity meter at same site. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharge: Dec. 25-27, 29, 30, Jan. 2, 3. Records fair, except those for estimated daily discharges, which are poor. Flow is affected by tide and is occasionally reversed. Negative figures indicate reverse flow. Flow is regulated by pumpage and operation of gate at S-13. Flow is affected by regulation of control-structure 13A 5 miles upstream and by upstream withdrawals from the canal during the growing season and pumpage into the canal during high water. Discharge is computed from relation between head and gate-opening at S-13.

COOPERATION.--Gate-opening and pump records provided by South Florida Water Management District.

AVERAGE DISCHARGE.--31 years (water years 1958-86, 88, 89), 171 ft³/s, 123,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,460 ft³/s Dec. 27, 1986; maximum gage height, 4.02 ft Apr. 25, 1979; maximum reverse flow, 657 ft³/s Sept. 12, 1962; no flow for some days in most years; minimum gage height, -0.79 ft July 14, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 369 ft³/s Sept. 29; maximum gage height, 2.63 ft May 28; no flow for some days during the year; minimum gage height, 1.19 ft Aug. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	.00	28	.00	.00	.00	81	12	239	126	133	94
2	98	18	.00	20	.00	.00	.00	1.6	224	228	83	79
3	71	23	45	23	.00	.00	35	.00	184	343	216	63
4	53	7.9	.00	1.3	.00	.00	.00	.00	171	190	.00	88
5	45	40	1.9	27	.00	.00	.00	.00	167	234	135	85
6	47	.00	.00	20	.00	.00	.00	.00	126	221	304	82
7	44	.00	.00	8.6	.00	.00	.00	.00	133	180	151	151
8	46	29	.00	26	.00	.00	2.5	.00	272	257	.00	109
9	48	13	35	.00	.00	.00	127	.00	293	184	.00	101
10	71	.00	.00	1.3	.00	.00	73	88	241	127	.00	69
11	103	19	.00	.00	.00	.00	103	113	205	132	.00	85
12	93	.00	.00	.00	.00	.00	.00	71	229	135	.00	49
13	50	.00	.00	.00	.00	.00	.00	.00	121	97	48	70
14	52	.00	34	.00	.00	.00	.00	32	145	100	193	64
15	59	38	.00	.00	.00	.00	.00	.00	99	138	.00	75
16	46	.00	.00	.00	.00	.00	81	.00	87	173	.00	97
17	42	.00	.00	.00	.00	.00	.00	.00	33	144	44	143
18	42	.00	32	.00	.00	.00	.00	.00	104	131	17	137
19	43	.00	.00	.00	.00	50	.00	.00	34	183	26	133
20	10	.40	.00	.00	.00	37	.00	.00	.00	194	.00	74
21	47	8.3	23	.00	.00	.00	.00	.00	.00	32	.00	109
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	148	45	98
23	27	.00	37	.00	.00	.00	.00	.00	42	43	17	89
24	28	.00	.00	.00	.00	.00	.00	.00	115	58	24	99
25	46	.00	30	.00	.00	.00	70	106	275	179	54	81
26	.00	53	10	.00	.00	.00	.00	81	354	136	64	57
27	28	.00	30	.00	.00	.00	.00	114	270	127	40	59
28	30	.00	.00	.00	.00	.00	.00	274	222	117	63	121
29	.00	35	4.0	.00	---	.00	.00	363	207	166	31	369
30	27	.00	45	.00	---	.00	.00	260	183	.00	51	295
31	28	---	.00	.00	---	.00	---	264	---	66	88	---
TOTAL	1339.00	284.60	354.90	127.20	0.00	87.00	572.50	1779.60	4775.00	4589.00	1827.00	3225
MEAN	43.2	9.49	11.4	4.10	.000	2.81	19.1	57.4	159	148	58.9	107
MAX	103	53	45	27	.00	50	127	363	354	343	304	369
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	49
AC-FT	2660	565	704	252	.00	173	1140	3530	9470	9100	3620	6400

WTR YR 1990 TOTAL 18960.80 MEAN 51.9 MAX 369 MIN .00 AC-FT 37610

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286100 SOUTH NEW RIVER CANAL AT S-13, NEAR DAVIE, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.63	1.64	1.61	1.68	1.89	1.88	1.94	2.23	1.63	1.55	1.61	1.59
2	1.52	1.65	1.65	1.60	1.89	1.88	2.11	2.21	1.59	1.55	1.59	1.57
3	1.59	1.62	1.58	1.63	1.87	1.89	2.15	2.17	1.58	1.54	1.54	1.62
4	1.56	1.67	1.55	1.58	1.86	1.90	2.22	2.14	1.54	1.68	1.56	1.64
5	1.60	1.53	1.61	1.61	1.86	1.90	2.22	2.11	1.52	1.54	1.57	1.65
6	1.56	1.62	1.63	1.65	1.84	1.89	2.21	2.09	1.56	1.54	1.62	1.64
7	1.57	1.67	1.65	1.58	1.84	1.86	2.19	2.05	1.51	1.58	1.59	1.63
8	1.57	1.67	1.67	1.60	1.82	1.84	2.17	2.01	1.57	1.62	1.64	1.61
9	1.57	1.56	1.59	1.64	1.82	1.83	2.11	1.98	1.60	1.70	1.61	1.61
10	1.57	1.65	1.59	1.70	1.81	1.82	1.91	2.06	1.55	1.71	1.63	1.64
11	1.50	1.63	1.62	1.72	1.81	1.80	1.98	2.16	1.54	1.74	1.61	1.61
12	1.54	1.68	1.65	1.74	1.80	1.78	2.28	2.11	1.52	1.78	1.58	1.59
13	1.61	1.69	1.69	1.75	1.77	1.75	2.09	2.31	1.61	1.78	1.65	1.59
14	1.60	1.70	1.61	1.75	1.75	1.72	1.91	2.21	1.77	1.67	1.59	1.65
15	1.58	1.53	1.57	1.77	1.72	1.69	2.10	2.28	1.76	1.67	1.60	1.65
16	1.60	1.62	1.64	1.80	1.70	1.67	1.97	2.29	1.76	1.65	1.60	1.54
17	1.60	1.64	1.68	1.81	1.68	1.65	2.08	2.27	2.03	1.78	1.65	1.56
18	1.60	1.63	1.62	1.82	1.65	1.74	2.16	2.24	1.78	1.70	1.60	1.58
19	1.58	1.64	1.63	1.82	1.67	1.76	2.17	2.20	1.83	1.60	1.56	1.55
20	1.67	1.64	1.67	1.82	1.76	1.74	2.19	2.15	2.09	1.84	1.65	1.59
21	1.53	1.62	1.62	1.82	1.83	1.97	2.18	2.11	2.23	1.68	1.58	1.55
22	1.66	1.62	1.62	1.82	1.84	2.03	2.16	2.10	2.28	1.71	1.65	1.61
23	1.61	1.63	1.57	1.80	1.86	2.06	2.15	2.06	2.20	1.73	1.64	1.63
24	1.61	1.62	1.63	1.79	1.97	2.05	2.29	2.12	2.16	1.61	1.66	1.63
25	1.56	1.62	1.66	1.78	1.97	2.03	2.05	2.06	1.83	1.58	1.65	1.63
26	1.63	1.57	1.57	1.78	1.95	2.02	2.12	2.24	1.83	1.58	1.64	1.64
27	1.62	1.52	1.60	1.76	1.92	2.01	2.18	2.19	1.68	1.54	1.62	1.63
28	1.64	1.62	1.61	1.78	1.89	1.98	2.19	2.16	1.61	1.56	1.61	1.63
29	1.66	1.60	1.68	1.85	---	1.97	2.23	1.86	1.57	1.60	1.63	1.69
30	1.61	1.65	1.59	1.88	---	1.95	2.28	1.91	1.56	1.57	1.58	1.63
31	1.64	---	1.56	1.89	---	2.01	---	1.74	---	1.57	1.62	---
TOTAL	49.39	48.75	50.22	54.02	51.04	58.07	63.99	65.82	52.29	50.95	49.93	48.38
MEAN	1.59	1.62	1.62	1.74	1.82	1.87	2.13	2.12	1.74	1.64	1.61	1.61
MAX	1.67	1.70	1.69	1.89	1.97	2.06	2.29	2.31	2.28	1.84	1.66	

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286101 SOUTH NEW RIVER CANAL BELOW S-13, NEAR DAVIE, FL

LOCATION.--Lat 26°03'57", long 80°12'32", in SW¼ sec.25, T.50 S., R.41 E., Broward County, Hydrologic Unit 03090202, at pump station 13, 150 ft west of U.S. Highway 441, and 1.5 mi east of Davie.

PERIOD OF RECORD.--January 1955 to current year (gage heights). Records of gage heights prior to October 1962 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily stage. Gage records water levels below pump station 13. Stage is basically tidal, but at times is affected by gate operation and pumping at S-13. The stage record published is the maximum and minimum tide event for each calendar day.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 3.98 ft Sept. 8, 1965; minimum -1.97 ft Apr. 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.42 ft Oct. 30; minimum -1.13 ft Feb. 17.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL HIGH (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.86	2.10	1.48	---	1.02	1.66	1.55	1.12	1.72	1.37	1.37	1.47
2	1.81	1.94	1.30	---	.98	1.65	1.59	1.32	1.64	1.59	1.31	1.61
3	1.50	1.94	1.36	---	.82	1.55	1.74	1.30	1.53	1.46	1.37	1.99
4	1.43	1.79	1.24	.98	.71	1.43	1.67	1.19	1.48	1.37	1.51	1.86
5	1.45	1.70	1.43	.91	.60	1.41	1.54	1.43	1.52	1.42	1.64	2.02
6	1.32	1.81	1.47	.98	.91	1.40	1.41	1.65	1.44	1.49	1.60	2.08
7	1.29	1.84	1.38	1.12	.87	1.50	1.51	1.76	1.38	1.42	1.66	2.16
8	1.41	2.07	1.42	1.16	.91	1.76	1.70	1.81	1.77	1.40	1.67	2.07
9	1.59	2.12	1.19	1.07	.99	1.64	1.81	1.63	1.65	1.41	1.56	1.95
10	1.76	2.03	1.16	1.12	1.09	1.65	1.70	1.92	1.61	1.40	1.72	1.84
11	1.76	1.97	1.18	1.10	1.10	1.62	1.51	1.91	1.51	1.37	1.80	1.66
12	1.79	1.88	1.48	1.16	1.04	1.53	1.52	1.64	1.62	1.49	1.86	1.70
13	1.94	1.73	1.36	1.26	.99	1.50	1.53	1.55	1.52	1.43	1.77	1.70
14	2.16	1.85	1.23	1.22	.81	1.53	1.52	1.20	1.41	1.34	1.76	1.74
15	1.98	1.77	.90	1.19	.79	1.56	1.46	1.14	1.53	1.35	1.65	1.78
16	1.86	1.73	.90	1.11	.57	1.40	1.41	1.32	1.65	1.31	1.66	1.91
17	1.71	1.45	.92	1.05	.22	1.24	1.24	1.39	1.49	1.50	1.71	1.83
18	1.61	1.32	.69	.96	.19	.98	1.27	1.27	1.54	1.38	1.76	1.76
19	1.47	1.40	.57	.73	.20	1.00	1.35	1.34	1.69	1.59	1.85	1.97
20	1.21	1.30	.46	.79	.13	1.13	1.40	1.47	1.70	1.74	1.81	2.02
21	1.29	1.49	.51	.47	---	1.15	1.52	1.42	1.51	1.73	1.77	2.02
22	1.37	1.42	.43	.33	---	1.42	1.73	1.57	1.61	1.85	1.72	1.82
23	1.47	1.35	.67	.60	---	1.34	1.96	1.70	1.78	1.81	1.87	1.77
24	1.58	1.21	---	.99	---	1.63	1.87	1.78	1.92	1.82	1.93	1.54
25	1.78	1.32	---	1.20	---	1.61	1.91	1.77	2.06	1.67	1.79	1.63
26	1.84	1.41	---	1.12	---	1.56	1.90	1.75	2.09	1.57	1.57	1.55
27	1.83	1.14	---	1.16	---	1.71	1.82	1.82	1.85	1.50	1.47	1.49
28	2.06	1.09	---	1.22	---	1.68	1.71	1.81	1.78	1.55	1.83	1.47
29	2.28	1.13	---	1.33	---	1.70	1.68	2.24	1.52	1.62	1.47	1.73
30	2.42	1.23	---	1.24	---	1.49	1.48	2.02	1.47	1.56	1.29	1.72
31	2.21	---	---	1.12	---	1.42	---	1.90	---	1.38	1.39	---
TOTAL	53.04	48.53	---	---	---	45.85	48.01	49.14	48.99	46.89	51.14	53.86
MEAN	1.71	1.62	---	---	---	1.48	1.60	1.59	1.63	1.51	1.65	1.80
MAX	2.42	2.12	---	---	---	1.76	1.96	2.24	2.09	1.85	1.93	2.16
MIN	1.21	1.09	---	---	---	.98	1.24	1.12	1.38	1.31	1.29	1.47

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286101 SOUTH NEW RIVER CANAL BELOW S-13, NEAR DAVIE, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL LOW (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.45	-.22	---	-.77	---	-.14	-.45	.30	-.06	-.05	-.15
2	.15	.32	-.21	---	-.81	-.37	.00	-.24	.18	-.06	-.15	-.03
3	-.07	.41	-.24	---	-.80	-.28	.15	-.26	.11	-.05	-.19	.26
4	-.11	.30	-.51	---	-.91	-.13	.23	-.34	-.06	-.10	-.23	.22
5	-.09	.30	-.35	-.62	-.98	-.23	.11	-.19	-.09	-.18	-.11	.17
6	-.12	.35	-.11	-.46	-.74	-.20	-.12	-.14	-.19	-.26	-.11	.25
7	-.18	.17	-.29	-.65	-.82	-.17	-.13	.00	-.37	-.22	-.08	.43
8	-.05	.46	-.41	-.62	-.89	.10	-.08	.03	-.08	-.29	-.06	.12
9	.00	.42	-.54	-.66	-.77	-.07	.11	-.04	.10	-.39	-.10	.08
10	.18	.25	-.72	-.78	-.73	-.08	-.21	.19	-.10	-.34	-.11	.02
11	.25	.09	-1.14	-.77	-.60	-.19	-.10	-.09	-.03	-.22	-.02	-.09
12	.12	-.12	-.54	-.75	-.57	-.12	-.16	-.23	-.13	-.20	.18	.06
13	-.08	-.31	-.55	-.61	-.58	-.27	-.20	-.33	-.14	-.11	.08	.05
14	.16	-.20	-1.02	-.44	-.70	-.13	-.19	-.39	-.03	-.17	.18	.14
15	.06	-.23	-.79	-.35	-.69	-.26	-.07	-.25	.09	-.16	-.10	.09
16	-.13	-.07	-.74	-.38	-.91	-.38	-.12	-.10	.11	-.44	-.10	.22
17	-.31	-.44	-.70	-.34	-1.13	-.43	-.10	-.07	-.18	-.48	-.03	.24
18	-.38	-.22	-.77	-.48	-.93	-.44	-.26	-.20	-.21	-.41	-.07	.02
19	-.35	-.28	-.75	-.54	-1.10	-.24	-.18	-.21	-.30	-.21	-.11	.18
20	-.46	.03	-.85	-.73	---	-.29	.09	-.27	-.32	-.23	-.03	.28
21	-.49	.12	-.87	-.87	---	-.21	-.02	-.45	-.53	-.23	.00	.37
22	-.08	.01	-.97	-1.02	---	.00	-.05	-.49	-.55	-.05	-.03	.16
23	-.01	-.06	---	-.86	---	-.17	-.06	-.51	-.13	.07	.13	.13
24	.13	-.22	---	-.80	---	-.25	-.14	-.43	.09	.02	.13	.07
25	.14	-.34	---	-.44	---	-.24	-.12	-.20	.15	-.01	.24	.08
26	.24	-.19	---	-.58	---	-.50	-.36	-.29	.12	-.05	-.04	.33
27	.12	-.39	---	-.62	---	-.35	-.40	-.08	.33	.11	-.02	.12
28	.29	-.51	---	-.46	---	-.47	-.34	.33	.17	.09	.00	-.01
29	.57	-.49	---	-.47	---	-.50	-.36	.79	.04	.24	.14	.47
30	.77	-.52	---	-.67	---	-.58	-.57	.56	.11	.12	-.06	.16
31	.62	---	---	-.61	---	-.28	---	.53	---	-.02	-.10	---
TOTAL	0.95	-0.91	---	---	---	---	-3.79	-3.82	-1.54	-4.29	-0.82	4.44
MEAN	.03	-.03	---	---	---	---	-.13	-.12	-.05	-.14	-.03	.15
MAX	.77	.46	---	---	---	---	.23	.79	.33	.24	.24	.47
MIN	-.49	-.52	---	---	---	---	-.57	-.51	-.55	-.48	-.23	-.15

WATER RESOURCES DATA FOR FLORIDA, 1990
Volume 2A: South Florida

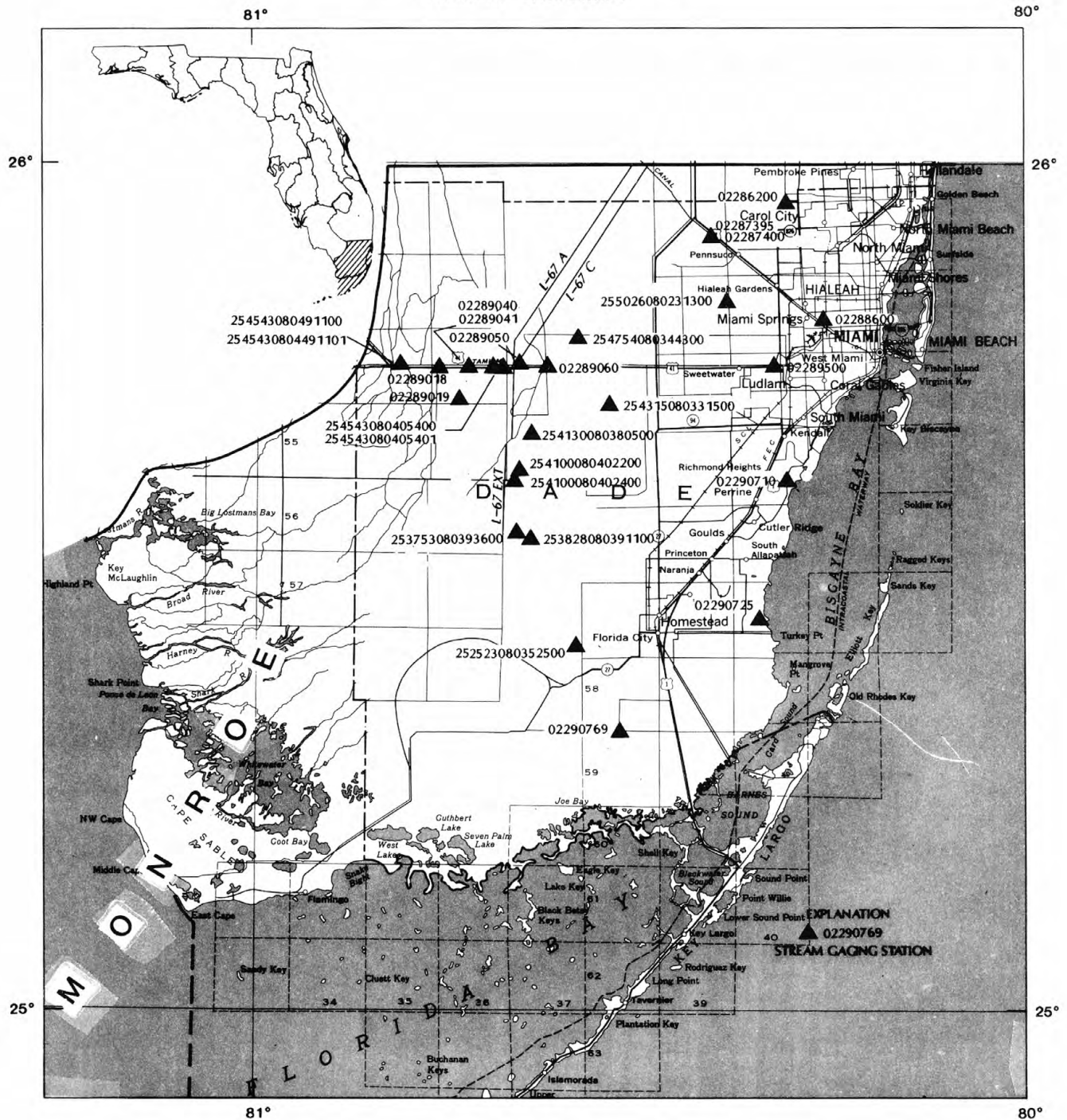


FIGURE 7. Location of gaging stations in the portion of the Everglades and southeastern coastal area south of latitude 26 degrees; Florida Bay and the Florida Keys.

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286200 SNAKE CREEK CANAL AT NW 67TH AVENUE, NEAR HIALEAH, FL

LOCATION.--Lat 25°57'50", long 80°18'40", in SW¼ sec.36, T.51 S., R.40 E., Broward County, Hydrologic Unit 03090202, near center of span on downstream side of bridge at NW 67th Avenue, 6.0 mi north of Hialeah, Dade County, 10.9 mi upstream from salinity-control structure 29, and 11 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1959 to February 1962 (gage heights), March 1962 to current year. Records of gage heights prior to March 1962 are available in files of the Geological Survey.

REVISED RECORDS.--WRD FL-74-2A: 1969.

GAGE.--Water-stage and electromagnetic velocity meter recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (State Department of Transportation bench mark). Prior to Oct. 1, 1975, at datum 0.28 ft lower. Nov. 1, 1959 to Mar. 15, 1962, water-stage recorder 10 ft downstream at datum 0.28 ft lower.

REMARKS.--No estimated record. Records poor. Flow affected by regulation at salinity-control structure 29, pump structure on the N.W. 67 Ave Canal and, at times by tide, and is occasionally reversed. Discharge computed from continuous velocity record obtained from recording electromagnetic velocity meter.

AVERAGE DISCHARGE.--24 years, (water years 1963-86) 275 ft³/s, 199,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,550 ft³/s Mar. 10, 1969; maximum gage height, 4.53 ft Oct. 31, 1969; maximum daily reverse flow, 537 ft³/s Sept. 8, 1965, minimum gage height, 0.58 ft June 22, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 459 ft³/s Aug. 19; maximum gage height, 3.17 ft May 29; no flow on Apr. 17, 18 and May 14, 15; minimum gage height, 1.60 ft Mar. 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	59	28	105	54	32	72	3.5	327	190	287	279
2	103	56	34	90	51	50	59	.13	283	293	85	175
3	132	52	29	87	59	49	61	1.8	295	436	55	135
4	74	50	42	75	56	52	52	.82	256	398	105	96
5	41	48	38	75	45	49	33	5.6	221	340	86	92
6	34	53	55	71	43	39	36	9.6	160	399	103	92
7	68	56	56	61	59	27	34	4.9	120	247	72	51
8	136	57	71	59	58	30	15	5.0	180	122	30	58
9	68	45	66	56	65	35	19	2.7	224	183	79	15
10	98	53	56	44	53	29	1.6	2.9	168	142	141	53
11	170	28	62	37	56	36	.95	8.0	145	213	246	155
12	84	28	62	44	37	31	.34	12	139	192	375	128
13	70	35	67	34	35	28	1.4	19	87	144	365	53
14	41	33	55	39	42	30	5.7	.00	78	126	340	24
15	59	40	59	45	43	38	8.6	.00	48	291	297	11
16	42	42	64	40	40	31	.67	.85	28	167	287	65
17	21	28	90	55	39	32	.00	.52	.78	242	316	114
18	68	21	85	51	38	53	.00	.77	3.0	129	315	61
19	100	28	87	52	57	63	3.2	.91	5.2	283	459	148
20	81	47	88	55	71	65	3.0	1.2	8.2	102	385	83
21	64	46	76	53	94	31	5.6	11	25	175	385	170
22	56	46	68	61	67	26	8.5	14	4.0	142	363	298
23	65	37	81	58	70	29	10	5.6	59	175	330	259
24	77	31	55	52	82	32	3.7	54	94	161	284	149
25	105	33	48	40	57	38	3.7	26	95	81	257	264
26	79	59	61	43	42	37	4.8	28	169	91	262	102
27	60	53	78	45	37	30	.70	103	176	---	257	204
28	55	37	90	53	42	31	6.3	243	152	---	258	258
29	55	27	83	69	---	34	4.1	284	152	---	332	295
30	48	25	94	83	---	28	.74	235	151	---	326	167
31	48	---	100	58	---	63	---	293	---	84	269	---
TOTAL	2295	1253	2028	1790	1492	1178	454.60	1376.80	3853.18	---	7751	4054
MEAN	74.0	41.8	65.4	57.7	53.3	38.0	15.2	44.4	128	---	250	135
MAX	170	59	100	105	94	65	72	293	327	---	459	298
MIN	21	21	28	34	35	26	.00	.00	.78	---	30	11
AC-FT	4550	2490	4020	3550	2960	2340	902	2730	7640	---	15370	8040

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286200 SNAKE CREEK CANAL AT NW 67TH AVENUE, NEAR HIALEAH, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.26	2.16	2.21	2.10	2.00	1.88	1.89	2.35	2.68	2.20	1.99	2.10
2	2.25	2.15	2.19	2.09	2.00	1.87	1.91	2.31	2.84	2.25	2.17	2.21
3	2.21	2.15	2.17	2.08	1.98	1.85	1.91	2.26	2.53	2.52	2.26	2.28
4	2.22	2.14	2.14	2.08	1.97	1.86	1.92	2.22	2.45	2.33	2.23	2.31
5	2.26	2.14	2.12	2.09	1.95	1.86	1.90	2.17	2.39	2.22	2.27	2.29
6	2.26	2.14	2.10	2.09	1.92	1.84	1.88	2.14	2.36	2.28	2.19	2.25
7	2.28	2.12	2.09	2.09	1.90	1.82	1.86	2.11	2.36	2.26	2.21	2.29
8	2.26	2.12	2.09	2.09	1.89	1.79	1.85	2.07	2.43	2.31	2.29	2.27
9	2.28	2.11	2.08	2.07	1.88	1.78	2.18	2.03	2.48	2.26	2.30	2.33
10	2.28	2.10	2.08	2.06	1.87	1.76	2.44	2.15	2.41	2.28	2.30	2.24
11	2.26	2.11	2.07	2.04	1.88	1.74	2.47	2.42	2.38	2.14	2.33	2.20
12	2.30	2.10	2.07	2.03	1.88	1.72	2.50	2.41	2.47	2.19	2.47	2.34
13	2.26	2.08	2.07	2.01	1.86	1.69	2.48	2.37	2.39	2.17	2.51	2.24
14	2.31	2.07	2.06	1.99	1.83	1.67	2.45	2.32	2.31	2.31	2.54	2.30
15	2.26	2.06	2.05	1.99	1.81	1.65	2.53	2.29	2.31	2.21	2.59	2.34
16	2.24	2.06	2.06	2.00	1.80	1.64	2.76	2.24	2.27	2.28	2.52	2.25
17	2.30	2.02	2.08	1.98	1.78	1.62	2.73	2.18	2.31	2.17	2.47	2.28
18	2.29	2.00	2.09	1.97	1.76	1.68	2.69	2.14	2.32	2.33	2.55	2.34
19	2.26	1.98	2.08	1.97	1.77	1.73	2.63	2.09	2.32	2.14	2.85	2.27
20	2.19	1.98	2.07	1.97	1.84	1.81	2.59	2.05	2.34	2.30	2.70	2.33
21	2.20	1.96	2.07	1.96	1.92	1.80	2.55	2.01	2.31	2.26	2.60	2.33
22	2.19	1.96	2.06	1.95	1.92	1.78	2.51	2.00	2.34	2.29	2.53	2.32
23	2.18	1.94	2.11	1.94	1.91	1.75	2.47	1.97	2.34	2.26	2.48	2.35
24	2.19	1.94	2.11	1.93	2.02	1.73	2.49	2.10	2.40	2.25	2.44	2.47
25	2.16	1.93	2.10	1.92	2.00	1.71	2.49	2.43	2.46	2.31	2.42	2.30
26	2.16	2.05	2.10	1.89	1.98	1.70	2.43	2.54	2.57	2.26	2.39	2.32
27	2.19	2.18	2.10	1.88	1.93	1.69	2.39	2.67	2.68	---	2.25	2.17
28	2.19	2.19	2.10	1.89	1.89	1.66	2.36	2.70	2.65	---	2.31	2.33
29	2.18	2.21	2.09	1.95	---	1.65	2.38	2.94	2.40	---	2.30	2.63
30	2.18	2.23	2.09	2.00	---	1.63	2.39	2.75	2.27	---	2.23	2.50
31	2.17	---	2.10	2.01	---	1.69	---	2.60	---	2.27	2.22	---
TOTAL	69.22	62.38	65.00	62.11	53.14	54.05	70.03	71.03	72.77	---	73.91	69.18
MEAN	2.23	2.08	2.10	2.00	1.90	1.74	2.33	2.29	2.43	---	2.38	2.31
MAX	2.31	2.23	2.21	2.10	2.02	1.88	2.76	2.94	2.84	---	2.85	2.63
MIN	2.16	1.93	2.05	1.88	1.76	1.62	1.85	1.97	2.27	---	1.99	2.10

CAL YR 1989 TOTAL 773.22 MEAN 2.12 MAX 2.73 MIN 1.52

EVERGLADES AND SOUTHEASTERN COASTAL AREA

255026080231300 SNAPPER CREEK CANAL EXTENSION AT NW 74TH STREET, NEAR HIALEAH, FL

LOCATION.--Lat 25°50'26", long 80°23'13", in SE sec.12, T.53 S., R.39 E., Dade County, Hydrologic Unit 03090202, on the north side of a short spur canal that runs west from the main canal at NW 74th Street, and 5.5 mi upstream from the Tamiami Canal.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily stage.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 4.47 ft May 29, 1984; minimum, 0.21 ft June 5, 6, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 3.55 ft Aug. 26; minimum, 0.80 ft Mar. 17.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.67	2.17	2.18	1.50	1.23	1.06	1.33	1.87	3.03	2.56	2.01	3.19
2	2.77	2.14	2.12	1.47	1.22	1.08	1.26	1.81	3.15	2.59	2.06	3.18
3	2.88	2.09	2.07	1.44	1.20	1.08	1.36	1.75	3.06	2.72	2.02	3.15
4	2.73	2.06	2.00	1.42	1.20	1.11	1.48	1.70	3.00	2.63	2.06	3.06
5	2.66	2.02	1.94	1.43	1.21	1.10	1.46	1.64	2.96	2.62	2.01	3.20
6	2.59	1.98	1.91	1.41	1.18	1.07	1.46	1.59	2.89	2.69	2.11	3.35
7	2.55	1.94	1.87	1.41	1.16	1.05	1.47	1.55	2.82	2.59	2.18	3.21
8	2.58	1.91	1.84	1.39	1.16	1.06	1.48	1.49	2.77	2.52	2.10	3.10
9	2.68	1.89	1.83	1.38	1.14	1.04	2.35	1.42	2.73	2.49	2.29	3.00
10	2.92	1.86	1.80	1.36	1.13	1.02	2.49	1.51	2.65	2.50	2.62	2.92
11	3.21	1.83	1.76	1.33	1.14	1.00	2.33	1.67	2.58	2.54	2.53	2.84
12	3.11	1.78	1.73	1.31	1.13	.98	2.26	1.55	2.52	2.55	2.70	3.00
13	3.05	1.74	1.73	1.28	1.11	.95	2.21	1.47	2.44	2.54	2.94	3.04
14	2.99	1.72	1.68	1.26	1.10	.92	2.17	1.44	2.37	2.55	3.00	2.92
15	2.94	1.69	1.65	1.25	1.09	.89	2.38	1.40	2.29	2.62	2.96	2.84
16	2.88	1.66	1.65	1.24	1.09	.87	2.79	1.34	2.22	2.51	2.88	2.79
17	2.81	1.60	1.66	1.21	1.09	.84	2.61	1.28	2.14	2.57	2.84	2.76
18	2.76	1.56	1.62	1.21	1.09	.89	2.51	1.23	2.07	2.66	2.92	2.74
19	2.74	1.53	1.59	1.20	1.10	.97	2.43	1.17	2.10	2.56	3.19	2.68
20	2.67	1.50	1.58	1.19	1.12	1.14	2.40	1.12	2.19	2.52	3.04	2.70
21	2.60	1.47	1.57	1.19	1.08	1.05	2.33	1.10	2.15	2.56	2.94	2.84
22	2.55	1.43	1.55	1.18	1.06	.99	2.28	1.06	2.06	2.60	2.88	2.87
23	2.50	1.40	1.64	1.20	1.07	.96	2.23	1.00	2.20	2.50	3.01	2.87
24	2.47	1.37	1.58	1.20	1.27	.93	2.18	1.25	2.30	2.44	3.43	3.15
25	2.45	1.34	1.56	1.18	1.18	.93	2.13	1.62	2.42	2.39	3.47	2.97
26	2.41	2.62	1.60	1.17	1.14	.93	2.06	1.64	2.65	2.36	3.46	2.85
27	2.36	2.60	1.62	1.15	1.10	.91	2.00	2.60	2.73	2.30	3.44	2.76
28	2.32	2.39	1.59	1.17	1.06	.90	1.96	3.26	2.77	2.23	3.39	2.74
29	2.28	2.31	1.56	1.20	---	.88	1.96	3.06	2.67	2.17	3.44	3.37
30	2.26	2.27	1.53	1.20	---	.88	1.93	3.01	2.61	2.10	3.34	3.26
31	2.22	---	1.52	1.21	---	1.01	---	3.03	---	2.04	3.26	---
TOTAL	82.61	55.87	53.53	39.74	31.85	30.49	61.29	52.63	76.54	77.22	86.52	89.35
MEAN	2.66	1.86	1.73	1.28	1.14	.98	2.04	1.70	2.55	2.49	2.79	2.98
MAX	3.21	2.62	2.18	1.50	1.27	1.14	2.79	3.26	3.15	2.72	3.47	3.37
MIN	2.22	1.34	1.52	1.15	1.06	.84	1.26	1.00	2.06	2.04	2.01	2.68
CAL YR 1989	TOTAL 629.23		MEAN 1.72	MAX 3.89	MIN .24							
WTR YR 1990	TOTAL 737.64		MEAN 2.02	MAX 3.47	MIN .84							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286399 MIAMI CANAL ABOVE S354 AND S-3 AT LAKE HARBOR, FL

LOCATION.--Lat 26°41'55", long 80°48'25", in SE¼ sec.35, T.43 S., R.35 E., Palm Beach County, Hydrologic Unit 03090202, in pump station 3 at Lake Okeechobee, 0.4 mi upstream from U.S. Highway 27, in Lake Harbor.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1957 to current year (gage heights). Records of gage heights prior to October 1962 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 1, 1957, to Sept. 30, 1959, at datum 0.05 ft lower and Oct. 1, 1959, to Feb. 7, 1962, at datum 0.22 ft lower.

REMARKS.--No estimated daily stage. Water-level records are those for Lake Okeechobee at pump station 3. Stage is affected by S-3 pumping, S354 gate operations, wind, and seiche.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 19.78 ft Mar. 7, 1983; minimum, 9.50 ft Aug. 3, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.15 ft Oct. 20; minimum, 10.20 ft May 24.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.00	12.81	12.64	12.44	12.29	12.36	11.61	10.87	10.60	10.63	11.41	12.38
2	12.07	12.75	12.40	12.45	12.24	12.21	11.57	10.87	10.62	10.55	11.43	12.52
3	12.28	12.95	12.69	12.32	12.24	12.20	11.67	10.84	10.60	10.68	11.42	12.50
4	12.28	12.93	12.62	12.26	12.17	12.41	11.84	10.80	10.56	10.70	11.42	12.53
5	12.13	12.79	12.32	12.28	12.69	12.35	11.55	10.78	10.57	10.78	11.42	12.51
6	12.12	12.74	12.25	12.26	12.31	12.15	11.39	10.79	10.59	10.79	11.42	12.47
7	12.06	12.69	12.22	12.20	12.31	11.89	11.38	11.12	10.64	10.82	11.38	12.37
8	12.25	12.60	12.15	12.24	12.31	11.74	11.82	10.82	10.62	10.83	11.37	12.34
9	12.44	12.65	12.27	12.37	12.22	12.13	11.54	10.65	10.65	10.85	11.43	12.36
10	12.36	12.81	12.48	12.36	12.08	12.14	11.37	10.64	10.62	10.84	11.41	12.38
11	12.68	12.84	12.31	12.33	12.29	12.05	11.40	11.02	10.64	10.81	11.51	12.44
12	12.72	12.67	12.19	12.27	12.84	---	11.83	10.86	10.77	10.82	11.60	12.40
13	12.70	12.63	12.44	12.98	12.34	---	11.68	10.77	10.78	10.82	11.59	12.36
14	12.71	12.56	12.67	12.39	12.26	---	11.37	10.74	10.63	10.79	11.76	12.32
15	12.75	12.51	12.28	12.30	12.20	---	11.20	10.76	10.49	11.08	11.81	12.23
16	12.78	12.64	12.19	12.27	12.19	---	11.23	10.68	10.42	11.24	11.86	12.24
17	12.77	13.06	12.32	12.25	12.26	---	11.17	10.65	10.42	11.19	11.88	12.29
18	12.73	12.82	12.24	12.27	12.23	---	11.19	10.61	10.40	11.20	11.91	12.40
19	12.88	12.63	12.18	12.25	12.16	---	11.30	10.57	10.34	11.33	12.01	12.49
20	13.45	12.58	12.25	12.21	12.31	---	11.38	10.53	10.32	11.18	11.96	12.40
21	13.05	12.49	12.34	12.22	12.25	12.41	11.21	10.49	10.30	11.20	12.03	12.34
22	13.06	12.39	12.64	12.28	12.00	12.03	11.11	10.54	10.34	11.24	12.03	12.29
23	12.91	12.46	13.06	12.33	12.17	11.96	11.07	10.58	10.40	11.30	12.04	12.31
24	12.83	12.68	13.05	12.21	12.69	11.85	11.15	10.48	10.42	11.38	12.05	12.59
25	12.98	12.39	12.36	12.14	12.76	11.81	11.02	10.56	10.53	11.38	12.16	12.39
26	12.93	12.36	12.18	12.81	12.84	11.76	10.97	10.48	10.49	11.49	12.21	12.29
27	13.14	12.38	12.22	12.44	12.42	11.79	10.84	10.51	10.58	11.64	12.24	12.29
28	13.22	12.37	12.24	12.39	12.37	11.66	10.76	10.48	10.60	11.51	12.25	12.27
29	12.91	12.52	12.27	12.23	---	11.50	10.91	10.44	10.61	11.44	12.34	12.30
30	12.72	12.86	12.26	12.28	---	11.43	10.88	10.55	10.61	11.42	12.35	12.48
31	12.77	---	12.20	12.36	---	11.51	---	10.56	---	11.36	12.36	---
TOTAL	392.68	379.56	383.93	382.39	345.44	---	339.41	331.04	316.16	343.29	366.06	371.48
MEAN	12.67	12.65	12.38	12.34	12.34	---	11.31	10.68	10.54	11.07	11.81	12.38
MAX	13.45	13.06	13.06	12.98	12.84	---	11.84	11.12	10.78	11.64	12.36	12.59
MIN	12.00	12.36	12.15	12.14	12.00	---	10.76	10.44	10.30	10.55	11.37	12.23

CAL YR 1989 TOTAL 4567.39 MEAN 12.51 MAX 14.56 MIN 10.93

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286400 MIAMI CANAL AT S354, AND S-3, AT LAKE HARBOR, FL

LOCATION.--Lat 26°41'55", long 80°48'25", in SE¼ sec.35, T.43 S., R.35 E., Palm Beach County, Hydrologic Unit 03090202, at gate structure S354 and pump station 3 at Lake Okeechobee, 0.4 mi upstream from U.S. Highway 27 in Lake Harbor.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1939 to June 1943 (published as Miami Canal at Lake Harbor), October 1957 to current year. Prior to October 1940, monthly discharge only, published in WSP 1304.

GAGE.--Dual graphic water-stage recorder, digital lake and canal water-stage recorders, electromagnetic velocity meter, gate-opening indicator and pump tachometer. Datum of gage is National Geodetic Vertical Datum of 1929. Dec. 1, 1939 to June 30, 1943, nonrecording gage at site 0.4 mi downstream at same datum. Oct. 1, 1957 to Sept. 30, 1959, dual water-stage recorder at present site, at datum 0.05 ft lower and Oct. 1, 1959 to Feb. 7, 1962, at datum 0.22 ft lower. Oct. 1, 1957 to Sept. 30, 1968, two deflection vane recorders. From 1981 WY to April 1, 1987, electromagnetic velocity meter and digital recorder. Electromagnetic velocity meter reinstalled May 11, 1988.

REMARKS.--Estimated daily discharge: July 5, 16, Aug. 18 and Sept. 3, 5, 6, 20. Records fair except for those estimated discharge which are poor. Flow regulated by gates and pump station at Lake Okeechobee. Discharge is summation of S354 flow, S-3 pumpage and syphoning. Flow frequently reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades, or by the operation of pump station 3 (negative figure indicates reverse flow). Discharge computed from relations between discharge, head, gate openings, and pump tachometer.

COOPERATION.--S-3 pump, syphon record and S354 gate-operation record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--32 years, (water years 1957-89), 56.9 ft³/s, 41,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,280 ft³/s Mar. 24, 1966; maximum gage height (Miami Canal) 14.92 ft, present datum, Mar. 21, 1960 and Oct. 2, 1965; maximum daily reverse flow, 2,790 ft³/s Mar. 26, 1970; no flow on some days each year; minimum gage height (Miami Canal), 7.51 ft Oct. 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 877 ft³/s Mar. 8; maximum gage height (Miami Canal), 12.66 ft Oct. 4; maximum daily reverse flow, 1,530 ft³/s Oct. 11; no flow for some days during the year; minimum gage height, 8.88 ft May 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	141	536	444	138	.00	.00	370	.00
2	.00	.00	.00	.00	200	525	399	57	.00	.00	45	.00
3	.00	.00	.00	.00	337	528	464	.00	.00	.00	352	.00
4	.00	.00	123	.00	340	526	593	132	.00	.00	.00	.00
5	-975	113	85.0	.00	531	557	441	.00	.00	-151	.00	.00
6	-224	274	156	.00	505	527	430	.00	.00	.00	.00	.00
7	.00	338	77.0	.00	510	709	362	373	.00	.00	.00	.00
8	-253	419	195	.00	513	877	551	284	.00	.00	.00	.00
9	-1060	624	.00	.00	453	723	673	241	.00	.00	.00	.00
10	-955	624	.00	.00	345	703	330	83	.00	.00	241	.00
11	-1530	592	149	.00	253	662	526	.00	.00	.00	.00	233
12	-1060	519	.00	.00	167	672	495	.00	.00	.00	.00	.00
13	-656	584	145	.00	284	624	361	.00	.00	.00	.00	.00
14	-343	571	.00	.00	446	647	214	.00	.00	.00	-198	226
15	-704	522	314	.00	474	560	191	.00	.00	.00	.00	.00
16	-343	493	155	205	---	587	261	.00	.00	-71	.00	.00
17	-322	501	.00	198	---	399	230	63	.00	.00	.00	.00
18	-316	422	.00	.00	---	357	176	96	217	.00	.00	.00
19	-313	467	.00	217	---	383	45	.00	283	.00	.00	.00
20	.00	439	163	103	---	528	496	.00	85	.00	.00	-81
21	.00	406	.00	121	---	553	453	117	178	.00	.00	.00
22	.00	413	265	226	112	608	350	253	115	.00	.00	.00
23	.00	431	220	211	---	751	408	335	.00	.00	.00	.00
24	.00	447	577	378	535	572	506	290	.00	.00	.00	75
25	.00	441	156	371	545	538	471	216	.00	.00	.00	4.6
26	.00	387	.00	396	558	608	294	66	.00	.00	.00	.00
27	.00	191	.00	357	491	566	286	.00	.00	.00	.00	.00
28	.00	.00	.00	373	515	513	344	.00	.00	.00	.00	.00
29	.00	.00	.00	309	---	517	146	128	.00	.00	.00	.00
30	.00	.00	.00	296	---	458	166	131	.00	.00	.00	.00
31	.00	---	.00	315	---	480	---	.00	---	507	.00	---
TOTAL-9054.00	10218.00	2780.00	4076.00	---	17794	11106	3003.00	878.00	285.00	810.00	457.60	
MEAN	-292	341	89.7	131	---	574	370	96.9	29.3	9.19	26.1	15.3
MAX	.00	624	577	396	---	877	673	373	283	507	370	233
MIN	-1530	.00	.00	.00	---	357	45	.00	.00	-151	-198	-81
AC-FT	-17960	20270	5510	8080	---	35290	22030	5960	1740	565	1610	908

CAL YR 1989 TOTAL 78671.00 MEAN 216 MAX 1020 MIN -2620 AC-FT 156000

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

CAL YR 1989	TOTAL 4002.39	MEAN 10.97	MAX 12.30	MIN 9.47
WTR YR 1990	TOTAL 3931.66	MEAN 10.77	MAX 12.11	MIN 8.90

EVERGLADES AND SOUTHEASTERN COASTAL AREA

264514080550700 INDUSTRIAL CANAL AT CLEWISTON, FL

LOCATION.--Lat 26°45'14", long 80°55'07", in NW¼ sec.14, T.43 S., R.34 E., Hendry County, Hydrologic Unit 03090202, on south side of U.S. Highway 27 bridge, 0.8 mi south of Okeechobee Waterway, and 0.8 mi east of Clewiston post office.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1976 to September 1979, October 1979 to September 1981 (gage heights), October 1982 to current year.

GAGE.--Water-stage recorder and electromagnetic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1979, at datum 0.24 ft lower.

REMARKS.--Records poor. Flow regulated by hurricane gate at Lake Okeechobee.

AVERAGE DISCHARGE.--9 years (water years 1977-79, 1983-87, 1990), 66.9 ft³/s, 48,470 acre ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 740 ft³/s Feb. 24, 1989; maximum gage height, 19.17 ft Mar. 7, 1983; maximum daily reverse flow, 1,400 ft³/s July 4, 1984; minimum gage height, 9.60 ft July 12, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 283 ft³/s Oct. 6; maximum gage height, 13.90 ft Jan. 26; maximum daily reverse flow, 319 ft³/s July 15; minimum gage height, 10.24 ft June 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	134	20	13	-116	25	53	47	8.1	-7.5	113	-32
2	25	141	12	-8.1	-29	45	36	91	-9.1	-44	21	9.6
3	49	123	29	-44	-13	26	5.0	9.5	-7.5	-100	135	-34
4	106	56	27	.02	-17	33	41	60	9.8	-118	-.67	66
5	152	130	29	-8.4	10	34	15	-3.2	24	-134	-.80	15
6	283	110	71	-5.7	7.0	5.2	91	-4.5	13	-100	-.27	1.3
7	226	55	50	-13	12	34	36	-2.1	-8.1	-16	70	47
8	24	58	19	-32	12	1.6	5.0	2.0	-.83	-8.8	30	-5.2
9	42	102	10	10	12	61	93	75	-45	-19	5.1	-.32
10	-48	107	.16	9.0	14	10	18	-254	-33	-31	18	26
11	-191	108	9.0	10	14	20	142	-260	6.4	4.7	-4.4	122
12	-102	77	-1.1	17	-88	106	104	-178	-5.5	-22	-85	16
13	-.48	84	34	4.9	-21	64	122	-18	4.0	-59	-11	-.87
14	5.7	62	-6.1	-.04	-3.7	169	74	1.5	-12	-108	-166	90
15	-28	54	15	11	-15	101	17	28	37	-319	-135	7.6
16	13	23	16	.94	20	103	115	25	12	-184	-36	13
17	75	22	-3.1	3.9	21	24	108	-5.8	13	-145	-8.6	15
18	117	45	38	3.1	23	27	188	50	12	-74	-74	104
19	103	64	4.5	19	19	158	83	8.8	104	-22	-164	34
20	40	74	30	9.1	24	70	158	3.2	33	-17	-56	-4.2
21	57	66	-2.0	9.7	31	121	68	66	6.9	-9.9	-44	66
22	43	89	20	26	26	45	26	17	60	5.6	-40	12
23	108	111	13	8.5	29	193	193	76	3.6	19	-18	9.4
24	-4.3	49	5.1	29	27	72	83	9.6	2.2	-3.4	-6.4	8.1
25	51	47	5.6	7.4	30	40	117	49	5.2	-1.9	-6.6	87
26	135	56	2.0	17	14	124	79	-7.0	16	36	-44	47
27	185	35	-128	-2.1	17	-18	118	-.14	-10	52	13	31
28	105	26	-1.2	12	47	178	37	-4.6	-50	-7.9	-66	44
29	27	47	-12	-5.0	---	99	36	84	-59	.60	-94	-22
30	38	8.6	-43	-29	---	124	-7.6	64	-36	-20	-56	-132
31	75	---	-54	6.7	---	50	---	-.28	---	99	-23	---
TOTAL	1722.92	2163.6	208.86	79.92	106.3	2144.8	2253.4	28.98	94.17	-1354.50	-734.64	640.41
MEAN	55.6	72.1	6.74	2.58	3.80	69.2	75.1	.93	3.14	-43.7	-23.7	21.3
MAX	283	141	71	29	47	193	193	91	104	99	135	122
MIN	-191	8.6	-128	-44	-116	-18	-7.6	-260	-59	-319	-166	-132
AC-FT	3420	4290	414	159	211	4250	4470	57	187	-2690	-1460	1270

WTR YR 1990 TOTAL 7354.22 MEAN 20.1 MAX 283 MIN -319 AC-FT 14590

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.12	12.89	12.66	12.49	12.44	12.50	11.73	10.99	10.71	10.72	11.50	12.52
2	12.16	12.83	12.46	12.50	12.41	12.38	11.67	11.02	10.76	10.64	11.51	12.63
3	12.33	12.97	12.59	12.41	12.39	12.25	11.62	11.05	10.71	10.77	11.51	12.62
4	12.38	12.97	12.57	12.37	12.27	12.50	11.75	11.00	10.64	10.80	11.51	12.65
5	12.28	12.87	12.37	12.38	12.65	12.48	11.61	10.91	10.66	10.92	11.53	12.63
6	12.24	12.84	12.33	12.35	12.49	12.52	11.52	10.87	10.70	10.91	11.53	12.58
7	12.17	12.81	12.31	12.30	12.41	12.66	11.49	11.25	10.76	10.94	11.48	12.48
8	12.33	12.73	12.26	12.32	12.41	12.65	11.93	11.04	10.75	10.99	11.47	12.46
9	12.51	12.71	12.23	12.41	12.36	12.43	11.79	10.83	10.78	11.00	11.54	12.49
10	12.45	12.89	12.44	12.41	12.21	12.39	11.57	10.73	10.73	10.98	11.52	12.51
11	12.79	12.95	12.38	12.38	12.34	12.38	11.46	11.14	10.70	10.96	11.63	12.56
12	12.81	12.80	12.29	12.30	12.83	12.38	11.83	11.03	10.91	10.96	11.73	12.53
13	12.79	12.77	12.36	12.82	12.49	12.33	11.77	10.91	10.95	10.98	11.74	12.50
14	12.81	12.69	12.62	12.45	12.44	12.24	11.45	10.87	10.76	10.95	11.93	12.44
15	12.85	12.63	12.34	12.38	12.41	12.16	11.29	10.91	10.60	11.26	11.96	12.33
16	12.89	12.61	12.26	12.38	12.36	12.08	11.29	10.84	10.54	11.47	11.99	12.34
17	12.89	12.96	12.37	12.37	12.40	11.92	11.26	10.78	10.53	11.40	11.99	12.38
18	12.82	12.86	12.31	12.37	12.39	12.38	11.30	10.73	10.53	11.38	12.03	12.51
19	12.86	12.70	12.27	12.37	12.31	12.14	11.55	10.70	10.46	11.50	12.14	12.64
20	13.18	12.63	12.32	12.34	12.42	12.14	11.67	10.67	10.43	11.36	12.09	12.53
21	13.04	12.53	12.38	12.31	12.42	12.46	11.40	10.60	10.43	11.35	12.16	12.46
22	13.05	12.47	12.63	12.35	12.24	12.16	11.22	10.61	10.46	11.34	12.14	12.40
23	12.92	12.51	12.76	12.44	12.28	12.06	11.18	10.67	10.50	11.41	12.13	12.39
24	12.87	12.74	12.62	12.34	12.55	11.98	11.33	10.61	10.53	11.46	12.16	12.68
25	12.98	12.52	12.36	12.29	12.71	11.93	11.25	10.78	10.61	11.50	12.28	12.50
26	12.94	12.45	12.27	12.72	12.90	11.89	11.19	10.69	10.58	11.57	12.32	12.40
27	13.05	12.47	12.31	12.51	12.55	11.90	11.03	10.67	10.67	11.68	12.34	12.40
28	13.07	12.46	12.33	12.48	12.51	11.85	10.94	10.60	10.72	11.62	12.36	12.45
29	12.85	12.59	12.36	12.33	---	11.71	11.04	10.48	10.77	11.55	12.45	12.45
30	12.77	12.84	12.36	12.38	---	11.64	11.01	10.64	10.73	11.51	12.46	12.59
31	12.84	---	12.32	12.45	---	11.67	---	10.66	---	11.46	12.46	---
TOTAL	394.04	381.69	384.44	384.70	348.59	378.16	343.14	335.28	319.61	347.34	369.59	375.05
MEAN	12.71	12.72	12.40	12.41	12.45	12.20	11.44	10.82	10.65	11.20	11.92	12.50
MAX	13.18	12.97	12.76	12.82	12.90	12.66	11.93	11.25	10.95	11.68	12.46	12.68
MIN	12.12	12.45	12.23	12.29	12.21	11.64	10.94	10.48	10.43	10.64	11.47	12.33
CAL YR 1989	TOTAL 4599.42		MEAN 12.60	MAX 14.57	MIN 11.02							
WTR YR 1990	TOTAL 4361.63		MEAN 11.95	MAX 13.18	MIN 10.43							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02287395 MIAMI CANAL EAST OF LEVEE 30, NEAR MIAMI, FL

LOCATION.--Lat 25°56'28", long 80°26'23", in NE¼ sec.9, T.52 S., R.39 E., Dade County, Hydrologic Unit 03090202, south of State Highway 27 approximately 800 ft on south bank 1000 ft downstream from control structure 32, 14.1 mi upstream from salinity-control structure, 19.5 mi northwest of Miami, and 19.8 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1959 to current year. Published as "at broken dam, near Miami" November 1959 to September 1967, and October 1984 to November 1988.

GAGE.--Water-stage and velocity-meter recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Dade County bench mark). Prior to January 20, 1968, October 1984 to November 1988 at site 0.5 mi downstream at same datum.

REMARKS.--No record estimated. Records poor. Flow affected by regulation at downstream salinity-control structure and by upstream storage releases at control structures 31, 32, and 32A. Discharge computed from continuous velocity record obtained from recording velocity meter.

AVERAGE DISCHARGE.--24 years (Water years 1960-84), 236 ft³/s, 170,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,090 ft³/s Mar. 20, 1970; maximum gage height, 6.59 ft July 1, 1982; no flow for many days in 1980; minimum gage height, 1.40 ft May 31, 1962 (at site then in use).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 97 ft³/s July 24; maximum gage height, 3.57 ft Aug. 15, 16; minimum daily discharge, 36 ft³/s Apr. 10; minimum gage height, 1.83 ft Mar. 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	67	78	72	66	63	70	---	57	55	61	62
2	67	66	76	69	63	71	70	---	61	56	58	60
3	66	58	81	69	63	73	66	---	59	59	62	59
4	63	62	77	69	63	72	62	60	58	59	60	59
5	66	66	72	74	69	72	67	61	61	58	60	56
6	66	67	71	74	65	68	68	53	62	58	57	58
7	67	68	70	73	65	67	63	51	65	60	58	58
8	63	73	75	71	63	63	56	55	59	62	59	58
9	64	73	70	68	60	65	56	57	66	61	59	58
10	69	69	71	64	61	66	36	53	65	60	64	58
11	67	69	69	63	61	65	---	50	59	61	61	55
12	66	72	68	68	64	61	---	56	59	63	61	55
13	73	69	70	74	63	58	---	57	61	63	63	56
14	81	68	71	70	59	55	---	50	61	62	62	55
15	78	68	64	72	59	56	---	56	61	62	60	55
16	79	64	69	73	58	58	---	56	62	60	61	57
17	76	77	69	72	58	61	---	56	58	62	62	59
18	76	74	72	69	56	58	---	52	59	67	62	58
19	77	70	70	69	59	63	---	53	56	65	65	57
20	74	68	68	68	59	54	---	52	56	71	64	58
21	73	77	67	67	64	68	---	47	59	71	63	58
22	66	78	64	63	62	69	---	46	60	76	63	58
23	69	71	70	60	62	67	---	46	61	92	63	56
24	66	78	74	59	68	62	---	50	59	97	63	59
25	65	76	67	64	70	58	---	55	61	86	63	58
26	65	75	64	82	66	55	---	59	62	77	65	57
27	64	70	68	75	63	55	---	60	58	69	66	59
28	67	76	71	70	62	58	---	60	63	72	67	65
29	67	70	73	70	---	62	---	56	65	71	67	68
30	67	73	75	64	---	65	---	57	58	63	63	66
31	61	---	76	66	---	68	---	58	---	62	62	---
TOTAL	2139	2112	2200	2141	1751	1956	---	---	1811	2060	1924	1755
MEAN	69.0	70.4	71.0	69.1	62.5	63.1	---	---	60.4	66.5	62.1	58.5
MAX	81	78	81	82	70	73	---	---	66	97	67	68
MIN	61	58	64	59	56	54	---	---	56	55	57	55
AC-FT	4240	4190	4360	4250	3470	3880	---	---	3590	4090	3820	3480

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02287395 MIAMI CANAL EAST OF LEVEE 30, NEAR MIAMI, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.87	2.57	2.53	2.26	2.21	1.98	2.21	---	3.02	2.89	2.80	3.10
2	2.87	2.56	2.52	2.25	2.21	2.01	2.20	---	3.02	3.00	2.78	3.10
3	2.86	2.53	2.50	2.24	2.19	1.98	2.24	---	3.03	3.19	2.86	3.08
4	2.84	2.52	2.47	2.24	2.17	2.00	2.28	2.35	2.99	3.11	2.99	3.03
5	2.82	2.50	2.45	2.26	2.15	2.01	2.28	2.32	2.94	3.10	2.90	3.02
6	2.78	2.50	2.44	2.25	2.15	1.98	2.27	2.28	2.94	3.12	2.88	3.03
7	2.76	2.48	2.44	2.26	2.12	1.97	2.24	2.25	2.91	3.04	2.86	3.02
8	2.78	2.47	2.43	2.24	2.11	1.99	2.23	2.24	2.92	2.97	2.83	2.99
9	2.86	2.45	2.41	2.22	2.11	1.98	2.21	2.21	2.93	2.91	2.97	2.97
10	2.99	2.43	2.40	2.22	2.10	1.96	2.89	2.27	2.88	2.89	3.15	2.94
11	3.05	2.42	2.38	2.21	2.10	1.95	---	2.37	2.83	2.89	3.13	2.92
12	2.97	2.39	2.38	2.20	2.10	1.94	---	2.34	2.80	3.05	3.21	2.99
13	2.90	2.38	2.38	2.19	2.09	1.93	---	2.31	2.76	2.99	3.30	2.98
14	2.94	2.36	2.35	2.20	2.07	1.93	---	2.28	2.71	2.98	3.35	2.94
15	2.93	2.35	2.34	2.19	2.06	1.91	---	2.27	2.67	3.08	3.26	2.94
16	2.91	2.32	2.37	2.19	2.03	1.89	---	2.22	2.63	3.00	3.26	2.95
17	2.89	2.30	2.37	2.18	2.01	1.87	---	2.20	2.60	3.04	3.23	2.96
18	2.88	2.28	2.35	2.17	2.00	1.91	---	2.16	2.57	3.15	3.27	2.95
19	2.85	2.27	2.33	2.17	2.00	1.95	---	2.14	2.54	3.13	3.50	2.91
20	2.79	2.26	2.32	2.16	2.02	2.01	---	2.12	2.57	3.14	3.42	2.90
21	2.75	2.23	2.32	2.16	2.02	1.99	---	2.08	2.62	3.11	3.34	2.89
22	2.74	2.23	2.31	2.13	2.05	1.98	---	2.05	2.60	3.14	3.32	2.90
23	2.72	2.21	2.35	2.15	2.02	1.95	---	2.03	2.74	3.14	3.29	2.90
24	2.71	2.20	2.33	2.16	2.12	1.95	---	2.30	2.91	3.11	3.28	2.90
25	2.67	2.21	2.32	2.15	2.09	1.95	---	2.58	2.96	3.04	3.34	2.84
26	2.64	2.43	2.31	2.11	2.07	1.94	---	2.65	2.97	3.00	3.35	2.85
27	2.56	2.54	2.30	2.11	2.04	1.94	---	2.96	3.00	2.95	3.29	2.88
28	2.60	2.54	2.29	2.12	2.00	1.94	---	2.98	2.99	2.90	3.31	2.89
29	2.60	2.55	2.28	2.17	---	1.94	---	2.91	2.93	2.89	3.39	3.12
30	2.58	2.55	2.28	2.21	---	1.95	---	2.88	2.92	2.90	3.25	3.01
31	2.56	---	2.28	2.20	---	2.04	---	2.90	---	2.84	3.15	---
TOTAL	86.67	72.03	73.53	67.97	58.41	60.72	---	---	84.90	93.69	98.26	88.90
MEAN	2.80	2.40	2.37	2.19	2.09	1.96	---	---	2.83	3.02	3.17	2.96
MAX	3.05	2.57	2.53	2.26	2.21	2.04	---	---	3.03	3.19	3.50	3.12
MIN	2.56	2.20	2.28	2.11	2.00	1.87	---	---	2.54	2.84	2.78	2.84

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02288600 MIAMI CANAL AT N.W. 36TH STREET, MIAMI, FL
(National stream-quality accounting network station)

LOCATION.--Lat 25°48'29", long 80°15'49", in NE¼ sec.29, T.53 S., R.41 E., Dade County, Hydrologic Unit 03090202, on right bank at downstream end of N.W. 36th Street Bridge fender at Miami, 200 ft upstream from salinity-control structure S-26.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1959 to current year.

GAGE.--Water-stage recorder and electromagnetic velocity meter recorder. Datum of gage is National Geodetic Vertical Datum of 1929. (Dade County bench mark).

REMARKS.--Estimated daily discharge for May 25 - 28, and June 1-6. Records fair. Flow affected by tide and is occasionally reversed. Some seepage losses above station into Miami-Dade Water and Sewer Authority well field for ground-water withdrawals. Natural flow materially affected by levee and control structures 31, 32 and 32A about 14 mi upstream, and structure 26 downstream. Discharge computed from continuous velocity record obtained from recording electromagnetic velocity meter.

COOPERATION.--Gate-opening record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--28 years (1960-85, 1987-88), 251 ft³/s, 181,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s Oct. 2, 1959; maximum gage height, 5.14 ft Sept. 8, 1965; maximum reverse flow, 1,400 ft³/s, estimated, Sept. 8, 1965, from hurricane tide; minimum gage height, -0.55 ft Apr. 26, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 489 ft³/s Sept. 29; maximum gage height, 3.23 ft Apr. 16; no flow for many days during year; minimum gage height, 1.81 ft Mar. 16 and 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	7.1	24	9.0	6.5	12	226	7.0	2.3	282
2	---	---	3.7	14	32	10	9.6	12	344	94	1.1	302
3	---	---	.00	20	32	10	1.5	8.2	1.5	109	2.2	268
4	---	---	3.5	26	26	.09	3.1	8.3	120	3.5	2.1	278
5	---	---	11	32	15	.00	.98	17	59	98	1.9	270
6	---	---	4.3	17	7.5	3.0	8.6	14	.47	51	1.3	178
7	11	---	5.1	19	14	3.9	9.9	6.7	17	8.0	3.6	273
8	5.8	---	21	21	11	1.0	4.4	2.2	9.7	13	6.3	235
9	53	---	6.6	11	20	2.9	234	6.5	16	16	54	237
10	61	---	5.8	6.5	23	6.0	115	13	22	14	98	196
11	26	---	1.2	4.2	9.5	9.6	7.0	3.1	8.4	8.9	55	143
12	44	---	5.9	6.4	4.0	12	5.3	7.2	3.4	21	126	263
13	81	---	6.3	3.0	6.7	8.3	4.6	19	4.7	37	134	220
14	60	---	2.6	2.8	11	12	7.7	14	1.6	53	145	208
15	43	---	2.5	11	21	17	54	13	6.6	8.8	78	199
16	26	---	.69	11	28	21	5.2	11	14	7.5	87	193
17	3.9	---	5.0	18	17	26	10	20	11	10	93	189
18	3.5	---	5.9	18	17	5.7	9.2	22	17	11	190	173
19	.00	---	4.6	17	16	5.0	8.0	20	14	6.8	314	143
20	.00	---	.00	18	9.7	10	6.7	16	21	15	206	166
21	.00	---	10	39	14	4.0	5.9	9.0	15	13	142	160
22	.00	---	11	8.6	26	1.6	4.5	.58	24	5.6	154	44
23	.00	---	1.5	15	22	2.9	11	.94	17	5.8	182	29
24	3.0	---	.00	28	4.2	4.1	8.6	5.2	96	4.8	259	61
25	.00	---	.00	39	6.5	7.3	3.4	9.4	107	3.0	317	76
26	11	---	4.6	10	3.8	15	4.8	6.5	338	1.1	344	83
27	.00	---	7.4	11	1.4	9.7	8.4	500	436	2.6	253	28
28	.00	---	3.2	11	6.2	3.2	15	578	317	2.1	264	164
29	.05	---	2.9	22	---	17	22	---	177	5.7	299	489
30	2.6	---	7.8	22	---	22	14	---	54	5.9	385	353
31	---	---	13	18	---	19	---	---	---	3.0	231	---
TOTAL	---	---	---	506.6	428.5	278.29	608.88	---	2498.37	645.1	4430.8	5903
MEAN	---	---	---	16.3	15.3	8.98	20.3	---	83.3	20.8	143	197
MAX	---	---	---	39	32	26	234	---	436	109	385	489
MIN	---	---	---	2.8	1.4	.00	.98	---	.47	1.1	1.1	28
AC-FT	---	---	---	1000	850	552	1210	---	4960	1280	8790	11710

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02288600 MIAMI CANAL AT N.W. 36TH STREET, MIAMI, FL
(National stream-quality accounting network station)

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	2.27	2.16	1.97	2.21	2.47	2.58	2.86	2.52	2.67
2	---	---	2.53	2.24	2.16	1.97	2.20	2.42	2.56	2.77	2.60	2.66
3	---	---	2.53	2.23	2.15	1.99	2.27	2.36	2.89	2.77	2.61	2.71
4	---	---	2.49	2.21	2.15	2.00	2.34	2.33	2.77	2.91	2.61	2.70
5	---	---	2.47	2.23	2.16	1.99	2.30	2.31	2.74	2.78	2.60	2.71
6	---	---	2.45	2.24	2.11	1.98	2.28	2.30	2.82	2.82	2.64	2.73
7	2.76	---	2.43	2.24	2.11	1.96	2.27	2.28	2.85	2.88	2.64	2.70
8	2.79	---	2.42	2.24	2.09	1.96	2.26	2.22	2.84	2.81	2.61	2.72
9	2.76	---	2.44	2.23	2.08	1.95	2.63	2.18	2.83	2.77	2.66	2.72
10	2.74	---	2.42	2.22	2.08	1.94	2.83	2.31	2.80	2.76	2.83	2.73
11	2.70	---	2.40	2.20	2.11	1.94	2.91	2.42	2.78	2.78	2.84	2.77
12	2.75	---	2.38	2.20	2.11	1.92	2.88	2.35	2.74	2.87	2.76	2.69
13	2.69	---	2.41	2.20	2.05	1.90	2.82	2.31	2.70	2.81	2.79	2.65
14	2.82	---	2.37	2.18	2.02	1.88	2.77	2.30	2.65	2.77	2.77	2.74
15	2.83	---	2.35	2.17	2.00	1.85	2.84	2.25	2.60	2.83	2.84	2.76
16	2.87	---	2.37	2.15	1.99	1.83	3.08	2.21	2.57	2.80	2.85	2.77
17	2.89	---	2.38	2.14	1.99	1.83	2.97	2.18	2.55	2.79	2.80	2.76
18	2.88	---	2.36	2.14	1.97	1.91	2.90	2.16	2.51	2.85	2.80	2.77
19	2.88	---	2.33	2.13	2.00	1.96	2.82	2.14	2.49	2.82	2.66	2.79
20	2.84	---	2.34	2.13	2.02	2.04	2.80	2.11	2.50	2.81	2.75	2.75
21	2.77	---	2.34	2.13	2.00	2.01	2.76	2.11	2.52	2.78	2.78	2.69
22	2.76	---	2.32	2.14	1.97	1.97	2.73	2.09	2.49	2.79	2.78	2.78
23	2.73	---	2.40	2.14	2.00	1.96	2.69	2.07	2.67	2.76	2.77	2.71
24	2.72	---	2.37	2.13	2.13	1.94	2.66	2.27	2.75	2.74	2.65	2.65
25	2.66	---	2.32	2.12	2.09	1.94	2.63	2.48	2.82	2.72	2.60	2.65
26	2.62	---	2.30	2.13	2.04	1.94	2.58	2.54	2.66	2.69	2.60	2.73
27	2.57	---	2.29	2.10	2.00	1.95	2.54	2.60	2.62	2.68	2.68	2.82
28	2.64	---	2.28	2.11	1.97	1.92	2.52	2.56	2.67	2.63	2.68	2.72
29	2.62	---	2.26	2.14	---	1.90	2.53	---	2.70	2.59	2.75	2.64
30	2.57	---	2.25	2.18	---	1.89	2.51	---	2.84	2.56	2.62	2.65
31	---	---	2.26	2.18	---	2.00	---	---	---	2.52	2.66	---
TOTAL	---	---	---	67.49	57.71	60.19	78.53	---	80.51	85.72	83.75	81.54
MEAN	---	---	---	2.18	2.06	1.94	2.62	---	2.68	2.77	2.70	2.72
MAX	---	---	---	2.27	2.16	2.04	3.08	---	2.89	2.91	2.85	2.82
MIN	---	---	---	2.10	1.97	1.83	2.20	---	2.49	2.52	2.52	2.64

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02288600 MIAMI CANAL AT N.W. 36TH STREET, MIAMI, FL

PERIOD OF RECORD.--October 1938 to current year.

REMARKS.--Samples collected periodically since 1939 for specific conductance and chlorides. Sites also sampled as a part of QW investigations. Station has been operated since 1974 as part of National Stream Quality Accounting Network.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	TUR- BID- ITY (NTU) (00076)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	
NOV 30...	1230	21.5	763	80020	0.50	720	5.2	7.3	7.9	247	0	304	
APR 18...	1005	26.0	765	80020	1.1	550	6.0	7.8	7.9	174	0	216	
JUN 26...	1215	29.0	763	80020	1.3	490	5.1	7.6	7.8	297	0	356	
AUG 09...	1120	31.0	763	80020	0.80	455	4.4	7.4	7.8	161	0	200	
DATE		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 30...	0.070	0.070	<0.010	1.2	0.220	0.020	<0.010	0.020	78	12	53	2.8	
APR 18...	0.060	0.050	0.010	1.4	0.200	0.030	0.020	0.010	61	9.4	42	2.9	
JUN 26...	0.050	0.030	<0.010	1.2	<0.100	<0.010	<0.010	<0.010	58	7.9	31	1.7	
AUG 09...	0.030	0.040	<0.010	0.90	<0.100	0.020	0.020	<0.010	59	5.9	27	1.4	
DATE		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	
NOV 30...	78	17	0.20	7.4	<1	29	<0.5	<1.0	1	<3	3		
APR 18...	63	17	0.30	4.8	1	25	<0.5	<1.0	<1	<3	6		
JUN 26...	50	8.9	0.20	5.0	<1	21	<0.5	<1.0	<1	<3	2		
AUG 09...	44	13	0.50	3.3	1	22	<0.5	<1.0	<1	<3	3		
DATE		IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	
NOV 30...	35	1	3	<10	1	<1.0	860	<6	9	<10	7		
APR 18...	20	3	2	<10	3	<1.0	700	<6	13	<10	<4		
JUN 26...	43	1	<1	<10	1	<1.0	620	<6	5	10	6		
AUG 09...	21	<1	2	<10	2	<1.0	580	<6	7	<10	4		

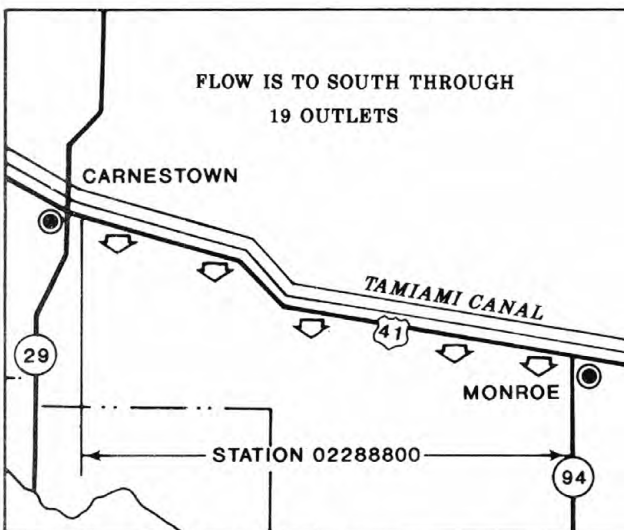
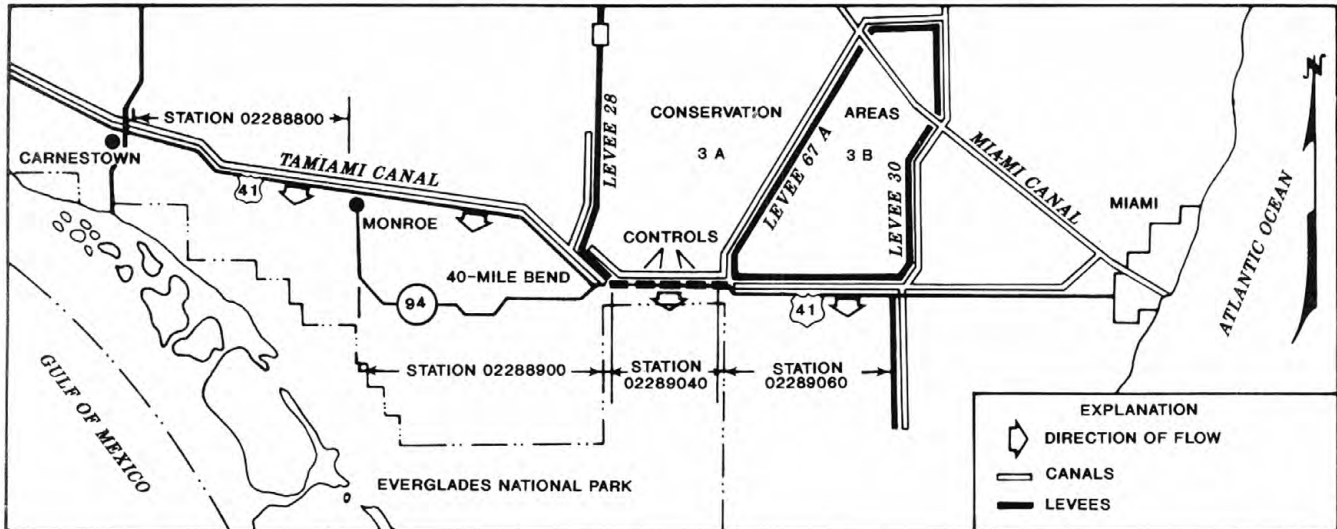
EVERGLADES AND SOUTHEASTERN COASTAL AREA

02288600 MIAMI CANAL AT N.W. 36TH STREET, MIAMI, FL

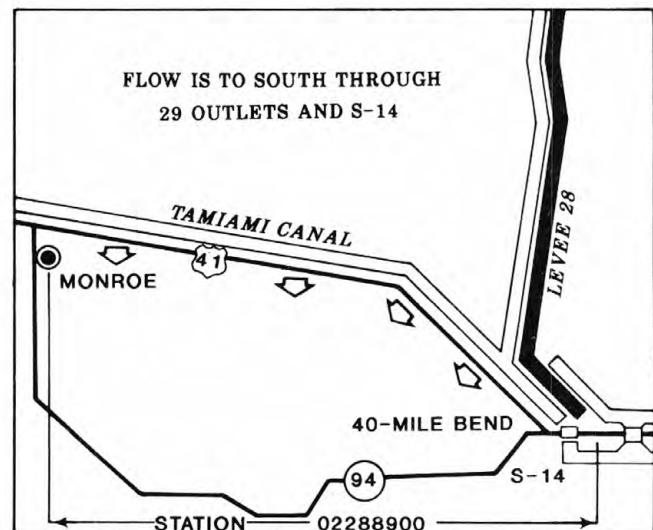
WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOC FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINIT WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINIT LAB (MG/L AS CACO3) (90410)	SULFATE WATER DISS UNCOR- RECTED (MG/L) (99890)
NOV 30...	<1	780	310	249	445	50	0.1	2	692	230	21
APR 18...	<1	K180	K54	177	312	67	0.5	3	550	169	--
JUN 26...	<1	5700	360	292	276	67	0.3	3	476	162	--
AUG 09...	<1	K50	K10	164	264	--	0.1	0	452	159	--

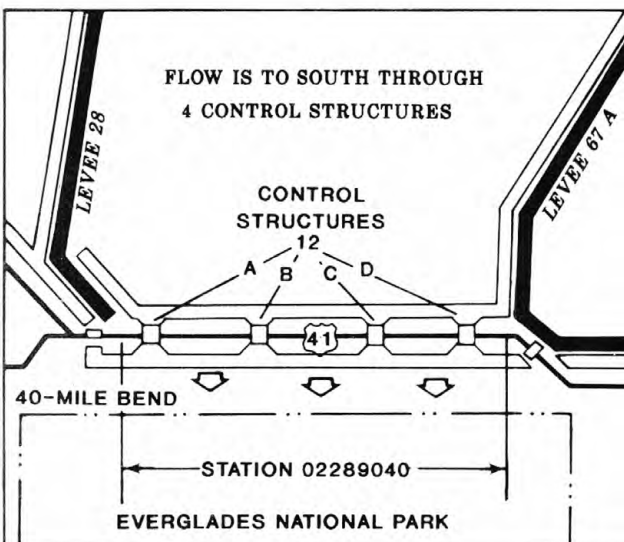
TAMIAMI CANAL OUTLETS



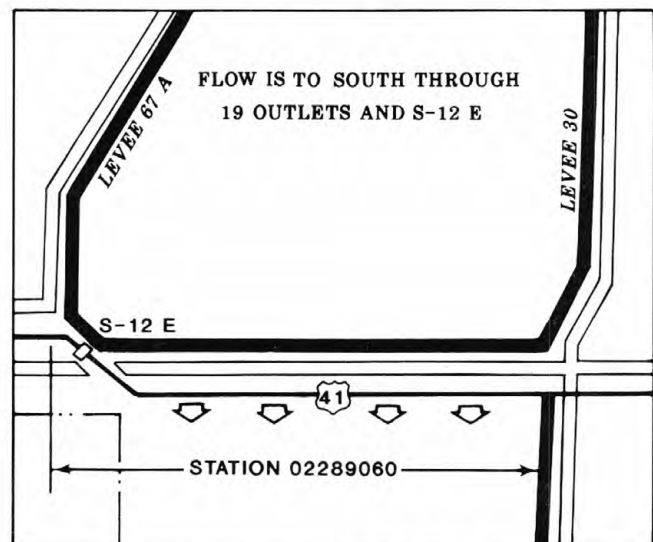
STATION 02288800 MONROE TO CARNESTOWN



STATION 02288900 40-MILE BEND TO MONROE



STATION 02289040 LEVEE 67 A TO 40-MILE BEND



STATION 02289060 LEVEE 30 TO LEVEE 67 A

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02288800 TAMIAMI CANAL OUTLETS, MONROE TO CARNESTOWN, FL

LOCATION.--Lat 25°53'10", long 81°15'30", in NW¼ sec.6, T.53 S., R.31 E., Collier County, Hydrologic Unit 03090204, on downstream side of bridge 84 on U.S. Highway 41, 7 mi east of Carnestown, and 10 mi west of Monroe.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 2, 1963, at site 2 mi east at datum 0.93 ft lower. May 2, 1963, to Feb. 10, 1965, at site on west bank of unnamed lateral 30 ft downstream.

REMARKS.--No estimated daily stage or discharge. Records fair. Figures of discharge consist of runoff from Big Cypress Watershed as represented by flow through all the outlets of the Tamiami Canal from Monroe, 55 mi west of Miami, to a point 1 mi east of the intersection with State Highway 29 at Carnestown. Flow at westernmost outlets slightly affected by tide.

AVERAGE DISCHARGE.--30 years, 380 ft³/s, 275,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,010 ft³/s Sept. 13, 1960; maximum gage height, 5.90 ft present datum Sept. 14, 1960; no flow for many days in some years; minimum gage height observed, -0.43 ft present datum May 30, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,510 ft³/s Aug. 29; maximum gage height, 4.66 ft Aug. 28, 29; no flow for many days; minimum gage height, -0.11 ft Apr. 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	941	379	19	6.3	.00	.00	1.3	7.1	2.0	49	354	2070
2	871	331	11	4.1	.08	.00	3.4	2.2	.00	20	297	1920
3	796	289	5.8	2.1	.00	.00	.13	.00	.00	19	234	1830
4	708	248	2.0	.49	.00	.00	.00	.00	.00	19	313	1720
5	617	217	.10	.86	4.7	.00	.00	.00	.00	1.6	879	1580
6	576	189	.00	.15	7.4	.00	.00	.00	.00	18	1120	1570
7	570	163	.00	.00	5.9	.00	.00	.00	.00	151	988	1550
8	588	141	.00	.00	4.0	.00	.00	.00	2.0	105	902	1700
9	570	128	3.2	.00	2.8	.00	.00	.00	93	27	1230	1580
10	678	112	5.0	.00	2.6	.00	.00	.00	46	17	1370	1440
11	1020	96	2.9	.00	3.2	.00	.00	.00	24	51	1380	1380
12	1030	80	1.8	.00	7.4	.00	.00	.00	.39	22	1360	1450
13	1140	68	12	.00	3.7	.00	.00	.00	.00	38	1320	1340
14	1530	59	13	.00	1.9	.00	.00	.00	.00	22	1390	1250
15	1850	48	7.4	.00	.70	.00	.00	4.9	.00	87	1320	1220
16	1830	41	12	.00	.00	.00	.00	8.5	.00	161	1310	1190
17	1830	33	24	.00	.00	.00	.00	4.1	.00	225	1290	1130
18	1680	24	19	.00	.00	.00	.00	.59	.00	244	1290	1130
19	1520	16	14	.00	.00	.00	.00	.00	.00	214	1320	1180
20	1440	10	18	.00	.00	.00	.00	.00	.00	219	1350	1240
21	1320	5.9	38	.00	.00	.00	.00	.00	.00	254	1360	1290
22	1190	3.5	36	.00	.00	.00	.00	.00	.00	238	1300	1290
23	1070	1.6	62	.00	.00	.00	.00	.00	.00	225	1210	1180
24	962	.39	60	.00	.00	.00	.00	.00	.11	730	1150	1060
25	865	.00	45	.00	.00	.00	47	.08	.00	757	1160	922
26	774	.00	37	.00	.00	.00	51	.00	48	661	1190	799
27	694	.00	30	.00	.00	.00	36	8.6	376	632	1370	687
28	627	.00	23	.00	.00	.00	24	39	334	597	2140	665
29	555	5.9	16	.00	---	.00	20	36	191	532	2510	614
30	488	29	12	.00	---	.00	14	24	104	466	2340	499
31	432	---	8.6	.00	---	.00	---	11	---	409	2220	---
TOTAL	30762	2718.29	537.80	14.00	44.38	0.00	196.83	146.07	1220.50	7210.6	38967	38476
MEAN	992	90.6	17.3	.45	1.58	.000	6.56	4.71	40.7	233	1257	1283
MAX	1850	379	62	6.3	7.4	.00	51	39	376	757	2510	2070
MIN	432	.00	.00	.00	.00	.00	.00	.00	.00	1.6	234	499
AC-FT	61020	5390	1070	28	88	.00	390	290	2420	14300	77290	76320

CAL YR 1989 TOTAL 142013.73 MEAN 389 MAX 2660 MIN .00 AC-FT 281700
WTR YR 1990 TOTAL 120293.47 MEAN 330 MAX 2510 MIN .00 AC-FT 238600

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02288800 TAMIAMI CANAL OUTLETS, MONROE TO CARNESTOWN, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.24	3.86	3.20	3.05	3.06	1.96	.53	.38	.90	2.44	4.04	4.51
2	4.21	3.82	3.16	3.02	3.05	1.92	.50	.32	.90	2.35	3.99	4.46
3	4.17	3.78	3.12	2.99	3.01	1.89	.50	.27	.86	2.41	3.93	4.43
4	4.12	3.74	3.06	2.98	2.95	2.21	.53	.21	.86	2.48	3.97	4.39
5	4.06	3.71	3.02	2.98	3.01	2.33	.47	.16	.85	2.40	4.19	4.34
6	4.04	3.68	2.99	2.97	3.00	2.27	.41	.12	.96	2.48	4.24	4.34
7	4.03	3.65	2.97	2.94	2.96	2.15	.37	.10	1.45	2.96	4.18	4.33
8	4.04	3.62	2.97	2.91	2.89	2.04	.35	.06	1.70	2.95	4.14	4.37
9	4.03	3.59	3.06	2.89	2.84	1.92	.32	.00	2.45	2.84	4.23	4.33
10	4.09	3.56	3.07	2.85	2.80	1.81	.28	.01	2.50	2.85	4.26	4.28
11	4.24	3.54	3.03	2.81	2.78	1.70	.24	.10	2.59	3.05	4.27	4.26
12	4.24	3.51	3.00	2.78	2.79	1.58	.22	.08	2.52	3.03	4.26	4.28
13	4.29	3.48	3.08	2.75	2.71	1.47	.17	.04	2.38	3.16	4.24	4.24
14	4.46	3.46	3.09	2.71	2.65	1.37	.12	.08	2.20	3.17	4.27	4.20
15	4.58	3.44	3.05	2.68	2.60	1.28	.09	.39	2.04	3.40	4.24	4.18
16	4.57	3.42	3.08	2.66	2.55	1.22	.09	.43	1.87	3.57	4.24	4.17
17	4.57	3.40	3.13	2.64	2.51	1.16	.08	.39	1.71	3.66	4.23	4.14
18	4.52	3.36	3.12	2.61	2.44	1.14	.06	.33	1.60	3.68	4.23	4.14
19	4.46	3.33	3.10	2.58	2.39	1.06	.04	.27	1.73	3.65	4.24	4.16
20	4.43	3.30	3.11	2.56	2.36	1.00	-.01	.20	1.71	3.65	4.25	4.19
21	4.38	3.27	3.18	2.53	2.30	.94	-.06	.18	1.79	3.69	4.26	4.22
22	4.33	3.24	3.17	2.51	2.23	.86	-.10	.24	1.86	3.67	4.23	4.27
23	4.27	3.21	3.24	2.54	2.24	.80	-.08	.26	2.35	3.66	4.19	4.22
24	4.22	3.19	3.24	2.82	2.38	.74	.44	.35	2.43	4.09	4.17	4.17
25	4.17	3.17	3.20	2.89	2.32	.71	.57	.61	2.31	4.20	4.17	4.10
26	4.12	3.15	3.18	2.90	2.20	.68	.55	.65	2.33	4.23	4.19	4.04
27	4.08	3.13	3.16	2.87	2.10	.65	.50	.84	2.85	4.24	4.26	3.97
28	4.04	3.11	3.13	2.83	2.02	.62	.46	1.06	2.81	4.22	4.53	3.99
29	3.99	3.16	3.11	2.80	---	.58	.45	1.06	2.67	4.18	4.65	3.99
30	3.95	3.24	3.08	2.81	---	.55	.42	1.02	2.55	4.13	4.59	3.91
31	3.90	---	3.06	3.01	---	.53	---	.96	---	4.09	4.56	---
TOTAL	130.84	103.12	96.16	86.87	73.14	41.14	8.51	11.17	57.73	104.58	131.44	126.62
MEAN	4.22	3.44	3.10	2.80	2.61	1.33	.28	.36	1.92	3.37	4.24	4.22
MAX	4.58	3.86	3.24	3.05	3.06	2.33	.57	1.06	2.85	4.24	4.65	4.51
MIN	3.90	3.11	2.97	2.51	2.02	.53	-.10	.00	.85	2.35	3.93	3.91
CAL YR 1989	TOTAL	1035.20	MEAN	2.84	MAX	4.88	MIN	.46				
WTR YR 1990	TOTAL	971.32	MEAN	2.66	MAX	4.65	MIN	-.10				

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02288900 TAMIA MI CANAL OUTLETS, 40-MILE BEND TO MONROE, FL
(National stream-quality accounting network station)

LOCATION.--Lat 25°51'05", long 80°58'50", in SW¼ sec.13, T.53 S., R.33 E., Collier County, Hydrologic Unit 03090202, on south bank, 25 ft east of bridge 105 on U.S. Highway 41, and 54 mi west of Miami, Dade County.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1939 to September 1963 (monthly discharge only). October 1963 to current year. Prior to October 1963, published as Tamiami Canal at bridge 105, near Miami (auxiliary). Records of gage height prior to October 1963 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 20, 1952, nonrecording gage and Feb. 20, 1952, to May 28, 1952, water-stage recorder, at same site at datum 0.37 ft higher.

AVERAGE DISCHARGE.--49 years, 274 ft³/s, 198,500 acre-ft/yr.

REMARKS.--No estimated daily stage or discharge: Nov. 23, Dec. 1. Records fair except those below 20 ft³/s and those estimated discharges, which are poor. Figures of daily discharge consist of runoff from Big Cypress Watershed and the Everglades as represented by flow through all 29 bridges from bridge 28 to 22 and bridge 117 to 96. Prior to October 1963, daily discharge for this portion of canal was published as part of the total daily discharge of station, Tamiami Canal outlets, Miami to Monroe (station 02289000).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,800 ft³/s July 2, 1966, from rating curve extended above 1,700 ft³/s; maximum gage height, 10.01 ft Oct. 20, 1947 (present datum); no flow for many days in some years; minimum gage height, 2.65 ft May 26, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,720 ft³/s Aug. 21; maximum gage height, 8.50 ft Oct. 7; no flow for many days; minimum gage height, 4.88 ft May 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	772	360	36	2.2	4.8	16	.00	.00	43	94	62	894
2	803	336	34	1.8	3.4	11	.00	.00	43	108	57	826
3	787	315	30	1.3	2.2	8.0	.00	.00	39	147	52	785
4	778	294	28	1.0	1.4	10	.00	.00	34	153	51	834
5	769	274	27	.94	.96	6.9	.00	.00	29	152	61	851
6	783	256	25	.87	.85	3.9	.00	.00	24	156	123	819
7	879	239	24	.80	.74	2.1	.00	.00	19	162	196	792
8	940	222	24	.72	.64	1.1	.00	.00	21	156	261	740
9	933	210	24	.64	.54	.87	.00	.00	38	154	350	693
10	971	196	23	.56	.44	.72	.00	.00	40	161	458	663
11	1060	184	22	.48	.36	.56	.00	.00	42	158	614	634
12	1030	169	20	.39	.30	.41	.00	.00	43	155	834	599
13	1040	158	22	.30	.18	.25	.00	.00	42	160	1100	585
14	1000	146	19	.21	.08	.10	.00	.00	41	163	1430	595
15	968	136	16	.14	.00	.00	.00	.00	38	168	1630	610
16	916	127	17	.06	.00	.00	.00	.00	36	163	1520	584
17	887	115	17	.00	.00	.00	.00	.00	33	150	1410	547
18	923	105	15	.00	.00	.11	.00	.00	30	133	1390	507
19	856	95	13	.00	.00	.10	.00	.00	37	130	1550	461
20	792	88	12	.00	.00	.02	.00	.00	51	131	1680	425
21	732	80	11	.00	.24	.00	.00	.00	52	126	1720	405
22	682	73	9.2	.00	.94	.00	.00	.00	53	118	1610	381
23	638	67	10	.04	8.7	.00	.00	.00	56	113	1510	352
24	599	61	8.7	.55	37	.00	.00	.25	66	113	1430	331
25	567	56	7.3	1.5	30	.00	.00	1.1	68	103	1490	307
26	532	51	6.3	6.4	25	.00	.00	1.3	76	99	1500	287
27	500	47	5.4	5.9	22	.00	.00	6.0	94	93	1350	263
28	471	45	4.5	5.3	19	.00	.00	12	96	86	1240	249
29	443	42	3.8	5.1	---	.00	.00	14	95	79	1190	241
30	416	40	3.1	5.3	---	.00	.00	15	94	74	1080	225
31	392	---	2.6	5.3	---	.00	---	21	---	68	971	---
TOTAL	23859	4587	519.9	47.80	159.77	62.14	0.00	70.65	1473	4026	29920	16485
MEAN	770	153	16.8	1.54	5.71	2.00	.000	2.28	49.1	130	965	549
MAX	1060	360	36	6.4	37	16	.00	21	96	168	1720	894
MIN	392	40	2.6	.00	.00	.00	.00	.00	19	68	51	225
AC-FT	47320	9100	1030	95	317	123	.00	140	2920	7990	59350	32700

WTR YR 1990 TOTAL 81210.26 MEAN 222 MAX 1720 MIN .00 AC-FT 161100

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02288900 TAMIAHI CANAL OUTLETS, 40-MILE BEND TO MONROE, FL
(National stream-quality accounting network station)GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.44	8.17	7.76	7.52	7.15	6.90	5.55	5.83	7.70	8.02	7.92	8.38
2	8.46	8.15	7.74	7.50	7.12	6.87	5.48	5.73	7.69	8.05	7.89	8.37
3	8.45	8.14	7.72	7.48	7.08	6.85	5.43	5.63	7.66	8.16	7.87	8.37
4	8.43	8.12	7.70	7.47	7.05	7.02	5.49	5.53	7.61	8.16	7.86	8.43
5	8.41	8.11	7.67	7.47	7.01	7.00	5.44	5.45	7.56	8.15	7.90	8.44
6	8.40	8.10	7.66	7.45	6.97	6.94	5.36	5.41	7.49	8.14	8.07	8.42
7	8.45	8.08	7.64	7.44	6.93	6.87	5.28	5.34	7.43	8.14	8.13	8.41
8	8.47	8.07	7.64	7.41	6.90	6.82	5.20	5.26	7.60	8.11	8.13	8.38
9	8.45	8.06	7.65	7.39	6.87	6.77	5.79	5.16	7.97	8.09	8.14	8.35
10	8.46	8.05	7.63	7.37	6.85	6.72	5.99	5.08	7.98	8.09	8.14	8.33
11	8.48	8.03	7.61	7.33	6.84	6.67	5.96	5.08	8.00	8.07	8.16	8.31
12	8.46	8.02	7.60	7.30	6.85	6.61	5.91	5.04	8.01	8.05	8.18	8.28
13	8.45	8.00	7.63	7.27	6.80	6.55	5.82	4.93	8.01	8.05	8.21	8.27
14	8.44	7.99	7.60	7.23	6.77	6.49	5.74	5.36	7.99	8.04	8.23	8.28
15	8.44	7.98	7.58	7.21	6.74	6.44	5.69	6.31	7.98	8.04	8.21	8.30
16	8.42	7.96	7.63	7.18	6.71	6.39	5.62	6.22	7.95	8.01	8.19	8.28
17	8.42	7.94	7.67	7.16	6.67	6.33	5.53	6.14	7.93	8.00	8.18	8.25
18	8.45	7.92	7.65	7.13	6.63	6.54	5.43	6.33	7.90	8.09	8.20	8.23
19	8.42	7.90	7.64	7.10	6.60	6.55	5.33	6.22	7.95	8.08	8.29	8.20
20	8.40	7.89	7.62	7.08	6.58	6.46	5.23	6.10	8.04	8.09	8.36	8.18
21	8.37	7.88	7.62	7.05	6.66	6.36	5.13	6.01	8.03	8.07	8.41	8.17
22	8.35	7.86	7.60	7.03	6.73	6.27	5.03	5.96	8.02	8.05	8.40	8.17
23	8.33	7.84	7.66	7.07	6.91	6.19	4.98	5.90	8.01	8.03	8.39	8.15
24	8.31	7.83	7.64	7.27	7.19	6.12	6.08	6.19	8.05	8.06	8.39	8.14
25	8.29	7.81	7.62	7.23	7.11	6.04	6.13	6.96	8.03	8.10	8.44	8.12
26	8.27	7.80	7.61	7.24	7.05	5.96	6.04	6.96	8.05	8.08	8.48	8.11
27	8.26	7.79	7.59	7.20	7.00	5.89	5.94	7.24	8.11	8.06	8.45	8.09
28	8.24	7.79	7.57	7.16	6.94	5.81	5.87	7.45	8.09	8.03	8.43	8.08
29	8.23	7.78	7.56	7.15	---	5.73	5.88	7.46	8.07	8.01	8.44	8.08
30	8.21	7.78	7.54	7.16	---	5.65	5.93	7.42	8.04	7.98	8.42	8.07
31	8.19	---	7.53	7.16	---	5.58	---	7.47	---	7.95	8.39	---
TOTAL	259.85	238.84	236.58	225.21	192.71	199.39	168.28	187.17	236.95	250.05	254.90	247.64
MEAN	8.38	7.96	7.63	7.26	6.88	6.43	5.61	6.04	7.90	8.07	8.22	8.25
MAX	8.48	8.17	7.76	7.52	7.19	7.02	6.13	7.47	8.11	8.16	8.48	8.44
MIN	8.19	7.78	7.53	7.03	6.58	5.58	4.98	4.93	7.43	7.95	7.86	8.07

WTR YR 1990 TOTAL 2697.57 MEAN 7.39 MAX 8.48 MIN 4.93

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02288900 TAMiami CANAL OUTLETS, 40-MILE BEND TO MONROE, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1968 to current year.

REMARKS.--Samples collected periodically for QW investigation beginning in 1969. Samples collected also as part of joint USGS-SFWMD network since 1975. Station became part of National Quality Accounting Network in 1978 and was also sampled monthly as part of QW network in cooperation with National Park Service.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	TUR- BID- ITY (NTU) (00076)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	
NOV 30...	0930	20.5	763	80020	0.40	445	3.2	7.5	7.6	157	0	192	
JUN 26...	0925	27.0	763	80020	1.0	345	1.1	7.3	7.8	159	0	188	
AUG 09...	0915	27.5	763	80020	0.50	280	2.3	7.6	7.8	125	0	152	
SEP 27...	0940	26.5	761	80020	0.40	345	2.4	7.4	7.8	166	0	204	
DATE		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS DIS- SOLVED TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED TOTAL (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 30...	0.060	0.050	<0.010	--	1.2	--	<0.100	<0.010	<0.010	<0.010	<0.010	72	3.3
JUN 26...	0.020	0.040	<0.010	--	1.1	--	<0.100	0.010	<0.010	<0.010	<0.010	59	2.8
AUG 09...	0.040	0.020	<0.010	--	0.80	--	<0.100	0.010	<0.010	<0.010	<0.010	48	1.8
SEP 27...	0.050	0.040	<0.010	<0.010	0.90	<0.100	<0.100	<0.010	<0.010	<0.010	<0.010	61	2.0
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
NOV 30...	18	0.60	23	<1.0	0.10	4.6	<1	18	<0.5	<1.0	<1	<3	
JUN 26...	11	0.70	16	2.1	0.20	4.6	<1	14	<0.5	<1.0	<1	<3	
AUG 09...	7.3	0.50	12	1.1	0.10	3.6	<1	11	<0.5	<1.0	<1	<3	
SEP 27...	8.7	0.60	11	8.3	<0.10	4.0	<1	14	<0.5	1.0	<1	<3	
DATE		COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)
NOV 30...	2	58	3	12	<10	2	<1.0	390	<6	7	<10	5	
JUN 26...	<1	100	1	8	<10	2	<1.0	230	<6	9	<10	4	
AUG 09...	3	47	<1	6	<10	2	<1.0	180	<6	7	<10	<4	
SEP 27...	3	36	<1	7	<10	2	<1.0	260	<6	15	10	<4	

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02288900 TAMIAHI CANAL OUTLETS, 40-MILE BEND TO MONROE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SOLIDS, RESIDUE AT 180 DEG, C DIS- SOLVED (MG/L) (70300)	SED. SUSP. SIEVE DIAM. Z FINER THAN .062 MM (70331)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE WATER DISS UNCOR- RECTED (MG/L) (99890)
NOV 30...	<1	K110	510	157	285	50	--	0.1	4	444	191	<1.0
JUN 26...	<1	K47	K190	154	214	60	--	0.2	5	330	146	--
AUG 09...	<1	K50	390	125	169	100	--	0.2	2	263	125	--
SEP 27...	<1	K88	K100	67	214	50	0.010	<0.1	2	345	167	--

LOCATION.--Lat 25°47'54", long 80°33'43", in SW¼ sec.30, T.53 S., R.38 E., Dade County, Hydrologic Unit 03090202, 2.8 mi northwest of Coopertown on east-west ditch in Conservation Area 3B.

PERIOD OF RECORD.--October 1976 to September 1980, October 1982 to current year. Prior to October 1977, published as "Shark Valley Slough No. 1 in conservation area 3B near Coopertown."

REMARKS.--Estimated daily stage, Aug. 10 to Aug. 19.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.38 ft Sept. 29, 1978; minimum, 3.95 ft May 23, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 6.90 ft Aug. 24; minimum, 3.95 ft May 23.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.81	6.65	6.64	6.04	5.55	5.27	5.19	4.95	6.30	5.77	5.87	6.86
2	6.80	6.65	6.63	6.01	5.54	5.25	5.25	4.91	6.38	5.92	5.84	6.85
3	6.81	6.66	6.62	5.98	5.52	5.23	5.40	4.85	6.33	6.13	5.95	6.83
4	6.80	6.66	6.59	5.97	5.49	5.23	5.65	4.79	6.29	6.12	6.37	6.82
5	6.79	6.67	6.57	5.96	5.47	5.22	5.63	4.73	6.25	6.08	6.34	6.80
6	6.78	6.68	6.55	5.94	5.47	5.21	5.58	4.67	6.21	6.09	6.31	6.79
7	6.76	6.69	6.53	5.92	5.43	5.18	5.51	4.62	6.16	6.09	6.31	6.78
8	6.76	6.69	6.52	5.89	5.41	5.17	5.46	4.58	6.13	6.07	6.35	6.77
9	6.75	6.68	6.49	5.86	5.39	5.15	5.47	4.53	6.11	6.02	6.30	6.76
10	6.75	6.68	6.47	5.84	5.36	5.12	5.47	4.49	6.05	6.02	6.33	6.74
11	6.79	6.68	6.44	5.82	5.33	5.09	5.43	4.51	5.99	6.10	6.37	6.72
12	6.81	6.66	6.42	5.79	5.32	5.05	5.39	4.49	5.94	6.08	6.41	6.74
13	6.81	6.65	6.41	5.76	5.31	5.02	5.36	4.45	5.88	6.13	6.45	6.76
14	6.81	6.64	6.38	5.75	5.28	4.99	5.31	4.43	5.82	6.20	6.49	6.77
15	6.81	6.63	6.36	5.73	5.26	4.97	5.25	4.41	5.77	6.21	6.53	6.77
16	6.80	6.62	6.35	5.71	5.24	4.94	5.22	4.35	5.71	6.16	6.57	6.77
17	6.79	6.60	6.35	5.69	5.21	4.91	5.18	4.29	5.66	6.15	6.61	6.77
18	6.79	6.58	6.33	5.66	5.19	4.96	5.14	4.24	5.60	6.18	6.64	6.77
19	6.78	6.55	6.30	5.64	5.15	5.05	5.09	4.18	5.55	6.17	6.68	6.76
20	6.77	6.53	6.28	5.62	5.14	5.13	5.06	4.11	5.53	6.16	6.72	6.77
21	6.74	6.51	6.27	5.59	5.19	5.14	5.01	4.07	5.51	6.12	6.75	6.76
22	6.73	6.49	6.25	5.57	5.22	5.14	4.96	4.03	5.49	6.12	6.79	6.75
23	6.72	6.46	6.26	5.55	5.22	5.11	4.91	3.97	5.54	6.13	6.80	6.74
24	6.72	6.44	6.24	5.54	5.31	5.09	4.92	4.01	5.68	6.11	6.85	6.73
25	6.71	6.42	6.22	5.52	5.36	5.06	4.96	4.30	5.73	6.09	6.87	6.72
26	6.70	6.52	6.20	5.48	5.37	5.02	4.93	4.52	5.88	6.06	6.85	6.70
27	6.69	6.60	6.17	5.47	5.36	5.00	4.88	5.34	5.93	6.06	6.83	6.68
28	6.68	6.61	6.15	5.46	5.32	4.98	4.83	6.28	5.92	6.01	6.83	6.68
29	6.67	6.62	6.12	5.47	---	4.96	4.84	6.27	5.86	5.98	6.89	6.73
30	6.67	6.64	6.09	5.53	---	4.93	4.96	6.26	5.81	5.94	6.89	6.74
31	6.66	---	6.07	5.54	---	4.94	---	6.26	---	5.90	6.88	---
TOTAL	209.46	198.16	197.27	177.30	149.41	157.51	156.24	145.89	177.01	188.37	202.67	202.83
MEAN	6.76	6.41	6.36	5.72	5.34	5.08	5.21	4.71	5.90	6.08	6.54	6.76
MAX	6.81	6.69	6.64	6.04	5.55	5.27	5.65	6.28	6.38	6.21		

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254543080491100 TAMIAMI CANAL ABOVE S-12-A, NEAR MIAMI, FL

LOCATION.--Lat 25°45'43", long 80°49'11", in N sec.15, T.54 S., R.35 E., Dade County, Hydrologic Unit 03090202, on north bank of Levee 29 borrow ditch, 200 ft northwest of structure 12A, 38 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1980 to current year (gage heights only). Records prior to October 1980 are fragmentary or missing from the files of the Geological Survey.

GAGE.--Water-stage recorder and Data Collection Platform. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily stage. Station is one of several located above the gated control structures in Levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through structure 12-A.

COOPERATION.--Gate-opening record provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 10.28 ft Feb. 16, 1983; minimum, 5.17 ft June 18, 19, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.93 ft Oct. 20; minimum, 6.19 ft May 22.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.79	8.78	8.48	8.04	7.64	7.48	7.16	7.18	7.67	7.71	8.38	8.73
2	8.82	8.77	8.45	8.06	7.62	7.42	7.35	7.16	7.69	7.80	8.40	8.74
3	8.85	8.79	8.43	8.02	7.58	7.36	7.52	7.10	7.67	7.83	8.36	8.75
4	8.84	8.79	8.42	7.98	7.52	7.44	7.58	7.04	7.67	7.81	8.35	8.77
5	8.84	8.78	8.39	7.92	7.59	7.46	7.59	6.95	7.66	7.83	8.33	8.77
6	8.83	8.77	8.38	7.83	7.61	7.48	7.57	6.92	7.66	7.86	8.36	8.78
7	8.82	8.76	8.36	7.78	7.57	7.51	7.54	6.97	7.59	7.89	8.40	8.82
8	8.82	8.75	8.34	7.73	7.53	7.50	7.63	6.91	7.64	7.90	8.37	8.80
9	8.81	8.73	8.32	7.73	7.49	7.44	7.74	6.81	7.72	7.90	8.36	8.78
10	8.82	8.72	8.34	7.72	7.40	7.42	7.69	6.74	7.67	7.89	8.36	8.77
11	8.87	8.72	8.32	7.76	7.38	7.40	7.60	6.82	7.63	7.90	8.37	8.76
12	8.89	8.71	8.30	7.76	7.48	7.36	7.73	6.78	7.61	7.88	8.42	8.76
13	8.90	8.70	8.28	7.80	7.40	7.21	7.79	6.73	7.60	7.87	8.45	8.79
14	8.90	8.68	8.29	7.79	7.33	7.14	7.75	6.71	7.54	7.90	8.47	8.79
15	8.91	8.67	8.28	7.77	7.30	7.00	7.66	6.72	7.41	8.02	8.49	8.77
16	8.92	8.64	8.25	7.78	7.29	6.89	7.65	6.71	7.29	8.04	8.50	8.75
17	8.92	8.63	8.24	7.77	7.28	6.77	7.60	6.61	7.22	8.05	8.52	8.73
18	8.92	8.63	8.21	7.71	7.26	6.89	7.49	6.55	7.16	8.14	8.55	8.73
19	8.90	8.61	8.19	7.62	7.21	6.88	7.43	6.49	7.16	8.15	8.56	8.74
20	8.92	8.59	8.18	7.56	7.21	7.42	7.39	6.42	7.12	8.15	8.61	8.76
21	8.91	8.57	8.19	7.50	7.42	7.30	7.31	6.37	7.19	8.13	8.67	8.76
22	8.91	8.54	8.20	7.56	7.50	7.17	7.22	6.29	7.27	8.13	8.66	8.75
23	8.90	8.50	8.21	7.57	7.42	7.16	7.16	6.30	7.30	8.20	8.66	8.73
24	8.89	8.52	8.21	7.57	7.63	7.04	7.20	6.40	7.38	8.29	8.67	8.72
25	8.88	8.51	8.18	7.60	7.60	7.00	7.19	6.66	7.52	8.34	8.69	8.71
26	8.87	8.49	8.16	7.63	7.67	6.99	7.10	6.81	7.65	8.36	8.70	8.70
27	8.85	8.48	8.13	7.62	7.62	7.03	7.02	7.07	7.74	8.38	8.70	8.69
28	8.84	8.47	8.12	7.60	7.53	6.99	6.96	7.35	7.80	8.38	8.71	8.69
29	8.82	8.47	8.11	7.57	---	6.92	7.06	7.57	7.76	8.38	8.74	8.70
30	8.80	8.49	8.09	7.62	---	6.86	7.17	7.63	7.74	8.36	8.75	8.70
31	8.79	---	8.05	7.65	---	6.86	---	7.68	---	8.34	8.73	---
TOTAL	274.75	259.26	256.10	239.62	209.08	222.79	222.85	212.45	225.73	249.81	264.29	262.44
MEAN	8.86	8.64	8.26	7.73	7.47	7.19	7.43	6.85	7.52	8.06	8.53	8.75
MAX	8.92	8.79	8.48	8.06	7.67	7.51	7.79	7.68	7.80	8.38	8.75	8.82
MIN	8.79	8.47	8.05	7.50	7.21	6.77	6.96	6.29	7.12	7.71	8.33	8.69
CAL YR 1989	TOTAL 2835.07		MEAN 7.77	MAX 8.92	MIN 5.19							
WTR YR 1990	TOTAL 2899.17		MEAN 7.94	MAX 8.92	MIN 6.29							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254543080491101 TAMIAMI CANAL BELOW S-12-A, NEAR MIAMI, FL

LOCATION.--Lat 25°45'43", long 80°49'11", in N sec.15, T.54 S., R.35 E., Dade County, Hydrologic Unit 03090202, on north bank of Levee 29 borrow canal, 200 ft northwest of control structure 12-A, and 38 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1963 to September 1965, October 1970 to September 1971, October 1975 to September 1976, October 1977 to September 1980 (discharge only), October 1980 to current year. Stage and discharge records for the missing periods above were either fragmentary or unavailable from the files of the Geological Survey.

GAGE.--Water-stage recorder and Data Collection Platform. Datum of gage is National Geodetic Vertical Datum of 1929. Since Apr. 3, 1990 data collection platform.

REMARKS.--No estimated daily stage or discharge. Records good. Station is one of several located downstream from the control structures in Levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through control structure 12-A. Discharge is the total discharge through the S-12-A structure, from Conservation Area 3A. The daily discharge computed from relation between discharge, head, and gate-openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions.

COOPERATION.--Gate-opening records for S-12-A provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--17 years (water years 1964-65, 1971, 1976, 1978-90), 80.9 ft³/s, 58,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 843 ft³/s July 21, 1982; maximum gage height, 10.23 ft July 20-22, 1982; no flow for some days most years; minimum gage height, 5.21 ft June 19, 20, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 73 ft³/s Oct. 25; maximum gage height, 8.58 ft Oct. 24-27; no flow for many days; minimum gage height, 5.94 ft May 23-24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	63	13	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	11	63	12	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	35	65	12	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	56	65	12	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	55	64	6.2	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	54	63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	53	54	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	53	48	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	52	47	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	58	46	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	68	46	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	69	46	.00	.00	.00	.00	.00	.00	4.1	.00	.00	.00
13	70	45	.00	.00	.00	.00	.00	.00	3.8	.00	.00	.00
14	70	38	.00	.00	.00	.00	.00	.00	2.7	.00	.00	.00
15	71	32	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	71	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	71	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	71	31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	70	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	71	30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	69	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	70	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	69	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	72	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	73	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	72	21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	70	20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	70	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	67	13	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	66	13	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	64	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	1902	1132	55.20	0.00	0.00	0.00	0.00	0.00	10.60	0.00	0.00	0.00
MEAN	61.4	37.7	1.78	.000	.000	.000	.000	.000	.35	.000	.000	.000
MAX	73	65	13	.00	.00	.00	.00	.00	4.1	.00	.00	.00
MIN	11	13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	3770	2250	109	.00	.00	.00	.00	.00	21	.00	.00	.00

CAL YR 1989 TOTAL 3138.30 MEAN 8.60 MAX 73 MIN .00 AC-FT 6220
WTR YR 1990 TOTAL 3099.80 MEAN 8.49 MAX 73 MIN .00 AC-FT 6150

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254543080491101 TAMIAMI CANAL BELOW S-12-A, NEAR MIAMI, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.24	8.54	8.21	7.55	7.34	7.35	6.73	6.64	7.72	7.73	7.97	8.01
2	8.26	8.54	8.20	7.53	7.34	7.32	6.76	6.62	7.67	7.90	8.05	8.01
3	8.34	8.54	8.20	7.53	7.32	7.29	6.82	6.59	7.63	7.84	8.00	8.01
4	8.45	8.54	8.19	7.52	7.29	7.29	6.87	6.56	7.61	7.81	7.98	8.03
5	8.45	8.54	8.16	7.52	7.30	7.28	6.88	6.53	7.59	7.82	7.96	8.06
6	8.46	8.54	8.03	7.50	7.28	7.27	6.88	6.56	7.56	7.83	8.02	8.08
7	8.46	8.50	7.97	7.48	7.26	7.25	6.86	6.53	7.53	7.80	8.05	8.10
8	8.46	8.46	7.94	7.47	7.24	7.24	6.86	6.49	7.54	7.78	8.01	8.10
9	8.47	8.45	7.93	7.45	7.22	7.22	6.98	6.44	7.59	7.77	7.99	8.09
10	8.48	8.45	7.92	7.44	7.20	7.19	7.02	6.40	7.57	7.77	7.98	8.09
11	8.52	8.45	7.91	7.43	7.18	7.17	7.01	6.37	7.56	7.77	7.99	8.09
12	8.53	8.45	7.90	7.42	7.17	7.15	6.99	6.33	7.59	7.76	8.03	8.10
13	8.53	8.45	7.86	7.41	7.15	7.11	6.98	6.29	7.59	7.77	8.04	8.10
14	8.53	8.42	7.83	7.40	7.13	7.07	6.97	6.26	7.52	7.80	8.04	8.10
15	8.54	8.37	7.80	7.40	7.14	7.01	6.96	6.24	7.46	7.83	8.01	8.10
16	8.54	8.35	7.80	7.39	7.16	6.94	6.95	6.22	7.38	7.83	8.00	8.09
17	8.54	8.35	7.79	7.39	7.14	6.86	6.92	6.18	7.30	7.84	7.99	8.08
18	8.54	8.35	7.78	7.37	7.11	6.91	6.89	6.15	7.22	7.96	8.02	8.09
19	8.54	8.34	7.76	7.36	7.09	6.91	6.84	6.11	7.29	7.94	8.05	8.10
20	8.55	8.33	7.74	7.34	7.19	6.98	6.81	6.07	7.37	7.91	8.06	8.11
21	8.55	8.31	7.71	7.33	7.38	7.02	6.78	6.03	7.34	7.89	8.05	8.10
22	8.54	8.29	7.69	7.34	7.38	6.98	6.73	5.99	7.34	7.87	8.03	8.10
23	8.54	8.28	7.70	7.42	7.39	6.94	6.69	5.96	7.38	7.88	8.04	8.11
24	8.55	8.28	7.67	7.56	7.50	6.90	6.79	6.13	7.57	7.95	8.07	8.10
25	8.58	8.28	7.65	7.48	7.48	6.87	6.84	6.87	7.54	7.98	8.06	8.08
26	8.58	8.27	7.63	7.44	7.44	6.83	6.81	6.94	7.54	7.96	8.04	8.05
27	8.58	8.27	7.62	7.40	7.42	6.81	6.75	7.19	7.69	7.95	8.02	8.02
28	8.57	8.25	7.60	7.38	7.39	6.78	6.70	7.40	7.84	7.94	8.01	8.01
29	8.57	8.22	7.59	7.36	---	6.76	6.67	7.41	7.78	7.93	8.03	8.02
30	8.56	8.22	7.58	7.35	---	6.73	6.66	7.43	7.72	7.92	8.03	8.02
31	8.55	---	7.56	7.34	---	6.71	---	7.55	---	7.91	8.02	---
TOTAL	263.60	251.63	242.92	230.30	203.63	218.14	205.40	202.48	226.03	243.64	248.64	242.15
MEAN	8.50	8.39	7.84	7.43	7.27	7.04	6.85	6.53	7.53	7.86	8.02	8.07
MAX	8.58	8.54	8.21	7.56	7.50	7.35	7.02	7.55	7.84	7.98	8.07	8.11
MIN	8.24	8.22	7.56	7.33	7.09	6.71	6.66	5.96	7.22	7.73	7.96	8.01
CAL YR 1989	TOTAL 2706.72											
WTR YR 1990	TOTAL 2778.56											
	MEAN 7.61											
	MAX 8.58											
	MIN 5.96											

LOCATION.--Lat 25°45'42", long 80°46'05", in N $\frac{1}{2}$ sec.19, T.54 S., R.36 E., Dade County, Hydrologic Unit 03090202, on south bank of levee 29 borrow ditch, 100 ft northwest of control structure 12-B, west of Miami.

PERIOD OF RECORD.--April 1963 to current year (gage heights only).

REMARKS.--No estimated daily stage. Station is one of several located above the gated control structures in levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through structure 12-B.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 10.55 ft Oct. 26, 1968; minimum, 5.14 ft June 18, 19, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.92 ft Oct. 20; minimum, 6.18 ft May 22.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.76	8.75	8.45	8.01	7.64	7.46	7.15	7.18	7.65	7.69	8.35	8.71
2	8.79	8.75	8.42	8.02	7.61	7.41	7.35	7.13	7.67	7.77	8.36	8.71
3	8.82	8.77	8.41	7.97	7.58	7.35	7.53	7.08	7.65	7.80	8.34	8.72
4	8.81	8.76	8.39	7.92	7.51	7.43	7.59	7.01	7.65	7.79	8.33	8.74
5	8.80	8.75	8.36	7.85	7.59	7.45	7.60	6.93	7.64	7.80	8.31	8.75
6	8.79	8.74	8.34	7.79	7.60	7.47	7.57	6.90	7.63	7.84	8.34	8.76
7	8.78	8.73	8.33	7.74	7.57	7.50	7.54	6.95	7.56	7.86	8.36	8.78
8	8.79	8.71	8.30	7.71	7.52	7.48	7.63	6.88	7.62	7.87	8.34	8.77
9	8.78	8.69	8.29	7.71	7.49	7.42	7.73	6.78	7.70	7.88	8.35	8.75
10	8.80	8.69	8.31	7.70	7.39	7.40	7.68	6.72	7.66	7.87	8.35	8.74
11	8.84	8.69	8.29	7.75	7.37	7.38	7.60	6.79	7.61	7.87	8.36	8.73
12	8.87	8.68	8.26	7.74	7.46	7.34	7.72	6.75	7.59	7.86	8.41	8.74
13	8.87	8.66	8.25	7.79	7.38	7.19	7.79	6.69	7.58	7.86	8.43	8.76
14	8.88	8.64	8.26	7.76	7.32	7.12	7.75	6.68	7.51	7.88	8.45	8.75
15	8.89	8.63	8.23	7.75	7.28	6.99	7.66	6.69	7.38	7.99	8.46	8.74
16	8.89	8.60	8.20	7.75	7.28	6.87	7.64	6.67	7.27	8.01	8.48	8.72
17	8.89	8.60	8.21	7.73	7.26	6.76	7.58	6.57	7.20	8.02	8.49	8.71
18	8.89	8.60	8.17	7.67	7.24	6.88	7.46	6.52	7.14	8.10	8.53	8.70
19	8.88	8.58	8.16	7.58	7.20	6.85	7.41	6.46	7.14	8.12	8.55	8.71
20	8.90	8.55	8.15	7.53	7.19	7.41	7.36	6.38	7.10	8.12	8.60	8.74
21	8.89	8.53	8.16	7.48	7.41	7.29	7.28	6.33	7.17	8.11	8.64	8.73
22	8.88	8.50	8.18	7.57	7.47	7.15	7.19	6.26	7.25	8.12	8.64	8.72
23	8.87	8.47	8.20	7.56	7.40	7.14	7.14	6.26	7.28	8.19	8.63	8.71
24	8.86	8.48	8.19	7.58	7.61	7.02	7.17	6.36	7.36	8.26	8.65	8.69
25	8.85	8.48	8.15	7.60	7.59	6.98	7.15	6.61	7.50	8.32	8.67	8.69
26	8.84	8.45	8.11	7.65	7.64	6.97	7.07	6.77	7.64	8.33	8.68	8.67
27	8.82	8.44	8.09	7.62	7.60	7.01	6.98	7.04	7.71	8.35	8.68	8.66
28	8.82	8.43	8.08	7.60	7.51	6.97	6.93	7.32	7.77	8.36	8.69	8.66
29	8.79	8.44	8.07	7.58	---	6.89	7.04	7.53	7.73	8.37	8.72	8.67
30	8.76	8.46	8.05	7.63	---	6.84	7.15	7.59	7.71	8.35	8.73	8.67
31	8.76	---	8.01	7.65	---	6.84	---	7.64	---	8.32	8.71	---
TOTAL	273.86	258.25	255.07	238.99	208.71	222.26	222.44	211.47	225.07	249.08	263.63	261.60
MEAN	8.83	8.61	8.23	7.71	7.45	7.17	7.41	6.82	7.50	8.03	8.50	8.72
MAX	8.90	8.77	8.45	8.02	7.64	7.50	7.79	7.64	7.77	8.37		

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289019 TAMiami CANAL BELOW S-12-B, NEAR MIAMI, FL

LOCATION.--Lat 25°45'40", long 80°46'05", in N½ sec.19, T.54 S., R.36 E., Dade County, Hydrologic Unit 03090202, on west bank of spillway, 100 ft southwest of control structure 12-B, and 35 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1963 to September 1963, October 1966 to September 1975 (gage heights only), October 1975 to current year. Discharge records for the missing periods above were either fragmentary or unavailable from the files of the Geological Survey.

GAGE.--Water-stage recorder and Data Collection Platform. Datum of gage is National Geodetic Vertical Datum of 1929. Since March 9, 1990, data collection platform.

REMARKS.--No estimated daily stage and discharge. Records good. Station is one of several located below the gated control structures in Levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through structure 12-B. Discharge computed from relation between discharge, head, and gate openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions.

COOPERATION.--Gate-opening record provided U.S. Army by Corps of Engineers.

AVERAGE DISCHARGE.--17 years (water years 1964-65, 1976-90), 84.8 ft³/s, 61,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 819 ft³/s Sept. 23, 1976; maximum gage height, 10.22 ft Nov. 7-11, 1969; no flow for some days most years; maximum daily reverse flow, 22 ft³/s Mar. 28, 1985; minimum gage height, 5.02 ft June 19, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 88 ft³/s Oct. 25; maximum gage height, 8.50 ft Oct. 24-27; no flow for many days; minimum gage height, 5.62 ft May 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	67	12	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	13	67	12	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	40	68	12	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	64	68	12	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	63	67	10	.00	.00	.00	.00	.00	.00	.00	.00	28
6	62	66	9.1	.00	.00	.00	.00	.00	.00	.00	.00	39
7	61	58	9.4	.00	.00	.00	.00	.00	.00	.00	.00	40
8	61	52	9.2	.00	.00	.00	.00	.00	.00	.00	.00	40
9	60	52	9.2	.00	.00	.00	.00	.00	.00	.00	.00	39
10	58	52	9.6	.00	.00	.00	.00	.00	.00	.00	.00	38
11	56	52	9.4	.00	.00	.00	.00	.00	.00	.00	.00	38
12	56	51	3.1	.00	.00	.00	.00	.00	2.7	.00	.00	23
13	56	50	.00	.00	.00	.00	.00	.00	5.9	.00	.00	15
14	56	44	.00	.00	.00	.00	.00	.00	.20	.00	.00	15
15	57	38	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
16	56	37	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
17	56	37	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
18	56	37	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
19	56	36	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
20	57	35	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
21	56	29	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
22	56	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
23	55	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
24	72	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
25	88	25	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.8
26	86	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	85	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	85	15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	82	12	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	80	12	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	73	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	1875	1249	117.00	0.00	0.00	0.00	0.00	0.00	8.80	0.00	0.00	469.80
MEAN	60.5	41.6	3.77	.000	.000	.000	.000	.000	.29	.000	.000	15.7
MAX	88	68	12	.00	.00	.00	.00	.00	5.9	.00	.00	40
MIN	13	12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	3720	2480	232	.00	.00	.00	.00	.00	17	.00	.00	932

CAL YR 1989 TOTAL 3432.00 MEAN 9.40 MAX 88 MIN .00 AC-FT 6810
WTR YR 1990 TOTAL 3719.60 MEAN 10.2 MAX 88 MIN .00 AC-FT 7380

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289030 LEVEE 3 CANAL NEAR CLEWISTON, FL

LOCATION.--Lat 26°25'50", long 80°56'50", in NW¼ sec.4, T.47 S., R.34 E., Hendry County, Hydrologic Unit 03090202, near center of span on upstream side of bridge on private road, 100 ft upstream from Deerfence Canal, 2 mi east of state Highway 846, and 22 mi south of Clewiston (revised).

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1969 to current year. Discontinued.

GAGE.--Water-stage recorder and auxiliary water-stage recorders, 3.6 mi and 9.1 mi below upstream gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by South Florida Water Management District). Prior to October 1974 at datum 0.15 ft lower. October 1979 to September 1981, water-stage recorder and electromagnetic velocity meter at site 3.6 mi downstream at present datum. Since October 1981, auxiliary water-stage recorder at site 3.6 mi downstream at present datum. Since September 1987, auxiliary water-stage recorder site 9.1 mi downstream at present datum.

REMARKS.--Estimated daily discharge: Nov. 1-30. Records poor. Flow at this location includes the flow of Deerfence Canal. Discharge computed using fall as a factor. Station discontinued as of Oct. 1, 1990.

AVERAGE DISCHARGE.--19 years (water years 1970-87, 1989), 144 ft³/s, 104,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,850 ft³/s June 26, 1982; maximum gage height, 18.57 ft Aug. 4, 1973; maximum daily reverse flow, 242 ft³/s Mar. 8, 1980; no flow for some days each year; minimum gage height, 9.65 ft May 7, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 277 ft³/s Aug. 30; maximum gage height, 13.89 ft Aug. 30; no flow for many days; minimum gage height, 10.94 ft May 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	.00	---	20	28	2.4	.00	.00	19	30	41	213
2	107	.00	---	20	31	27	.00	.00	14	35	33	191
3	152	.00	---	19	52	2.3	.00	.00	16	27	45	179
4	89	.00	---	38	48	.85	.00	.00	24	32	65	175
5	113	.00	.00	47	7.1	.00	2.5	.00	37	6.1	52	170
6	---	.00	.00	44	23	.00	3.4	.00	37	2.8	55	166
7	---	.00	1.7	57	20	.00	1.3	.00	42	1.9	50	152
8	---	.00	5.4	53	24	.00	.21	.00	54	14	44	137
9	---	.00	.45	17	49	.00	6.4	.00	66	9.1	56	132
10	---	.00	---	15	52	.00	11	.00	64	9.9	50	116
11	---	.00	---	1.2	26	.00	3.8	.23	51	5.9	36	125
12	---	.00	---	5.3	.00	.00	.04	11	51	18	25	109
13	---	.00	---	1.7	17	.00	.00	5.6	39	15	43	78
14	---	.00	---	7.3	28	.00	2.2	7.2	42	34	55	48
15	---	.00	---	9.2	41	.00	2.0	9.8	51	16	56	40
16	---	.00	---	14	55	.00	.22	19	47	83	39	33
17	---	.00	---	30	32	.00	.68	11	31	93	36	26
18	---	.00	---	33	26	.00	.65	6.2	23	178	36	28
19	---	.00	---	49	23	.00	.00	17	7.1	105	48	21
20	---	.00	---	48	13	.00	.05	22	9.3	110	99	23
21	---	.00	---	32	2.2	.00	.00	16	3.2	105	95	28
22	---	.00	---	10	2.2	.00	.00	10	8.2	93	83	23
23	---	.00	---	26	2.3	.00	.00	11	7.4	85	104	22
24	---	.00	---	39	.36	.00	.00	15	5.7	115	110	19
25	---	.00	---	32	.02	.00	.00	20	5.4	114	131	23
26	---	.00	---	1.8	.02	.00	.00	23	8.9	78	156	17
27	---	.00	---	13	6.2	.00	.00	20	9.8	48	147	9.0
28	---	.00	---	20	9.7	.00	.00	11	10	48	171	5.4
29	---	.00	---	43	---	.00	.00	10	31	40	221	.51
30	---	.00	---	40	---	.00	.00	17	44	22	277	6.8
31	---	---	---	19	---	.00	---	21	---	38	241	---
TOTAL	---	0.00	---	804.5	618.10	32.55	34.45	283.03	858.0	1611.7	2700	2315.71
MEAN	---	.000	---	26.0	22.1	1.05	1.15	9.13	28.6	52.0	87.1	77.2
MAX	---	.00	---	57	55	27	11	23	66	178	277	213
MIN	---	.00	---	1.2	.00	.00	.00	.00	3.2	1.9	25	.51
AC-FT	---	.00	---	1600	1230	65	68	561	1700	3200	5360	4590

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289030 LEVEE 3 CANAL NEAR CLEWISTON, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.84	---	---	13.22	12.89	12.54	---	11.19	12.13	12.55	12.82	13.36
2	12.84	---	---	13.27	12.87	12.50	---	11.18	12.19	12.59	12.81	13.31
3	13.17	---	---	13.31	12.67	12.55	11.98	11.13	12.22	12.67	12.75	13.26
4	13.03	---	---	13.34	12.72	12.59	11.99	11.05	12.25	12.74	12.78	13.23
5	13.17	---	12.37	13.36	12.83	---	11.98	10.98	12.33	12.85	12.76	13.23
6	---	---	12.36	13.36	12.80	---	11.92	11.03	12.37	12.91	12.78	13.22
7	---	---	12.34	13.35	12.82	---	11.87	11.06	12.40	12.95	12.76	13.16
8	---	---	12.34	13.34	12.81	---	11.89	11.08	12.48	12.96	12.72	13.10
9	---	---	12.44	13.34	12.78	---	11.83	11.06	12.56	12.96	12.69	13.05
10	---	---	---	13.33	12.74	---	11.78	11.21	12.62	12.97	12.74	12.99
11	---	---	---	13.28	12.81	---	11.78	11.63	12.64	12.97	12.83	12.86
12	---	---	---	13.16	12.92	---	11.76	11.96	12.68	12.97	12.83	12.64
13	---	---	---	13.10	12.89	---	11.65	12.18	12.68	13.02	12.82	12.44
14	---	---	---	13.05	12.88	---	11.65	12.25	12.64	13.10	12.96	12.22
15	---	---	---	13.05	12.84	---	11.68	12.22	12.60	13.41	13.00	12.07
16	---	---	---	13.08	12.64	---	11.68	12.24	12.54	13.35	13.02	12.01
17	---	---	---	13.11	12.66	---	11.59	12.22	12.47	13.08	12.98	11.99
18	---	---	---	13.13	12.65	---	11.59	12.20	12.34	13.37	13.00	12.04
19	---	---	---	13.09	12.61	---	11.52	12.15	12.23	13.18	13.05	12.06
20	---	---	---	13.05	12.36	---	11.53	12.02	12.17	13.11	13.16	12.09
21	---	---	---	13.03	12.12	---	11.45	11.90	12.15	13.10	13.16	12.03
22	---	---	---	12.98	11.98	---	11.40	11.85	12.17	13.11	13.15	12.02
23	---	---	---	12.79	12.15	---	11.31	11.87	12.16	13.11	13.23	12.12
24	---	---	---	12.85	12.37	---	11.23	11.89	12.16	13.20	13.26	12.27
25	---	---	---	12.88	12.47	---	11.18	11.97	12.19	13.23	13.33	12.09
26	---	---	---	12.89	12.54	---	11.05	11.97	12.25	13.14	13.45	11.82
27	---	---	---	12.65	12.48	---	11.00	12.00	12.32	13.08	13.48	11.73
28	---	---	---	12.66	12.51	---	10.94	12.03	12.38	13.03	13.55	11.63
29	---	---	---	12.68	---	---	11.09	12.00	12.45	12.98	13.74	11.55
30	---	---	---	12.77	---	---	11.17	12.01	12.51	12.93	13.78	11.69
31	---	---	---	12.85	---	---	---	12.08	---	12.87	13.44	---
TOTAL	---	---	---	405.35	353.81	---	---	363.61	371.28	403.49	404.83	373.28
MEAN	---	---	---	13.08	12.64	---	---	11.73	12.38	13.02	13.06	12.44
MAX	---	---	---	13.36	12.92	---	---	12.25	12.68	13.41	13.78	13.36
MIN	---	---	---	12.65	11.98	---	---	10.98	12.13	12.55	12.69	11.55

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289040 TAMIAHI CANAL OUTLETS, LEVEE 67A TO 40-MILE BEND, NEAR MIAMI, FL

LOCATION.--Lat 25°45'22", long 80°43'34", in N $\frac{1}{2}$ sec.22, T.54 S., R.36 E., Dade County, Hydrologic Unit 03090202, on south bank of levee 29 borrow canal, 100 ft northwest of control structure 12-C, and 33 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to September 1963 (monthly discharge), October 1963 to current year.

REVISED RECORDS.--WRD FL-87-2A: 1986. WRD FL-89-2A: 1983.

GAGE.--Water-stage recorder and data collection platform. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily stage or discharge. Records good. Discharge is the total discharge through the S-12 structure A, B, C, and D from Conservation Area 3-A. Prior to October 1963 discharge was the total discharge of station, Tamiami Canal outlets, Miami to Monroe (station 02289000). The daily discharge computed from relation between discharge, head, and gate openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions.

COOPERATION.--Gate-opening records for S-12 complex provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--50 years, 431 ft³/s, 312,300 acre-ft/yr. (This average discharge reflects revised mean discharges of 1983, 1986 water years).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,810 ft³/s Aug. 10, 11, 1968; maximum gage height, 10.52 ft Oct. 26, 1968; no flow for some days most years; maximum daily reverse flow, 38 ft³/s Mar. 28, 1985; minimum gage height, 5.17 ft June 19, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 320 ft³/s Nov. 3; maximum gage height, 8.97 ft Oct. 20; no flow for many days; minimum gage height, 6.24 ft May 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	314	64	.00	.00	.00	.00	.00	.00	60	209	252
2	58	313	63	.00	.00	.00	.00	.00	.00	59	214	253
3	136	320	63	.00	.00	.00	.00	.00	.00	59	207	255
4	208	318	61	.00	.00	.00	.00	.00	.00	57	207	256
5	205	315	43	.00	.00	.00	.00	.00	.00	59	207	271
6	202	311	25	.00	.00	.00	.00	.00	25	63	215	272
7	200	256	26	.00	.00	.00	.00	.00	31	66	187	278
8	199	222	26	.00	.00	.00	.00	.00	31	66	164	276
9	198	219	26	.00	.00	.00	.00	.00	33	67	167	272
10	217	218	26	8.3	.00	.00	.00	.00	30	66	165	270
11	256	218	26	15	.00	.00	.00	.00	27	96	169	268
12	258	216	19	15	.00	.00	.00	.00	47	66	181	254
13	259	213	16	15	.00	.00	.00	.00	57	24	184	248
14	260	189	17	15	.00	.00	.00	.00	67	22	154	248
15	262	167	16	15	.00	.00	.00	.00	73	146	119	247
16	261	164	16	15	.00	.00	.00	.00	60	163	120	242
17	260	164	16	5.5	.00	.00	.00	.00	66	176	122	241
18	258	164	16	.00	.00	.00	.00	.00	83	203	125	227
19	256	160	8.5	.00	.00	.00	.00	.00	25	205	128	221
20	260	158	.00	.00	.00	.00	.00	.00	.00	209	130	223
21	255	135	.00	.00	.00	.00	.00	.00	.00	200	170	221
22	255	121	.00	.00	.00	.00	.00	.00	.00	205	199	221
23	253	118	.00	.00	.00	.00	.00	.00	.00	221	198	220
24	283	120	.00	.00	.00	.00	.00	.00	.00	187	198	219
25	309	120	.00	.00	.00	.00	.00	.00	.00	179	203	229
26	302	116	.00	.00	.00	.00	.00	.00	50	186	204	232
27	299	115	.00	.00	.00	.00	.00	.00	68	188	205	231
28	299	80	.00	.00	.00	.00	.00	.00	71	183	228	228
29	291	64	.00	.00	---	.00	.00	.00	63	188	253	230
30	286	64	.00	.00	---	.00	.00	.00	57	181	254	232
31	302	---	.00	.00	---	.00	---	.00	---	198	251	---
TOTAL	7405	5672	573.50	103.80	0.00	0.00	0.00	0.00	964.00	4048	5737	7337
MEAN	239	189	18.5	3.35	.000	.000	.000	.000	32.1	131	185	245
MAX	309	320	64	15	.00	.00	.00	.00	83	221	254	278
MIN	58	64	.00	.00	.00	.00	.00	.00	.00	22	119	219
AC-FT	14690	11250	1140	206	.00	.00	.00	.00	1910	8030	11380	14550

CAL YR 1989 TOTAL 14639.80 MEAN 40.1 MAX 320 MIN .00 AC-FT 29040
WTR YR 1990 TOTAL 31840.30 MEAN 87.2 MAX 320 MIN .00 AC-FT 63160

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289040 TAMIAMI CANAL OUTLETS, LEVEE 67A TO 40-MILE BEND, NEAR MIAMI, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.80	8.78	8.48	8.05	7.64	7.48	7.17	7.20	7.68	7.72	8.37	8.75
2	8.83	8.78	8.44	8.05	7.61	7.42	7.37	7.16	7.70	7.81	8.38	8.75
3	8.85	8.81	8.44	8.01	7.58	7.36	7.55	7.10	7.69	7.84	8.37	8.77
4	8.84	8.79	8.42	7.95	7.52	7.44	7.60	7.04	7.68	7.83	8.37	8.77
5	8.83	8.78	8.39	7.89	7.60	7.46	7.60	6.96	7.67	7.84	8.35	8.79
6	8.82	8.77	8.37	7.83	7.61	7.48	7.57	6.94	7.66	7.87	8.37	8.80
7	8.82	8.76	8.36	7.78	7.58	7.50	7.54	6.98	7.59	7.90	8.39	8.83
8	8.82	8.75	8.33	7.75	7.53	7.48	7.63	6.90	7.65	7.90	8.38	8.81
9	8.82	8.73	8.33	7.74	7.50	7.44	7.73	6.81	7.73	7.91	8.40	8.79
10	8.83	8.73	8.34	7.74	7.40	7.43	7.68	6.75	7.69	7.91	8.39	8.78
11	8.88	8.73	8.33	7.79	7.38	7.40	7.61	6.82	7.65	7.91	8.41	8.77
12	8.91	8.71	8.29	7.78	7.47	7.36	7.73	6.78	7.63	7.89	8.46	8.78
13	8.91	8.69	8.29	7.83	7.38	7.21	7.79	6.72	7.61	7.89	8.48	8.79
14	8.92	8.67	8.30	7.80	7.32	7.14	7.75	6.71	7.54	7.91	8.50	8.79
15	8.93	8.66	8.26	7.79	7.29	7.00	7.67	6.72	7.42	8.02	8.52	8.78
16	8.93	8.63	8.23	7.79	7.28	6.89	7.65	6.70	7.31	8.04	8.54	8.76
17	8.93	8.64	8.24	7.76	7.27	6.78	7.60	6.61	7.24	8.05	8.55	8.75
18	8.93	8.63	8.20	7.70	7.24	6.91	7.49	6.55	7.18	8.13	8.59	8.75
19	8.92	8.61	8.19	7.60	7.20	6.88	7.44	6.49	7.18	8.15	8.60	8.75
20	8.95	8.59	8.19	7.54	7.20	7.44	7.39	6.42	7.14	8.15	8.64	8.77
21	8.93	8.56	8.20	7.50	7.41	7.32	7.31	6.37	7.22	8.15	8.68	8.77
22	8.92	8.54	8.21	7.58	7.48	7.18	7.23	6.31	7.28	8.16	8.67	8.76
23	8.91	8.51	8.23	7.57	7.41	7.17	7.18	6.31	7.32	8.23	8.67	8.75
24	8.90	8.53	8.22	7.58	7.62	7.04	7.22	6.40	7.40	8.29	8.69	8.74
25	8.89	8.51	8.18	7.60	7.60	7.00	7.19	6.65	7.54	8.34	8.72	8.73
26	8.87	8.49	8.15	7.65	7.65	7.00	7.11	6.80	7.68	8.36	8.72	8.72
27	8.86	8.47	8.13	7.62	7.60	7.04	7.03	7.08	7.75	8.38	8.72	8.71
28	8.85	8.46	8.12	7.60	7.52	6.99	6.98	7.38	7.80	8.39	8.73	8.70
29	8.82	8.47	8.11	7.58	---	6.92	7.08	7.58	7.76	8.40	8.76	8.71
30	8.80	8.50	8.09	7.63	---	6.86	7.18	7.64	7.74	8.38	8.76	8.72
31	8.79	---	8.05	7.66	---	6.87	---	7.68	---	8.36	8.75	---
TOTAL	275.01	259.28	256.11	239.74	208.89	222.89	223.07	212.56	226.13	250.11	264.93	262.84
MEAN	8.87	8.64	8.26	7.73	7.46	7.19	7.44	6.86	7.54	8.07	8.55	8.76
MAX	8.95	8.81	8.48	8.05	7.65	7.50	7.79	7.68	7.80	8.40	8.76	8.83
MIN	8.79	8.46	8.05	7.50	7.20	6.78	6.98	6.31	7.14	7.72	8.35	8.70
CAL YR 1989	TOTAL 2835.94		MEAN 7.77	MAX 8.95	MIN 5.21							
WTR YR 1990	TOTAL 2901.56		MEAN 7.95	MAX 8.95	MIN 6.31							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289041 TAMIAMI CANAL BELOW S-12-C, NEAR MIAMI, FL

LOCATION.--Lat 25°45'40", long 80°43'34", in N½ sec.22, T.54 S., R.36 E., Hydrologic Unit 03090202, on west bank of spillway, 100 ft southwest of control structure 12-C, and 33 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1963 to September 1963, October 1965 to September 1976 (gage heights only), October 1963 to September 1965, October 1976 to current year. Discharge records for missing periods were fragmentary or missing from the files of the Geological Survey.

GAGE.--Water-stage recorder and Data Collection Platform. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily stage or discharge. Records good. Station is one of several located downstream from the control structures in Levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through control structure 12-C. Discharge is the total discharge through the S-12-C structure, from Conservation Area 3A. The daily discharge computed from relation between discharge, head, and gate-openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions. Since March 16, 1990 data collection platform.

COOPERATION.--Gate-opening records for S-12-C provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--16 years (water years 1964-65, 1977-90), 216 ft³/s, 156,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,340 ft³/s Oct. 17, 1978; maximum gage heights, 10.36 ft Nov. 5-8, 10, 1969; no flow for some days most years; maximum daily reverse flow, 49 ft³/s July 14, 1990; minimum gage height, 4.87 ft June 19, 20, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 98 ft³/s Aug. 6; maximum gage height, 8.34 ft Aug. 1, 28, Sept. 6; maximum daily reverse flow, 49 ft³/s July 14; minimum gage height, 5.56 ft May 23-24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	96	16	.00	.00	.00	.00	.00	.00	.00	92	79
2	21	95	16	.00	.00	.00	.00	.00	.00	.00	93	79
3	37	97	16	.00	.00	.00	.00	.00	.00	.00	90	80
4	53	96	15	.00	.00	.00	.00	.00	.00	.00	92	80
5	52	95	11	.00	.00	.00	.00	.00	.00	.00	91	81
6	51	94	6.5	.00	.00	.00	.00	.00	10	.00	98	80
7	51	79	6.5	.00	.00	.00	.00	.00	11	.00	79	82
8	51	68	6.4	.00	.00	.00	.00	.00	11	.00	64	81
9	51	67	6.4	.00	.00	.00	.00	.00	12	.00	66	80
10	59	67	6.5	.00	.00	.00	.00	.00	10	.00	65	80
11	73	67	6.4	.00	.00	.00	.00	.00	7.9	29	68	79
12	74	66	6.3	.00	.00	.00	.00	.00	15	-3.0	74	79
13	74	65	6.4	.00	.00	.00	.00	.00	21	-45	76	80
14	74	55	6.7	.00	.00	.00	.00	.00	25	-49	61	80
15	75	45	6.5	.00	.00	.00	.00	.00	31	62	41	80
16	75	44	6.4	.00	.00	.00	.00	.00	29	72	41	78
17	75	44	6.5	.00	.00	.00	.00	.00	29	79	42	78
18	75	44	6.3	.00	.00	.00	.00	.00	30	91	43	69
19	74	43	3.2	.00	.00	.00	.00	.00	9.7	88	44	65
20	76	42	.00	.00	.00	.00	.00	.00	.00	93	45	66
21	75	36	.00	.00	.00	.00	.00	.00	.00	87	53	65
22	74	32	.00	.00	.00	.00	.00	.00	.00	91	60	65
23	74	31	.00	.00	.00	.00	.00	.00	.00	96	59	65
24	85	31	.00	.00	.00	.00	.00	.00	.00	75	57	64
25	96	31	.00	.00	.00	.00	.00	.00	.00	73	58	64
26	94	30	.00	.00	.00	.00	.00	.00	.00	77	58	63
27	94	30	.00	.00	.00	.00	.00	.00	.00	77	58	63
28	94	21	.00	.00	.00	.00	.00	.00	.00	72	68	63
29	92	16	.00	.00	---	.00	.00	.00	.00	75	79	63
30	91	16	.00	.00	---	.00	.00	.00	.00	72	80	64
31	94	---	.00	.00	---	.00	---	.00	---	84	79	---
TOTAL	2155	1643	161.00	0.00	0.00	0.00	0.00	0.00	251.60	1296.00	2074	2195
MEAN	69.5	54.8	5.19	.000	.000	.000	.000	.000	8.39	41.8	66.9	73.2
MAX	96	97	16	.00	.00	.00	.00	.00	31	96	98	82
MIN	21	16	.00	.00	.00	.00	.00	.00	.00	-49	41	63
AC-FT	4270	3260	319	.00	.00	.00	.00	.00	499	2570	4110	4350

CAL YR 1989 TOTAL 4392.00 MEAN 12.0 MAX 97 MIN .00 AC-FT 8710
WTR YR 1990 TOTAL 9775.60 MEAN 26.8 MAX 98 MIN -49 AC-FT 19390

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289041 TAMIAMI CANAL BELOW S-12-C, NEAR MIAMI, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.91	8.26	7.96	7.46	7.15	7.02	6.30	6.31	7.29	7.54	8.30	8.27
2	7.93	8.28	7.96	7.45	7.14	6.99	6.30	6.27	7.27	7.61	8.31	8.27
3	7.97	8.28	7.96	7.44	7.12	6.95	6.33	6.23	7.24	7.74	8.30	8.28
4	8.08	8.28	7.95	7.43	7.09	6.95	6.38	6.20	7.24	7.78	8.29	8.28
5	8.08	8.28	7.93	7.42	7.08	6.93	6.38	6.17	7.23	7.81	8.28	8.28
6	8.09	8.28	7.86	7.41	7.07	6.91	6.38	6.15	7.34	7.85	8.29	8.30
7	8.09	8.23	7.83	7.41	7.05	6.89	6.37	6.12	7.46	7.87	8.26	8.30
8	8.09	8.18	7.83	7.39	7.03	6.87	6.38	6.08	7.50	7.87	8.20	8.30
9	8.09	8.18	7.82	7.38	7.01	6.86	6.60	6.04	7.57	7.87	8.20	8.29
10	8.12	8.17	7.82	7.36	6.99	6.83	6.64	6.01	7.58	7.88	8.20	8.29
11	8.18	8.18	7.82	7.35	6.96	6.80	6.63	5.99	7.58	7.89	8.21	8.29
12	8.19	8.17	7.81	7.34	6.95	6.78	6.61	5.95	7.57	7.89	8.22	8.30
13	8.19	8.17	7.78	7.33	6.92	6.74	6.58	5.91	7.55	7.91	8.22	8.30
14	8.19	8.14	7.75	7.31	6.89	6.70	6.56	5.90	7.50	7.93	8.18	8.30
15	8.19	8.09	7.73	7.29	6.90	6.65	6.54	5.94	7.38	7.99	8.15	8.29
16	8.19	8.09	7.73	7.28	6.94	6.59	6.52	5.90	7.27	8.00	8.16	8.29
17	8.19	8.09	7.73	7.27	6.93	6.53	6.49	5.84	7.20	8.01	8.16	8.28
18	8.19	8.09	7.72	7.27	6.90	6.61	6.46	5.80	7.14	8.09	8.18	8.27
19	8.19	8.09	7.70	7.26	6.89	6.61	6.41	5.74	7.16	8.11	8.18	8.24
20	8.19	8.09	7.63	7.24	6.88	6.60	6.37	5.69	7.14	8.11	8.20	8.24
21	8.19	8.07	7.60	7.22	6.92	6.58	6.33	5.64	7.14	8.11	8.22	8.24
22	8.19	8.05	7.57	7.21	7.01	6.54	6.29	5.62	7.21	8.12	8.23	8.24
23	8.19	8.04	7.57	7.19	7.06	6.50	6.26	5.58	7.25	8.18	8.25	8.23
24	8.22	8.04	7.55	7.19	7.15	6.46	6.32	5.80	7.28	8.22	8.28	8.23
25	8.25	8.04	7.53	7.19	7.15	6.42	6.39	6.65	7.26	8.22	8.30	8.23
26	8.25	8.04	7.52	7.17	7.12	6.39	6.37	6.75	7.31	8.23	8.30	8.22
27	8.24	8.03	7.52	7.15	7.09	6.36	6.32	7.01	7.42	8.25	8.30	8.21
28	8.24	8.01	7.50	7.14	7.06	6.33	6.28	7.19	7.52	8.27	8.31	8.21
29	8.23	7.97	7.49	7.13	---	6.33	6.29	7.16	7.53	8.27	8.28	8.22
30	8.23	7.97	7.48	7.13	---	6.33	6.32	7.13	7.54	8.26	8.28	8.21
31	8.25	---	7.47	7.13	---	6.34	---	7.16	---	8.27	8.27	---
TOTAL	252.82	243.88	239.12	225.94	196.45	206.39	192.40	191.93	220.67	248.15	255.51	247.90
MEAN	8.16	8.13	7.71	7.29	7.02	6.66	6.41	6.19	7.36	8.00	8.24	8.26
MAX	8.25	8.28	7.96	7.46	7.15	7.02	6.64	7.19	7.58	8.27	8.31	8.30
MIN	7.91	7.97	7.47	7.13	6.88	6.33	6.26	5.58	7.14	7.54	8.15	8.21
CAL YR 1989	TOTAL 2601.58		MEAN 7.13	MAX 8.28	MIN 4.88							
WTR YR 1990	TOTAL 2721.16		MEAN 7.46	MAX 8.31	MIN 5.58							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254543080405401 TAMIAMI CANAL BELOW S-12-D, NEAR MIAMI, FL

LOCATION.--Lat 25°45'43", long 80°40'54", in sec.14, T.54 S., R.36 E., Hydrologic Unit 03090202, on south bank 100 ft southwest of structure 12-D, and 30 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1963 to September 1965, October 1975 to September 1977, October 1978 to September 1979, October 1980 to September 1981, discharge only, October 1981 to current year. Discharge and stage record for missing periods were fragmentary or missing from the files of the Geological Survey. Since Oct. 1, 1989, data collection platform.

GAGE.--Water-stage recorder and Data Collection Platform with rainfall. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily rainfall, stage and discharge. Records good. Station is one of several located downstream from the control structures in Levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through control structure 12-D. Discharge is the total discharge through the S-12-D structure, from Conservation Area 3A. The daily discharge computed from relation between discharge, head, and gate openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions.

COOPERATION.--Gate-opening record for S-12-D provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--15 years (water years 1964-65, 1976-77, 1979-90), 132 ft³/s, 95,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,640 ft³/s; maximum gage height, 10.27 ft Nov. 5, 6, 1982; no flow for some days most years; maximum daily reverse flow, 16 ft³/s Mar. 28, 1985; minimum gage height, 4.70 ft June 20, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 176 ft³/s Sept. 4; maximum gage height, 8.43 ft Aug. 28; no flow for many days; minimum gage height, 5.51 ft May 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	88	23	.00	.00	.00	.00	.00	.00	60	117	173
2	13	88	23	.00	.00	.00	.00	.00	.00	59	121	174
3	25	90	23	.00	.00	.00	.00	.00	.00	59	117	175
4	37	89	22	.00	.00	.00	.00	.00	.00	57	115	176
5	36	89	16	.00	.00	.00	.00	.00	.00	59	116	162
6	36	88	9.9	.00	.00	.00	.00	.00	15	63	117	153
7	36	65	10	.00	.00	.00	.00	.00	20	66	108	156
8	35	54	10	.00	.00	.00	.00	.00	20	66	100	155
9	36	53	10	.00	.00	.00	.00	.00	21	67	101	153
10	44	53	10	8.3	.00	.00	.00	.00	20	66	100	152
11	61	53	10	15	.00	.00	.00	.00	19	67	101	151
12	61	53	10	15	.00	.00	.00	.00	25	69	107	152
13	61	53	10	15	.00	.00	.00	.00	26	69	108	153
14	61	52	10	15	.00	.00	.00	.00	39	71	93	153
15	61	52	9.9	15	.00	.00	.00	.00	42	84	78	152
16	61	52	9.8	15	.00	.00	.00	.00	31	91	79	149
17	60	52	9.9	5.5	.00	.00	.00	.00	37	97	80	148
18	58	52	9.8	.00	.00	.00	.00	.00	53	112	82	143
19	58	51	5.3	.00	.00	.00	.00	.00	15	117	84	141
20	58	51	.00	.00	.00	.00	.00	.00	.00	116	85	142
21	57	45	.00	.00	.00	.00	.00	.00	.00	113	117	141
22	57	42	.00	.00	.00	.00	.00	.00	.00	114	139	141
23	57	42	.00	.00	.00	.00	.00	.00	.00	125	139	140
24	56	42	.00	.00	.00	.00	.00	.00	.00	112	141	140
25	54	42	.00	.00	.00	.00	.00	.00	.00	106	145	160
26	53	41	.00	.00	.00	.00	.00	.00	50	109	146	169
27	53	41	.00	.00	.00	.00	.00	.00	68	111	147	168
28	53	29	.00	.00	.00	.00	.00	.00	71	111	160	165
29	52	23	.00	.00	---	.00	.00	.00	63	113	174	167
30	52	23	.00	.00	---	.00	.00	.00	57	109	174	168
31	73	---	.00	.00	---	.00	---	.00	---	114	172	---
TOTAL	1528	1648	241.60	103.80	0.00	0.00	0.00	0.00	692.00	2752	3663	4672
MEAN	49.3	54.9	7.79	3.35	.000	.000	.000	.000	23.1	88.8	118	156
MAX	73	90	23	15	.00	.00	.00	.00	71	125	174	176
MIN	13	23	.00	.00	.00	.00	.00	.00	.00	57	78	140
AC-FT	3030	3270	479	206	.00	.00	.00	.00	1370	5460	7270	9270

CAL YR 1989 TOTAL 3733.90 MEAN 10.2 MAX 90 MIN .00 AC-FT 7410
WTR YR 1990 TOTAL 15300.40 MEAN 41.9 MAX 176 MIN .00 AC-FT 30350

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.02	8.04	7.51	6.99	6.85	6.72	6.28	6.27	6.91	7.67	8.17	8.36
2	7.04	8.04	7.50	6.98	6.84	6.71	6.28	6.23	6.91	7.75	8.17	8.36
3	7.18	8.05	7.49	6.97	6.82	6.70	6.31	6.19	6.88	7.78	8.17	8.37
4	7.48	8.05	7.49	6.97	6.81	6.70	6.34	6.17	6.88	7.77	8.18	8.37
5	7.51	8.04	7.43	6.97	6.80	6.69	6.34	6.14	6.87	7.78	8.16	8.32
6	7.52	8.04	7.23	6.96	6.78	6.68	6.33	6.12	7.01	7.81	8.17	8.29
7	7.52	7.96	7.19	6.93	6.77	6.65	6.32	6.07	7.20	7.84	8.14	8.30
8	7.53	7.85	7.17	6.91	6.77	6.62	6.33	6.04	7.24	7.83	8.09	8.29
9	7.53	7.85	7.17	6.90	6.76	6.60	6.46	6.00	7.27	7.84	8.09	8.28
10	7.59	7.85	7.16	6.90	6.75	6.58	6.49	5.97	7.28	7.84	8.09	8.28
11	7.79	7.84	7.15	6.90	6.74	6.55	6.49	5.94	7.28	7.84	8.10	8.28
12	7.80	7.84	7.15	6.89	6.73	6.54	6.47	5.90	7.34	7.84	8.12	8.28
13	7.81	7.83	7.15	6.88	6.70	6.52	6.44	5.86	7.42	7.84	8.12	8.28
14	7.81	7.82	7.13	6.87	6.69	6.49	6.44	5.88	7.45	7.85	8.09	8.28
15	7.82	7.81	7.12	6.86	6.72	6.47	6.43	5.94	7.38	7.95	8.03	8.28
16	7.82	7.81	7.13	6.85	6.74	6.44	6.42	5.89	7.27	7.96	8.03	8.27
17	7.85	7.81	7.12	6.85	6.72	6.41	6.40	5.84	7.21	7.98	8.03	8.27
18	7.91	7.80	7.11	6.85	6.70	6.46	6.38	5.78	7.15	8.05	8.04	8.23
19	7.91	7.80	7.10	6.83	6.68	6.47	6.34	5.72	7.07	8.07	8.04	8.17
20	7.94	7.79	7.09	6.82	6.67	6.47	6.31	5.66	6.91	8.07	8.06	8.18
21	7.94	7.75	7.07	6.82	6.69	6.45	6.29	5.61	6.85	8.07	8.14	8.18
22	7.94	7.70	7.06	6.81	6.75	6.42	6.26	5.59	6.86	8.09	8.24	8.17
23	7.94	7.69	7.05	6.81	6.78	6.40	6.23	5.53	6.86	8.15	8.25	8.17
24	7.97	7.69	7.04	6.81	6.82	6.38	6.30	5.78	6.93	8.15	8.25	8.17
25	8.01	7.68	7.04	6.81	6.80	6.36	6.36	6.60	6.94	8.12	8.27	8.22
26	8.01	7.68	7.03	6.81	6.78	6.35	6.33	6.68	7.32	8.13	8.26	8.25
27	8.01	7.67	7.03	6.81	6.76	6.33	6.29	6.91	7.69	8.14	8.25	8.24
28	8.01	7.62	7.02	6.81	6.74	6.31	6.26	6.97	7.73	8.15	8.32	8.24
29	8.00	7.53	7.01	6.81	---	6.29	6.26	6.91	7.70	8.15	8.37	8.25
30	8.00	7.52	7.00	6.82	---	6.26	6.29	6.88	7.68	8.15	8.37	8.25
31	8.02	---	7.00	6.83	---	6.25	---	6.87	---	8.15	8.36	---
TOTAL	240.23	234.45	221.94	213.03	189.16	201.27	190.47	189.94	215.49	246.81	253.17	247.88
MEAN	7.75	7.81	7.16	6.87	6.76	6.49	6.35	6.13	7.18	7.96	8.17	8.26
MAX	8.02	8.05	7.51	6.99	6.85	6.72	6.49	6.97	7.73	8.15	8.37	8.37
MIN	7.02	7.52	7.00	6.81	6.67	6.25	6.23	5.53	6.85	7.67	8.03	8.17
CAL YR 1989	TOTAL 2505.40		MEAN 6.86	MAX 8.05	MIN 4.70							
WTR YR 1990	TOTAL 2643.84		MEAN 7.24	MAX 8.37	MIN 5.53							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254543080405401 TAMiami CANAL BELOW S-12-D, NEAR MIAMI, FL

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.26	.00	.00	.00	.27	.27	.06	.00
2	.53	.71	.00	.00	.00	.00	.00	.00	.00	2.16	.00	.02
3	.00	.00	.00	.00	.00	.08	.32	.00	.16	.17	1.10	.00
4	.00	.00	.00	.07	.00	---	.00	.24	.15	.00	.00	.14
5	.00	.00	.00	.05	.08	---	.00	.05	.00	.02	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.87	.18
7	.01	.00	.00	.00	.00	.00	.00	.00	.00	.08	.00	.00
8	.00	.00	.00	.00	.00	.00	.86	.00	.18	.16	.04	.00
9	.01	.00	.03	.00	.00	.00	.03	.00	.00	.37	.00	.00
10	.51	.00	.00	.00	.00	.00	.00	.03	.00	.29	.00	.00
11	.56	.00	.00	.00	.07	.00	.00	.00	.27	.03	1.87	.04
12	.00	.00	.00	.00	.00	.11	.00	.00	.00	.42	.05	.24
13	.00	.00	.07	.00	.00	.00	.00	.00	.00	.39	.51	.07
14	.01	.00	.00	.00	.00	.00	.00	.90	.00	.08	.77	.00
15	.00	.00	.00	.00	.00	3.84	.00	.00	.02	.00	.00	.00
16	.00	.00	.17	.00	.00	.00	.00	.00	.00	.12	.00	.00
17	.00	.00	.03	.00	.00	.00	.00	.00	.00	.02	.25	.18
18	.00	.00	.00	.00	.00	.47	.00	.00	.00	.25	.36	.00
19	.00	.00	.00	.00	.00	.05	.03	.00	.00	.07	.00	.00
20	.00	.00	.00	.00	.07	.00	.06	.00	.02	.00	.82	.03
21	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	---
22	.00	.00	.01	.00	.00	.00	.00	.00	.10	.16	.76	---
23	.00	.00	.06	.00	.47	.00	.32	.07	.86	.00	.48	---
24	.01	.00	.00	.00	.00	.00	.61	3.80	.00	.03	.13	---
25	.00	.00	.00	.00	.00	.00	.00	.13	1.95	.01	.03	---
26	.00	.04	.01	.08	.00	.00	.00	.91	.16	.01	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	2.19	.45	.00	.00	.00
28	.00	.01	.00	.04	.00	.00	.02	.01	.00	.29	1.39	.17
29	.00	.10	.00	.08	---	.00	.15	.00	.00	.00	.32	.27
30	.00	.00	.00	.01	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.10	---	.09	---	.27	---	.00	.00	---
TOTAL	1.64	0.86	0.38	0.43	0.95	---	2.40	8.65	4.59	5.43	9.81	---

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289050 TAMiami CANAL ABOVE S-333 NEAR MIAMI, FL

LOCATION.--Lat 25°45'39", long 80°40'27", in S½ sec.6, T.54 S., R.37 E., Dade County, Hydrologic Unit 03090202, on right bank in control house of control structure 333 at Levee 67A, 100 ft north of U.S. Highway 41 and 29 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1978 to September 1981 (gage heights), October 1981 to current year. Records prior to October 1981 are available in files of the South Florida Water Management District.

REVISED RECORDS.--WDR FL-87-2A: 1986.

GAGE.--Water-stage recorder and gate-opening recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Estimated daily stage and discharge, Oct. 7-26. Records fair except those for estimated daily stage which are poor. Flow is regulated by operation of control structure 333. Discharge computed from relations between discharge, head, and gate opening.

COOPERATION.--Control structure 333 gate-operation records provided by South Florida Water Management District.

AVERAGE DISCHARGE.--9 years, 214 ft³/s, 155,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,610 ft³/s May 14, 1985; maximum gage height, 10.40 ft Nov. 5, 1982; no flow for many days each year; minimum gage height, 5.20 ft June 19, 1989 (estimated).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 392 ft³/s Oct. 25; maximum gage height, 8.95 ft Oct. 20; no flow for many days; minimum gage height, 6.24 ft May 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	383	96	.00	.00	.00	.00	.00	.00	82	224	323
2	79	383	95	.00	.00	.00	.00	.00	.00	82	225	324
3	140	385	95	.00	.00	.00	.00	.00	.00	89	222	324
4	216	383	95	.00	.00	.00	.00	.00	.00	99	220	325
5	215	382	95	.00	.00	.00	.00	.00	.00	100	220	331
6	214	380	96	.00	.00	.00	.00	.00	27	101	221	337
7	214	336	96	.00	.00	.00	.00	.00	42	102	192	338
8	214	310	96	.00	.00	.00	.00	.00	43	101	169	338
9	214	310	97	.00	.00	.00	.00	.00	44	102	170	336
10	252	309	97	23	.00	.00	.00	.00	44	102	170	335
11	337	308	97	37	.00	.00	.00	.00	43	138	171	335
12	338	307	51	37	.00	.00	.00	.00	86	158	173	336
13	338	306	24	38	.00	.00	.00	.00	120	158	173	336
14	338	255	25	38	.00	.00	.00	.00	140	158	164	336
15	339	190	24	38	.00	.00	.00	.00	160	164	154	336
16	339	191	24	38	.00	.00	.00	.00	153	165	155	334
17	349	191	24	14	.00	.00	.00	.00	148	188	155	334
18	363	191	24	.00	.00	.00	.00	.00	145	208	156	355
19	362	190	13	.00	.00	.00	.00	.00	164	210	157	379
20	364	189	.00	.00	.00	.00	.00	.00	169	210	158	379
21	362	165	.00	.00	.00	.00	.00	.00	173	210	188	379
22	361	143	.00	.00	.00	.00	.00	.00	179	211	227	379
23	360	142	.00	.00	.00	.00	.00	.00	180	215	226	378
24	377	143	.00	.00	.00	.00	.00	.00	183	219	226	377
25	392	142	.00	.00	.00	.00	.00	.00	193	221	228	320
26	391	140	.00	.00	.00	.00	.00	.00	138	223	228	285
27	391	147	.00	.00	.00	.00	.00	.00	80	224	228	285
28	391	117	.00	.00	.00	.00	.00	.00	82	224	278	283
29	388	95	.00	.00	---	.00	.00	.00	82	225	324	284
30	386	96	.00	.00	---	.00	.00	.00	82	224	324	285
31	384	---	.00	.00	---	.00	---	.00	---	223	323	---
TOTAL	9487	7209	1264.00	263.00	0.00	0.00	0.00	0.00	2900.00	5136	6449	10026
MEAN	306	240	40.8	8.48	.000	.000	.000	.000	96.7	166	208	334
MAX	392	385	97	38	.00	.00	.00	.00	193	225	324	379
MIN	79	95	.00	.00	.00	.00	.00	.00	.00	82	154	283
AC-FT	18820	14300	2510	522	.00	.00	.00	.00	5750	10190	12790	19890

CAL YR 1989 TOTAL 19490.00 MEAN 53.4 MAX 392 MIN .00 AC-FT 38660
WTR YR 1990 TOTAL 42734.00 MEAN 117 MAX 392 MIN .00 AC-FT 84760

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.79	8.79	8.48	8.05	7.66	7.50	7.18	7.19	7.66	7.70	8.34	8.74
2	8.82	8.78	8.44	8.05	7.63	7.44	7.38	7.15	7.68	7.78	8.35	8.74
3	8.85	8.82	8.44	8.00	7.60	7.39	7.58	7.09	7.67	7.82	8.34	8.76
4	8.84	8.80	8.42	7.94	7.54	7.46	7.62	7.02	7.67	7.80	8.34	8.76
5	8.83	8.79	8.39	7.88	7.62	7.48	7.61	6.95	7.66	7.82	8.33	8.77
6	8.82	8.77	8.37	7.82	7.63	7.50	7.59	6.94	7.64	7.86	8.35	8.78
7	8.82	8.76	8.36	7.77	7.60	7.52	7.56	6.97	7.58	7.89	8.37	8.80
8	8.82	8.74	8.33	7.74	7.55	7.49	7.64	6.89	7.64	7.88	8.36	8.79
9	8.82	8.73	8.33	7.74	7.51	7.45	7.73	6.80	7.72	7.89	8.37	8.77
10	8.83	8.73	8.35	7.73	7.42	7.43	7.68	6.75	7.68	7.88	8.36	8.76
11	8.89	8.72	8.33	7.78	7.41	7.40	7.62	6.82	7.63	7.88	8.39	8.75
12	8.91	8.71	8.30	7.78	7.50	7.36	7.74	6.77	7.61	7.87	8.45	8.76
13	8.91	8.69	8.29	7.82	7.40	7.21	7.80	6.71	7.59	7.87	8.45	8.77
14	8.91	8.67	8.31	7.79	7.34	7.14	7.76	6.70	7.53	7.89	8.48	8.77
15	8.93	8.65	8.26	7.78	7.30	7.00	7.68	6.70	7.40	8.00	8.51	8.76
16	8.93	8.63	8.24	7.78	7.30	6.89	7.65	6.69	7.29	8.02	8.53	8.74
17	8.93	8.65	8.25	7.75	7.28	6.78	7.60	6.59	7.22	8.04	8.54	8.73
18	8.93	8.63	8.21	7.70	7.26	6.91	7.49	6.53	7.16	8.11	8.58	8.73
19	8.92	8.61	8.19	7.60	7.23	6.88	7.42	6.46	7.16	8.13	8.59	8.73
20	8.95	8.59	8.19	7.55	7.22	7.45	7.38	6.39	7.12	8.13	8.63	8.75
21	8.93	8.56	8.20	7.51	7.42	7.32	7.30	6.36	7.20	8.13	8.67	8.74
22	8.92	8.53	8.21	7.60	7.49	7.18	7.23	6.31	7.27	8.15	8.66	8.74
23	8.91	8.50	8.24	7.59	7.43	7.18	7.17	6.30	7.30	8.22	8.66	8.73
24	8.90	8.53	8.23	7.60	7.65	7.05	7.20	6.38	7.38	8.28	8.67	8.72
25	8.89	8.50	8.19	7.63	7.62	7.01	7.18	6.63	7.52	8.32	8.71	8.71
26	8.88	8.48	8.16	7.68	7.67	7.01	7.09	6.79	7.66	8.34	8.71	8.70
27	8.87	8.47	8.14	7.65	7.62	7.04	7.01	7.06	7.73	8.36	8.71	8.69
28	8.87	8.46	8.12	7.63	7.54	6.99	6.97	7.38	7.78	8.36	8.73	8.68
29	8.84	8.47	8.11	7.61	---	6.92	7.07	7.59	7.74	8.37	8.75	8.70
30	8.81	8.50	8.09	7.66	---	6.86	7.17	7.63	7.72	8.35	8.76	8.71
31	8.80	---	8.05	7.68	---	6.88	---	7.67	---	8.33	8.74	---
TOTAL	275.07	259.26	256.22	239.89	209.44	223.12	223.10	212.21	225.61	249.47	264.43	262.28
MEAN	8.87	8.64	8.27	7.74	7.48	7.20	7.44	6.85	7.52	8.05	8.53	8.74
MAX	8.95	8.82	8.48	8.05	7.67	7.52	7.80	7.67	7.78	8.37	8.76	8.80
MIN	8.79	8.46	8.05	7.51	7.22	6.78	6.97	6.30	7.12	7.70	8.33	8.68
CAL YR 1989	TOTAL 2834.15		MEAN 7.76	MAX 8.95	MIN 5.20							
WTR YR 1990	TOTAL 2900.10		MEAN 7.95	MAX 8.95	MIN 6.30							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254100080402400 L-67 EXTENDED CANAL WEST NEAR FLORIDA CITY, FL

LOCATION.--Lat 25°41'00", long 80°40'24", between sec.24, T.55 S., R.36 E., and sec.6, T.55 S., R.37 E., in-between hiatus of unsurveyed area, Dade County, Hydrologic Unit 03090202, 5.8 mi south of Highway 41 on the L-67 extension levee and 11.8 mi west of Krome Avenue.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1983 to present year (gage heights).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily gage heights for Feb. 3-16.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.24 ft Oct. 6, 1988, minimum, 3.50 ft Apr. 8, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 6.28 ft Aug. 28, 29; minimum, 3.50 ft Apr. 8, 1990.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	6.19	5.91	5.26	4.40	3.77	4.95	5.54	6.03	6.33	6.72
2	---	---	6.18	5.89	5.23	4.38	3.74	4.91	5.51	6.18	6.32	6.69
3	---	---	6.16	5.88	5.21	4.36	3.71	4.85	5.46	6.35	6.34	6.67
4	---	---	6.14	5.87	5.17	4.35	3.67	4.80	5.44	6.33	6.41	6.64
5	---	---	6.13	5.89	5.14	4.35	3.63	4.75	5.44	6.31	6.41	6.62
6	---	---	6.12	5.87	5.10	4.32	3.59	4.69	5.42	6.28	6.43	6.61
7	---	---	6.11	5.86	5.08	4.29	3.55	4.63	5.39	6.27	6.46	6.63
8	---	---	6.11	5.84	5.03	4.27	3.55	4.58	5.37	6.26	6.45	6.61
9	---	---	6.10	5.82	4.98	4.25	3.79	4.52	5.37	6.24	6.45	6.59
10	---	---	6.08	5.80	4.94	4.21	3.93	4.47	5.34	6.24	6.44	6.57
11	---	---	6.06	5.77	4.91	4.17	3.98	4.43	5.37	6.25	6.46	6.56
12	---	---	6.06	5.76	4.87	4.13	3.97	4.37	5.39	6.24	6.58	6.56
13	---	---	6.08	5.72	4.85	4.09	3.93	4.30	5.33	6.26	6.58	6.55
14	---	---	6.05	5.70	4.82	4.05	3.89	4.24	5.29	6.28	6.56	6.54
15	---	6.28	6.04	5.68	4.78	4.02	3.85	4.18	5.25	6.26	6.55	6.53
16	---	6.28	6.06	5.66	4.73	3.98	3.81	4.11	5.20	6.23	6.52	6.52
17	---	6.25	6.06	5.64	4.67	3.94	3.79	4.03	5.14	6.22	6.50	6.52
18	---	6.24	6.05	5.61	4.63	4.00	4.05	3.96	5.13	6.26	6.48	6.54
19	---	6.24	6.03	5.59	4.60	4.09	4.15	3.88	5.44	6.25	6.48	6.57
20	---	6.21	6.02	5.57	4.59	4.21	4.15	3.80	5.45	6.26	6.50	6.56
21	---	6.23	6.02	5.54	4.61	4.20	4.14	3.73	5.48	6.24	6.54	6.55
22	---	6.22	6.01	5.52	4.58	4.16	4.11	3.69	5.48	6.27	6.55	6.53
23	---	6.22	6.03	5.49	4.54	4.11	4.07	3.62	5.46	6.32	6.59	6.53
24	---	6.21	6.01	5.47	4.61	4.06	4.09	3.71	5.60	6.30	6.65	6.52
25	---	6.20	5.99	5.44	4.59	4.01	4.26	4.43	5.61	6.30	6.66	6.50
26	---	6.22	5.98	5.40	4.53	3.96	4.26	4.61	5.93	6.29	6.65	6.48
27	---	6.22	5.97	5.36	4.48	3.92	4.22	5.14	6.05	6.32	6.64	6.47
28	---	6.21	5.95	5.34	4.43	3.88	4.18	5.66	6.09	6.32	6.69	6.48
29	---	6.21	5.94	5.33	---	3.85	4.44	5.64	6.05	6.36	6.80	6.57
30	---	6.21	5.93	5.30	---	3.81	4.96	5.60	6.02	6.35	6.77	6.58
31	---	---	5.92	5.27	---	3.78	---	5.56	---	6.34	6.74	---
TOTAL	---	---	187.58	174.79	134.96	127.60	119.23	139.84	165.04	194.41	202.53	197.01
MEAN	---	---	6.05	5.64	4.82	4.12	3.97	4.51	5.50	6.27	6.53	6.57
MAX	---	---	6.19	5.91	5.26	4.40	4.96	5.66	6.09	6.36	6.80	6.72
MIN	---	---	5.92	5.27	4.43	3.78	3.55	3.62	5.13	6.03	6.32	6.47

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254100080402200 NORTHEAST SHARK RIVER SLOUGH EAST OF L 67 EXTENSION NEAR RICHMOND HEIGHTS, FL

LOCATION.--Lat 25°41'00", long 80°40'22", in NW¼ sec.6, T.55 S., R.37 E., Dade County, Hydrologic Unit 03090202, 5.8 mi south of U.S. Highway 41 on the L-67 extension levee and 11.8 mi west of Krome Avenue.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1984 to current year (gage heights).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily gage heights for Feb. 3-8, Apr. 29-30, May 1, 2. Well dry Feb. 9 - Apr. 28, May 7-26.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.67 ft Aug. 20, 21, 1988; minimum, 4.86 ft May 9, 10, 11, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 6.65 ft Aug. 29; minimum, indeterminate, well dry.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.98	5.87	6.06	5.92	5.28	---	---	5.61	5.65	6.10	6.12	6.46
2	5.97	5.95	6.04	5.90	5.25	---	---	5.58	5.61	6.31	6.09	6.43
3	6.01	6.16	6.02	5.89	5.19	---	---	5.53	5.55	6.41	6.17	6.42
4	5.97	6.14	6.00	5.88	5.15	---	---	5.40	5.50	6.37	6.51	6.41
5	5.94	6.10	5.99	5.91	5.13	---	---	5.26	5.48	6.35	6.42	6.38
6	5.91	6.08	5.98	5.90	5.10	---	---	5.14	5.44	6.28	6.34	6.39
7	5.90	6.06	5.98	5.88	5.08	---	---	---	5.41	6.23	6.30	6.42
8	5.88	6.05	5.99	5.87	5.07	---	---	---	5.39	6.18	6.30	6.37
9	5.86	6.06	5.99	5.85	---	---	---	---	5.39	6.15	6.33	6.34
10	5.98	6.05	5.98	5.83	---	---	---	---	5.33	6.16	6.33	6.32
11	6.27	6.07	5.97	5.81	---	---	---	---	5.34	6.16	6.39	6.32
12	6.22	6.05	5.97	5.79	---	---	---	---	5.37	6.15	6.51	6.38
13	6.15	6.04	5.99	5.76	---	---	---	---	5.28	6.18	6.46	6.36
14	6.13	6.04	5.98	5.74	---	---	---	---	5.22	6.28	6.44	6.31
15	6.12	6.04	5.97	5.73	---	---	---	---	5.17	6.25	6.41	6.28
16	6.09	6.04	6.00	5.71	---	---	---	---	5.12	6.19	6.38	6.25
17	6.06	6.02	6.05	5.69	---	---	---	---	5.07	6.15	6.35	6.26
18	6.03	6.01	6.03	5.66	---	---	---	---	5.11	6.26	6.33	6.33
19	6.01	6.00	6.01	5.64	---	---	---	---	5.54	6.23	6.33	6.40
20	5.98	5.99	6.00	5.63	---	---	---	---	5.52	6.24	6.33	6.37
21	5.96	6.00	6.01	5.61	---	---	---	---	5.63	6.19	6.35	6.34
22	5.95	5.99	5.99	5.58	---	---	---	---	5.60	6.18	6.34	6.32
23	5.93	5.99	6.05	5.56	---	---	---	---	5.57	6.27	6.38	6.32
24	5.93	5.99	6.04	5.53	---	---	---	---	5.68	6.25	6.44	6.32
25	5.93	5.99	6.01	5.50	---	---	---	---	5.72	6.32	6.41	6.30
26	5.92	6.02	5.99	5.46	---	---	---	---	6.26	6.26	6.41	6.28
27	5.91	6.05	5.97	5.41	---	---	---	5.54	6.31	6.24	6.40	6.26
28	5.90	6.04	5.96	5.40	---	---	---	6.03	6.37	6.19	6.45	6.32
29	5.88	6.06	5.94	5.38	---	---	---	5.89	6.21	6.17	6.62	6.47
30	5.87	6.09	5.93	5.34	---	---	5.63	5.77	6.12	6.14	6.55	6.49
31	5.87	---	5.92	5.31	---	---	---	5.69	---	6.14	6.50	---
TOTAL	185.51	181.04	185.81	176.07	---	---	---	---	166.96	192.98	197.69	190.62
MEAN	5.98	6.03	5.99	5.68	---	---	---	---	5.57	6.23	6.38	6.35
MAX	6.27	6.16	6.06	5.92	---	---	---	---	6.37	6.41	6.62	6.49
MIN	5.86	5.87	5.92	5.31	---	---	---	---	5.07	6.10	6.09	6.25

CAL YR 1989 TOTAL 2137.01 MEAN 5.85 MAX 6.60 MIN 4.92

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289060 TAMIAMI CANAL OUTLETS, LEVEE 30 TO LEVEE 67A, NEAR MIAMI, FL

LOCATION.--Lat 25°45'40", long 80°33'40", in SE¼ sec.6, T.54 S., R.38 E., Dade County, Hydrologic Unit 03090202, on south bank, 50 ft west of bridge 53 on U.S. Highway 41, and 22.8 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to September 1963 (monthly discharge), October 1963 to current year. Prior to October 1963, published as Tamiami Canal at bridge 45, near Miami (auxiliary). Records prior to October 1962 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Aug. 27, 1942, nonrecording gage at datum 0.80 ft lower; Aug. 27, 1942 to Feb. 21, 1952, nonrecording gage at present datum; and Feb. 21, 1952 to Aug. 7, 1969 water-stage recorder at same datum all at site 4 mi to the west.

REMARKS.--No estimated daily stage and discharge. Records poor. Figures of daily discharge consist of seepage through levee 29 from Conservation Area 3B and discharges from S-333 distributed along L-29 from Conservation Area 3A as represented by flow through all the outlets of Tamiami Canal from levee 30 to levee 67A. Prior to October 1963, daily discharge for this portion of the Canal was published as part of the total daily discharge of station, Tamiami Canal outlets, Miami to Monroe (station 02289000).

AVERAGE DISCHARGE.--50 years, 213 ft³/s, 154,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,100 ft³/s Sept. 17, 1985; maximum gage height, 9.76 ft Nov. 1, 1960; maximum daily reverse flow, 7.0 ft³/s estimated, May 11, 12, 1964; minimum gage height, 1.66 ft May 13, 14, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 420 ft³/s Sept. 21; maximum gage height, 7.06 ft Sept. 20; no flow for many days; minimum gage height, 3.46 ft May 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	219	69	.70	3.2	.00	.00	.00	2.4	38	145	294
2	76	221	67	.31	3.4	.00	.00	.00	3.4	48	143	288
3	88	227	64	.02	2.9	.00	.00	.00	3.1	64	167	284
4	126	233	61	.00	2.4	.00	.00	.00	3.0	65	182	284
5	134	232	57	.00	2.2	.00	.00	.00	2.7	64	176	314
6	136	229	47	.00	1.9	.00	.00	.00	4.3	67	177	327
7	139	217	43	.00	1.6	.00	.00	.00	8.5	68	160	327
8	142	210	41	.00	1.4	.00	.00	.00	11	66	137	322
9	147	207	39	.00	1.2	.00	.00	.00	13	64	130	315
10	187	207	36	.06	1.0	.00	.00	.00	13	64	125	313
11	285	206	33	3.8	1.0	.00	.00	.00	13	83	130	328
12	293	200	29	12	.96	.00	.00	.00	17	106	134	327
13	296	201	25	11	.82	.00	.00	.00	33	113	133	334
14	289	185	22	9.1	.73	.00	.00	.00	41	116	131	332
15	280	163	21	7.9	.48	.00	.00	.00	51	120	115	342
16	269	157	20	6.7	.00	.00	.00	.00	51	115	111	336
17	273	148	20	3.8	.00	.00	.00	.00	48	122	110	331
18	288	145	18	.71	.00	.00	.00	.00	45	138	118	355
19	283	142	15	.29	.00	.00	.00	.00	48	138	116	404
20	262	139	10	.17	.00	.00	.00	.00	53	142	129	416
21	259	120	8.4	.11	.00	.00	.00	.00	57	143	148	420
22	253	89	6.7	.15	.00	.00	.00	.00	58	151	178	418
23	242	88	10	.14	.00	.00	.00	.00	61	158	186	420
24	264	86	8.7	.13	.00	.00	.00	.00	69	158	192	407
25	289	85	7.2	.18	.00	.00	.00	.00	72	158	192	335
26	280	92	6.3	.16	.00	.00	.00	.00	70	158	187	267
27	270	90	5.3	.09	.00	.00	.00	.42	52	159	184	258
28	259	83	3.9	.28	.00	.00	.00	3.2	49	157	233	253
29	246	72	2.4	.63	---	.00	.00	2.7	45	154	308	282
30	234	71	1.6	1.3	---	.00	.00	2.3	41	150	314	279
31	227	---	.98	2.1	---	.00	---	1.9	---	146	314	---
TOTAL	6892	4764	798.48	61.83	25.19	0.00	0.00	10.52	1038.4	3493	5205	9912
MEAN	222	159	25.8	1.99	.90	.000	.000	.34	34.6	113	168	330
MAX	296	233	69	12	3.4	.00	.00	3.2	72	159	314	420
MIN	76	71	.98	.00	.00	.00	.00	.00	2.4	38	110	253
AC-FT	13670	9450	1580	123	50	.00	.00	21	2060	6930	10320	19660

CAL YR 1989 TOTAL 14335.34 MEAN 39.3 MAX 296 MIN .00 AC-FT 28430
WTR YR 1990 TOTAL 32200.42 MEAN 88.2 MAX 420 MIN .00 AC-FT 63870

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.56	7.01	6.63	5.89	5.08	4.75	4.95	4.81	6.15	6.39	6.75	6.94
2	6.56	7.01	6.63	5.85	5.07	4.74	4.95	4.72	6.17	6.46	6.75	6.94
3	6.61	7.02	6.61	5.81	5.04	4.73	4.99	4.62	6.14	6.58	6.78	6.94
4	6.74	7.02	6.61	5.79	5.01	4.74	5.10	4.55	6.11	6.59	6.80	6.94
5	6.75	7.02	6.59	5.79	4.98	4.75	5.05	4.52	6.08	6.58	6.79	6.96
6	6.76	7.02	6.52	5.77	4.96	4.73	5.00	4.44	6.10	6.60	6.80	6.97
7	6.76	6.98	6.50	5.73	4.93	4.68	4.95	4.35	6.17	6.61	6.77	6.97
8	6.76	6.95	6.49	5.70	4.90	4.65	4.90	4.29	6.19	6.60	6.74	6.96
9	6.77	6.94	6.48	5.66	4.88	4.63	5.08	4.22	6.20	6.58	6.74	6.96
10	6.82	6.94	6.46	5.69	4.85	4.60	5.11	4.18	6.18	6.58	6.73	6.96
11	6.93	6.94	6.45	5.81	4.83	4.57	5.08	4.17	6.17	6.63	6.73	6.96
12	6.94	6.94	6.42	5.82	4.81	4.55	5.02	4.12	6.20	6.66	6.74	6.96
13	6.94	6.94	6.38	5.79	4.78	4.52	4.95	4.05	6.34	6.67	6.74	6.96
14	6.94	6.90	6.35	5.76	4.76	4.49	4.89	4.00	6.39	6.68	6.74	6.96
15	6.94	6.82	6.34	5.74	4.73	4.46	4.84	3.95	6.46	6.69	6.71	6.97
16	6.94	6.81	6.33	5.71	4.71	4.43	4.79	3.89	6.45	6.68	6.70	6.96
17	6.95	6.79	6.32	5.64	4.69	4.40	4.74	3.82	6.43	6.70	6.70	6.96
18	6.97	6.79	6.31	5.48	4.66	4.50	4.69	3.76	6.42	6.74	6.71	6.97
19	6.97	6.79	6.27	5.40	4.64	4.62	4.62	3.69	6.44	6.74	6.72	7.00
20	6.96	6.78	6.19	5.36	4.64	4.72	4.60	3.62	6.48	6.74	6.74	7.01
21	6.97	6.76	6.17	5.31	4.66	4.73	4.59	3.57	6.51	6.75	6.77	7.01
22	6.97	6.72	6.13	5.28	4.66	4.72	4.53	3.54	6.52	6.76	6.82	7.01
23	6.97	6.71	6.15	5.24	4.67	4.70	4.47	3.48	6.54	6.77	6.83	7.01
24	6.99	6.70	6.12	5.21	4.86	4.68	4.53	3.57	6.59	6.77	6.84	7.00
25	7.01	6.69	6.09	5.17	4.90	4.66	4.69	4.13	6.61	6.77	6.84	6.96
26	7.02	6.72	6.08	5.14	4.86	4.64	4.63	4.40	6.61	6.77	6.84	6.92
27	7.02	6.72	6.05	5.09	4.82	4.62	4.55	5.41	6.48	6.77	6.84	6.91
28	7.01	6.69	6.02	5.07	4.78	4.59	4.47	6.18	6.47	6.77	6.88	6.91
29	7.01	6.66	5.98	5.07	---	4.56	4.54	6.17	6.44	6.76	6.95	6.93
30	7.01	6.65	5.94	5.09	---	4.52	4.85	6.15	6.41	6.76	6.95	6.93
31	7.01	---	5.92	5.08	---	4.59	---	6.14	---	6.75	6.95	---
TOTAL	213.56	205.43	195.53	170.94	135.16	143.27	144.15	136.51	190.45	206.90	210.39	208.84
MEAN	6.89	6.85	6.31	5.51	4.83	4.62	4.80	4.40	6.35	6.67	6.79	6.96
MAX	7.02	7.02	6.63	5.89	5.08	4.75	5.11	6.18	6.61	6.77	6.95	7.01
MIN	6.56	6.65	5.92	5.07	4.64	4.40	4.47	3.48	6.08	6.39	6.70	6.91
CAL YR 1989	TOTAL 2178.46		MEAN 5.97	MAX 7.02	MIN 3.91							
WTR YR 1990	TOTAL 2161.13		MEAN 5.92	MAX 7.02	MIN 3.48							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289500 TAMiami CANAL NEAR CORAL GABLES, FL

LOCATION.--Lat 25°45'43", long 80°19'42", in SW¼ sec.3, T.54 S., R.40 E., Dade County, Hydrologic Unit 03090202, on upstream side of footbridge, 25 ft from south bank, 0.5 mi upstream from Coral Gables, 2.5 mi west of Coral Gables, 3.5 mi downstream from Snapper Creek Canal, and 6.2 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1940 to June 1943, October 1959 to current year. Records of gage height prior to October 1960 are available in files of the Geological Survey.

REVISED RECORDS.--WDR FL-87-2A: 1986.

GAGE.--Water-stage recorder and electromagnetic velocity meter recorder. Datum of gage is National Geodetic Vertical Datum of 1929. January 1940 to June 1943, nonrecording gage at same site at datum 0.22 ft lower.

REMARKS.--Estimated daily discharge: Apr. 13 to May 9. The flow is slightly affected by tide and is regulated by control structure at Dade-Broward Levee, 7.5 mi upstream and at salinity-control structure S-25, 1.2 mi downstream. The canal is blocked by Levee 30, 10.5 mi upstream. Flow is diverted to and from Snapper Creek Canal, 3.5 mi upstream. Discharge computed from continuous velocity record obtained from recording electromagnetic velocity meter.

COOPERATION.--Records of salinity-control structure operation provided by South Florida Water Management District.

AVERAGE DISCHARGE.--29 years (water years 1960-83, 1985-88, 1990), 135 ft³/s 98,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 675 ft³/s Aug. 22, 1981; maximum gage height, 6.38 ft Aug. 18, 1981; no flow many days during 1985, 1989 water years; maximum daily reverse flow, 28 ft³/s May 4, 5, 6, 1975; minimum gage height, 1.08 ft May 31, 1962.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Maximum stage known, 8.49 ft Oct. 12, 1947, present datum, from non recording gage reading.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 244 ft³/s June 28; maximum gage height, 3.82 ft May 27; maximum daily reverse discharge, 26 ft³/s May 25; minimum gage height, 1.63 ft Mar. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	47	12	39	22	3.4	12	.00	43	85	14	97
2	32	43	32	29	23	3.9	22	.00	23	59	20	84
3	36	33	17	30	20	6.0	42	5.0	28	60	22	110
4	32	18	3.8	29	23	7.6	23	5.0	12	40	25	69
5	37	15	2.7	38	24	6.4	19	5.0	21	34	21	62
6	25	13	1.8	43	20	6.0	.72	.00	17	47	14	64
7	14	13	11	38	22	6.5	.02	5.0	5.2	27	12	61
8	19	10	15	40	19	12	1.4	.00	15	28	15	46
9	37	9.5	22	31	19	9.6	-5.2	-6.7	5.7	28	32	44
10	48	6.7	27	28	17	7.0	17	-3.0	3.8	47	60	37
11	63	6.2	40	35	18	6.2	17	-7.5	2.9	35	56	40
12	38	7.5	16	38	16	5.8	22	-14	3.4	37	102	63
13	35	7.0	2.4	31	15	8.1	27	-15	3.9	31	170	46
14	33	6.3	34	26	14	18	10	-5.8	3.5	43	164	67
15	29	5.8	61	25	19	12	10	-7.5	2.6	57	132	40
16	25	6.5	57	25	22	15	15	-5.7	4.4	36	80	49
17	15	8.4	59	32	19	28	5.0	-6.2	5.1	46	80	43
18	14	8.5	75	35	17	17	5.0	-6.9	7.7	49	86	34
19	18	9.1	91	33	15	8.7	5.0	-8.3	23	53	118	39
20	29	7.8	58	32	14	7.1	5.0	-7.5	25	45	111	39
21	21	6.6	57	33	12	7.1	5.0	-4.4	24	35	91	35
22	16	6.3	53	38	13	8.4	5.0	-5.3	24	25	102	36
23	17	3.5	41	22	10	6.8	5.0	-6.8	28	24	95	36
24	36	5.8	10	24	8.8	7.9	5.0	-12	63	22	129	47
25	73	6.7	10	25	9.3	18	5.0	-26	57	22	119	36
26	79	17	25	30	8.6	39	5.0	-10	116	17	128	34
27	71	16	42	23	7.2	11	5.0	39	214	13	104	33
28	67	19	44	24	6.4	6.1	5.0	54	244	14	102	31
29	64	15	37	22	---	10	5.0	58	186	13	132	44
30	55	7.6	35	21	---	7.7	5.0	63	137	11	129	23
31	56	---	44	21	---	6.3	---	69	---	10	116	---
TOTAL	1151	384.8	1035.7	940	453.3	322.6	302.94	144.40	1348.2	1093	2581	1489
MEAN	37.1	12.8	33.4	30.3	16.2	10.4	10.1	4.66	44.9	35.3	83.3	49.6
MAX	79	47	91	43	24	39	42	69	244	85	170	110
MIN	14	3.5	1.8	21	6.4	3.4	-5.2	-26	2.6	10	12	23
AC-FT	2280	763	2050	1860	899	640	601	286	2670	2170	5120	2950

WTR YR 1990 TOTAL 11245.94 MEAN 30.8 MAX 244 MIN -26 AC-FT 22310

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.90	2.63	2.63	2.16	2.03	1.80	2.22	2.36	2.94	3.01	2.88	3.10
2	2.91	2.60	2.62	2.14	2.03	1.81	2.23	2.32	2.91	3.06	2.95	3.16
3	2.95	2.57	2.60	2.13	2.02	1.81	2.45	2.30	2.87	3.07	2.89	2.95
4	2.93	2.55	2.58	2.11	2.01	1.85	2.63	2.27	2.99	3.04	2.93	3.04
5	2.85	2.52	2.56	2.11	2.01	1.88	2.59	2.25	2.98	3.07	2.94	3.11
6	2.82	2.49	2.53	2.11	1.99	1.88	2.54	2.22	2.97	2.99	2.96	3.15
7	2.82	2.46	2.51	2.10	1.97	1.89	2.50	2.20	2.99	3.04	2.97	3.15
8	2.82	2.44	2.48	2.09	1.96	1.89	2.46	2.19	2.95	3.03	2.96	3.17
9	2.94	2.42	2.46	2.08	1.94	1.89	2.94	2.18	2.96	3.01	3.01	3.15
10	3.03	2.40	2.43	2.07	1.92	1.88	3.02	2.29	2.96	2.96	3.11	3.14
11	3.20	2.36	2.41	2.05	1.92	1.87	2.95	2.43	2.96	2.99	3.10	3.11
12	3.16	2.32	2.38	2.05	1.92	1.86	2.85	2.37	2.97	3.03	3.23	3.07
13	3.12	2.32	2.39	2.03	1.90	1.85	2.83	2.35	2.94	3.05	3.32	3.10
14	3.07	2.30	2.36	2.02	1.88	1.84	2.81	2.31	2.89	3.05	3.23	3.02
15	3.04	2.28	2.34	2.01	1.87	1.83	2.78	2.26	2.87	3.03	3.16	3.05
16	3.01	2.27	2.33	2.01	1.85	1.81	2.82	2.22	2.84	3.06	3.15	3.06
17	3.00	2.25	2.34	2.00	1.84	1.80	2.81	2.18	2.81	3.03	3.08	3.06
18	2.99	2.23	2.31	1.99	1.83	1.82	2.78	2.14	2.77	3.07	3.09	3.07
19	3.00	2.20	2.28	1.98	1.83	1.87	2.74	2.10	2.75	3.05	3.20	3.02
20	2.91	2.19	2.28	1.97	1.84	1.95	2.72	2.06	2.74	2.98	3.14	3.04
21	2.88	2.17	2.28	1.97	1.82	1.95	2.69	2.03	2.71	3.00	3.15	3.05
22	2.89	2.15	2.27	1.98	1.80	1.94	2.65	2.00	2.68	3.00	3.07	3.04
23	2.86	2.13	2.28	2.10	1.79	1.94	2.61	1.97	2.83	2.99	3.06	3.03
24	2.85	2.11	2.26	2.08	1.84	1.92	2.58	2.12	2.97	2.96	3.16	2.98
25	2.83	2.09	2.23	2.06	1.83	1.92	2.55	2.34	2.96	2.95	3.18	3.03
26	2.80	2.38	2.21	2.04	1.85	1.91	2.51	2.43	3.15	2.96	3.15	3.01
27	2.77	2.57	2.21	2.02	1.84	1.92	2.49	3.16	3.37	2.98	3.14	2.99
28	2.73	2.60	2.20	2.02	1.82	1.90	2.46	3.43	3.36	2.94	3.14	3.00
29	2.71	2.64	2.18	2.03	---	1.89	2.43	3.24	3.15	2.91	3.15	3.30
30	2.68	2.65	2.17	2.02	---	1.89	2.39	3.12	3.04	2.88	3.15	3.17
31	2.65	---	2.16	2.02	---	1.99	---	2.98	---	2.89	3.10	---
TOTAL	90.12	71.29	73.27	63.55	53.15	58.25	79.03	73.82	88.28	93.08	95.75	92.32
MEAN	2.91	2.38	2.36	2.05	1.90	1.88	2.63	2.38	2.94	3.00	3.09	3.08
MAX	3.20	2.65	2.63	2.16	2.03	1.99	3.02	3.43	3.37	3.07	3.32	

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254315080331500 NORTHEAST SHARK RIVER SLOUGH NO. 2 NEAR COOPERTOWN, FL

LOCATION.--Lat 25°43'15", long 80°33'15", in SW¼ sec.20, T.54 S., R.38 E., Dade County, Hydrologic Unit 03090202, 2.7 mi south of Coopertown in Northeast Shark River Slough.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1976 to September 1980, October 1982 to current year (gage heights). Published as "Northeast Shark Valley Slough No. 2 near Coopertown" October 1976 to September 1977.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily gage heights.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.55 ft Aug. 20, 1988; minimum, 3.41 ft estimated Apr. 23, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 6.48 ft Sept. 19; minimum, indeterminate, well was dry.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.52	5.81	5.52	---	---	---	---	4.78	6.22	5.76	5.83	6.36
2	5.48	5.81	5.49	---	---	---	---	4.77	6.19	5.78	5.76	6.36
3	5.44	5.83	5.45	---	---	---	---	4.76	6.16	5.95	5.85	6.36
4	5.38	5.83	5.40	---	---	---	---	4.76	6.13	5.93	6.24	6.36
5	5.34	5.82	5.36	---	---	---	---	4.76	6.11	5.94	6.25	6.36
6	5.30	5.82	5.33	---	---	---	---	4.76	6.08	6.05	6.28	6.38
7	5.29	5.80	5.30	---	---	---	---	4.76	6.05	6.02	6.27	6.38
8	5.31	5.80	5.27	---	---	---	---	4.75	6.03	6.00	6.27	6.38
9	5.37	5.79	5.25	---	---	---	---	4.75	6.02	5.99	6.29	6.36
10	5.64	5.78	5.22	---	---	---	---	4.75	5.97	6.00	6.29	6.35
11	5.88	5.79	5.19	---	---	---	---	4.75	5.93	6.01	6.28	6.34
12	5.99	5.77	5.16	---	---	---	---	4.75	5.88	6.00	6.30	6.33
13	5.99	5.75	5.24	---	---	---	---	4.75	5.81	6.01	6.30	6.32
14	5.99	5.74	5.17	---	---	---	---	4.75	5.71	6.03	6.33	6.32
15	6.00	5.72	5.12	---	---	---	---	4.75	5.61	6.04	6.34	6.32
16	6.00	5.70	5.18	---	---	---	---	4.75	5.52	6.02	6.32	6.32
17	6.01	5.65	5.19	---	---	---	---	4.74	5.43	6.00	6.30	6.34
18	6.01	5.62	5.13	---	---	---	---	4.74	5.33	5.99	6.31	6.36
19	6.00	5.58	5.08	---	---	---	---	4.74	5.27	5.98	6.35	6.39
20	5.98	5.54	5.11	---	---	---	---	4.74	5.38	6.02	6.33	6.46
21	5.96	5.50	5.11	---	---	---	---	4.74	5.58	6.00	6.32	6.44
22	5.95	5.44	5.06	---	---	---	---	4.74	5.47	5.99	6.31	6.43
23	5.93	5.39	5.16	---	---	---	---	4.74	5.40	6.01	6.30	6.41
24	5.92	5.34	5.09	---	---	---	---	4.74	5.54	6.01	6.31	6.41
25	5.92	5.31	5.02	---	---	---	---	4.74	5.62	5.99	6.32	6.39
26	5.90	5.57	4.99	---	---	---	---	4.74	5.86	5.99	6.33	6.37
27	5.89	5.58	4.95	---	---	---	---	5.63	5.89	6.01	6.35	6.36
28	5.87	5.56	4.91	---	---	---	---	6.25	5.89	5.99	6.34	6.35
29	5.85	5.58	4.87	---	---	---	4.87	6.23	5.85	5.97	6.36	6.39
30	5.84	5.57	4.83	---	---	---	4.89	6.23	5.81	5.93	6.36	6.40
31	5.82	---	4.81	---	---	---	---	6.22	---	5.88	6.36	---
TOTAL	178.77	169.79	159.96	---	---	---	---	154.06	173.74	185.29	194.15	191.10
MEAN	5.77	5.66	5.16	---	---	---	---	4.97	5.79	5.98	6.26	6.37
MAX	6.01	5.83	5.52	---	---	---	---	6.25	6.22	6.05	6.36	6.46
MIN	5.29	5.31	4.81	---	---	---	---	4.74	5.27	5.76	5.76	6.32

CAL YR 1989 TOTAL 1975.05 MEAN 5.41 MAX 6.38 MIN 4.75

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254130080380500 NORTHEAST SHARK RIVER SLOUGH NO. 1 NEAR COOPERTOWN, FL

LOCATION.--Lat 25°41'30", long 80°38'05" in NW¼ sec.4, T.54 S., R.31 E., Dade County, Hydrologic Unit 03090202, 0.7 mi west of southeast corner of Blue Shanty Canal, 0.8 mi south of east-west section of Shanty Canal, and 4.7 mi southwest of Coopertown.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1976 to September 1980, July 1982 to present year (gage heights). Prior to October 1977, published as "Northeast Shark Valley Slough No. 1 near Coopertown."

REVISED RECORD.--WDR FL-79-2A: 1977.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1988 gage heights published were at datum 0.48 lower. Records have been revised to correct datum in the daily values files of the Geological Survey.

REMARKS.--No estimated daily gage heights.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.14 ft Aug. 20, 1988; minimum, indeterminate well was dry.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.02 ft Aug. 28; minimum, indeterminate well was dry.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.44	6.51	6.57	6.26	5.28	---	---	5.72	6.49	6.47	6.58	6.90
2	6.43	6.54	6.56	6.23	5.25	---	---	5.62	6.51	6.51	6.57	6.88
3	6.41	6.60	6.55	6.20	5.20	---	---	5.53	6.49	6.60	6.61	6.87
4	6.39	6.58	6.54	6.18	5.15	---	---	5.45	6.48	6.60	6.74	6.86
5	6.38	6.57	6.53	6.19	5.12	---	---	5.38	6.46	6.59	6.77	6.85
6	6.36	6.57	6.52	6.15	5.08	---	---	5.31	6.44	6.59	6.76	6.85
7	6.35	6.57	6.52	6.12	5.06	---	---	5.24	6.43	6.59	6.78	6.85
8	6.34	6.56	6.52	6.08	5.05	---	---	5.17	6.42	6.58	6.83	6.84
9	6.33	6.57	6.51	6.05	5.04	---	5.07	5.11	6.41	6.60	6.91	6.82
10	6.46	6.57	6.51	6.01	5.04	---	5.25	5.06	6.38	6.61	6.88	6.81
11	6.59	6.57	6.49	5.98	---	---	5.18	5.02	6.39	6.61	6.87	6.80
12	6.64	6.57	6.49	5.94	---	---	5.12	5.00	6.39	6.61	6.89	6.79
13	6.60	6.57	6.51	5.90	---	---	5.06	4.99	6.36	6.64	6.89	6.78
14	6.59	6.57	6.50	5.86	---	---	5.03	4.99	6.32	6.66	6.89	6.77
15	6.59	6.57	6.49	5.83	---	---	5.02	4.98	6.28	6.66	6.87	6.75
16	6.57	6.57	6.50	5.80	---	---	4.99	4.97	6.25	6.64	6.85	6.74
17	6.56	6.56	6.52	5.76	---	---	5.12	4.95	6.20	6.62	6.83	6.74
18	6.55	6.55	6.52	5.72	---	---	5.45	4.95	6.16	6.66	6.81	6.78
19	6.54	6.55	6.50	5.69	---	---	5.35	4.94	6.17	6.65	6.82	6.80
20	6.53	6.55	6.49	5.65	---	---	5.28	4.94	6.23	6.65	6.82	6.83
21	6.51	6.55	6.49	5.62	---	---	5.21	4.93	6.38	6.63	6.82	6.83
22	6.51	6.56	6.47	5.58	---	---	5.14	4.93	6.42	6.66	6.81	6.83
23	6.50	6.56	6.49	5.55	---	---	5.07	4.93	6.40	6.72	6.84	6.82
24	6.51	6.55	6.47	5.51	---	---	5.22	4.92	6.46	6.69	6.85	6.83
25	6.51	6.55	6.44	5.46	---	---	5.52	4.95	6.43	6.68	6.86	6.81
26	6.51	6.56	6.42	5.42	---	---	5.37	5.06	6.46	6.66	6.86	6.79
27	6.51	6.57	6.40	5.37	---	---	5.23	6.08	6.51	6.65	6.87	6.78
28	6.51	6.56	6.37	5.35	---	---	5.14	6.54	6.54	6.64	6.92	6.77
29	6.50	6.57	6.34	5.32	---	---	5.46	6.49	6.51	6.64	6.97	6.88
30	6.50	6.57	6.32	5.28	---	---	5.85	6.47	6.49	6.61	6.94	6.90
31	6.51	---	6.29	5.25	---	---	---	6.47	---	6.60	6.92	---
TOTAL	201.23	196.87	200.84	179.31	---	---	---	165.09	191.86	205.32	211.63	204.55
MEAN	6.49	6.56	6.48	5.78	---	---	---	5.33	6.40	6.62	6.83	6.82
MAX	6.64	6.60	6.57	6.26	---	---	---	6.54	6.54	6.72	6.97	6.90
MIN	6.33	6.51	6.29	5.25	---	---	---	4.92	6.16	6.47	6.57	6.74

CAL YR 1989 TOTAL 2274.03 MEAN 6.23 MAX 6.98 MIN 5.00

EVERGLADES AND SOUTHEASTERN COASTAL AREA

253828080391100 NORTHEAST SHARK RIVER SLOUGH NO. 4, NORTH OF GROSSMAN, FL

LOCATION.--Lat 25°38'28", long 80°39'11", in NW¼ sec.4, T.54 S., R. Government Lot 6 E., Dade County, Hydrologic Unit 03090202, approximately 2.0 mi northeast of the extreme southern end of the L-67 extension levee and 11.8 mi west of Krome Avenue.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1985 to current year (gage heights).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 1985 gage heights were published at datum 0.42 lower. Records have been revised to correct datum in the daily values files of the Geological Survey.

REMARKS.--No estimated daily gage heights.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.87 ft Aug. 20, 1988; minimum, indeterminate, well runs dry.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.63 ft Oct. 7; minimum, indeterminate, well was dry.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

[illegible]

EVERGLADES AND SOUTHEASTERN COASTAL AREA

253753080393600 NORTHEAST SHARK RIVER SLOUGH NO. 5, SOUTH OF GROSSMAN, FL

LOCATION.--Lat 25°37'53", long 80°39'36", in NW¼ sec.4, T.54 S., R. Government Lot 6 E., Dade County, Hydrologic Unit 03090202, approximately 0.3 mi northeast of the extreme southern end of the L-67 extension levee and 11.8 mi west of Krome Avenue.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1985 to current year (gage heights).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1988 gage heights were published at datum 0.48 lower. Records have been revised to correct datum in the daily values files of the Geological Survey.

REMARKS.--No estimated daily gage heights.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.95 ft Aug. 27, 1988; minimum, indeterminate many days during 1989, 1990 water years when well went dry.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 6.75 ft Aug. 31, Sept. 1; minimum, indeterminate, when well was dry Dec. 3 - June 25.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.29	6.20	6.23	---	---	---	---	---	---	6.21	6.35	6.75
2	6.31	6.35	6.21	---	---	---	---	---	---	6.23	6.33	6.74
3	6.36	6.55	---	---	---	---	---	---	---	6.28	6.36	6.73
4	6.33	6.50	---	---	---	---	---	---	---	6.36	6.52	6.72
5	6.31	6.48	---	---	---	---	---	---	---	6.43	6.55	6.70
6	6.29	6.46	---	---	---	---	---	---	---	6.43	6.57	6.71
7	6.27	6.43	---	---	---	---	---	---	---	6.44	6.59	6.69
8	6.27	6.42	---	---	---	---	---	---	---	6.42	6.61	6.69
9	6.26	6.40	---	---	---	---	---	---	---	6.40	6.71	6.67
10	6.28	6.38	---	---	---	---	---	---	---	6.40	6.69	6.66
11	6.36	6.36	---	---	---	---	---	---	---	6.43	6.68	6.64
12	6.40	6.35	---	---	---	---	---	---	---	6.42	6.71	6.63
13	6.38	6.33	---	---	---	---	---	---	---	6.43	6.70	6.62
14	6.36	6.32	---	---	---	---	---	---	---	6.45	6.69	6.60
15	6.34	6.31	---	---	---	---	---	---	---	6.45	6.67	6.58
16	6.33	6.30	---	---	---	---	---	---	---	6.43	6.65	6.57
17	6.31	6.28	---	---	---	---	---	---	---	6.42	6.64	6.58
18	6.29	6.27	---	---	---	---	---	---	---	6.43	6.65	6.59
19	6.28	6.25	---	---	---	---	---	---	---	6.42	6.69	6.60
20	6.25	6.24	---	---	---	---	---	---	---	6.41	6.67	6.62
21	6.22	6.24	---	---	---	---	---	---	---	6.39	6.65	6.64
22	6.22	6.22	---	---	---	---	---	---	---	6.38	6.65	6.63
23	6.21	6.22	---	---	---	---	---	---	---	6.37	6.66	6.62
24	6.21	6.21	---	---	---	---	---	---	---	6.36	6.67	6.62
25	6.21	6.21	---	---	---	---	---	---	---	6.34	6.66	6.61
26	6.21	6.24	---	---	---	---	---	---	6.24	6.34	6.67	6.59
27	6.21	6.27	---	---	---	---	---	---	6.24	6.42	6.69	6.58
28	6.21	6.26	---	---	---	---	---	---	6.24	6.40	6.68	6.58
29	6.20	6.25	---	---	---	---	---	---	6.22	6.38	6.70	6.70
30	6.20	6.25	---	---	---	---	---	---	6.21	6.37	6.71	6.72
31	6.20	---	---	---	---	---	---	---	---	6.37	6.73	---
TOTAL	194.57	189.55	---	---	---	---	---	---	---	198.01	205.50	199.38
MEAN	6.28	6.32	---	---	---	---	---	---	---	6.39	6.63	6.65
MAX	6.40	6.55	---	---	---	---	---	---	---	6.45	6.73	6.75
MIN	6.20	6.20	---	---	---	---	---	---	---	6.21	6.33	6.57

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.37	2.22	2.26	2.17	2.06	1.83	2.24	2.33	2.27	2.32	2.07	1.99
2	2.28	2.30	2.27	2.16	2.05	1.87	2.25	2.30	2.30	2.23	2.20	2.07
3	2.35	2.34	2.25	2.15	2.05	1.91	2.29	2.26	2.29	1.95	2.32	2.28
4	2.39	2.35	2.22	2.13	2.04	1.93	2.34	2.22	2.35	2.28	2.30	2.21
5	2.39	2.35	2.20	2.14	2.03	1.95	2.42	2.18	2.28	2.24	2.29	2.27
6	2.37	2.35	2.18	2.13	2.00	1.95	2.41	2.15	2.23	2.31	2.24	2.25
7	2.35	2.34	2.17	2.12	1.98	1.96	2.39	2.14	2.36	2.24	2.28	2.22
8	2.26	2.33	2.16	2.11	1.96	1.95	2.38	2.14	2.34	2.33	2.30	2.26
9	2.27	2.23	2.16	2.10	1.95	1.95	2.09	2.11	2.30	2.30	2.29	2.26
10	2.22	2.27	2.14	2.08	1.94	1.93	1.86	2.12	2.35	2.29	2.23	2.24
11	2.29	2.34	2.14	2.06	1.93	1.92	1.69	2.20	2.28	2.31	2.18	2.30
12	2.28	2.34	2.19	2.05	1.93	1.91	1.93	2.18	2.28	2.35	2.40	2.27
13	2.31	2.37	2.24	2.04	1.90	1.89	2.39	2.15	2.38	2.32	2.18	2.26
14	2.32	2.37	2.25	2.02	1.88	1.87	2.36	2.10	2.32	2.23	2.10	2.30
15	2.18	2.36	2.23	2.00	1.86	1.85	2.29	2.06	2.35	2.24	2.16	2.31
16	2.41	2.35	2.24	1.99	1.84	1.83	2.39	2.02	2.41	2.30	2.17	2.29
17	2.04	2.32	2.27	1.97	1.83	1.80	2.42	1.98	2.42	2.21	2.13	2.28
18	2.28	2.30	2.26	1.96	1.81	1.84	2.31	1.94	2.41	2.29	2.18	2.25
19	2.16	2.27	2.25	1.95	1.81	1.92	2.40	1.89	2.40	2.32	2.19	2.02
20	2.11	2.25	2.27	1.94	1.81	2.21	2.44	1.85	2.40	2.32	2.19	2.28
21	2.30	2.23	2.32	1.92	1.80	2.21	2.44	1.81	2.39	1.85	2.23	2.25
22	2.38	2.20	2.32	1.92	1.77	2.20	2.43	1.78	2.38	2.15	2.24	2.13
23	2.35	2.18	2.33	2.17	1.78	2.20	2.41	1.76	2.38	2.32	2.17	2.25
24	2.34	2.16	2.30	2.17	1.81	2.18	2.39	1.85	2.37	2.00	2.25	2.23
25	2.43	2.16	2.26	2.15	1.79	2.17	2.37	2.02	2.13	1.95	2.25	2.23
26	2.28	2.20	2.23	2.14	1.78	2.15	2.36	2.11	2.30	2.33	2.22	2.25
27	2.26	1.88	2.22	2.12	1.77	2.15	2.31	2.24	2.16	2.37	2.22	2.27
28	2.34	2.22	2.21	2.11	1.78	2.13	2.28	2.12	2.25	2.39	2.23	2.29
29	2.40	2.23	2.20	2.09	---	2.11	2.32	2.23	2.24	2.33	2.23	2.20
30	2.25	2.26	2.18	2.08	---	2.09	2.35	2.24	2.29	2.30	2.23	2.25
31	2.13	---	2.17	2.08	---	2.10	---	2.11	---	2.15	2.24	---
TOTAL	71.09	68.07	69.09	64.22	52.94	61.96	68.95	64.59	69.61	69.52	68.91	66.96
MEAN	2.29	2.27	2.23	2.07	1.89	2.00	2.30	2.08	2.32	2.24	2.22	2.23
MAX	2.43	2.37	2.33	2.17	2.06	2.21	2.44	2.33	2.42	2.39	2.40	

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02290769 CANAL 111 ABOVE S-18-C, NEAR FLORIDA CITY, FL

LOCATION.--Lat 25°19'49", long 80°31'31", in NW¼ sec.3, T.59 S., R.38 E., Dade County, Hydrologic Unit 03090202, at control structure 18-C, and 8.5 mi south of Florida City.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORD.--WDR FL-78-2A: 1974-77.

GAGE.--Digital water-stage recorders, electromagnetic velocity meter recorder and dual graphic water-stage and gate opening recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--No estimated daily stage and discharge. Records fair. Flow regulated by S-18-C. Discharge computed from relation between head, and gate openings at S-18-C.

COOPERATION.--Gate-opening recorder record and record of slot operations provided by South Florida Water Management District.

AVERAGE DISCHARGE.--22 years, 146 ft³/s, 105,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,940 ft³/s Aug. 16, 1988; maximum gage height, 3.62 ft July 24, 1985; no flow for many days each year; maximum daily reverse flow, 194 ft³/s Jan. 2, 1988; minimum gage height, -1.53 ft May 14, 1971 (estimated).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 840 ft³/s Sept. 1; maximum gage height, 2.71 ft Aug. 30; no flow for many days; maximum daily reverse flow, 7.3 ft³/s Apr. 25; minimum gage height, 0.30 ft May 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	78	57	37	11	.00	.00	.00	.00	.00	.00	840
2	.00	80	44	34	24	.00	.00	.00	.00	.00	.00	704
3	.00	66	46	32	21	.00	.00	.00	.00	.00	122	680
4	61	68	44	32	21	.00	.00	.00	.00	.00	568	612
5	106	54	42	33	23	.00	.00	.00	.00	.00	532	514
6	99	52	40	34	20	.00	.00	.00	.00	194	332	478
7	98	42	38	34	20	.00	.00	.00	.00	386	224	330
8	95	30	38	36	20	.00	.00	.00	.00	.00	.00	310
9	95	34	40	36	18	10	.00	.00	.00	.00	.00	170
10	93	30	40	38	18	15	.00	.00	.00	.00	.00	146
11	99	54	38	37	19	14	.00	.00	.00	.00	406	144
12	109	28	36	34	19	14	.00	.00	.00	.00	582	.00
13	106	.00	40	35	17	13	.00	.00	.00	306	626	.00
14	104	13	38	34	17	12	.00	.00	.00	120	616	.00
15	102	19	36	33	16	11	.00	.00	.00	.00	602	.00
16	101	50	38	31	17	10	8.2	.00	.00	.00	558	.00
17	100	24	42	29	18	10	16	.00	.00	.00	372	.00
18	100	26	40	30	18	17	14	.00	.00	.00	346	.00
19	98	22	38	31	19	17	11	.00	.00	.00	536	.00
20	100	24	38	31	20	18	8.7	.00	23	.00	560	.00
21	94	20	38	33	10	17	4.8	.00	41	.00	538	.00
22	89	32	38	33	.00	16	2.1	.00	39	.00	550	98
23	103	8.8	42	33	.00	11	-2.2	.00	41	.00	576	256
24	105	.00	40	32	.00	.00	-6.0	.00	52	.00	564	218
25	102	.00	36	31	.00	.00	-7.3	.00	45	17	568	80
26	98	.00	40	35	.00	.00	-6.5	.00	.00	38	572	.00
27	94	40	40	30	.00	.00	-6.3	353	.00	95	516	.00
28	89	30	40	31	.00	.00	-6.9	193	.00	.00	452	.00
29	84	80	40	10	---	.00	-2.2	113	.00	.00	408	510
30	80	128	38	.00	---	.00	14	211	.00	.00	494	598
31	89	---	38	.00	---	.00	---	.00	---	.00	744	---
TOTAL	2693.00	1132.80	1243	939.00	386.00	205.00	41.40	870.00	241.00	1156.00	12964.00	6688.00
MEAN	86.9	37.8	40.1	30.3	13.8	6.61	1.38	28.1	8.03	37.3	418	223
MAX	109	128	57	38	24	18	16	353	52	386	744	840
MIN	.00	.00	36	.00	.00	.00	-7.3	.00	.00	.00	.00	.00
AC-FT	5340	2250	2470	1860	766	407	82	1730	478	2290	25710	13270

CAL YR 1989 TOTAL 29110.50 MEAN 79.8 MAX 876 MIN .00 AC-FT 57740
WTR YR 1990 TOTAL 28559.20 MEAN 78.2 MAX 840 MIN -7.3 AC-FT 56650

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.35	1.77	1.83	1.57	1.41	1.23	1.15	.97	2.33	2.32	2.26	2.63
2	2.35	1.76	1.84	1.56	1.39	1.35	1.58	.95	2.30	2.31	2.26	2.55
3	2.37	1.75	1.83	1.55	1.37	1.36	1.51	.90	2.26	2.30	2.32	2.55
4	2.30	1.75	1.80	1.54	1.34	1.42	1.46	.86	2.28	2.29	2.31	2.47
5	2.20	1.74	1.77	1.54	1.36	1.46	1.37	.81	2.38	2.27	2.42	2.49
6	2.15	1.73	1.75	1.54	1.32	1.46	1.28	.76	2.35	2.28	2.11	2.46
7	2.14	1.71	1.73	1.53	1.29	1.43	1.21	.76	2.31	2.20	2.25	2.35
8	2.14	1.70	1.72	1.53	1.27	1.40	1.19	.82	2.28	2.26	2.31	2.33
9	2.16	1.69	1.72	1.52	1.24	1.34	1.34	.77	2.26	2.27	2.35	2.25
10	2.18	1.70	1.71	1.51	1.22	1.28	1.55	.73	2.23	2.29	2.41	2.26
11	2.19	1.72	1.69	1.49	1.23	1.23	1.54	.75	2.21	2.34	2.35	2.24
12	2.17	1.70	1.67	1.46	1.22	1.20	1.52	.69	2.17	2.35	2.33	2.39
13	2.14	1.68	1.69	1.46	1.19	1.16	1.46	.65	2.13	2.34	2.40	2.43
14	2.12	1.67	1.67	1.44	1.16	1.12	1.41	.63	2.08	2.25	2.40	2.43
15	2.10	1.67	1.65	1.43	1.13	1.08	1.36	.60	2.03	2.37	2.40	2.44
16	2.09	1.69	1.68	1.41	1.12	1.05	1.31	.55	1.98	2.35	2.34	2.49
17	2.08	1.67	1.72	1.40	1.10	1.03	1.25	.50	1.93	2.33	2.32	2.49
18	2.05	1.65	1.71	1.39	1.07	1.24	1.21	.46	1.88	2.34	2.28	2.50
19	2.03	1.64	1.69	1.39	1.08	1.29	1.16	.42	1.82	2.33	2.38	2.48
20	2.02	1.62	1.68	1.39	1.13	1.29	1.14	.37	1.75	2.33	2.39	2.49
21	1.99	1.61	1.67	1.37	1.12	1.25	1.09	.34	1.67	2.30	2.38	2.52
22	1.96	1.59	1.66	1.37	1.13	1.20	1.04	.32	1.62	2.31	2.40	2.39
23	1.93	1.58	1.70	1.39	1.12	1.17	1.00	.33	1.71	2.41	2.42	2.11
24	1.90	1.57	1.67	1.39	1.24	1.15	.95	.75	1.99	2.39	2.44	2.12
25	1.89	1.57	1.59	1.37	1.23	1.11	.93	1.39	1.98	2.36	2.44	2.25
26	1.87	1.62	1.60	1.38	1.21	1.07	.88	1.68	2.18	2.35	2.45	2.37
27	1.85	1.68	1.60	1.35	1.17	1.05	.83	2.37	2.36	2.33	2.43	2.37
28	1.84	1.67	1.60	1.36	1.15	1.01	.81	2.34	2.38	2.32	2.42	2.38
29	1.82	1.73	1.59	1.37	---	.98	.86	2.49	2.36	2.31	2.43	2.39
30	1.80	1.80	1.58	1.40	---	.96	.97	2.19	2.34	2.29	2.47	2.53
31	1.78	---	1.57	1.40	---	.96	---	2.34	---	2.28	2.65	---
TOTAL	63.96	50.43	52.38	44.80	34.01	37.33	36.36	30.49	63.55	71.77	73.52	72.15
MEAN	2.06	1.68	1.69	1.45	1.21	1.20	1.21	.98	2.12	2.32	2.37	2.40
MAX	2.37	1.80	1.84	1.57	1.41	1.46	1.58	2.49	2.38	2.41	2.65	2.63
MIN	1.78	1.57	1.57	1.35	1.07	.96	.81	.32	1.62	2.20	2.11	2.11
CAL YR 1989	TOTAL 682.39		MEAN 1.87	MAX 2.55	MIN .73							
WTR YR 1990	TOTAL 630.75		MEAN 1.73	MAX 2.65	MIN .32							

EVERGLADES AND SOUTHEASTERN COASTAL AREA

252523080352500 LEVEE 31 W CANAL AT S-332, NEAR FLORIDA CITY, FL

LOCATION.--Lat 25°25'23", long 80°35'25", in SE¼ sec.35, T.57 S., R.37 E., Dade County, Hydrologic Unit 03090202, at control structure 332.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Digital water-stage recorder. Graphic dual stage recorder (South Florida Water Management). Datum of gage is National Geodetic Vertical Datum of 1929. Downstream stage recorder discontinued May 9, 1988.

REMARKS.--No estimated daily discharges and stage. Records fair. Flow regulated by structure 332. Discharge computed from relation between pump RPM and discharge.

COOPERATION.--Graphic upstream and downstream stage record, pump operation logs and culvert operation provided by South Florida Water Management District.

AVERAGE DISCHARGE.--7 years, 49.9 ft³/s, 36,150 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 166 ft³/s, Nov. 10, 11, 14, 17, 19, 20, 24, 26, 27, 1984, June 27 - July 2, 1989 and May 29-31, June 27 - July 1, Aug. 1 - Sept. 10, Sept. 30, 1990; maximum gage height, 5.78 ft Aug. 16, 1988; no flow for many days each year; minimum gage height, 1.52 ft May 22, 23, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 166 ft³/s, May 29-31, June 27 - July 1, Aug. 1 - Sept. 10, Sept. 30, 1990; maximum gage height, 4.70 ft July 2; no flow May 19-24; minimum gage height, 1.52 ft May 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	99	42	14	11	6.5	4.6	4.6	135	166	166	166
2	112	75	14	14	9.1	4.6	4.6	4.6	104	141	166	166
3	127	75	14	14	9.1	4.6	4.6	4.6	104	127	166	166
4	127	75	14	14	9.1	4.6	4.6	7.4	104	127	166	166
5	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	166
6	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	166
7	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	166
8	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	166
9	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	166
10	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	166
11	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	141
12	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	116
13	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	116
14	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	108
15	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	102
16	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	102
17	127	75	14	14	9.1	4.6	4.6	9.1	104	127	166	102
18	127	75	14	14	9.1	4.6	4.6	4.2	104	127	166	102
19	127	75	14	14	9.1	4.6	4.6	.00	104	127	166	102
20	127	75	14	14	9.1	4.6	4.6	.00	104	127	166	102
21	127	75	14	14	9.1	4.6	4.6	.00	104	127	166	102
22	127	75	14	14	9.1	4.6	4.6	.00	104	127	166	102
23	127	75	14	14	9.1	4.6	4.6	.00	104	127	166	102
24	127	75	14	14	9.1	4.6	4.6	.00	104	127	166	102
25	127	75	14	14	9.1	4.6	4.6	5.3	104	127	166	102
26	127	75	14	14	9.1	4.6	4.6	9.1	145	127	166	102
27	127	75	14	14	9.1	4.6	4.6	9.1	166	150	166	102
28	127	75	14	14	9.1	4.6	4.6	74	166	166	166	102
29	127	75	14	14	---	4.6	4.6	166	166	166	166	124
30	127	75	14	14	---	4.6	4.6	166	166	166	166	166
31	127	---	14	14	---	4.6	---	166	---	165	166	---
TOTAL	3890	2274	462	434	256.7	144.5	138.0	739.20	3440	4168	5146	3859
MEAN	125	75.8	14.9	14.0	9.17	4.66	4.60	23.8	115	134	166	129
MAX	127	99	42	14	11	6.5	4.6	166	166	166	166	166
MIN	95	75	14	14	9.1	4.6	4.6	.00	104	127	166	102
AC-FT	7720	4510	916	861	509	287	274	1470	6820	8270	10210	7650

CAL YR 1989 TOTAL 18996.90 MEAN 52.0 MAX 166 MIN .00 AC-FT 37680
WTR YR 1990 TOTAL 24951.40 MEAN 68.4 MAX 166 MIN .00 AC-FT 49490

EVERGLADES AND SOUTHEASTERN COASTAL AREA

252523080352500 LEVEE 31 W CANAL AT S-332, NEAR FLORIDA CITY, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.97	3.63	3.62	2.95	3.19	3.14	2.70	2.61	3.85	4.12	3.96	4.27
2	3.99	3.69	3.61	2.95	3.20	3.19	2.87	2.55	3.94	4.26	3.88	4.28
3	4.09	3.83	3.59	2.99	3.20	3.19	2.85	2.48	4.06	4.51	4.23	4.23
4	4.01	3.77	3.52	3.05	3.18	3.21	2.83	2.41	4.10	4.32	4.43	4.26
5	3.94	3.72	3.44	3.09	3.20	3.24	2.78	2.32	4.34	4.20	4.28	4.18
6	3.87	3.68	3.36	3.10	3.12	3.25	2.70	2.24	4.28	4.10	4.13	4.04
7	3.92	3.63	3.31	3.09	3.05	3.25	2.62	2.21	4.21	4.24	4.11	3.95
8	3.97	3.51	3.24	3.09	3.05	3.26	2.69	2.21	4.16	4.25	4.08	4.04
9	3.97	3.40	3.22	3.11	3.03	3.23	3.04	2.13	4.11	4.14	4.00	4.11
10	4.10	3.54	3.20	3.11	2.99	3.18	3.06	2.06	4.07	4.01	4.11	4.07
11	4.41	3.51	3.13	3.07	2.97	3.14	2.98	2.06	4.00	4.10	4.03	4.00
12	4.39	3.47	3.04	3.04	2.99	3.11	2.97	2.02	3.93	4.15	4.07	3.99
13	4.36	3.39	3.06	3.02	2.97	3.09	2.91	1.97	3.82	4.19	4.05	3.97
14	4.29	3.33	3.15	2.99	2.98	3.05	2.84	1.94	3.72	4.32	3.95	3.95
15	4.25	3.30	3.16	2.97	2.98	3.01	2.76	1.89	3.63	4.28	4.05	3.99
16	4.21	3.26	3.21	2.97	2.96	2.97	2.72	1.85	3.54	4.13	3.89	4.13
17	4.15	3.19	3.26	2.97	2.95	2.92	2.64	1.79	3.46	3.96	3.85	4.06
18	4.13	3.16	3.23	2.96	2.95	2.98	2.58	1.74	3.38	4.25	3.98	4.01
19	4.24	3.14	3.21	3.03	2.95	3.11	2.53	1.70	3.31	3.98	4.44	3.87
20	4.25	3.07	3.15	3.08	2.97	3.52	2.49	1.65	3.27	3.88	4.40	3.92
21	4.15	3.00	3.08	3.09	2.97	3.34	2.44	1.61	3.24	3.81	4.16	3.99
22	4.09	2.94	3.07	3.10	2.95	3.20	2.39	1.56	3.16	3.86	4.07	3.91
23	4.04	2.92	3.11	3.09	2.95	3.09	2.33	1.54	3.35	4.22	3.97	3.98
24	3.98	2.94	3.06	3.12	3.14	3.00	2.28	1.76	3.76	4.16	4.02	3.92
25	3.94	2.96	2.91	3.13	3.14	2.92	2.26	2.22	3.76	4.28	4.33	3.86
26	3.89	3.23	2.93	3.16	3.15	2.83	2.24	2.51	4.29	4.29	4.42	3.80
27	3.85	3.65	2.99	3.13	3.13	2.74	2.20	3.73	4.52	4.13	4.18	3.74
28	3.79	3.67	3.03	3.13	3.10	2.67	2.14	4.48	4.45	4.06	4.14	3.75
29	3.73	3.65	3.04	3.12	---	2.58	2.37	4.23	4.27	3.98	4.32	4.33
30	3.69	3.59	3.04	3.15	---	2.51	2.72	4.13	4.20	3.90	4.40	3.84
31	3.63	---	3.00	3.17	---	2.50	---	3.88	---	3.98	4.47	---
TOTAL	125.29	101.77	98.97	95.02	85.41	94.42	78.93	73.48	116.18	128.06	128.40	120.44
MEAN	4.04	3.39	3.19	3.07	3.05	3.05	2.63	2.37	3.87	4.13	4.14	4.01
MAX	4.41	3.83	3.62	3.17	3.20	3.52	3.06	4.48	4.52	4.51	4.47	4.33
MIN	3.63	2.92	2.91	2.95	2.95	2.50	2.14	1.54	3.16	3.81	3.85	3.74
CAL YR 1989	TOTAL 1253.17		MEAN 3.43	MAX 4.70	MIN 2.13							
WTR YR 1990	TOTAL 1246.37		MEAN 3.41	MAX 4.52	MIN 1.54							

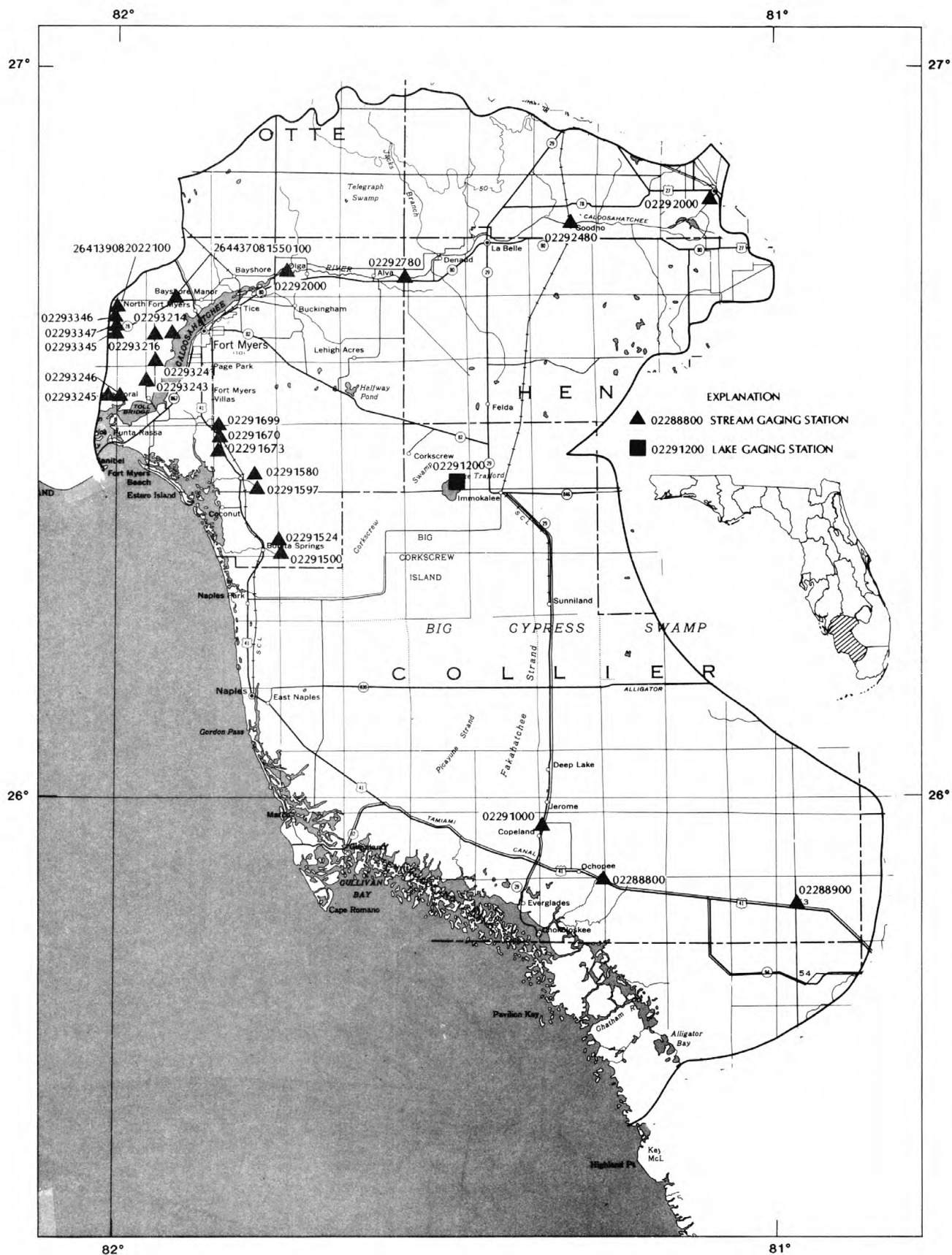


FIGURE 9. Location of gaging stations in the Big Cypress Swamp and southwestern coastal area; the Caloosahatchee River; the Lake Trafford; Charlotte Harbor and the Coastal area.

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291000 BARRON RIVER CANAL NEAR EVERGLADES, FL

LOCATION.--Lat 25°57'28" , long 81°21'19", in NW¼ sec.7, T.52 S., R.30 E., Collier County, Hydrologic Unit 03090204, on right bank 40 ft upstream from control structure, 0.7 mi north of Copeland, 7 mi north of town of Everglades, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July to December 1951 (discharge measurements only), January 1952 to current year. Records prior to January 1952 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (State Department of Transportation bench mark). Prior to Jan. 24, 1952, nonrecording gage.

REMARKS.--No estimated daily stage and discharge. Records fair. Flow regulated by operation of control structure at, above, and below station, and is occasionally affected by tide. Overbank flow not included in discharge figures.

AVERAGE DISCHARGE.--37 years (water years 1952-87, 90), 96.7 ft³/s, 70,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 292 ft³/s Sept. 25, 1962; maximum gage height, 6.57 ft Sept. 4, 5, 1983; no flow many days each year; minimum gage height, 0.21 ft May 18, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 1947 reached a stage of about 7 ft, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 143 ft³/s Aug. 30, gage height, 6.18 ft; no flow for many days; minimum gage height, 1.67 ft May 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	7.5	11	3.3	.74	.83	.00	.00	4.8	1.3	111
2	13	11	7.7	11	2.8	.92	.37	.00	.00	3.5	1.8	90
3	13	11	7.7	10	2.6	2.3	.36	.00	.00	4.2	9.9	73
4	12	11	7.5	10	2.0	3.6	.33	.00	.00	4.2	21	60
5	12	11	7.5	10	1.9	2.6	.16	.00	.00	2.6	22	59
6	12	10	7.5	10	1.3	1.9	.04	.00	.96	.77	22	63
7	12	9.8	7.7	9.9	1.1	.97	.03	.00	6.2	.98	22	51
8	12	9.5	8.1	9.6	.72	.72	.19	.00	8.0	2.3	22	45
9	12	9.0	9.8	9.2	.53	.77	.00	.00	6.0	.60	21	40
10	13	9.1	9.6	8.8	.42	.92	.00	.00	3.9	2.1	21	36
11	15	8.9	9.6	8.4	1.5	.96	.00	.00	3.4	7.6	22	37
12	15	8.6	9.8	8.0	2.0	.99	.00	.00	2.6	4.0	22	38
13	17	8.4	10	7.2	1.2	.99	.00	.00	1.8	3.7	22	34
14	16	7.9	10	6.6	1.2	.80	.00	.00	1.0	1.5	23	33
15	15	6.9	10	6.2	1.9	.60	.00	.00	.61	2.2	23	43
16	15	7.0	11	5.7	2.4	.36	.00	.00	.27	1.4	24	46
17	15	6.0	11	5.3	2.1	.10	.00	.00	.21	1.6	25	45
18	14	5.3	11	4.7	2.0	1.3	.00	.00	.68	.69	33	44
19	14	4.7	11	4.2	2.3	.66	.00	.00	2.2	.78	37	42
20	14	4.4	11	3.8	1.9	.41	.00	.00	1.8	4.5	34	39
21	14	3.8	11	3.6	1.5	.13	.00	.00	1.2	6.0	30	38
22	14	3.1	11	3.6	2.0	.00	.00	.00	1.0	4.3	27	44
23	13	3.0	12	3.4	2.7	.00	.00	.00	.65	2.7	26	41
24	13	2.8	12	3.1	3.6	.00	.00	.00	.24	2.2	29	38
25	13	2.4	12	2.7	2.4	.00	.00	.00	.02	5.1	37	35
26	13	2.2	11	2.2	1.4	.00	.00	.00	1.0	4.7	36	32
27	13	1.8	11	1.4	.85	.00	.00	.00	7.1	4.0	46	29
28	12	1.6	11	1.4	.70	.00	.00	.00	8.1	3.1	71	31
29	12	5.6	11	1.6	---	.00	.00	.00	5.9	2.3	117	31
30	12	7.8	11	1.5	---	.00	.00	.00	4.2	1.7	123	31
31	12	---	11	4.0	---	.05	---	.00	---	1.3	130	---
TOTAL	415	204.6	309.0	188.1	50.32	22.79	2.31	0.00	69.04	91.42	1101.0	1379
MEAN	13.4	6.82	9.97	6.07	1.80	.74	.077	.000	2.30	2.95	35.5	46.0
MAX	17	11	12	11	3.6	3.6	.83	.00	8.1	7.6	130	111
MIN	12	1.6	7.5	1.4	.42	.00	.00	.00	.00	.60	1.3	29
AC-FT	823	406	613	373	100	45	4.6	.00	137	181	2180	2740

CAL YR 1989 TOTAL 1123.86 MEAN 3.08 MAX 17 MIN .00 AC-FT 2230
WTR YR 1990 TOTAL 3832.58 MEAN 10.5 MAX 130 MIN .00 AC-FT 7600

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291000 BARRON RIVER CANAL NEAR EVERGLADES, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.44	5.29	5.07	5.23	4.66	3.95	3.01	2.06	2.61	3.06	3.76	5.96
2	5.43	5.27	5.07	5.21	4.61	3.91	2.96	2.02	2.59	3.03	3.69	5.81
3	5.41	5.26	5.07	5.20	4.58	3.96	2.93	2.00	2.68	3.09	3.83	5.69
4	5.39	5.24	5.07	5.20	4.53	4.17	2.90	1.97	2.68	3.12	4.43	5.60
5	5.38	5.23	5.07	5.20	4.50	4.09	2.86	1.93	2.62	3.07	4.86	5.58
6	5.37	5.22	5.07	5.19	4.45	4.00	2.82	1.90	2.69	3.01	4.97	5.62
7	5.36	5.20	5.07	5.18	4.42	3.90	2.79	1.88	3.18	3.05	4.95	5.52
8	5.36	5.17	5.09	5.17	4.38	3.84	2.77	1.85	3.39	3.15	4.82	5.47
9	5.35	5.15	5.18	5.15	4.35	3.79	2.74	1.82	3.89	3.09	4.70	5.43
10	5.43	5.15	5.16	5.13	4.32	3.75	2.71	1.81	3.81	3.21	4.74	5.39
11	5.49	5.14	5.17	5.11	4.40	3.70	2.67	1.83	3.72	3.63	4.90	5.40
12	5.48	5.12	5.18	5.09	4.48	3.65	2.64	1.77	3.61	3.65	4.81	5.41
13	5.60	5.11	5.21	5.05	4.37	3.60	2.60	1.75	3.50	4.03	4.88	5.37
14	5.54	5.08	5.20	5.02	4.30	3.56	2.57	1.76	3.39	3.96	5.21	5.36
15	5.51	5.04	5.20	5.00	4.25	3.52	2.53	1.89	3.30	3.97	5.24	5.46
16	5.48	5.04	5.22	4.98	4.22	3.47	2.51	1.88	3.22	3.90	5.28	5.48
17	5.47	4.99	5.23	4.96	4.18	3.42	2.47	1.83	3.14	3.88	5.29	5.47
18	5.46	4.96	5.22	4.93	4.15	3.46	2.43	1.78	3.10	3.80	5.36	5.46
19	5.46	4.93	5.22	4.90	4.15	3.40	2.40	1.74	3.10	3.77	5.40	5.45
20	5.45	4.91	5.23	4.87	4.10	3.35	2.37	1.70	3.04	3.93	5.37	5.41
21	5.43	4.89	5.23	4.84	4.06	3.31	2.34	1.69	2.97	3.97	5.34	5.41
22	5.41	4.85	5.23	4.82	4.13	3.26	2.30	1.71	2.92	3.86	5.31	5.46
23	5.40	4.85	5.29	4.80	4.31	3.22	2.26	1.70	2.86	3.76	5.30	5.44
24	5.39	4.83	5.27	4.77	4.31	3.17	2.25	1.76	2.79	4.35	5.33	5.41
25	5.38	4.82	5.26	4.73	4.21	3.13	2.22	2.06	2.73	4.45	5.40	5.38
26	5.36	4.81	5.26	4.69	4.11	3.09	2.19	2.16	2.74	4.36	5.39	5.35
27	5.35	4.79	5.25	4.64	4.04	3.05	2.15	2.33	3.06	4.25	5.48	5.33
28	5.34	4.78	5.25	4.62	3.99	3.01	2.12	2.74	3.14	4.13	5.67	5.35
29	5.33	4.97	5.24	4.61	---	2.98	2.12	2.77	3.06	4.02	6.00	5.35
30	5.32	5.08	5.24	4.60	---	2.96	2.09	2.73	3.00	3.92	6.04	5.34
31	5.30	---	5.23	4.71	---	2.97	---	2.67	---	3.83	6.09	---
TOTAL	167.87	151.17	160.75	153.60	120.56	108.64	75.72	61.49	92.53	114.30	157.84	164.16
MEAN	5.42	5.04	5.19	4.95	4.31	3.50	2.52	1.98	3.08	3.69	5.09	5.47
MAX	5.60	5.29	5.29	5.23	4.66	4.17	3.01	2.77	3.89	4.45	6.09	5.96
MIN	5.30	4.78	5.07	4.60	3.99	2.96	2.09	1.69	2.59	3.01	3.69	5.33
CAL YR 1989	TOTAL 1462.12		MEAN 4.01	MAX 5.65	MIN 1.61							
WTR YR 1990	TOTAL 1528.63		MEAN 4.19	MAX 6.09	MIN 1.69							

02291200 LAKE TRAFFORD NEAR IMMOKALEE. FL

SURFACE AREA.--1,485 acres.

DRAINAGE AREA.--27 mi², approximately.

PERIOD OF RECORD.--March 1941 to current year. Records of elevations prior to October 1960 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is 16.43 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 6, 1960, at several sites in the immediate vicinity at same datum. May 15, 1962, to Sept. 30, 1962, auxiliary nonrecording gage in canal at county boat landing, 0.3 mi southeast. Oct. 1, 1962, to Nov. 25, 1968, nonrecording gage at same site and datum. Gage readings have been reduced to elevations NGVD. Gage relocated March 30, 1988 because of excessive aquatic growth in ditch causing erroneous record at low stage.

REMARKS.--Estimated daily elevations: Jan 31 - Feb. 1. Lake is landlocked except above an elevation of about 21 ft, when there is overflow to the south into Corkscrew Swamp.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 22.79 ft Sept. 23, 1947; minimum, 15.90 ft estimated June 6-10, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 20.03 ft Oct. 1; minimum, 17.65 ft June 21.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.01	19.65	19.42	19.37	19.19	18.99	18.58	18.04	17.82	17.71	18.61	19.03
2	20.01	19.64	19.42	19.37	19.18	18.99	18.57	18.02	17.79	17.73	18.59	19.04
3	19.99	19.62	19.40	19.37	19.17	18.99	18.55	18.01	17.78	17.75	18.58	19.10
4	19.97	19.61	19.38	19.37	19.17	18.97	18.51	17.98	17.77	17.74	18.57	19.10
5	19.96	19.64	19.37	19.38	19.13	18.96	18.49	17.97	17.75	17.72	18.56	19.10
6	19.94	19.66	19.36	19.38	19.12	18.94	18.48	17.95	17.73	17.77	18.55	19.09
7	19.93	19.68	19.36	19.38	19.11	18.91	18.46	17.93	17.76	18.05	18.55	19.09
8	19.93	19.67	19.37	19.37	19.10	18.89	18.42	17.92	17.84	18.04	18.54	19.08
9	19.91	19.66	19.43	19.36	19.09	18.88	18.40	17.90	17.87	18.03	18.54	19.07
10	19.93	19.64	19.41	19.35	19.09	18.87	18.39	17.90	17.86	18.05	18.57	19.05
11	19.99	19.62	19.40	19.35	19.11	18.85	18.38	17.90	17.85	18.06	18.58	19.03
12	19.99	19.59	19.40	19.33	19.10	18.83	18.35	17.90	17.81	18.07	18.58	19.02
13	19.98	19.49	19.41	19.30	19.09	18.82	18.33	17.90	17.77	18.17	18.60	19.04
14	19.98	19.48	19.38	19.30	19.08	18.80	18.31	17.92	17.75	18.22	18.66	19.06
15	19.96	19.47	19.38	19.29	19.07	18.78	18.28	17.90	17.73	18.31	18.70	19.06
16	19.94	19.50	19.38	19.28	19.06	18.77	18.26	17.90	17.71	18.32	18.80	19.07
17	19.93	19.45	19.37	19.28	19.05	18.76	18.25	17.89	17.69	18.33	18.83	19.08
18	19.93	19.43	19.37	19.28	19.04	18.71	18.22	17.88	17.68	18.36	18.97	19.07
19	19.93	19.42	19.37	19.28	19.03	18.70	18.19	17.87	17.69	18.38	19.01	19.05
20	19.89	19.41	19.37	19.27	19.01	18.69	18.16	17.86	17.67	18.43	19.03	19.04
21	19.87	19.40	19.36	19.27	19.00	18.65	18.15	17.85	17.69	18.47	19.04	19.04
22	19.85	19.48	19.35	19.26	18.99	18.63	18.13	17.83	17.76	18.50	19.04	19.07
23	19.84	19.48	19.39	19.26	19.03	18.61	18.12	17.83	17.77	18.52	19.05	19.07
24	19.83	19.46	19.38	19.26	19.06	18.59	18.16	17.83	17.76	18.55	19.06	19.03
25	19.82	19.45	19.38	19.24	19.04	18.58	18.14	17.83	17.73	18.57	19.07	19.01
26	19.81	19.46	19.38	19.20	19.01	18.56	18.12	17.82	17.72	18.58	19.06	18.99
27	19.73	19.46	19.38	19.20	19.00	18.55	18.09	17.83	17.74	18.60	19.05	18.97
28	19.68	19.45	19.38	19.20	18.99	18.53	18.08	17.90	17.76	18.61	19.05	19.01
29	19.67	19.45	19.38	19.20	---	18.52	18.07	17.89	17.74	18.61	19.04	19.19
30	19.67	19.45	19.38	19.20	---	18.52	18.06	17.86	17.72	18.61	19.03	19.23
31	19.66	---	19.39	19.19	---	18.56	---	17.84	---	18.61	19.02	---
TOTAL	616.53	585.87	600.90	598.14	534.11	581.40	548.70	554.85	532.71	565.47	582.93	571.88
MEAN	19.89	19.53	19.38	19.29	19.08	18.75	18.29	17.90	17.76	18.24	18.80	19.06
MAX	20.01	19.68	19.43	19.38	19.19	18.99	18.58	18.04	17.87	18.61	19.07	19.23
MIN	19.66	19.40	19.35	19.19	18.99	18.52	18.06	17.82	17.67	17.71	18.54	18.97
CAL YR 1989	TOTAL 6902.91		MEAN 18.91	MAX 20.14		MIN 17.38						
WTR YR 1990	TOTAL 6873.49		MEAN 18.83	MAX 20.01		MIN 17.67						

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291500 IMPERIAL RIVER NEAR BONITA SPRINGS, FL

LOCATION.--Lat 26°20'07", long 81°44'59", in SW¼ sec.31, T.47 S., R.26 E., Lee County, Hydrologic Unit 03090204, (Bonita Springs Quadrangle), on left bank, 4 ft downstream of bridge on Orr Rd., 2.0 mi east 0.1 mi east of Interstate 75, 0.3 mi north of Bonita Beach Rd., 2.0 mi east of U.S. Highway 41 at Bonita Springs, and 7.4 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily stage and discharge. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 528 ft³/s Oct. 16, 1987, gage height 10.21; minimum discharge, 1.3 ft³/s May 20, 1990, gage height 3.13 ft; minimum gage height, 3.03 ft Apr. 16, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 290 ft³/s Aug. 17, gage height 8.02 ft; minimum discharge, 1.3 ft³/s May 20, gage height 3.13 ft; minimum gage height 3.03 Apr. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	18	12	11	7.4	6.6	4.1	4.0	10	7.7	25	77
2	52	17	12	10	7.6	6.4	4.1	4.0	12	8.8	23	76
3	51	17	11	10	7.9	6.2	4.0	4.2	12	9.2	21	97
4	47	16	10	9.9	8.0	6.5	4.0	4.2	12	9.0	18	125
5	43	15	9.9	9.9	8.0	6.4	4.0	4.1	12	9.5	17	134
6	39	15	9.9	9.8	7.8	6.1	4.0	4.0	12	9.4	16	130
7	36	15	9.9	9.8	7.4	6.1	3.9	4.1	12	9.3	15	118
8	40	14	11	10	7.0	6.1	3.8	3.9	13	8.3	14	104
9	48	15	25	10	6.8	5.8	3.7	3.7	15	7.5	14	88
10	42	15	23	10	6.8	6.0	3.7	4.0	18	11	17	75
11	57	14	16	10	7.1	6.1	3.7	4.2	19	13	24	66
12	53	13	13	9.9	7.6	5.7	3.7	3.6	18	14	29	66
13	50	13	12	10	7.3	5.1	3.7	3.0	17	14	42	64
14	47	12	11	9.8	7.2	4.4	3.8	2.4	15	14	106	57
15	44	12	11	9.5	7.1	4.4	3.8	3.0	14	14	174	46
16	42	14	11	9.4	7.0	4.3	3.8	3.5	13	14	246	44
17	39	14	11	9.3	7.0	4.2	3.6	2.9	12	14	284	45
18	36	13	11	8.8	6.7	4.2	3.9	2.0	12	15	261	43
19	35	13	10	8.6	6.8	4.2	4.6	2.1	12	15	223	41
20	34	12	11	8.3	7.0	4.2	4.5	2.0	11	17	210	38
21	31	12	12	8.1	6.6	4.3	4.3	2.5	11	20	206	38
22	29	12	11	8.2	6.5	4.3	4.1	2.7	10	27	195	36
23	27	13	12	8.4	6.7	4.2	4.0	2.3	10	36	167	34
24	27	14	14	8.1	8.2	4.1	3.8	2.6	9.8	34	142	35
25	25	12	14	7.8	9.8	4.0	3.8	2.7	9.4	37	119	31
26	24	11	14	7.6	9.2	4.0	3.8	2.6	9.2	49	98	26
27	23	11	15	7.3	7.9	4.0	3.7	4.5	9.2	45	89	22
28	22	11	14	7.3	6.9	4.0	3.6	8.1	9.0	40	81	21
29	21	12	14	7.1	---	4.0	4.0	9.0	8.1	37	86	31
30	21	12	14	7.2	---	4.0	4.1	9.0	8.0	34	83	36
31	19	---	13	7.3	---	4.0	---	8.6	---	29	79	---
TOTAL	1153	407	397.7	278.4	207.3	153.9	117.6	123.5	364.7	621.7	3124	1844
MEAN	37.2	13.6	12.8	8.98	7.40	4.96	3.92	3.98	12.2	20.1	101	61.5
MAX	57	18	25	11	9.8	6.6	4.6	9.0	19	49	284	134
MIN	19	11	9.9	7.1	6.5	4.0	3.6	2.0	8.0	7.5	14	21
AC-FT	2290	807	789	552	411	305	233	245	723	1230	6200	3660

CAL YR 1989 TOTAL 10107.6 MEAN 27.7 MAX 349 MIN 3.3 AC-FT 20050
WTR YR 1990 TOTAL 8792.8 MEAN 24.1 MAX 284 MIN 2.0 AC-FT 17440

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291500 IMPERIAL RIVER NEAR BONITA SPRINGS, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.61	3.69	3.49	3.46	3.30	3.22	3.10	3.09	3.61	3.76	4.09	5.18
2	4.69	3.67	3.46	3.42	3.30	3.21	3.11	3.09	3.66	3.80	4.04	5.17
3	4.66	3.67	3.44	3.41	3.31	3.21	3.10	3.09	3.69	3.81	4.00	5.53
4	4.55	3.64	3.42	3.41	3.31	3.21	3.10	3.09	3.71	3.81	3.96	5.95
5	4.43	3.61	3.41	3.41	3.31	3.20	3.10	3.09	3.72	3.82	3.94	6.08
6	4.32	3.60	3.41	3.40	3.30	3.20	3.10	3.08	3.73	3.82	3.91	6.03
7	4.25	3.59	3.41	3.40	3.29	3.19	3.09	3.08	3.75	3.82	3.89	5.85
8	4.37	3.58	3.42	3.41	3.27	3.19	3.09	3.08	3.80	3.78	3.87	5.63
9	4.58	3.59	3.86	3.42	3.26	3.19	3.08	3.07	3.88	3.75	3.86	5.37
10	4.42	3.61	3.79	3.42	3.26	3.18	3.08	3.09	3.99	3.75	3.93	5.14
11	4.85	3.56	3.59	3.41	3.27	3.18	3.08	3.12	4.03	3.79	4.08	4.98
12	4.74	3.53	3.51	3.41	3.28	3.17	3.09	3.10	4.01	3.82	4.16	4.99
13	4.63	3.52	3.49	3.41	3.27	3.15	3.09	3.09	3.98	3.82	4.44	4.94
14	4.57	3.50	3.45	3.40	3.26	3.12	3.09	3.09	3.93	3.82	5.65	4.77
15	4.45	3.50	3.43	3.39	3.26	3.12	3.09	3.12	3.91	3.85	6.63	4.49
16	4.41	3.55	3.46	3.39	3.25	3.12	3.09	3.15	3.89	3.86	7.53	4.44
17	4.32	3.56	3.46	3.38	3.26	3.11	3.08	3.14	3.88	3.85	7.95	4.46
18	4.23	3.52	3.43	3.37	3.25	3.11	3.09	3.13	3.89	3.87	7.70	4.43
19	4.21	3.50	3.41	3.36	3.24	3.11	3.13	3.14	3.90	3.87	7.25	4.38
20	4.19	3.48	3.43	3.35	3.24	3.11	3.12	3.15	3.89	3.94	7.10	4.33
21	4.08	3.49	3.47	3.34	3.23	3.11	3.10	3.18	3.87	4.00	7.05	4.32
22	4.02	3.49	3.45	3.34	3.23	3.11	3.10	3.20	3.85	4.12	6.90	4.28
23	3.97	3.50	3.48	3.34	3.24	3.11	3.09	3.20	3.84	4.29	6.54	4.26
24	3.95	3.53	3.53	3.33	3.29	3.11	3.08	3.22	3.83	4.25	6.20	4.27
25	3.92	3.48	3.54	3.32	3.34	3.10	3.08	3.24	3.82	4.31	5.87	4.19
26	3.87	3.46	3.55	3.31	3.31	3.10	3.08	3.25	3.81	4.53	5.55	4.11
27	3.84	3.46	3.56	3.30	3.26	3.10	3.07	3.33	3.81	4.46	5.39	4.04
28	3.82	3.46	3.55	3.30	3.23	3.10	3.07	3.48	3.80	4.37	5.26	4.02
29	3.79	3.47	3.54	3.29	---	3.10	3.09	3.52	3.77	4.31	5.35	4.19
30	3.78	3.49	3.54	3.29	---	3.10	3.09	3.54	3.77	4.25	5.29	4.28
31	3.75	---	3.52	3.30	---	3.10	---	3.54	---	4.17	5.22	---
TOTAL	132.27	106.30	108.50	104.49	91.62	97.44	92.75	98.78	115.02	123.47	166.60	144.10
MEAN	4.27	3.54	3.50	3.37	3.27	3.14	3.09	3.19	3.83	3.98	5.37	4.80
MAX	4.85	3.69	3.86	3.46	3.34	3.22	3.13	3.54	4.03	4.53	7.95	6.08
MIN	3.75	3.46	3.41	3.29	3.23	3.10	3.07	3.07	3.61	3.75	3.86	4.02
CAL YR 1989	TOTAL 1408.52		MEAN 3.86	MAX 8.80	MIN 3.18							
WTR YR 1990	TOTAL 1381.34		MEAN 3.78	MAX 7.95	MIN 3.07							

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291524 SPRING CREEK HEADWATER NEAR BONITA SPRINGS, FL

LOCATION.--Lat 26°21'42", long 81°47'27", in SE¼ sec.22, T.47 S., R.25 E., Lee County, Hydrologic Unit 03090204, (Bonita Springs Quadrangle) at culvert on State Highway 887, 1.8 mi north of Bonita Springs, 4.7 mi upstream from mouth and 5.6 mi south of Estero.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Florida State Road Department Bench Mark.

REMARKS.--No estimated daily stage and discharge. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68 ft³/s Sept. 29, 1990, gage height, 8.68 ft; no flow for some days during the 1989, 1990 water year; minimum gage height, 6.11 ft June 16, 17, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 68 ft³/s Sept. 29, gage height, 8.68 ft; no flow for some days; minimum gage height, 6.23 ft Apr. 27, 28, 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	2.8	.95	1.8	1.2	2.1	.32	.07	1.4	1.9	8.3	11
2	4.3	2.7	.96	1.8	1.1	2.0	.27	.07	1.5	2.3	7.9	9.9
3	4.0	2.6	.89	1.8	1.2	1.7	.24	.08	1.9	3.0	8.0	9.6
4	3.6	2.6	.85	1.8	1.2	1.5	.24	.09	2.2	3.0	7.8	9.3
5	3.3	2.6	.85	1.8	1.2	1.5	.16	.09	2.6	3.0	7.7	9.0
6	3.1	2.5	.85	1.8	1.1	1.6	.15	.08	2.7	3.0	7.4	8.8
7	3.0	2.4	.82	1.7	1.1	1.5	.15	.07	3.3	2.9	7.0	8.5
8	3.2	2.5	.85	1.5	1.0	1.4	.15	.07	5.0	2.8	9.1	7.9
9	3.3	2.5	1.0	1.6	.96	1.3	.14	.07	6.4	2.8	9.7	7.2
10	3.2	2.4	1.1	1.7	.96	1.2	.14	.06	6.4	2.9	9.6	6.8
11	5.2	2.4	1.0	1.6	1.1	1.2	.14	.06	6.3	3.2	9.2	6.4
12	6.7	2.3	.96	1.6	1.3	1.1	.13	.06	5.8	4.8	8.9	6.5
13	6.1	2.4	1.1	1.5	1.2	.97	.12	.05	5.2	6.0	12	6.4
14	5.5	1.8	1.1	1.4	1.2	.85	.12	.04	4.7	6.0	24	6.4
15	5.4	.89	1.1	1.3	1.2	.85	.10	.05	4.4	8.8	24	6.1
16	4.9	.85	1.1	1.3	1.2	.80	.09	.05	4.2	13	21	7.0
17	4.5	.86	1.0	1.3	1.1	.73	.09	.05	4.1	12	25	9.2
18	3.9	.96	.96	1.3	1.2	.73	.08	.06	4.0	11	29	9.1
19	3.7	.96	.96	1.3	1.2	.66	.09	.06	3.8	11	25	8.4
20	4.6	.96	1.0	1.2	1.2	.62	.08	.04	3.5	12	23	7.4
21	4.8	.96	1.2	1.2	1.1	.47	.06	.04	3.3	14	20	6.9
22	4.5	.96	1.2	1.2	1.1	.42	.05	.05	3.2	13	17	6.2
23	4.2	.96	1.5	1.3	1.3	.42	.04	.06	3.1	11	16	5.5
24	3.9	.86	1.7	1.3	1.7	.36	.03	.08	2.8	9.9	14	5.1
25	3.6	.85	1.9	1.3	2.0	.32	.01	.11	2.6	11	14	4.7
26	3.4	.85	1.8	1.2	2.1	.32	.00	.12	2.5	11	13	4.4
27	3.4	.85	1.8	1.1	2.1	.32	.00	.16	2.5	12	12	4.1
28	3.2	.85	1.9	1.1	2.1	.32	.00	.54	2.4	12	12	18
29	3.0	.85	1.9	1.1	---	.32	.04	.92	2.3	11	12	59
30	2.9	.87	1.8	1.1	---	.32	.06	1.2	2.1	10	11	41
31	2.9	---	1.8	1.1	---	.32	---	1.3	---	9.1	11	---
TOTAL	125.6	48.84	37.90	44.1	36.42	28.22	3.29	5.85	106.2	239.4	435.6	315.8
MEAN	4.05	1.63	1.22	1.42	1.30	.91	.11	.19	3.54	7.72	14.1	10.5
MAX	6.7	2.8	1.9	1.8	2.1	2.1	.32	1.3	6.4	14	29	59
MIN	2.9	.85	.82	1.1	.96	.32	.00	.04	1.4	1.9	7.0	4.1
AC-FT	249	97	75	87	72	56	6.5	12	211	475	864	626

CAL YR 1989 TOTAL 1052.23 MEAN 2.88 MAX 23 MIN .00 AC-FT 2090
WTR YR 1990 TOTAL 1427.22 MEAN 3.91 MAX 59 MIN .00 AC-FT 2830

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291580 NORTH BRANCH ESTERO RIVER AT ESTERO, FL

LOCATION.--Lat 26°26'30", long 81°47'45", in NE¼ sec.27, T.46 S., R.27 E., Lee County, Hydrologic Unit 03090204, (Estero Quadrangle) on right bank behind house at east end of Broadway Road, 0.6 mi east of railroad tracks, 0.6 mi upstream of gage site for Estero Road at Estero and 3.5 mi upstream from mouth of River.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily stage and discharge. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 264 ft³/s Oct. 12, 1987, gage height 13.32 ft; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, .12 ft³/s Sept. 28, gage height, 7.76 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.02

CAL YR 1989 TOTAL 2.23 MEAN .006 MAX .39 MIN .00 AC-FT 4.4
WTR YR 1990 TOTAL 0.02 MEAN .000 MAX .01 MIN .00 AC-FT .04

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.26	7.24	6.88	6.70	6.35	6.31	5.97	5.71	7.11	7.09	7.30	7.34
2	7.24	7.23	6.85	6.70	6.38	6.29	5.98	5.70	7.18	7.13	7.31	7.34
3	7.24	7.22	6.82	6.70	6.37	6.27	5.98	5.68	7.27	7.19	7.30	7.34
4	7.24	7.21	6.78	6.68	6.34	6.25	5.99	5.65	7.26	7.15	7.30	7.33
5	7.24	7.20	6.74	6.65	6.33	6.25	5.99	5.63	7.26	7.11	7.30	7.34
6	7.24	7.17	6.71	6.62	6.31	6.22	5.97	5.61	7.27	7.16	7.30	7.33
7	7.25	7.13	6.68	6.62	6.29	6.18	5.94	5.61	7.31	7.11	7.30	7.31
8	7.24	7.09	6.67	6.63	6.26	6.15	5.96	5.60	7.32	7.07	7.30	7.31
9	7.25	7.07	6.74	6.65	6.24	6.12	5.95	5.57	7.31	7.02	7.29	7.30
10	7.25	7.06	6.75	6.65	6.21	6.08	5.92	5.58	7.31	7.02	7.29	7.28
11	7.25	7.03	6.76	6.62	6.26	6.07	5.87	5.58	7.30	7.20	7.29	7.27
12	7.25	7.01	6.76	6.58	6.33	6.04	5.83	5.56	7.29	7.29	7.29	7.27
13	7.25	6.99	6.76	6.56	6.30	5.99	5.80	5.55	7.28	7.28	7.36	7.27
14	7.24	6.97	6.74	6.54	6.27	5.94	5.76	5.59	7.27	7.27	7.39	7.28
15	7.24	6.96	6.70	6.54	6.24	5.89	5.74	5.81	7.26	7.31	7.38	7.26
16	7.24	7.00	6.67	6.52	6.21	5.86	5.77	6.04	7.26	7.30	7.39	7.29
17	7.23	7.02	6.64	6.50	6.18	5.85	5.77	6.09	7.25	7.30	7.40	7.31
18	7.23	7.00	6.62	6.49	6.16	5.87	5.75	6.09	7.25	7.34	7.40	7.30
19	7.27	6.97	6.62	6.46	6.15	5.86	5.76	6.08	7.24	7.34	7.39	7.28
20	7.26	6.94	6.65	6.46	6.14	5.92	5.74	6.08	7.24	7.35	7.40	7.27
21	7.26	6.90	6.70	6.47	6.13	5.94	5.71	6.10	7.23	7.35	7.39	7.26
22	7.25	6.89	6.71	6.48	6.11	5.93	5.68	6.17	7.22	7.34	7.36	7.26
23	7.25	6.90	6.80	6.47	6.15	5.89	5.66	6.23	7.21	7.33	7.35	7.26
24	7.24	6.92	6.81	6.45	6.33	5.83	5.67	6.29	7.21	7.33	7.35	7.25
25	7.24	6.92	6.81	6.41	6.37	5.80	5.67	6.35	7.18	7.34	7.35	7.24
26	7.24	6.93	6.80	6.38	6.39	5.78	5.66	6.38	7.17	7.34	7.34	7.24
27	7.24	6.93	6.78	6.35	6.39	5.76	5.64	6.46	7.21	7.35	7.34	7.24
28	7.24	6.90	6.74	6.35	6.35	5.73	5.63	6.79	7.21	7.34	7.35	7.36
29	7.24	6.89	6.72	6.34	---	5.73	5.70	6.90	7.14	7.32	7.35	7.40
30	7.24	6.90	6.70	6.33	---	5.85	5.72	6.95	7.12	7.32	7.33	7.39
31	7.24	---	6.69	6.35	---	5.90	---	7.05	---	7.30	7.33	---
TOTAL	224.59	210.59	208.80	202.25	175.54	185.55	174.18	186.48	217.14	224.69	227.52	218.92
MEAN	7.24	7.02	6.74	6.52	6.27	5.99	5.81	6.02	7.24	7.25	7.34	7.30
MAX	7.27	7.24	6.88	6.70	6.39	6.31	5.99	7.05	7.32	7.35	7.40	7.40
MIN	7.23	6.89	6.62	6.33	6.11	5.73	5.63	5.55	7.11	7.02	7.29	7.24
CAL YR 1989	TOTAL 2541.48		MEAN 6.96	MAX 7.71	MIN 5.76							
WTR YR 1990	TOTAL 2456.25		MEAN 6.73	MAX 7.40	MIN 5.55							

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291597 SOUTH BRANCH ESTERO RIVER AT ESTERO, FL

LOCATION.--Lat 26°25'43", long 81°47'36", in NW¼ sec.34, T.46 S., R.25 E., Lee County, Hydrologic Unit 03090204, (Estero Quadrangle) near left bank on downstream headwall culvert on Corkscrew Road, 1.0 mi east of U.S. Highway 41 at Estero and 5.2 mi upstream from mouth of Estero River.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for those estimated stage and discharge, July 3-9, July 26 to Aug. 6, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 284 ft³/s Oct. 14, 1987, gage height, 8.90 ft; no flow on May 10, 1990, gage height, 3.30 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45 ft³/s Sept. 28, gage height, 5.41 ft; no flow on May 10, gage height, 3.30 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	2.1	.77	.43	.24	.24	.11	.06	.27	.22	2.8	3.1
2	5.1	2.0	.75	.41	.25	.24	.10	.05	.28	.23	2.7	3.2
3	4.6	1.9	.71	.40	.25	.23	.10	.05	.91	.22	2.7	3.8
4	4.2	1.8	.70	.39	.25	.22	.10	.05	.87	.25	2.6	3.5
5	3.8	1.7	.68	.38	.25	.20	.10	.05	.69	.21	2.7	3.2
6	3.6	1.7	.70	.38	.25	.19	.10	.05	.60	.23	2.9	2.8
7	6.8	1.6	.68	.38	.24	.17	.10	.05	.75	.20	3.2	2.4
8	8.8	1.6	.67	.37	.25	.16	.11	.04	.81	.26	3.1	2.2
9	7.7	1.5	.67	.38	.24	.15	.11	.02	1.0	.20	2.9	2.2
10	7.3	1.4	.64	.34	.25	.13	.11	.03	.87	.27	2.7	2.2
11	14	1.4	.63	.34	.33	.12	.11	.03	.74	.89	2.7	2.0
12	10	1.3	.60	.32	.32	.11	.11	.02	.67	1.4	2.3	2.0
13	8.0	1.3	.60	.32	.32	.11	.09	.02	.60	1.6	16	2.0
14	6.7	1.3	.59	.33	.34	.11	.07	.03	.54	1.1	41	2.0
15	5.6	1.3	.56	.31	.32	.11	.06	.07	.47	2.4	37	1.9
16	4.7	1.2	.55	.30	.30	.10	.06	.07	.45	4.1	29	2.2
17	3.6	1.1	.54	.29	.30	.10	.06	.06	.40	3.1	27	2.5
18	2.3	1.0	.52	.28	.28	.10	.06	.06	.36	3.4	21	2.5
19	6.5	.98	.49	.26	.27	.10	.07	.05	.34	6.0	14	2.2
20	10	.96	.50	.26	.26	.10	.06	.05	.30	4.7	10	2.0
21	7.9	.91	.50	.24	.24	.09	.06	.06	.28	4.7	8.4	1.9
22	6.3	.87	.48	.24	.23	.09	.06	.06	.26	4.0	7.0	1.8
23	5.1	.88	.56	.23	.30	.09	.06	.07	.26	3.3	6.0	1.7
24	4.4	.87	.54	.22	.31	.08	.06	.07	.25	3.2	5.2	1.6
25	3.9	.87	.54	.22	.30	.08	.06	.07	.22	3.9	4.6	1.5
26	3.5	.85	.52	.21	.28	.08	.05	.07	.23	3.0	4.1	1.4
27	3.2	.84	.51	.21	.26	.08	.05	.12	.24	3.0	4.0	1.4
28	2.8	.84	.48	.21	.24	.08	.05	.37	.24	3.2	4.4	25
29	2.5	.84	.46	.21	---	.10	.06	.33	.22	3.2	4.1	36
30	2.4	.82	.45	.23	---	.10	.06	.32	.23	3.0	3.5	25
31	2.2	---	.44	.23	---	.11	---	.30	---	3.0	3.3	---
TOTAL	173.0	37.73	18.03	9.32	7.67	3.97	2.36	2.75	14.35	68.48	282.9	147.2
MEAN	5.58	1.26	.58	.30	.27	.13	.079	.089	.48	2.21	9.13	4.91
MAX	14	2.1	.77	.43	.34	.24	.11	.37	1.0	6.0	41	36
MIN	2.2	.82	.44	.21	.23	.08	.05	.02	.22	.20	2.3	1.4
AC-FT	343	75	36	18	15	7.9	4.7	5.5	28	136	561	292

CAL YR 1989	TOTAL 743.97	MEAN 2.04	MAX 46	MIN .10	AC-FT 1480
WTR YR 1990	TOTAL 767.76	MEAN 2.10	MAX 41	MIN .02	AC-FT 1520

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.31	3.96	3.69	3.61	3.51	3.55	3.45	3.38	3.79	3.77	4.30	4.18
2	4.27	3.94	3.69	3.60	3.52	3.55	3.44	3.38	3.80	3.78	4.27	4.19
3	4.23	3.92	3.68	3.60	3.51	3.55	3.44	3.38	4.12	3.77	4.25	4.26
4	4.19	3.91	3.67	3.60	3.51	3.54	3.43	3.38	4.13	3.80	4.23	4.22
5	4.14	3.90	3.67	3.59	3.50	3.53	3.43	3.38	4.06	3.76	4.24	4.18
6	4.12	3.89	3.68	3.60	3.50	3.52	3.44	3.38	4.01	3.77	4.25	4.12
7	4.41	3.88	3.67	3.59	3.49	3.50	3.45	3.38	4.09	3.74	4.22	4.06
8	4.54	3.87	3.67	3.60	3.48	3.49	3.45	3.35	4.12	3.70	4.19	4.03
9	4.47	3.86	3.68	3.60	3.48	3.48	3.45	3.33	4.19	3.74	4.16	4.02
10	4.44	3.85	3.66	3.58	3.48	3.47	3.46	3.34	4.14	3.79	4.15	4.02
11	4.72	3.83	3.66	3.58	3.54	3.46	3.47	3.35	4.10	4.02	4.13	3.99
12	4.62	3.81	3.65	3.57	3.53	3.45	3.47	3.33	4.07	4.26	4.06	4.00
13	4.50	3.82	3.66	3.57	3.53	3.45	3.41	3.33	4.03	4.30	4.52	3.99
14	4.41	3.82	3.65	3.58	3.54	3.45	3.37	3.36	4.01	4.14	5.33	3.98
15	4.33	3.81	3.64	3.57	3.52	3.45	3.37	3.44	3.97	4.34	5.22	3.96
16	4.26	3.80	3.64	3.56	3.51	3.45	3.37	3.46	3.96	4.64	5.07	4.02
17	4.12	3.77	3.63	3.56	3.52	3.45	3.37	3.43	3.93	4.50	5.06	4.07
18	3.95	3.75	3.62	3.55	3.51	3.45	3.37	3.43	3.91	4.48	4.98	4.07
19	4.34	3.74	3.61	3.54	3.51	3.44	3.38	3.42	3.90	4.76	4.86	4.02
20	4.65	3.73	3.62	3.53	3.50	3.44	3.37	3.42	3.86	4.63	4.74	3.98
21	4.52	3.72	3.62	3.53	3.49	3.42	3.37	3.44	3.84	4.62	4.65	3.96
22	4.40	3.71	3.62	3.52	3.49	3.42	3.37	3.46	3.82	4.53	4.56	3.94
23	4.31	3.71	3.66	3.52	3.55	3.42	3.37	3.47	3.81	4.44	4.48	3.92
24	4.25	3.71	3.65	3.51	3.58	3.41	3.37	3.49	3.81	4.40	4.40	3.90
25	4.20	3.72	3.66	3.51	3.57	3.40	3.37	3.49	3.78	4.47	4.35	3.87
26	4.15	3.71	3.65	3.51	3.56	3.40	3.36	3.48	3.79	4.40	4.30	3.84
27	4.12	3.71	3.64	3.50	3.55	3.40	3.36	3.57	3.80	4.38	4.29	3.83
28	4.07	3.71	3.63	3.50	3.54	3.41	3.37	3.85	3.80	4.40	4.33	4.69
29	4.03	3.72	3.62	3.50	---	3.43	3.38	3.83	3.78	4.39	4.30	5.16
30	4.01	3.71	3.62	3.51	---	3.44	3.38	3.82	3.78	4.36	4.23	4.99
31	3.98	---	3.62	3.50	---	3.45	---	3.81	---	4.35	4.20	---
TOTAL	133.06	113.99	113.13	110.19	98.52	107.27	102.09	107.36	118.20	130.43	138.32	123.46
MEAN	4.29	3.80	3.65	3.55	3.52	3.46	3.40	3.46	3.94	4.21	4.46	4.12
MAX	4.72	3.96	3.69	3.61	3.58	3.55	3.47	3.85	4.19	4.76	5.33	5.16
MIN	3.95	3.71	3.61	3.50	3.48	3.40	3.36	3.33	3.78	3.70	4.06	3.83
CAL YR 1989	TOTAL 1389.93		MEAN 3.81	MAX 5.43	MIN 3.44							
WTR YR 1990	TOTAL 1396.02		MEAN 3.82	MAX 5.33	MIN 3.33							

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291669 SIXMILE CYPRESS CREEK NORTH NEAR FORT MYERS, FL

LOCATION.--Lat 26°31'20", long 81°51'17", in NW¼ sec.31, T.45 S., R.25 E., Lee County, Hydrologic Unit 03090204, 200 ft upstream from Tenmile Canal, 2,200 ft north of Briarcliff Road, 6.9 mi north of Estero, and 7.2 mi south of Ft. Myers.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for those estimated stage and discharge for Dec. 21 to Jan. 26, June 27 to Aug. 9, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,830 ft³/s Aug. 11, 1988, gage height, 7.95 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 273 ft³/s Aug. 17, gage height, 10.14 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	.03	.00	.00	.00	.00	.00	.00	.00	.00	68	150
2	.93	.01	.00	.00	.00	.00	.00	.00	.00	.00	39	146
3	.75	.00	.00	.00	.00	.00	.00	.00	.00	.00	21	138
4	.75	.00	.00	.00	.00	.00	.00	.00	.00	.00	15	135
5	.75	.00	.00	.00	.00	.00	.00	.00	.00	.00	27	142
6	.87	.00	.00	.00	.00	.00	.00	.00	.00	.00	26	143
7	1.3	.00	.00	.00	.00	.00	.00	.00	.00	.00	25	140
8	1.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	36	138
9	1.8	.00	.00	.00	.00	.00	.00	.00	.00	.00	38	133
10	2.9	.00	.00	.00	.00	.00	.00	.00	.00	.00	35	83
11	7.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	54	18
12	5.2	.00	.00	.00	.00	.00	.00	.00	.00	.00	111	10
13	5.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	165	12
14	5.3	.00	.00	.00	.00	.00	.00	.00	.00	.00	227	8.9
15	5.5	.00	.00	.00	.00	.00	.00	.00	.00	.00	237	6.2
16	6.1	.00	.00	.00	.00	.00	.00	.00	.00	.09	249	4.6
17	5.1	.00	.00	.00	.00	.00	.00	.00	.00	.12	262	4.3
18	4.5	.00	.00	.00	.00	.00	.00	.00	.00	.65	234	4.5
19	3.9	.00	.00	.00	.00	.00	.00	.00	.00	1.2	216	4.4
20	3.3	.00	.00	.00	.00	.00	.00	.00	.00	2.7	198	3.5
21	2.5	.00	.00	.00	.00	.00	.00	.00	.00	4.4	179	3.2
22	2.1	.00	.00	.00	.00	.00	.00	.00	.00	3.7	159	3.0
23	1.7	.00	.00	.00	.00	.00	.00	.00	.00	2.6	141	2.8
24	1.4	.00	.00	.00	.00	.00	.00	.00	.00	2.3	130	2.4
25	1.1	.00	.00	.00	.00	.00	.00	.00	.00	7.3	139	2.1
26	1.0	.00	.00	.00	.00	.00	.00	.00	.00	22	132	1.7
27	.82	.00	.00	.00	.00	.00	.00	.00	.00	81	128	1.5
28	.58	.00	.00	.00	.00	.00	.00	.00	.00	192	135	1.5
29	.36	.00	.00	.00	---	.00	.00	.00	.00	250	136	2.1
30	.19	.00	.00	.00	---	.00	.00	.00	.00	174	140	2.6
31	.08	---	.00	.00	---	.00	---	.00	---	114	150	---
TOTAL	75.91	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	858.06	3852	1447.3
MEAN	2.45	.001	.000	.000	.000	.000	.000	.000	.000	27.7	124	48.2
MAX	7.6	.03	.00	.00	.00	.00	.00	.00	.00	250	262	150
MIN	.08	.00	.00	.00	.00	.00	.00	.00	.00	.00	15	1.5
AC-FT	151	.08	.00	.00	.00	.00	.00	.00	.00	1700	7640	2870

WTR YR 1990 TOTAL 6233.31 MEAN 17.1 MAX 262 MIN .00 AC-FT 12360

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291669 SIXMILE CYPRESS CREEK NORTH NEAR FORT MYERS, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.23	5.88	5.49	5.46	5.36	5.58	5.39	4.93	5.49	5.61	8.00	9.33
2	6.22	5.81	5.25	5.46	5.40	5.57	5.39	4.91	5.50	5.61	7.52	9.28
3	6.19	5.75	5.24	5.46	5.43	5.57	5.38	4.89	5.54	5.64	7.20	9.21
4	6.18	5.67	5.23	5.46	5.44	5.56	5.36	4.88	5.53	5.63	6.95	9.18
5	6.17	5.60	5.40	5.45	5.43	5.55	5.34	4.88	5.55	5.61	7.45	9.24
6	6.21	5.54	5.29	5.45	5.42	5.54	5.31	4.88	5.58	5.59	7.35	9.26
7	6.30	5.51	5.42	5.45	5.41	5.54	5.29	4.88	5.60	5.58	7.15	9.24
8	6.35	5.51	5.53	5.44	5.41	5.53	5.27	4.88	5.61	5.57	7.80	9.21
9	6.37	5.50	5.52	5.44	5.41	5.52	5.24	4.87	5.60	5.56	7.80	9.15
10	6.48	5.50	5.26	5.44	5.40	5.52	5.22	4.89	5.60	5.56	7.73	8.44
11	6.84	5.49	5.27	5.44	5.49	5.52	5.20	4.87	5.60	5.57	8.13	7.28
12	6.70	5.49	5.28	5.43	5.51	5.52	5.18	4.86	5.58	5.58	8.91	6.97
13	6.69	5.49	5.29	5.43	5.51	5.51	5.15	4.86	5.56	5.60	9.45	7.05
14	6.70	5.49	5.29	5.43	5.51	5.51	5.12	4.93	5.55	5.60	9.97	6.91
15	6.72	5.49	5.29	5.42	5.51	5.50	5.09	4.99	5.54	5.63	10.05	6.75
16	6.74	5.49	5.28	5.42	5.51	5.49	5.07	5.02	5.53	5.94	10.10	6.65
17	6.69	5.48	5.26	5.42	5.51	5.49	5.04	4.99	5.53	5.97	10.12	6.62
18	6.63	5.47	5.26	5.42	5.50	5.48	5.02	4.98	5.56	6.15	10.02	6.65
19	6.59	5.47	5.26	5.41	5.50	5.46	5.02	4.98	5.58	6.27	9.89	6.63
20	6.53	5.49	5.26	5.41	5.49	5.47	4.97	4.97	5.58	6.47	9.74	6.56
21	6.46	5.50	5.49	5.41	5.49	5.45	4.94	5.01	5.57	6.64	9.59	6.53
22	6.40	5.50	5.49	5.41	5.49	5.42	4.92	5.05	5.56	6.57	9.41	6.50
23	6.35	5.50	5.49	5.40	5.55	5.40	4.91	5.12	5.56	6.47	9.24	6.48
24	6.30	5.50	5.49	5.40	5.64	5.38	4.90	5.16	5.55	6.43	9.12	6.44
25	6.26	5.50	5.48	5.39	5.63	5.36	4.89	5.19	5.55	6.57	9.22	6.39
26	6.24	5.50	5.48	5.39	5.60	5.34	4.88	5.19	5.54	7.08	9.15	6.35
27	6.19	5.49	5.48	5.38	5.59	5.33	4.88	5.22	5.53	8.20	9.10	6.32
28	6.14	5.49	5.47	5.38	5.58	5.32	4.88	5.35	5.53	9.30	9.18	6.32
29	6.08	5.47	5.47	5.38	---	5.31	5.05	5.41	5.60	9.60	9.19	6.41
30	6.01	5.36	5.47	5.37	---	5.32	4.97	5.45	5.62	9.35	9.23	6.48
31	5.94	---	5.47	5.37	---	5.35	---	5.48	---	8.70	9.32	---
TOTAL	197.90	165.93	166.65	168.02	153.72	169.41	153.27	155.97	166.82	199.65	273.08	223.83
MEAN	6.38	5.53	5.38	5.42	5.49	5.46	5.11	5.03	5.56	6.44	8.81	7.46
MAX	6.84	5.88	5.53	5.46	5.64	5.58	5.39	5.48	5.62	9.60	10.12	9.33
MIN	5.94	5.36	5.23	5.37	5.36	5.31	4.88	4.86	5.49	5.56	6.95	6.32
CAL YR 1989	TOTAL 2125.62		MEAN 5.82	MAX 9.39	MIN 4.77							
WTR YR 1990	TOTAL 2194.25		MEAN 6.01	MAX 10.12	MIN 4.86							

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291670 SIX MILE CYPRESS CREEK SOUTH NEAR FT. MYERS, FL

LOCATION.--Lat 26°31'05", long 81°51'17", in NW¼ sec.31, T.45 S., R.25 E., Lee County, Hydrologic Unit 03090204, (Fort Myers SE Quadrangle), 200 ft upstream from Tenmile Canal, 700 ft North of Briarcliff Rd, 6.7 mi north of Estero and 7.5 mi south Ft. Myers.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily stage and discharge Sept. 13-30. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft³/s Aug. 14, 1990, gage height, 9.54 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 142 ft³/s Aug. 14, gage height, 9.54 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	.16	.00	.00	.00	.00	.00	.00	.00	.00	52	126
2	1.0	.13	.00	.00	.00	.00	.00	.00	.00	.00	27	121
3	1.5	.11	.00	.00	.00	.00	.00	.00	.00	.00	16	103
4	2.0	.09	.00	.00	.00	.00	.00	.00	.00	.00	11	89
5	2.6	.07	.00	.00	.00	.00	.00	.00	.00	.00	20	108
6	3.1	.05	.00	.00	.00	.00	.00	.00	.00	.00	17	109
7	3.8	.03	.00	.00	.00	.00	.00	.00	.00	.00	13	83
8	4.4	.02	.00	.00	.00	.00	.00	.00	.00	.00	16	34
9	5.0	.01	.00	.00	.00	.00	.00	.00	.00	.00	20	31
10	5.8	.00	.00	.00	.00	.00	.00	.00	.00	.00	21	13
11	6.9	.00	.00	.00	.00	.00	.00	.00	.00	.00	27	3.6
12	7.3	.00	.00	.00	.00	.00	.00	.00	.00	.00	46	3.5
13	7.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	102	2.5
14	6.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	140	3.8
15	6.3	.00	.00	.00	.00	.00	.00	.00	.00	.01	140	3.4
16	5.9	.00	.00	.00	.00	.00	.00	.00	.00	.05	138	3.3
17	5.5	.00	.00	.00	.00	.00	.00	.00	.00	.06	130	3.0
18	5.1	.00	.00	.00	.00	.00	.00	.00	.00	.11	120	2.7
19	4.6	.00	.00	.00	.00	.00	.00	.00	.00	.22	109	2.5
20	4.2	.00	.00	.00	.00	.00	.00	.00	.00	.32	100	2.4
21	3.7	.00	.00	.00	.00	.00	.00	.00	.00	.66	91	2.1
22	3.3	.00	.00	.00	.00	.00	.00	.00	.00	.73	85	2.0
23	2.9	.00	.00	.00	.00	.00	.00	.00	.00	.66	93	2.0
24	2.4	.00	.00	.00	.00	.00	.00	.00	.00	.66	94	2.0
25	2.1	.00	.00	.00	.00	.00	.00	.00	.00	1.1	86	2.0
26	1.7	.00	.00	.00	.00	.00	.00	.00	.00	2.0	84	2.0
27	1.3	.00	.00	.00	.00	.00	.00	.00	.00	4.5	67	2.0
28	.99	.00	.00	.00	.00	.00	.00	.00	.00	7.7	90	2.2
29	.66	.00	.00	.00	---	.00	.00	.00	.02	7.8	98	2.4
30	.35	.00	.00	.00	---	.00	.00	.00	.00	7.6	106	2.3
31	.19	---	.00	.00	---	.00	---	.00	---	6.2	120	---
TOTAL	108.72	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.02	40.38	2279	868.7
MEAN	3.51	.022	.000	.000	.000	.000	.000	.000	.001	1.30	73.5	29.0
MAX	7.3	.16	.00	.00	.00	.00	.00	.00	.02	7.8	140	126
MIN	.19	.00	.00	.00	.00	.00	.00	.00	.00	.00	11	2.0
AC-FT	216	1.3	.00	.00	.00	.00	.00	.00	.04	80	4520	1720

CAL YR 1989 TOTAL 140.10 MEAN .38 MAX 7.3 MIN .00 AC-FT 278
WTR YR 1990 TOTAL 3297.49 MEAN 9.03 MAX 140 MIN .00 AC-FT 6540

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.62	5.54	5.47	5.49	5.33	5.56	5.40	5.04	5.61	5.68	7.42	9.12
2	5.61	5.54	5.47	5.48	5.37	5.56	5.40	5.03	5.62	5.68	6.77	9.08
3	5.59	5.53	5.46	5.48	5.41	5.56	5.38	5.01	5.65	5.70	6.39	8.85
4	5.58	5.52	5.46	5.48	5.41	5.55	5.36	5.00	5.67	5.70	6.17	8.62
5	5.57	5.52	5.48	5.48	5.41	5.54	5.34	4.98	5.66	5.70	6.58	9.01
6	5.58	5.51	5.49	5.48	5.39	5.53	5.31	4.96	5.68	5.69	6.48	9.04
7	5.62	5.51	5.50	5.48	5.39	5.53	5.29	4.91	5.70	5.69	6.27	8.43
8	5.64	5.51	5.49	5.48	5.39	5.52	5.27	4.87	5.70	5.68	6.48	7.25
9	5.63	5.50	5.49	5.47	5.38	5.51	5.25	4.89	5.70	5.67	6.64	7.14
10	5.69	5.50	5.47	5.47	5.38	5.51	5.23	4.94	5.71	5.67	6.70	6.28
11	5.92	5.49	5.48	5.47	5.45	5.51	5.21	4.93	5.70	5.68	6.94	5.72
12	5.86	5.49	5.49	5.47	5.47	5.51	5.19	4.90	5.69	5.68	7.51	5.71
13	5.85	5.49	5.49	5.45	5.47	5.50	5.16	4.87	5.67	5.70	8.77	5.75
14	5.86	5.49	5.49	5.45	5.47	5.50	5.13	4.92	5.66	5.70	9.51	6.75
15	5.87	5.49	5.49	5.45	5.49	5.50	5.11	5.11	5.66	5.71	9.56	6.20
16	5.89	5.49	5.48	5.45	5.51	5.49	5.10	5.19	5.65	5.74	9.59	6.15
17	5.87	5.48	5.47	5.45	5.50	5.49	5.09	5.21	5.65	5.73	9.61	6.00
18	5.84	5.48	5.47	5.44	5.49	5.48	5.07	5.22	5.68	5.75	9.56	5.85
19	5.83	5.48	5.47	5.44	5.49	5.47	5.07	5.23	5.69	5.80	9.47	5.75
20	5.78	5.48	5.48	5.44	5.49	5.47	5.05	5.23	5.69	5.84	9.37	5.70
21	5.74	5.48	5.47	5.43	5.48	5.45	5.03	5.24	5.68	6.02	9.24	5.65
22	5.70	5.48	5.47	5.43	5.47	5.43	5.01	5.25	5.67	6.04	9.02	5.60
23	5.67	5.48	5.49	5.42	5.47	5.41	5.00	5.28	5.67	5.97	8.29	5.55
24	5.65	5.47	5.48	5.41	5.51	5.39	4.99	5.30	5.67	5.96	7.88	5.52
25	5.63	5.48	5.49	5.40	5.52	5.37	4.96	5.32	5.66	6.15	8.22	5.51
26	5.62	5.48	5.49	5.38	5.52	5.35	4.93	5.33	5.66	6.61	7.86	5.50
27	5.60	5.47	5.49	5.36	5.54	5.34	4.90	5.35	5.65	7.75	7.77	5.50
28	5.59	5.47	5.49	5.34	5.55	5.32	4.87	5.47	5.65	9.14	8.31	5.50
29	5.58	5.47	5.48	5.34	---	5.32	5.04	5.53	5.69	9.16	8.37	5.70
30	5.56	5.46	5.48	5.34	---	5.32	5.04	5.57	5.69	9.05	8.57	5.65
31	5.55	---	5.49	5.33	---	5.36	---	5.60	---	8.43	9.06	---
TOTAL	176.59	164.78	169.91	168.48	152.75	169.35	154.18	159.68	170.13	194.47	248.38	198.08
MEAN	5.70	5.49	5.48	5.43	5.46	5.46	5.14	5.15	5.67	6.27	8.01	6.60
MAX	5.92	5.54	5.50	5.49	5.55	5.56	5.40	5.60	5.71	9.16	9.61	9.12
MIN	5.55	5.46	5.46	5.33	5.33	5.32	4.87	4.87	5.61	5.67	6.17	5.50
CAL YR 1989	TOTAL 2023.15 MEAN 5.54 MAX 8.58 MIN 4.70											
WTR YR 1990	TOTAL 2126.78 MEAN 5.83 MAX 9.61 MIN 4.87											

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291673 TENMILE CANAL AT CONTROL NEAR ESTERO, FL

LOCATION.--Lat 26°31'04", long 81°51'18", in NE¼ sec. 1, T.46 S., R.24 E., Lee County, Hydrologic Unit 03090204, on left bank 200 ft upstream of weir, 1.05 mi north of Alico Road, 2.4 mi upstream from mouth and 6.5 mi northwest of Estero.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (State Department of Transportation bench mark).

REMARKS.--Records fair except for those estimated stage and discharge, Oct. 1-13, Sept. 9, 10 and when vertical lift gates were open, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 502 ft³/s, Aug. 11, 1988, gage height 6.15 ft; no flow for many days each year; minimum gage height, 2.70 ft Sept. 9, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,310 ft³/s, Aug. 14, gage height 6.26 ft; maximum gage height, 6.37 ft Aug. 14; many days of no flow; minimum gage height, 2.70 ft Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	9.8	.87	2.8	.02	6.6	.11	.00	.77	16	316	481
2	112	8.1	.51	2.1	.11	6.1	.09	.00	2.1	16	305	435
3	99	7.1	.49	2.1	.20	6.2	.07	.00	5.6	23	254	394
4	98	6.3	.30	1.9	.21	5.5	.03	.00	8.9	19	343	343
5	85	5.1	.91	2.0	.22	4.9	.00	.00	8.7	16	556	486
6	78	4.8	1.9	1.9	.17	4.0	.00	.00	12	14	469	509
7	79	4.1	2.1	1.8	.16	3.8	.00	.00	15	12	158	432
8	98	4.0	2.0	1.8	.16	2.8	.00	.00	18	11	237	369
9	105	3.6	2.5	1.3	.14	2.5	.00	.00	15	10	284	281
10	112	3.2	1.1	1.3	.11	2.3	.00	.00	15	9.9	288	296
11	79	2.8	1.9	1.3	1.9	2.3	.00	.00	14	11	293	374
12	68	2.6	2.1	1.2	1.8	1.9	.00	.00	12	12	299	221
13	67	2.1	2.9	.69	1.8	1.8	.00	.00	9.8	13	392	121
14	60	2.1	2.7	.31	1.8	1.6	.00	.00	8.3	13	1040	112
15	62	1.8	3.0	.34	1.5	1.3	.00	.00	6.7	17	1270	92
16	65	2.4	1.8	.31	1.5	.81	.00	.00	5.7	25	1250	80
17	62	1.5	1.3	.30	1.5	.70	.00	.00	6.2	22	1250	76
18	58	1.4	1.3	.30	1.1	.74	.00	.00	10	25	1220	76
19	58	1.3	1.1	.28	1.1	.32	.00	.00	12	38	1170	84
20	52	1.3	1.9	.27	.98	.49	.00	.00	11	44	1100	78
21	45	1.2	2.1	.25	.65	.25	.00	.00	9.9	61	900	71
22	40	1.1	2.2	.26	.58	.18	.00	.00	9.0	57	649	68
23	34	1.4	3.6	.24	4.7	.12	.00	.00	8.8	44	426	68
24	30	1.0	2.4	.21	13	.07	.00	.00	9.0	37	304	67
25	26	1.3	2.9	.16	12	.02	.00	.00	8.0	451	297	60
26	23	1.0	2.7	.16	10	.00	.00	.00	7.2	941	293	55
27	20	.72	2.7	.09	8.3	.00	.00	.00	6.3	322	264	52
28	17	.72	2.6	.07	7.5	.00	.00	.00	6.6	521	359	53
29	14	.72	2.1	.05	---	.00	.00	.08	19	645	435	85
30	13	.53	2.1	.04	---	.00	.00	.19	21	501	387	114
31	11	---	2.2	.02	---	.05	---	.33	---	345	406	---
TOTAL	1881	85.09	60.28	25.85	73.21	57.35	0.30	0.60	301.57	4291.9	17214	6033
MEAN	60.7	2.84	1.94	.83	2.61	1.85	.010	.019	10.1	138	555	201
MAX	112	9.8	3.6	2.8	13	6.6	.11	.33	21	941	1270	509
MIN	11	.53	.30	.02	.02	.00	.00	.00	.77	9.9	158	52
AC-FT	3730	169	120	51	145	114	.6	1.2	598	8510	34140	11970

WTR YR 1990 TOTAL 30024.15 MEAN 82.3 MAX 1270 MIN .00 AC-FT 59550

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291673 TENMILE CANAL AT CONTROL NEAR ESTERO, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.80	5.57	5.50	5.53	5.38	5.56	5.41	4.86	5.50	5.60	3.09	3.62
2	5.80	5.56	5.49	5.52	5.41	5.55	5.41	4.86	5.52	5.60	3.05	3.48
3	5.78	5.56	5.49	5.52	5.45	5.55	5.40	4.86	5.55	5.63	2.97	3.34
4	5.78	5.55	5.49	5.52	5.45	5.55	5.38	4.85	5.57	5.61	4.22	3.18
5	5.76	5.55	5.50	5.52	5.46	5.54	5.35	4.83	5.57	5.60	5.60	3.64
6	5.75	5.54	5.52	5.52	5.44	5.54	5.33	4.82	5.58	5.60	5.03	3.72
7	5.75	5.54	5.52	5.52	5.43	5.54	5.30	4.81	5.60	5.59	3.54	3.46
8	5.78	5.54	5.52	5.52	5.43	5.53	5.29	4.79	5.61	5.58	5.07	3.26
9	5.79	5.53	5.52	5.51	5.42	5.52	5.26	4.89	5.60	5.58	5.68	2.97
10	5.80	5.53	5.51	5.51	5.41	5.52	5.24	4.96	5.60	5.57	5.72	3.02
11	5.75	5.53	5.52	5.51	5.49	5.52	5.22	4.86	5.59	5.58	5.79	3.28
12	5.73	5.52	5.52	5.51	5.52	5.52	5.21	4.86	5.59	5.58	5.87	4.09
13	5.73	5.52	5.53	5.50	5.52	5.52	5.18	4.86	5.57	5.59	6.00	5.81
14	5.72	5.52	5.53	5.49	5.52	5.51	5.16	4.88	5.57	5.59	6.26	5.80
15	5.72	5.52	5.53	5.49	5.51	5.51	5.14	4.96	5.56	5.61	6.12	5.77
16	5.73	5.52	5.52	5.49	5.51	5.50	5.13	5.04	5.55	5.63	6.07	5.75
17	5.72	5.51	5.51	5.49	5.51	5.50	5.12	5.05	5.55	5.62	6.06	5.74
18	5.71	5.51	5.51	5.48	5.51	5.50	5.11	5.06	5.57	5.63	5.97	5.75
19	5.71	5.51	5.51	5.48	5.51	5.49	5.10	5.06	5.59	5.67	5.81	5.76
20	5.70	5.51	5.52	5.47	5.50	5.49	5.08	5.07	5.58	5.68	5.60	5.75
21	5.68	5.51	5.52	5.47	5.50	5.47	5.06	5.09	5.57	5.72	4.97	5.74
22	5.67	5.51	5.52	5.47	5.50	5.44	5.04	5.11	5.57	5.71	4.17	5.73
23	5.66	5.51	5.53	5.46	5.53	5.42	5.01	5.14	5.57	5.68	3.45	5.73
24	5.65	5.51	5.52	5.45	5.59	5.40	4.99	5.16	5.57	5.67	3.05	5.73
25	5.64	5.51	5.53	5.43	5.59	5.38	4.96	5.18	5.56	5.70	3.02	5.72
26	5.63	5.50	5.53	5.43	5.57	5.37	4.92	5.19	5.56	5.09	3.01	5.71
27	5.62	5.50	5.53	5.40	5.57	5.35	4.90	5.21	5.55	3.10	2.91	5.70
28	5.61	5.50	5.52	5.40	5.56	5.34	4.87	5.33	5.56	3.75	3.23	5.70
29	5.60	5.50	5.52	5.39	---	5.33	4.86	5.40	5.60	4.15	3.48	5.76
30	5.59	5.50	5.52	5.38	---	5.33	4.86	5.44	5.62	3.69	3.32	5.80
31	5.58	---	5.52	5.38	---	5.37	---	5.48	---	3.18	3.38	---
TOTAL	176.94	165.69	171.02	169.76	153.79	169.66	154.29	155.96	167.15	163.58	141.51	144.51
MEAN	5.71	5.52	5.52	5.48	5.49	5.47	5.14	5.03	5.57	5.28	4.56	4.82
MAX	5.80	5.57	5.53	5.53	5.59	5.56	5.41	5.48	5.62	5.72	6.26	5.81
MIN	5.58	5.50	5.49	5.38	5.38	5.33	4.86	4.79	5.50	3.10	2.91	2.97

WTR YR 1990 TOTAL 1933.86 MEAN 5.30 MAX 6.26 MIN 2.91

CALOOSAHATCHEE RIVER

02292000 CALOOSAHATCHEE CANAL AT MOORE HAVEN, FL

LOCATION.--Lat 26°50'22", long 81°05'15", in NW¼NW¼ sec.12, T.42 S., R.32 E., Glades County, Hydrologic Unit 03090205, on right bank in boat house at downstream side of hurricane gate structure and lock 1 at Lake Okeechobee outlet, 0.1 mi west of control structure 77, 0.45 mi upstream from U.S. Highway 27, and 15 mi upstream from lock 2.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May to September 1913 (discharge measurements), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1304. Prior to October 1938, published as Threemile Canal near Ritta.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 17, 1952, at site 0.5 mi downstream, at datum 1.44 ft lower. Jan. 17, 1952 to Sept. 30, 1966, at site 0.5 mi downstream at present datum. October 1938 to September 1966, auxiliary water-stage recorder 0.2 mi upstream from Lake Hicpochee and 3.0 mi downstream. Since October 1966, auxiliary water-stage recorder on upstream side of hurricane gate structure and lock 1.

REMARKS.--No estimated daily discharge and stage. Records poor. Flow regulated by operation of control structure 77 at Lake Okeechobee.

COOPERATION.--Gate-opening record provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--52 years, 860 ft³/s, 623,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8,290 ft³/s Apr. 10, 11, 1970; maximum gage height, 15.76 ft present datum Sept. 27, 1948; maximum daily reverse flow, 4,410 ft³/s May 28, 1982; lock closed and flow consists of leakage and lockage estimated as 5.0 ft³/s during several periods in each year; minimum gage height, 5.8 ft present datum, estimated Aug. 8, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,810 ft³/s Feb. 27; maximum gage height, 12.43 ft July 17; lock closed and flow consists of leakage and lockage estimated as 5.0 ft³/s for many days; maximum daily reverse flow, 1,170 ft³/s July 15; minimum gage height, 9.95 ft Apr. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.0	102	5.0	5.0	123	5.0	5.0	49	-53	5.0	5.0
2	5.0	5.0	134	5.0	5.0	85	5.0	5.0	5.0	-241	142	5.0
3	5.0	67	547	5.0	5.0	.00	5.0	321	-5.0	-305	123	5.0
4	5.0	187	457	5.0	151	.00	5.0	414	-5.0	-495	5.0	5.0
5	72	178	192	5.0	57	.00	103	216	-5.0	-461	5.0	5.0
6	321	179	252	5.0	44	.00	257	41	-5.0	-571	5.0	5.0
7	302	180	427	5.0	182	107	234	389	5.0	-672	5.0	5.0
8	223	189	456	5.0	144	408	206	445	5.0	-419	5.0	5.0
9	5.0	289	5.0	5.0	235	169	205	451	-5.0	-331	5.0	5.0
10	5.0	266	5.0	5.0	186	222	361	362	-5.0	-75	5.0	5.0
11	5.0	240	5.0	5.0	41	205	293	138	-87	-274	5.0	5.0
12	5.0	268	5.0	5.0	70	246	674	74	-101	-156	5.0	5.0
13	5.0	287	95	5.0	161	385	629	5.0	-74	-286	5.0	5.0
14	5.0	280	477	5.0	67	470	1470	-5.0	-14	-582	5.0	5.0
15	5.0	276	758	5.0	5.0	497	2290	16	-46	-1170	5.0	5.0
16	5.0	261	602	39	5.0	457	2240	204	43	-990	5.0	5.0
17	5.0	254	190	37	5.0	228	2330	216	57	-504	5.0	5.0
18	5.0	53	73	5.0	5.0	539	1360	134	118	.00	5.0	5.0
19	5.0	205	5.0	256	5.0	592	599	134	156	5.0	5.0	5.0
20	5.0	298	5.0	266	5.0	61	738	130	207	5.0	5.0	5.0
21	5.0	260	420	5.0	38	556	659	238	171	5.0	5.0	5.0
22	5.0	258	755	132	121	467	317	292	261	5.0	5.0	5.0
23	5.0	281	364	5.0	42	263	479	297	151	5.0	5.0	5.0
24	5.0	339	753	5.0	5.0	421	353	200	52	5.0	5.0	5.0
25	5.0	315	556	5.0	1130	315	161	145	-47	5.0	5.0	5.0
26	5.0	301	5.0	5.0	2070	395	317	5.0	-258	5.0	5.0	151
27	5.0	276	5.0	5.0	2810	567	367	5.0	-89	5.0	5.0	321
28	5.0	233	5.0	5.0	1560	722	320	-5.0	-340	5.0	5.0	205
29	5.0	303	5.0	5.0	---	686	63	-5.0	-301	5.0	5.0	5.0
30	5.0	145	5.0	5.0	---	375	5.0	88	-129	5.0	5.0	5.0
31	5.0	---	5.0	5.0	---	.00	---	122	---	5.0	5.0	---
TOTAL	1053.0	6678.0	7670.0	860.0	9159.0	9561.00	17050.0	5077.0	-236.0	-7520.00	410.0	812.0
MEAN	34.0	223	247	27.7	327	308	568	164	-7.87	-243	13.2	27.1
MAX	321	339	758	266	2810	722	2330	451	261	5.0	142	321
MIN	5.0	5.0	5.0	5.0	5.0	.00	5.0	-5.0	-340	-1170	5.0	5.0
AC-FT	2090	13250	15210	1710	18170	18960	33820	10070	-468	-14920	813	1610

CAL YR 1989 TOTAL 76234.1 MEAN 209 MAX 6060 MIN -286 AC-FT 151200
WTR YR 1990 TOTAL 50574.00 MEAN 139 MAX 2810 MIN -1170 AC-FT 100300

CALOOSAHATCHEE RIVER

02292000 CALOOSAHATCHEE CANAL AT MOORE HAVEN, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.26	11.18	11.30	10.94	10.99	10.99	10.69	10.72	10.59	10.70	10.79	11.00
2	11.05	11.12	11.18	10.99	10.93	11.16	10.69	10.67	10.71	10.69	10.69	11.09
3	11.00	10.99	11.11	11.04	10.84	11.29	10.68	10.61	10.75	10.87	10.74	11.04
4	11.05	11.04	11.19	11.07	10.84	11.28	10.63	10.59	10.76	11.00	10.75	10.96
5	10.87	11.14	11.04	11.10	10.87	11.18	10.59	10.62	10.77	11.10	10.85	11.07
6	10.87	11.10	10.74	11.16	10.64	10.94	10.53	10.60	10.77	11.14	11.06	11.15
7	10.93	11.04	10.72	11.19	10.60	10.69	10.55	10.52	10.68	11.22	11.21	11.09
8	11.07	11.04	10.88	11.22	10.49	10.48	10.57	10.53	10.69	11.14	11.26	11.09
9	11.10	11.04	11.05	11.19	10.48	10.50	10.56	10.52	10.89	11.14	11.36	11.15
10	11.10	11.13	11.08	11.17	10.63	10.52	10.54	10.50	11.17	11.17	11.06	11.22
11	11.04	11.12	11.12	11.25	10.75	10.58	10.57	10.75	11.14	11.16	11.10	11.09
12	11.16	11.09	11.08	11.29	10.87	10.58	10.50	10.95	11.09	11.00	10.96	10.91
13	11.00	11.14	10.98	11.27	11.09	10.54	10.60	10.94	11.05	11.24	11.09	10.93
14	11.12	11.19	10.95	11.28	11.23	10.50	10.45	10.86	10.92	11.49	11.41	10.99
15	11.05	11.18	11.00	11.28	11.25	10.57	10.38	10.72	10.65	12.14	11.08	11.00
16	11.17	11.18	11.15	11.21	11.26	10.59	10.39	10.65	10.44	12.09	11.08	11.07
17	11.29	11.27	11.20	11.01	11.24	10.60	10.29	10.62	10.41	11.82	11.11	11.19
18	11.11	11.22	11.25	10.93	11.21	10.48	10.19	10.60	10.39	11.35	11.04	11.29
19	11.18	11.07	11.18	10.86	11.20	10.62	10.37	10.60	10.31	10.94	11.40	11.36
20	11.07	11.12	11.03	10.90	11.16	10.57	10.48	10.58	10.30	11.21	11.18	11.07
21	11.27	11.14	10.86	10.92	11.09	10.52	10.47	10.47	10.30	11.12	10.96	10.93
22	11.30	11.12	10.84	10.91	10.80	10.53	10.49	10.40	10.32	11.09	10.96	10.99
23	11.07	11.03	10.90	10.92	10.78	10.53	10.53	10.50	10.40	11.15	11.17	11.00
24	11.12	11.08	10.77	10.89	11.08	10.53	10.48	10.53	10.49	11.10	11.23	10.99
25	11.17	11.17	10.85	10.83	11.27	10.60	10.53	10.64	10.71	11.24	10.86	10.98
26	11.25	11.19	10.98	10.92	11.40	10.48	10.43	10.70	10.93	11.19	11.03	10.90
27	11.32	11.20	11.23	10.92	11.30	10.46	10.50	10.68	10.83	11.04	11.07	10.76
28	11.20	11.14	10.78	10.91	10.99	10.57	10.53	10.65	11.00	10.94	11.06	10.74
29	11.15	11.15	10.99	10.98	---	10.57	10.73	10.51	10.87	10.97	11.21	10.84
30	11.21	11.32	11.14	11.02	---	10.67	10.73	10.39	10.77	10.94	10.98	10.97
31	11.23	---	10.93	11.04	---	10.64	---	10.46	---	10.90	11.07	---
TOTAL	344.78	333.94	341.50	342.61	307.28	330.76	315.67	329.08	321.10	346.29	342.82	330.86
MEAN	11.12	11.13	11.02	11.05	10.97	10.67	10.52	10.62	10.70	11.17	11.06	11.03
MAX	11.32	11.32	11.30	11.29	11.40	11.29	10.73	10.95	11.17	12.14	11.41	11.36
MIN	10.87	10.99	10.72	10.83	10.48	10.46	10.19	10.39	10.30	10.69	10.69	10.74
CAL YR 1989	TOTAL 4067.73		MEAN 11.14	MAX 11.99	MIN 10.72							
WTR YR 1990	TOTAL 3986.69		MEAN 10.92	MAX 12.14	MIN 10.19							

CALOOSAHATCHEE RIVER

02292480 CALOOSAHATCHEE CANAL AT ORTONA LOCK NEAR LA BELLE, FL
(National stream-quality accounting network station)

LOCATION.--Lat 26°47'22", long 81°18'11", in SW¼ sec.26, T.42 S., R.30 E., Glades County, Hydrologic Unit 03090205, near right bank, 500 ft upstream from Ortona Lock, 1.4 mi downstream from Long Hammock Creek, and 9.0 mi east of La Belle.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1948 to September 1950 (discharge measurements and gage heights), July 1971 to current year. Records of gage heights and discharge measurements can be found in the records of the Geological Survey.

REVISED RECORDS.--WDR FL-80-2A: 1979.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. (Levels by U.S. Army Corps of Engineers).

REMARKS.--Estimated daily discharge: May 11. Records good, except those for estimated daily discharges, which are fair. Flow regulated by operation of control structures 77 and 78.

COOPERATION.--Gate-opening record provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--19 years, 745 ft³/s, 539,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 9,720 ft³/s Aug. 8, 1974; maximum gage height, 12.80 ft June 26, 1974; no flow for a few days in some years; minimum gage height, 8.60 ft Nov. 3, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,300 ft³/s Feb. 27; maximum gage height, 12.33 ft July 16; no minimum daily discharge 0.10 ft³/s Aug. 5; minimum gage height, 10.06 ft June 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	19	8.3	12	14	8.6	11	9.3	9.9	5.9	5.2	636
2	338	14	5.5	10	14	8.7	8.9	11	10	6.0	6.1	789
3	8.0	11	256	7.6	20	7.8	7.9	125	10	6.2	5.3	789
4	9.7	23	190	8.5	20	8.7	6.4	366	10	4.5	5.1	725
5	12	21	190	11	14	7.8	8.8	131	10	1.9	.10	394
6	9.5	14	192	10	9.9	8.7	7.1	8.4	10	5.4	7.1	398
7	17	11	192	11	15	244	9.6	54	10	5.3	5.4	357
8	13	14	166	13	15	191	11	186	10	5.3	106	4.4
9	14	13	12	11	16	6.9	8.4	348	11	5.4	463	4.4
10	82	15	8.7	15	18	13	6.1	176	11	4.6	573	37
11	253	21	8.7	14	18	10	87	9.9	10	6.3	276	183
12	305	19	14	12	8.4	10	341	10	11	7.0	506	62
13	161	19	9.2	14	8.5	146	403	10	10	4.6	583	8.7
14	85	15	100	15	8.7	189	1600	10	10	4.6	2240	7.0
15	274	15	398	6.3	9.6	187	2210	9.8	9.9	5.0	2450	8.7
16	8.9	14	317	147	6.2	143	2210	9.8	9.8	1140	1050	8.8
17	310	15	15	106	15	41	2210	9.6	9.8	2280	1150	9.8
18	103	15	8.9	17	9.5	223	1130	9.6	9.9	2260	588	7.2
19	208	18	10	270	7.0	331	39	9.8	9.5	1150	1700	300
20	154	15	11	174	8.8	46	335	9.8	9.3	478	2150	348
21	15	16	242	18	108	189	315	9.9	9.5	716	1470	53
22	311	12	347	13	239	157	10	9.9	9.5	395	731	4.3
23	298	8.7	159	13	52	8.6	166	10	9.6	397	417	4.4
24	13	14	395	17	11	102	139	10	9.9	341	1510	10
25	18	19	260	11	1200	188	6.8	10	10	188	1090	7.9
26	19	20	7.6	13	2210	164	10	10	11	395	1150	132
27	43	8.8	549	17	3300	145	9.3	9.8	10	395	835	185
28	174	9.7	297	18	1420	400	9.4	9.8	11	251	1220	140
29	17	9.9	17	15	---	399	9.5	9.6	10	183	1930	177
30	9.6	10	101	17	---	194	7.6	9.5	10	159	1900	514
31	9.7	---	242	14	---	6.8	---	9.8	---	3.5	1500	---
TOTAL	3395.4	449.1	4728.9	1050.4	8795.6	3784.6	11332.8	1621.3	301.6	10809.5	27622.30	6304.6
MEAN	110	15.0	153	33.9	314	122	378	52.3	10.1	349	891	210
MAX	338	23	549	270	3300	400	2210	366	11	2280	2450	789
MIN	8.0	8.7	5.5	6.3	6.2	6.8	6.1	8.4	9.3	1.9	.10	4.3
AC-FT	6730	891	9380	2080	17450	7510	22480	3220	598	21440	54790	12510

CAL YR 1989 TOTAL 101718.20 MEAN 279 MAX 4700 MIN .00 AC-FT 201800
WTR YR 1990 TOTAL 80196.10 MEAN 220 MAX 3300 MIN .10 AC-FT 159100

CALOOSAHATCHEE RIVER

02292480 CALOOSAHATCHEE CANAL AT ORTONA LOCK, NEAR LA BELLE, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	WEATHER (WMO CODE NUMBER) (00041)	GAGE HEIGHT (FEET) (00065)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
NOV												
07...	0940	0.50	60.0	25.0	--	1028	1028	--	--	--	--	600
07...	0941	3.00	60.0	25.0	--	1028	1028	--	--	--	--	601
07...	0942	5.00	60.0	25.0	--	1028	1028	--	--	--	--	600
07...	0943	10.0	60.0	24.5	--	1028	1028	--	--	--	--	603
07...	0944	17.0	60.0	24.5	--	1028	1028	--	--	--	--	604
07...	1000	0.50	175	25.0	--	1028	1028	--	--	--	--	602
07...	1001	3.00	175	25.0	--	1028	1028	--	--	--	--	602
07...	1002	5.00	175	25.0	--	1028	1028	--	--	--	--	603
07...	1003	10.0	175	24.5	--	1028	1028	--	--	--	--	604
07...	1004	17.0	175	24.5	--	1028	1028	--	--	--	--	605
07...	1015	0.50	290	25.0	--	1028	1028	--	--	--	--	602
07...	1016	3.00	290	25.0	--	1028	1028	--	--	--	--	603
07...	1017	5.00	290	25.0	--	1028	1028	--	--	--	--	603
07...	1018	10.0	290	24.5	--	1028	1028	--	--	--	--	604
07...	1019	17.0	290	24.5	--	1028	1028	--	--	--	--	605
07...	1200	--	--	--	23.5	--	80020	0	--	1.0	43.0	603
JAN												
23...	0945	0.50	60.0	20.5	--	1028	1028	--	--	--	--	700
23...	0946	3.00	60.0	20.0	--	1028	1028	--	--	--	--	700
23...	0947	5.00	60.0	20.0	--	1028	1028	--	--	--	--	700
23...	0948	10.0	60.0	20.0	--	1028	1028	--	--	--	--	700
23...	0949	17.0	60.0	20.0	--	1028	1028	--	--	--	--	704
23...	1005	0.50	175	20.0	--	1028	1028	--	--	--	--	706
23...	1006	3.00	175	20.0	--	1028	1028	--	--	--	--	706
23...	1007	5.00	175	20.0	--	1028	1028	--	--	--	--	708
23...	1008	10.0	175	20.0	--	1028	1028	--	--	--	--	706
23...	1009	17.0	175	20.0	--	1028	1028	--	--	--	--	706
23...	1015	0.50	240	20.5	--	1028	1028	--	--	--	--	705
23...	1016	3.00	290	20.0	--	1028	1028	--	--	--	--	705
23...	1017	5.00	290	20.0	--	1028	1028	--	--	--	--	707
23...	1018	10.0	290	20.0	--	1028	1028	--	--	--	--	706
23...	1019	17.0	290	20.0	--	1028	1028	--	--	--	--	706
23...	1330	--	--	--	23.0	--	80020	0	--	2.0	81.0	--
APR												
17...	0940	0.50	60.0	25.0	--	1028	1028	--	10.20	--	--	663
17...	0941	3.00	60.0	25.0	--	1028	1028	--	--	--	--	667
17...	0942	5.00	60.0	25.0	--	1028	1028	--	--	--	--	668
17...	0943	10.0	60.0	25.0	--	1028	1028	--	--	--	--	668
17...	0944	17.0	60.0	25.0	--	1028	1028	--	--	--	--	670
17...	0950	0.50	175	25.0	--	1028	1028	--	--	--	--	669
17...	0951	3.00	175	25.0	--	1028	1028	--	--	--	--	671
17...	0952	5.00	175	25.0	--	1028	1028	--	--	--	--	672
17...	0953	10.0	175	25.0	--	1028	1028	--	--	--	--	671
17...	0954	17.0	175	25.0	--	1028	1028	--	--	--	--	671
17...	1000	0.50	290	25.0	--	1028	1028	--	--	--	--	673
17...	1001	3.00	290	25.0	--	1028	1028	--	--	--	--	673
17...	1002	5.00	290	25.0	--	1028	1028	--	--	--	--	672
17...	1003	10.0	290	25.0	--	1028	1028	--	--	--	--	673
17...	1004	17.0	290	25.0	--	1028	1028	--	--	--	--	673
17...	1330	--	663	--	27.5	--	80020	1	10.20	3.8	38.0	663
JUL												
17...	0950	0.50	60.0	28.0	--	1028	1028	--	--	--	--	528
17...	0951	3.00	60.0	28.0	--	1028	1028	--	--	--	--	528
17...	0952	5.00	60.0	28.0	--	1028	1028	--	--	--	--	529
17...	0953	10.0	60.0	28.0	--	1028	1028	--	--	--	--	529
17...	0954	17.0	60.0	28.0	--	1028	1028	--	--	--	--	529
17...	1025	0.50	175	28.0	--	1028	1028	--	--	--	--	528
17...	1026	3.00	175	28.0	--	1028	1028	--	--	--	--	528
17...	1027	5.00	175	28.0	--	1028	1028	--	--	--	--	528
17...	1028	10.0	175	28.0	--	1028	1028	--	--	--	--	524
17...	1029	17.0	175	28.0	--	1028	1028	--	--	--	--	524
17...	1110	0.50	290	28.0	--	1028	1028	--	--	--	--	533
17...	1111	3.00	290	28.0	--	1028	1028	--	--	--	--	532
17...	1112	5.00	290	28.0	--	1028	1028	--	--	--	--	532
17...	1113	10.0	290	28.0	--	1028	1028	--	--	--	--	531
17...	1114	17.0	290	28.0	--	1028	1028	--	--	--	--	531
17...	1340	--	--	--	27.5	--	80020	2	--	4.2	37.0	--

CALOOSAHATCHEE RIVER

02292480 CALOOSAHATCHEE CANAL AT ORTONA LOCK, NEAR LA BELLE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, TOTAL (MG/L AS N) (00610)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV												
07...	6.8	7.9	--	--	--	--	--	--	--	--	--	--
07...	6.3	7.9	--	--	--	--	--	--	--	--	--	--
07...	6.3	7.9	--	--	--	--	--	--	--	--	--	--
07...	5.0	7.8	--	--	--	--	--	--	--	--	--	--
07...	4.5	7.8	--	--	--	--	--	--	--	--	--	--
07...	6.7	7.7	--	--	--	--	--	--	--	--	--	--
07...	6.0	7.9	--	--	--	--	--	--	--	--	--	--
07...	5.8	7.9	--	--	--	--	--	--	--	--	--	--
07...	5.3	7.7	--	--	--	--	--	--	--	--	--	--
07...	4.5	7.8	--	--	--	--	--	--	--	--	--	--
07...	7.1	8.0	--	--	--	--	--	--	--	--	--	--
07...	6.0	7.9	--	--	--	--	--	--	--	--	--	--
07...	6.0	7.9	--	--	--	--	--	--	--	--	--	--
07...	5.6	7.8	--	--	--	--	--	--	--	--	--	--
07...	5.4	7.8	--	--	--	--	--	--	--	--	--	--
07...	--	8.3	7.9	167	0.030	0.040	<0.010	1.1	0.300	0.170	0.130	0.110
JAN												
23...	8.0	8.2	--	--	--	--	--	--	--	--	--	--
23...	8.0	8.1	--	--	--	--	--	--	--	--	--	--
23...	7.7	8.1	--	--	--	--	--	--	--	--	--	--
23...	7.4	8.0	--	--	--	--	--	--	--	--	--	--
23...	6.0	7.9	--	--	--	--	--	--	--	--	--	--
23...	8.6	8.2	--	--	--	--	--	--	--	--	--	--
23...	8.2	8.0	--	--	--	--	--	--	--	--	--	--
23...	8.0	8.0	--	--	--	--	--	--	--	--	--	--
23...	7.7	8.0	--	--	--	--	--	--	--	--	--	--
23...	7.0	7.9	--	--	--	--	--	--	--	--	--	--
23...	8.7	8.1	--	--	--	--	--	--	--	--	--	--
23...	8.8	8.0	--	--	--	--	--	--	--	--	--	--
23...	8.3	8.0	--	--	--	--	--	--	--	--	--	--
23...	8.0	8.0	--	--	--	--	--	--	--	--	--	--
23...	8.0	7.9	--	--	--	--	--	--	--	--	--	--
23...	--	8.3	8.0	160	0.050	0.040	<0.010	1.4	--	0.070	0.080	0.050
APR												
17...	6.1	7.9	--	--	--	--	--	--	--	--	--	--
17...	5.9	7.9	--	--	--	--	--	--	--	--	--	--
17...	5.7	7.9	--	--	--	--	--	--	--	--	--	--
17...	5.7	7.9	--	--	--	--	--	--	--	--	--	--
17...	5.7	7.9	--	--	--	--	--	--	--	--	--	--
17...	6.4	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.8	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.7	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.6	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.8	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.9	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.9	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.5	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.7	8.0	--	--	--	--	--	--	--	--	--	--
17...	5.8	8.0	--	--	--	--	--	--	--	--	--	--
17...	--	7.9	8.2	104	0.020	0.020	<0.010	1.5	--	0.060	0.020	0.010
JUL												
17...	3.7	6.9	--	--	--	--	--	--	--	--	--	--
17...	3.7	7.1	--	--	--	--	--	--	--	--	--	--
17...	3.5	7.1	--	--	--	--	--	--	--	--	--	--
17...	3.7	7.1	--	--	--	--	--	--	--	--	--	--
17...	3.7	7.1	--	--	--	--	--	--	--	--	--	--
17...	--	7.4	--	--	--	--	--	--	--	--	--	--
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17...	--	7.6	--	--	--	--	--	--	--	--	--	--
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17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	7.1	7.7	151	0.060	0.060	<0.010	1.3	0.200	0.160	0.150	0.110

CALOOSAHATCHEE RIVER

02292480 CALOOSAHATCHEE CANAL AT ORTONA LOCK, NEAR LA BELLE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
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07...	78	9.0	34	5.7	53	28	0.20	9.8	2	30	<0.5	<1.0
JAN												
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23...	64	16	51	6.2	84	53	0.30	10	1	39	<0.5	1.0
APR												
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17...	42	16	55	7.5	96 98	51	0.30	5.8	1	40	<0.5	2.0
JUL												
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17...	55	9.7	30	4.6	56	27	0.20	8.4	1	18	<0.5	<1.0

CALOOSAHCACHEE RIVER

02292480 CALOOSAHATCHEE CANAL AT ORTONA LOCK, NEAR LA BELLE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV												
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07...	1	<3	1	130	1	9	<10	1	<1.0	530	<6	11
JAN												
23...	--	--	--	--	--	--	--	--	--	--	--	--
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23...	2	<3	<10	30	<10	3	<10	<10	1.0	930	<6	23
APR												
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17...	<1	<3	1	15	<1	1	<10	2	<1.0	1000	<6	8
JUL												
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17...	1	<3	4	86	8	3	<10	2	<1.0	480	<6	110

CALOOSAHATCHEE RIVER

02292780 TOWNSEND CANAL NEAR ALVA, FL

LOCATION.--Lat 26°42'33", long 81°33'30", in SW¼ sec.30, T.43 S., R.28 E., Hendry County, Hydrologic Unit 03090205, on north side of bridge on State Highway 80, 3.2 mi east of Alva, 9 mi west of La Belle, and 9.6 mi east of Olga.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1975 to current year.

GAGE.--Water-stage recorders. Prior to July 1983, deflection vane recorder at same site. Prior to Oct. 1, 1987, electromagnetic velocity meter at same site. Datum of gage is National Geodetic Vertical Datum of 1929. Since April 17, 1987 supplementary water-stage recorder at site 1000 ft downstream. Since Dec. 4, 1987 auxiliary upstream recorder at site above primary gage.

REMARKS.--No estimated daily discharge. Records poor. Flow regulated by pump station upstream and control and gate structure downstream. Flow frequently reversed to supply water for agricultural purposes (negative figures indicate flow to the south). Discharge computed from stage-discharge relation and slope discharge relation.

AVERAGE DISCHARGE.--6 years (water years 1977-82), 5.81 ft³/s, 4,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,670 ft³/s June 19, 1982; maximum gage height, 9.98 ft June 9, 1983; maximum daily reverse flow, 1,000 ft³/s Apr. 7, 1983; minimum gage height, 1.08 ft July 27, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 352 ft³/s Sept. 29; maximum gage height, 6.82 ft July 25; maximum daily reverse flow, 639 ft³/s Dec. 23; minimum gage height, 2.10 ft Apr. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	-146	-113	1.6	---	3.8	20	-99	-5.6	25	---	23
2	88	-175	-204	2.2	---	3.8	27	-242	-7.5	35	---	28
3	.30	-191	-233	3.1	---	-5.3	33	-411	3.9	.00	---	82
4	7.8	-68	-248	1.6	---	3.1	18	-299	2.4	.00	---	54
5	-11	-6.7	-413	1.6	---	-37	12	-124	3.1	-41	---	.30
6	-20	-121	-469	2.1	---	-227	5.1	-66	4.6	-26	---	-91
7	-24	-215	-531	1.7	---	-273	-38	-414	58	212	---	-108
8	-.70	-206	-454	-14	---	-201	-42	-502	79	43	---	---
9	2.4	-107	-2.0	---	---	-157	-237	-527	.00	32	---	---
10	5.7	-246	4.1	---	---	-95	-444	-138	.00	4.3	220	---
11	19	-72	-1.4	---	---	-60	-555	42	1.6	.00	37	---
12	.00	-50	-.10	---	---	-161	-530	20	1.9	-1.0	.00	---
13	2.7	-23	-4.1	---	---	-283	-316	7.5	1.2	-16	97	---
14	12	-189	-388	---	---	-175	-156	11	-22	11	273	---
15	13	-345	-480	---	---	-150	-144	10	-74	78	86	---
16	11	-280	-265	---	---	-226	-191	11	-122	58	43	---
17	-5.1	-49	-58	---	---	-384	-200	13	-156	27	1.4	---
18	-106	7.6	-22	---	---	-444	-275	2.8	-111	.00	.20	---
19	-24	4.9	3.5	---	---	-425	-540	-12	48	.00	68	---
20	3.3	2.4	-181	---	---	-211	-576	-15	1.9	.00	134	---
21	.40	-66	-490	---	---	-224	-207	-173	48	.50	33	---
22	.00	-163	-573	---	---	-122	-198	-56	90	2.5	-33	---
23	-20	-73	-639	---	---	-104	-226	-53	112	.00	12	-73
24	-62	-36	-492	---	13	-207	-116	-21	18	2.0	206	-171
25	-139	-5.9	-184	---	12	-241	-39	7.3	67	241	147	-322
26	-64	-2.8	175	---	11	-224	-70	6.2	15	71	86	-383
27	-152	-82	202	---	17	-545	-138	4.5	-43	20	91	-386
28	-1.8	-135	11	---	-3.0	-526	-129	8.4	-24	.00	81	-184
29	-51	-134	2.0	---	---	-526	-39	7.6	.00	.00	1.8	352
30	-14	-71	2.2	---	---	-337	-8.6	6.0	.20	-49	9.7	199
31	-98	---	1.9	---	---	-40	---	-3.2	---	---	21	---
TOTAL	-626.50	-3243.5	-6042.90	---	---	-6599.6	-5299.5	-2997.9	-9.30	---	---	---
MEAN	-20.2	-108	-195	---	---	-213	-177	-96.7	-.31	---	---	---
MAX	88	7.6	202	---	---	3.8	33	42	112	---	---	---
MIN	-152	-345	-639	---	---	-545	-576	-527	-156	---	---	---
AC-FT	-1240	-6430	-11990	---	---	-13090	-10510	-5950	-18	---	---	---

CALOOSAHATCHEE RIVER

02292780 TOWNSEND CANAL NEAR ALVA, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.13	2.97	2.93	3.28	---	3.31	4.41	3.03	3.30	4.32	---	4.04
2	4.67	2.94	2.81	3.37	---	3.35	4.45	2.71	3.54	4.43	---	4.13
3	4.09	2.92	2.75	3.46	---	3.32	4.54	2.44	3.85	3.82	---	4.80
4	4.02	3.11	2.80	3.40	---	3.40	4.18	2.61	3.89	3.73	---	4.72
5	3.54	3.27	2.60	3.42	---	3.27	3.76	2.87	4.19	3.22	---	4.20
6	3.20	3.10	2.54	3.41	---	2.82	3.53	2.93	4.24	3.31	---	3.44
7	3.47	2.88	2.46	3.35	---	2.67	3.21	2.51	4.83	5.91	---	2.98
8	3.76	2.86	2.52	3.30	---	2.81	3.15	2.38	4.99	4.94	---	---
9	3.94	2.98	3.65	---	---	2.74	2.82	2.37	4.29	4.83	4.00	---
10	4.00	2.82	3.85	---	---	2.74	2.49	3.11	4.12	4.36	5.50	---
11	4.32	3.03	3.47	---	---	2.75	2.33	4.63	3.97	4.08	4.55	---
12	4.20	3.11	3.32	---	---	2.64	2.34	4.48	3.65	3.96	4.15	---
13	4.12	3.19	3.33	---	---	2.52	2.61	4.19	3.51	4.12	4.83	---
14	3.96	2.95	2.68	---	---	2.63	2.62	4.10	3.28	4.39	5.69	---
15	3.92	2.68	2.56	---	---	2.73	2.71	4.07	3.10	5.14	4.95	---
16	3.93	2.80	2.81	---	---	2.70	2.79	4.17	2.99	5.04	4.76	---
17	3.53	3.33	3.07	---	---	2.48	2.90	4.07	2.91	4.76	4.36	---
18	3.03	3.67	3.19	---	---	2.38	2.79	3.55	2.95	4.51	4.09	---
19	3.65	3.46	3.45	---	---	2.45	2.40	3.25	4.41	4.57	4.43	---
20	4.23	3.35	3.01	---	---	2.60	2.31	3.36	4.22	4.54	4.87	---
21	4.06	3.13	2.57	---	---	2.59	2.74	2.87	4.37	4.50	4.46	---
22	3.65	2.96	2.50	---	---	2.80	2.69	2.92	5.23	4.46	3.21	---
23	3.20	3.10	2.41	---	---	2.74	2.62	2.95	5.42	4.38	3.56	3.09
24	3.11	3.17	2.54	---	3.68	2.58	2.92	3.34	4.63	4.17	5.33	2.93
25	2.95	3.28	2.92	---	3.74	2.60	2.98	3.92	4.99	5.66	5.09	2.69
26	3.13	3.29	4.61	---	3.65	2.65	2.95	3.64	4.51	5.06	4.88	2.58
27	3.01	3.11	4.95	---	3.62	2.30	2.81	3.59	3.74	4.66	4.77	2.58
28	3.27	3.00	3.80	---	3.16	2.33	2.75	4.02	3.68	4.34	4.43	3.26
29	3.08	2.94	3.44	---	---	2.37	3.32	4.08	3.85	4.24	3.94	5.60
30	3.24	3.00	3.38	---	---	2.60	3.50	4.05	3.92	3.48	3.88	5.14
31	3.09	---	3.42	---	---	3.33	---	3.70	---	---	3.99	---
TOTAL	113.50	92.40	96.34	---	---	85.20	91.62	105.91	120.57	---	---	---
MEAN	3.66	3.08	3.11	---	---	2.75	3.05	3.42	4.02	---	---	---
MAX	4.67	3.67	4.95	---	---	3.40	4.54	4.63	5.42	---	---	---
MIN	2.95	2.68	2.41	---	---	2.30	2.31	2.37	2.91	---	---	---

CAL YR 1989 TOTAL 1261.97 MEAN 3.46 MAX 5.56 MIN 2.13

CALOOSAHATCHEE RIVER

02292900 CALOOSAHATCHEE RIVER AT S-79, NEAR OLGA, FL

LOCATION.--Lat 26°43'25", long 81°41'55", in SW¼ sec.23, T.43 S., R.26 E., Lee County, Hydrologic Unit 03090205, in control house at southeast end of lock at salinity-control structure 79, 1 mi upstream from Telegraph Creek, and 1.2 mi northeast of Olga.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1964 to March 1966 (gage heights), April 1966 to current year.

REVISED RECORD.--WDR FL-79-2A; 1978.

GAGE.--Dual water-stage recorder, gate-opening recorder, and gate-opening indicators. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Estimated daily discharge: May 5, 6. Records good, except for those of estimated daily discharge, which are fair. Flow regulated by operation of salinity-control structure 79. Discharge computed from relations between discharge, head, and gate opening.

COOPERATION.--Records of gate and lock operation provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--24 years, 1,690 ft³/s, 1,224,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 21,400 ft³/s Mar. 27, 1970; maximum gage height, 5.42 ft June 18, 1982; no flow for some days in 1981, 1985, 1986; minimum gage height, 1.18 ft Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,980 ft³/s Aug. 15; maximum gage height, 3.74 ft Aug. 24; minimum daily discharge, 2.0 ft³/s May 9; minimum gage height, 2.47 ft Apr. 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	146	9.7	302	16	6.3	6.3	3.4	85	553	328	2520
2	2330	9.2	12	14	20	5.0	391	3.2	75	841	85	1890
3	946	9.1	16	48	20	4.8	483	4.6	484	408	34	2620
4	1170	21	6.7	257	24	5.7	306	2.7	316	317	517	2060
5	919	67	8.6	173	14	7.3	8.0	3.7	5.4	260	745	1520
6	699	294	14	216	16	6.4	6.8	3.2	926	273	776	1370
7	846	50	11	234	22	5.1	6.2	3.3	672	1910	797	703
8	826	7.7	6.7	9.4	16	5.1	9.2	3.5	793	1480	1020	648
9	883	8.9	7.2	12	17	7.2	10	2.0	712	1080	874	233
10	992	10	304	18	17	6.4	5.3	2.1	132	1010	2680	381
11	1710	19	69	12	13	7.3	5.2	477	699	495	1740	536
12	1660	21	11	10	8.9	4.6	8.0	490	373	1060	1880	430
13	1080	13	251	18	521	4.5	9.6	60	73	546	2480	690
14	1390	13	54	25	411	4.2	2690	210	7.4	1210	5670	1550
15	2220	8.7	6.0	15	342	4.9	2050	195	6.4	1920	5980	310
16	1440	5.6	7.4	13	56	5.2	2330	174	6.2	2850	3890	302
17	1520	14	17	19	6.9	3.0	2220	6.5	6.1	4220	3220	495
18	1010	20	8.6	15	8.7	7.7	1260	7.2	6.0	4190	2900	461
19	904	23	12	23	6.1	5.3	5.3	6.7	88	2700	4410	663
20	767	21	11	22	5.2	5.1	7.7	5.7	599	2130	4750	630
21	1270	13	13	25	6.7	8.4	8.6	5.3	629	1820	3760	175
22	1120	10	6.9	13	5.5	8.1	6.2	5.0	1220	1500	2260	181
23	975	6.6	5.5	12	5.7	7.3	3.3	5.2	1160	1600	2130	91
24	319	18	6.3	17	8.0	6.5	5.1	4.7	568	1270	4250	19
25	257	20	5.4	13	2090	6.1	6.3	6.0	1520	2400	3350	9.8
26	159	21	837	355	3340	5.5	7.2	6.0	557	1610	3080	4.5
27	166	11	2060	132	4800	5.1	4.6	57	344	1920	2680	9.2
28	868	8.7	808	31	1590	4.2	5.1	315	210	1060	3190	75
29	208	8.3	536	14	---	5.4	4.6	4.3	530	1290	4150	1580
30	156	12	207	14	---	4.0	3.8	515	355	795	3240	1800
31	352	---	791	14	---	4.5	---	219	---	322	2720	---
TOTAL	30582	909.8	6119.0	2095.4	13406.7	176.2	11872.4	2806.3	13157.5	45040	79586	23956.5
MEAN	987	30.3	197	67.6	479	5.68	396	90.5	439	1453	2567	799
MAX	2330	294	2060	355	4800	8.4	2690	515	1520	4220	5980	2620
MIN	156	5.6	5.4	9.4	5.2	3.0	3.3	2.0	5.4	260	34	4.5
AC-FT	60660	1800	12140	4160	26590	349	23550	5570	26100	89340	157900	47520

CAL YR 1989 TOTAL 249825.6 MEAN 684 MAX 5270 MIN 1.2 AC-FT 495500
WTR YR 1990 TOTAL 229707.8 MEAN 629 MAX 5980 MIN 2.0 AC-FT 455600

CALOOSAHATCHEE RIVER

02292900 CALOOSAHATCHEE RIVER AT S-79, NEAR OLGA, FL

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1945 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	TEMPER- ATURE WATER (DEG C) (00010)	AGENCY COL- LECTING SAMPLE CODE NUMBER (00027)	AGENCY ANA- LYZING SAMPLE CODE NUMBER (00028)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH (STAND- ARD UNITS) (00400)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
OCT												
02...	1010	0.50	200	29.5	1028	1028	3.38	429	2.9	7.4	39	0
02...	1011	3.00	200	29.5	1028	1028	--	430	2.8	7.4	--	0
02...	1012	5.00	200	29.0	1028	1028	--	429	2.9	7.4	--	0
02...	1013	10.0	200	29.0	1028	1028	--	432	3.0	7.4	--	0
02...	1014	17.0	200	29.0	1028	1028	--	434	3.1	7.4	39	0
11...	0900	0.50	200	28.0	1028	1028	3.04	433	2.8	7.4	40	0
11...	0901	3.00	200	28.0	1028	1028	--	433	3.2	7.4	--	0
11...	0902	5.00	200	28.0	1028	1028	--	433	3.3	7.4	--	0
11...	0903	10.0	200	28.0	1028	1028	--	432	3.2	7.4	--	0
11...	0904	17.0	200	28.0	1028	1028	--	432	3.2	7.4	40	0
NOV												
01...	1230	0.50	200	25.5	1028	1028	3.29	496	6.0	7.7	46	0
01...	1231	3.00	200	25.5	1028	1028	--	496	5.6	7.6	--	0
01...	1232	5.00	200	25.0	1028	1028	--	499	5.1	7.6	--	0
01...	1233	10.0	200	24.5	1028	1028	--	498	5.0	7.6	--	0
01...	1234	17.0	200	24.0	1028	1028	--	500	4.6	7.6	46	0
01...	1245	0.50	200	22.5	1028	1028	--	798	6.8	7.1	130	0
01...	1246	3.00	200	22.5	1028	1028	--	798	7.0	7.1	--	0
01...	1247	5.00	200	22.5	1028	1028	--	799	6.9	7.1	--	0
01...	1248	10.0	200	22.0	1028	1028	--	801	6.2	7.1	--	0
01...	1249	17.0	200	22.0	1028	1028	--	1370	6.1	7.1	--	0
DEC												
01...	1245	0.50	200	22.5	1028	1028	--	798	6.8	7.1	130	0
01...	1246	3.00	200	22.5	1028	1028	--	798	7.0	7.1	--	0
01...	1247	5.00	200	22.5	1028	1028	--	799	6.9	7.1	--	0
01...	1248	10.0	200	22.0	1028	1028	--	801	6.2	7.1	--	0
01...	1249	17.0	200	22.0	1028	1028	--	1370	6.1	7.1	180	0
08...	1050	0.50	200	21.0	1028	1028	--	13700	4.5	7.8	--	0
08...	1051	3.00	200	21.0	1028	1028	--	14000	4.6	7.8	--	0
08...	1052	5.00	200	21.0	1028	1028	--	14700	3.6	7.8	--	0
08...	1053	10.0	200	20.5	1028	1028	--	17100	1.7	7.7	--	0
08...	1054	17.0	200	21.0	1028	1028	--	17200	1.6	7.6	5400	0
JAN												
02...	1200	0.50	200	17.0	1028	1028	--	701	9.1	8.1	88	0
02...	1201	3.00	200	16.5	1028	1028	--	702	7.7	8.1	--	0
02...	1202	5.00	200	16.5	1028	1028	--	704	8.0	8.1	--	0
02...	1203	10.0	200	16.5	1028	1028	--	707	8.1	8.1	--	0
02...	1204	17.0	200	16.5	1028	1028	--	1610	7.1	8.2	100	0
FEB												
02...	1335	0.50	200	24.0	1028	1028	--	875	7.3	8.1	120	0
02...	1336	3.00	200	23.5	1028	1028	--	877	6.8	8.1	--	0
02...	1337	5.00	200	23.5	1028	1028	--	877	6.9	8.1	--	0
02...	1338	10.0	200	23.0	1028	1028	--	899	6.2	8.1	--	0
02...	1339	17.0	200	23.0	1028	1028	--	4350	6.0	8.0	320	0
MAR												
05...	1115	0.50	200	22.0	1028	1028	--	895	6.6	8.0	120	0
05...	1116	3.00	200	22.0	1028	1028	--	895	6.5	8.0	--	0
05...	1117	5.00	200	21.5	1028	1028	--	894	6.6	8.0	--	0
05...	1118	10.0	200	21.5	1028	1028	--	898	6.2	8.0	--	0
05...	1119	17.0	200	21.0	1028	1028	--	6350	7.2	8.0	1700	0
APR												
03...	1200	0.50	200	24.5	1028	1028	--	1120	6.5	7.9	190	0
03...	1201	3.00	200	24.5	1028	1028	--	1120	6.4	8.0	--	0
03...	1202	5.00	200	24.0	1028	1028	--	1140	6.2	8.0	--	0
03...	1203	10.0	200	24.0	1028	1028	--	1270	5.8	7.9	--	0
03...	1204	17.0	200	24.0	1028	1028	--	1660	5.0	7.9	1100	0
MAY												
08...	1045	0.50	200	27.5	1028	1028	2.90	1140	6.6	8.1	--	0
08...	1046	3.00	200	27.5	1028	1028	--	1150	5.6	8.1	--	0
08...	1047	5.00	200	27.5	1028	1028	--	1150	5.6	8.0	--	0
08...	1048	10.0	200	27.5	1028	1028	--	1310	4.4	8.0	--	0
08...	1049	17.0	200	27.0	1028	1028	--	1860	5.1	8.0	--	0
JUN												
04...	1400	0.50	200	31.0	1028	1028	3.17	1080	7.0	8.4	230	0
04...	1401	3.00	200	30.5	1028	1028	--	1080	6.5	8.4	--	0
04...	1402	5.00	200	30.0	1028	1028	--	1080	5.8	8.4	--	0
04...	1403	10.0	200	29.0	1028	1028	--	1120	5.0	8.1	--	0
04...	1404	17.0	200	29.0	1028	1028	--	1730	4.5	8.0	320	0

CALOOSAHATCHEE RIVER

02292900 CALOOSAHATCHEE RIVER AT S-79, NEAR OLGA, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	TIME	SAM- PLING DEPTH (FEET) (000003)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	TEMPER- ATURE WATER (DEG C) (00010)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH (STAND- ARD UNITS) (00400)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
JUL											
02...	1330	0.50	200	30.0	1028	1028	785	4.0	7.7	120	0
02...	1331	3.00	200	30.0	1028	1028	791	3.9	7.7	--	0
02...	1332	5.00	200	30.0	1028	1028	795	4.2	7.7	--	0
02...	1333	10.0	200	29.5	1028	1028	832	3.5	7.6	--	0
02...	1334	17.0	200	29.0	1028	1028	867	2.5	7.5	150	0
AUG											
02...	1340	0.50	200	30.5	1028	1028	593	3.8	7.5	52	0
02...	1341	3.00	200	30.0	1028	1028	592	2.5	7.5	--	0
02...	1342	5.00	200	29.5	1028	1028	585	2.1	7.5	--	0
02...	1343	10.0	200	29.0	1028	1028	585	1.5	7.4	--	0
02...	1344	17.0	200	29.0	1028	1028	585	1.1	7.4	56	0
14...	0935	0.50	200	--	1028	1028	--	--	--	520	0
14...	0936	17.0	200	--	1028	1028	--	--	--	520	0
SEP											
04...	1140	0.50	200	30.0	1028	1028	491	2.7	7.3	48	0
04...	1141	3.00	200	30.0	1028	1028	492	2.7	7.3	--	0
04...	1142	5.00	200	29.5	1028	1028	495	2.6	7.2	--	0
04...	1143	10.0	200	29.5	1028	1028	495	2.6	7.2	--	0
04...	1144	17.0	200	29.5	1028	1028	496	2.6	7.3	48	0

CALOOSAHATCHEE RIVER

02293214 MEADE CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°38'10", long 81°55'50", in NE¼ sec.20 T.44 S., R.24 E., Lee County, Hydrologic Unit 0300205, (Fort Myers NW Quadrangle), near left bank on upstream side of wingwall of bridge on Viscaya Parkway, 100 ft west of S.E. 21st Avenue, and 1.5 mi upstream from Caloosahatchee River at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. State Road Department Bench Mark.

REMARKS.--Records fair except those for estimated daily stage and discharge, Oct. 1-17, Aug. 10-23 which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70 ft³/s Oct. 12, 1987, gage height, 6.79 ft; no flow for many days each year; minimum gage height, 4.36 ft Sept. 27, 28, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52 ft³/s July 28, gage height, 6.55 ft; no flow for many days; minimum gage height, 4.90 ft May 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	.00	.11	4.7	.00	1.4	.00	.00	12	12	11	11
2	10	.00	.00	4.4	.00	1.5	.00	.00	19	12	4.3	15
3	8.2	.00	.03	4.6	.00	1.8	.00	.00	28	12	3.3	20
4	6.5	.00	.00	3.7	.00	1.8	.00	.00	23	12	1.6	28
5	4.9	.00	.00	1.6	.00	1.4	.00	.00	16	12	2.3	14
6	3.4	.07	.00	.71	.00	1.4	.00	.00	12	12	3.3	15
7	2.4	.19	.00	.45	.00	1.4	.00	.00	11	13	4.7	12
8	1.3	.22	.26	.30	.00	1.3	.00	.00	12	12	7.9	13
9	.40	.30	2.5	.22	.00	1.3	.00	.00	13	13	7.6	14
10	2.4	.31	2.4	.07	.00	1.1	.00	.00	14	19	6.5	12
11	2.0	.25	2.4	.00	.27	.84	.00	.00	14	25	5.7	9.0
12	2.0	.20	2.4	.03	.17	.65	.00	.00	15	27	20	8.1
13	1.6	.20	3.3	.00	.00	.56	.00	.00	15	25	14	6.9
14	1.3	.15	2.9	.00	.00	.36	.00	.00	15	18	8.5	6.2
15	.80	.08	2.8	.00	.00	.26	.00	.00	12	17	14	5.8
16	.53	.00	2.9	.00	.00	.25	.00	.00	10	16	4.6	6.1
17	.11	.00	3.1	.00	.00	.14	.00	.00	10	17	25	5.5
18	.00	.00	3.3	.00	.00	.07	.00	.00	12	20	12	5.2
19	.14	.00	3.6	.00	.00	.00	.00	.00	13	22	7.3	5.3
20	.00	.00	4.2	.00	.00	.00	.00	.00	14	17	6.2	4.5
21	.00	.00	4.9	.00	.00	.00	.00	.00	14	16	6.2	4.1
22	.00	.00	5.0	.00	.00	.00	.00	.00	13	15	5.7	4.2
23	.00	.00	6.5	.00	2.4	.00	.00	.00	8.0	14	5.2	4.3
24	.00	.00	4.7	.00	3.8	.00	.00	.00	6.3	13	5.2	4.0
25	.00	.00	3.8	.00	2.7	.00	.00	.00	5.7	17	1.4	3.7
26	.00	.00	3.7	.00	1.9	.00	.00	.00	5.5	30	.72	3.7
27	.00	.00	3.7	.00	1.6	.00	.00	1.4	6.9	44	5.5	3.7
28	.00	.00	3.7	.00	1.5	.00	.00	10	9.2	44	12	4.4
29	.00	.14	3.9	.00	---	.00	.00	7.2	12	21	8.1	6.6
30	.00	.26	4.0	.00	---	.00	.00	6.4	12	16	11	7.2
31	.00	---	4.1	.00	---	.00	---	6.0	---	16	13	---
TOTAL	61.98	2.37	84.20	20.78	14.34	17.53	0.00	31.00	382.6	579	243.82	262.5
MEAN	2.00	.079	2.72	.67	.51	.57	.000	1.00	12.8	18.7	7.87	8.75
MAX	14	.31	6.5	4.7	3.8	1.8	.00	10	28	44	25	28
MIN	.00	.00	.00	.00	.00	.00	.00	.00	5.5	12	.72	3.7
AC-FT	123	4.7	167	41	28	35	.00	61	759	1150	484	521

CAL YR 1989 TOTAL 2258.87 MEAN 6.19 MAX 34 MIN .00 AC-FT 4480
WTR YR 1990 TOTAL 1700.12 MEAN 4.66 MAX 44 MIN .00 AC-FT 3370

02293214 MEADE CANAL AT CAPE CORAL, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.20	5.22	5.25	5.40	5.21	5.31	5.22	5.10	5.44	5.47	5.77	5.76
2	5.19	5.22	5.24	5.40	5.21	5.31	5.22	5.08	5.67	5.47	5.61	5.84
3	5.18	5.23	5.24	5.40	5.22	5.32	5.22	5.05	5.93	5.47	5.56	5.93
4	5.17	5.23	5.23	5.38	5.22	5.32	5.20	5.03	5.75	5.47	5.48	6.07
5	5.16	5.24	5.23	5.31	5.21	5.31	5.18	5.03	5.59	5.47	5.52	5.71
6	5.15	5.24	5.23	5.28	5.19	5.31	5.17	5.02	5.48	5.48	5.56	5.73
7	5.15	5.25	5.23	5.27	5.19	5.31	5.18	4.99	5.44	5.49	5.62	5.66
8	5.14	5.25	5.25	5.26	5.19	5.30	5.17	4.95	5.48	5.48	5.70	5.67
9	5.13	5.26	5.34	5.25	5.19	5.30	5.15	4.93	5.50	5.50	5.70	5.71
10	5.30	5.26	5.34	5.24	5.19	5.29	5.14	4.95	5.52	5.64	5.68	5.65
11	5.29	5.26	5.34	5.24	5.24	5.29	5.13	4.97	5.54	5.79	5.66	5.47
12	5.29	5.25	5.34	5.24	5.25	5.28	5.12	4.97	5.55	5.84	5.88	5.44
13	5.28	5.25	5.37	5.23	5.24	5.27	5.10	4.96	5.56	5.79	5.80	5.40
14	5.27	5.25	5.35	5.22	5.24	5.26	5.09	4.96	5.55	5.63	5.72	5.37
15	5.26	5.24	5.35	5.22	5.24	5.26	5.08	4.97	5.46	5.61	5.80	5.35
16	5.25	5.23	5.36	5.22	5.23	5.26	5.07	5.00	5.42	5.59	5.62	5.36
17	5.24	5.21	5.36	5.23	5.23	5.25	5.06	5.01	5.42	5.61	6.00	5.34
18	5.24	5.21	5.37	5.23	5.23	5.24	5.07	5.00	5.47	5.67	5.78	5.33
19	5.25	5.20	5.37	5.23	5.22	5.22	5.21	4.99	5.51	5.72	5.70	5.34
20	5.22	5.20	5.39	5.23	5.23	5.22	5.21	4.96	5.53	5.60	5.68	5.30
21	5.20	5.21	5.41	5.23	5.22	5.19	5.20	4.95	5.54	5.59	5.68	5.29
22	5.20	5.21	5.42	5.24	5.21	5.18	5.19	4.97	5.49	5.55	5.66	5.29
23	5.21	5.22	5.47	5.23	5.32	5.17	5.18	4.97	5.35	5.52	5.64	5.30
24	5.21	5.22	5.41	5.23	5.38	5.17	5.17	4.98	5.29	5.50	5.63	5.28
25	5.21	5.21	5.38	5.23	5.35	5.16	5.15	4.97	5.27	5.60	5.47	5.27
26	5.21	5.22	5.38	5.22	5.32	5.16	5.14	4.92	5.27	5.95	5.42	5.27
27	5.22	5.23	5.38	5.19	5.31	5.15	5.12	4.98	5.31	6.41	5.56	5.27
28	5.21	5.23	5.38	5.20	5.31	5.14	5.11	5.41	5.39	6.39	5.78	5.30
29	5.20	5.24	5.38	5.20	---	5.13	5.12	5.33	5.46	5.93	5.71	5.38
30	5.21	5.26	5.38	5.21	---	5.13	5.11	5.30	5.47	5.85	5.76	5.41
31	5.21	---	5.39	5.21	---	5.18	---	5.28	---	5.86	5.80	---
TOTAL	161.65	156.95	165.56	162.87	146.79	162.39	154.48	155.98	164.65	175.94	175.95	164.49
MEAN	5.21	5.23	5.34	5.25	5.24	5.24	5.15	5.03	5.49	5.68	5.68	5.48
MAX	5.30	5.26	5.47	5.40	5.38	5.32	5.22	5.41	5.93	6.41	6.00	6.07
MIN	5.13	5.20	5.23	5.19	5.19	5.13	5.06	4.92	5.27	5.47	5.42	5.27
CAL YR 1989	TOTAL 1912.49		MEAN 5.24	MAX 5.68		MIN 4.85						
WTR YR 1990	TOTAL 1947.70		MEAN 5.34	MAX 6.41		MIN 4.92						

CALOOSAHATCHEE RIVER

02293216 MACKINAC CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°38'09", long 81°57'29", in NW¼ sec.19, T.44 S., R.24 E., Lee County, Hydrologic Unit 03090205, (Fort Myers NW quadrangle), near left bank on upstream side of wingwall of bridge on SE 9th St., 105 ft west of S.E. 8th St., .4 mi upstream from Country Club Blvd. bridge and 3.4 mi upstream from Caloosahatchee River at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. State Road Department bench mark.

REMARKS.--No estimated daily stage and discharge. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 135 ft³/s July 19, 1987, gage height, 8.21 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--No flow during the entire year; maximum gage height, 7.13 ft June 3; minimum gage height, 5.56 ft May 20-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1989 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1990 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00

02293216 MACKINAC CANAL AT CAPE CORAL, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.64	6.28	6.19	6.30	6.17	6.20	6.06	5.78	6.35	6.44	6.52	6.68
2	6.60	6.28	6.18	6.28	6.17	6.20	6.05	5.77	6.55	6.51	6.49	6.66
3	6.55	6.28	6.18	6.27	6.17	6.21	6.06	5.75	7.07	6.52	6.46	6.62
4	6.51	6.27	6.17	6.27	6.17	6.21	6.04	5.73	6.95	6.50	6.45	6.61
5	6.47	6.26	6.16	6.28	6.15	6.21	6.02	5.72	6.83	6.47	6.47	6.58
6	6.45	6.26	6.16	6.28	6.13	6.21	6.01	5.71	6.74	6.45	6.48	6.58
7	6.44	6.26	6.16	6.28	6.13	6.20	6.01	5.69	6.70	6.42	6.51	6.55
8	6.46	6.25	6.17	6.29	6.12	6.17	5.99	5.66	6.72	6.40	6.52	6.52
9	6.44	6.25	6.26	6.28	6.12	6.17	5.97	5.65	6.72	6.40	6.54	6.52
10	6.45	6.25	6.25	6.27	6.12	6.16	5.96	5.66	6.68	6.52	6.56	6.50
11	6.50	6.23	6.24	6.27	6.16	6.15	5.96	5.66	6.64	6.63	6.57	6.48
12	6.47	6.22	6.25	6.26	6.15	6.15	5.95	5.64	6.59	6.61	6.52	6.47
13	6.46	6.21	6.27	6.24	6.14	6.14	5.93	5.64	6.55	6.62	6.51	6.46
14	6.44	6.21	6.25	6.22	6.13	6.13	5.90	5.63	6.52	6.61	6.58	6.45
15	6.43	6.21	6.24	6.22	6.12	6.13	5.90	5.63	6.49	6.62	6.55	6.44
16	6.41	6.23	6.24	6.21	6.11	6.13	5.89	5.64	6.46	6.59	6.52	6.41
17	6.40	6.22	6.24	6.22	6.12	6.12	5.88	5.62	6.44	6.58	6.57	6.41
18	6.40	6.20	6.24	6.21	6.11	6.10	5.88	5.61	6.43	6.62	6.63	6.40
19	6.40	6.19	6.24	6.21	6.11	6.09	5.90	5.60	6.41	6.70	6.61	6.37
20	6.37	6.19	6.25	6.22	6.11	6.09	5.87	5.58	6.39	6.67	6.61	6.35
21	6.34	6.19	6.26	6.22	6.10	6.06	5.86	5.59	6.37	6.64	6.58	6.34
22	6.32	6.19	6.26	6.22	6.09	6.04	5.86	5.61	6.36	6.60	6.55	6.34
23	6.32	6.20	6.32	6.21	6.15	6.03	5.85	5.62	6.34	6.57	6.52	6.33
24	6.31	6.19	6.30	6.21	6.25	6.02	5.84	5.64	6.32	6.54	6.49	6.32
25	6.31	6.18	6.29	6.21	6.24	6.02	5.81	5.64	6.31	6.54	6.47	6.30
26	6.30	6.19	6.29	6.19	6.22	6.01	5.79	5.64	6.30	6.59	6.45	6.29
27	6.30	6.20	6.29	6.16	6.20	6.01	5.78	5.71	6.33	6.71	6.54	6.29
28	6.29	6.20	6.29	6.16	6.20	5.99	5.77	6.19	6.36	6.67	6.87	6.31
29	6.29	6.21	6.29	6.16	---	5.99	5.79	6.22	6.38	6.63	6.81	6.36
30	6.28	6.20	6.29	6.17	---	5.98	5.78	6.24	6.40	6.59	6.73	6.38
31	6.28	---	6.29	6.17	---	6.02	---	6.25	---	6.55	6.69	---
TOTAL	198.63	186.70	193.51	193.16	172.16	189.34	177.36	177.72	195.70	203.51	203.37	193.32
MEAN	6.41	6.22	6.24	6.23	6.15	6.11	5.91	5.73	6.52	6.56	6.56	6.44
MAX	6.64	6.28	6.32	6.30	6.25	6.21	6.06	6.25	7.07	6.71	6.87	6.68
MIN	6.28	6.18	6.16	6.16	6.09	5.98	5.77	5.58	6.30	6.40	6.45	6.29
CAL YR 1989	TOTAL 2296.66		MEAN 6.29	MAX 6.90	MIN 5.76							
WTR YR 1990	TOTAL 2284.48		MEAN 6.26	MAX 7.07	MIN 5.58							

CALOOSAHATCHEE RIVER

02293241 SAN CARLOS CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°36'11", long 81°57'54", in NE¼ sec.36, T.44 S., R.23 E., Lee County, Hydrologic Unit 03090205, near right bank on upstream side of wingwall of bridge on SE 26th Terr., 300 ft west of Retunda Pkwy. and 3.35 mi upstream of Caloosahatchee River.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. State Road Department bench mark.

REMARKS.--Records fair except for estimated daily stage and discharge, Oct. 1-17 which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 174 ft³/s Oct. 12, 1987, gage height, 7.04 ft; no flow for many days during each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41 ft³/s Aug. 27; gage height, 6.20 ft; no flow for many days; minimum gage height, 4.34 ft May 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	2.4	.82	4.0	.00	.31	.00	.00	.00	8.3	2.1	15
2	4.7	2.4	.73	3.8	.00	.28	.00	.00	1.6	12	2.1	11
3	4.1	2.4	.69	3.5	.00	.36	.00	.00	11	9.7	1.9	7.5
4	3.5	2.4	.52	3.1	.00	.39	.00	.00	9.7	7.1	1.6	8.4
5	3.2	2.4	.21	2.6	.00	.34	.00	.00	7.1	5.5	1.7	9.7
6	2.9	2.3	.00	2.2	.00	.32	.00	.00	5.4	4.6	1.6	6.7
7	2.4	2.3	.00	1.8	.00	.32	.00	.00	5.6	3.7	1.4	5.2
8	1.9	2.1	.05	1.6	.00	.16	.00	.00	8.6	3.2	1.4	4.3
9	3.8	2.1	.88	1.4	.00	.07	.00	.00	9.4	4.3	1.8	3.8
10	8.1	2.0	.82	1.2	.00	.05	.00	.00	7.8	8.5	1.8	3.7
11	7.7	1.8	.73	.88	.00	.03	.00	.00	6.3	11	1.8	3.6
12	7.3	1.7	.70	.81	.00	.01	.00	.00	5.0	9.5	1.4	4.3
13	6.9	1.5	1.1	.63	.00	.00	.00	.00	3.9	9.8	3.2	3.5
14	7.3	1.4	.81	.26	.00	.00	.00	.00	2.9	7.6	6.1	3.0
15	7.3	1.3	.69	.20	.00	.00	.00	.00	2.6	6.9	5.6	2.7
16	7.7	1.7	.69	.17	.00	.00	.00	.00	2.1	5.9	7.4	2.5
17	8.0	1.7	.61	.16	.00	.00	.00	.00	2.1	5.2	22	2.4
18	7.7	1.4	.57	.10	.00	.00	.00	.00	2.0	6.2	29	2.2
19	7.7	1.3	1.5	.11	.00	.00	.00	.00	1.9	9.1	18	1.9
20	7.2	1.2	2.7	.12	.00	.00	.00	.00	1.6	6.7	14	1.5
21	5.0	1.1	3.1	.10	.00	.00	.00	.00	1.1	5.3	11	1.3
22	4.0	1.1	3.1	.09	.00	.00	.00	.00	.94	4.3	8.8	1.2
23	3.6	1.2	4.9	.05	.22	.00	.00	.00	.72	3.8	7.2	1.1
24	3.3	1.1	4.1	.03	.68	.00	.00	.00	.74	3.1	4.9	.97
25	3.1	1.1	3.8	.00	.63	.00	.00	.00	.53	3.8	3.9	.69
26	2.9	1.0	4.0	.00	.45	.00	.00	.00	.48	4.2	3.2	.62
27	2.9	1.1	3.9	.00	.34	.00	.00	.00	1.5	6.5	17	.66
28	2.8	1.1	3.8	.00	.29	.00	.00	.00	2.3	4.6	35	1.3
29	2.5	1.1	3.8	.00	---	.00	.00	.00	4.3	3.5	16	3.2
30	2.4	1.0	3.8	.00	---	.00	.00	.00	6.0	3.0	9.9	3.6
31	2.4	---	3.7	.00	---	.00	---	.00	---	2.3	13	---
TOTAL	149.3	48.7	56.82	28.91	2.61	2.64	0.00	0.00	115.21	189.2	255.8	117.54
MEAN	4.82	1.62	1.83	.93	.093	.085	.000	.000	3.84	6.10	8.25	3.92
MAX	8.1	2.4	4.9	4.0	.68	.39	.00	.00	11	12	35	15
MIN	1.9	1.0	.00	.00	.00	.00	.00	.00	.00	2.3	1.4	.62
AC-FT	296	97	113	57	5.2	5.2	.00	.00	229	375	507	233

CAL YR 1989 TOTAL 1208.18 MEAN 3.31 MAX 30 MIN .00 AC-FT 2400
WTR YR 1990 TOTAL 966.73 MEAN 2.65 MAX 35 MIN .00 AC-FT 1920

CALOOSAHATCHEE RIVER

02293241 SAN CARLOS CANAL AT CAPE CORAL, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.23	5.20	5.12	5.26	4.98	5.09	4.93	4.61	4.70	5.32	5.17	5.51
2	5.22	5.20	5.12	5.25	4.98	5.08	4.93	4.59	4.87	5.38	5.17	5.43
3	5.20	5.20	5.12	5.24	4.98	5.09	4.93	4.57	5.37	5.30	5.17	5.36
4	5.19	5.20	5.10	5.23	4.98	5.10	4.90	4.54	5.31	5.26	5.16	5.38
5	5.18	5.20	5.07	5.21	4.97	5.09	4.88	4.53	5.26	5.23	5.16	5.41
6	5.17	5.20	5.04	5.19	4.97	5.09	4.87	4.53	5.22	5.21	5.16	5.33
7	5.16	5.20	5.03	5.17	4.94	5.09	4.86	4.51	5.23	5.19	5.15	5.29
8	5.14	5.19	5.04	5.17	4.93	5.07	4.86	4.47	5.28	5.18	5.15	5.27
9	5.11	5.19	5.13	5.16	4.92	5.05	4.84	4.45	5.29	5.20	5.17	5.25
10	5.21	5.19	5.12	5.15	4.91	5.05	4.82	4.45	5.27	5.31	5.17	5.25
11	5.34	5.18	5.12	5.13	4.92	5.05	4.82	4.46	5.24	5.36	5.17	5.24
12	5.33	5.17	5.12	5.12	4.99	5.04	4.81	4.44	5.22	5.30	5.16	5.27
13	5.32	5.16	5.14	5.11	4.97	5.03	4.78	4.44	5.19	5.30	5.21	5.24
14	5.32	5.16	5.12	5.08	4.97	5.02	4.76	4.43	5.17	5.27	5.31	5.23
15	5.33	5.15	5.12	5.08	4.95	5.01	4.75	4.42	5.16	5.26	5.29	5.21
16	5.34	5.17	5.12	5.07	4.95	5.00	4.75	4.42	5.15	5.24	5.34	5.20
17	5.35	5.17	5.11	5.07	4.95	4.99	4.73	4.41	5.15	5.23	5.61	5.20
18	5.36	5.16	5.11	5.06	4.95	5.00	4.73	4.40	5.14	5.26	5.73	5.19
19	5.36	5.15	5.15	5.06	4.94	4.98	4.75	4.38	5.14	5.31	5.56	5.18
20	5.35	5.15	5.21	5.06	4.94	4.97	4.74	4.35	5.13	5.26	5.49	5.16
21	5.29	5.14	5.23	5.06	4.93	4.96	4.72	4.35	5.11	5.24	5.43	5.15
22	5.26	5.14	5.23	5.06	4.91	4.93	4.70	4.36	5.11	5.22	5.39	5.15
23	5.24	5.15	5.29	5.05	5.00	4.92	4.69	4.37	5.10	5.20	5.35	5.14
24	5.23	5.14	5.26	5.04	5.12	4.91	4.67	4.39	5.10	5.19	5.28	5.13
25	5.23	5.14	5.25	5.03	5.11	4.90	4.65	4.39	5.09	5.21	5.26	5.12
26	5.22	5.14	5.26	5.03	5.10	4.89	4.63	4.39	5.09	5.22	5.23	5.11
27	5.22	5.14	5.25	4.99	5.09	4.88	4.61	4.41	5.12	5.27	5.45	5.12
28	5.21	5.14	5.25	4.99	5.09	4.87	4.60	4.63	5.15	5.24	5.81	5.14
29	5.20	5.14	5.25	4.98	---	4.86	4.62	4.64	5.19	5.21	5.53	5.23
30	5.20	5.14	5.25	4.98	---	4.85	4.62	4.65	5.24	5.19	5.41	5.24
31	5.20	---	5.25	4.99	---	4.90	---	4.67	---	5.18	5.46	---
TOTAL	162.71	155.00	159.98	158.07	139.44	154.76	142.95	138.65	154.79	162.74	165.10	157.13
MEAN	5.25	5.17	5.16	5.10	4.98	4.99	4.76	4.47	5.16	5.25	5.33	5.24
MAX	5.36	5.20	5.29	5.26	5.12	5.10	4.93	4.67	5.37	5.38	5.81	5.51
MIN	5.11	5.14	5.03	4.98	4.91	4.85	4.60	4.35	4.70	5.18	5.15	5.11
CAL YR 1989	TOTAL 1866.41		MEAN 5.11	MAX 5.70	MIN 4.47							
WTR YR 1990	TOTAL 1851.32		MEAN 5.07	MAX 5.81	MIN 4.35							

CALOOSAHATCHEE RIVER

02293243 COURTNEY CANAL AT COPE CORAL, FL

LOCATION.--Lat 26°34'39", long 81°59'08", in SW¼ sec.2, T.45 S., R.23 E., Lee County, Hydrologic Unit 03090205, near left bank on upstream side of wing wall of bridge at Mohawk Pkwy, 200 ft west of 5th Ave., and 5 mi upstream from Caloosahatchee River at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. State Road Department bench mark.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80 ft³/s July 20, 1987, gage height, 5.55 ft; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37 ft³/s Aug. 27, 28, gage height, 4.89 ft; no flow for many days; minimum gage height, 2.20 ft Apr. 10-12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	.00	.00	.63	.00	.00	.00	.00	.00	13	18	27
2	26	.00	.00	1.3	.00	.00	.00	.00	.00	17	19	25
3	24	.00	.00	1.4	.00	.00	.00	.00	13	16	18	18
4	22	.00	.00	1.5	.00	.00	.00	.00	17	16	20	21
5	20	.00	.00	1.3	.00	.00	.00	.00	20	15	17	24
6	17	.00	.00	.85	.00	.00	.00	.00	26	14	7.2	15
7	15	.00	.00	.55	.00	.00	.00	.00	25	12	3.2	11
8	15	.00	.00	.44	.00	.00	.00	.00	25	10	2.1	9.1
9	14	.00	.00	.34	.00	.00	.00	.00	26	10	2.8	9.0
10	15	.00	.00	.12	.00	.00	.00	.00	24	20	3.8	8.0
11	19	.00	.00	.15	.00	.00	.00	.00	22	33	5.2	8.3
12	17	.00	.00	.26	.00	.00	.82	.00	19	33	16	8.7
13	15	.00	.00	.22	.00	.00	.00	.00	15	32	23	6.1
14	14	.00	.00	.00	.00	.00	.00	.00	13	29	29	4.6
15	13	.00	.00	.00	.00	.00	.00	.00	13	30	27	3.5
16	11	.00	.00	.00	.00	.00	.00	.00	12	29	27	2.6
17	9.5	.00	.00	.00	.00	.00	.00	.00	10	27	33	2.0
18	8.0	.00	.00	.00	.00	.00	.00	.00	9.6	26	34	1.2
19	8.0	.00	.00	.00	.00	.00	.00	.00	8.7	32	32	.70
20	7.6	.00	.00	.00	.00	.00	.00	.00	7.5	32	31	.13
21	6.1	.00	.00	.00	.00	.00	.00	.00	6.8	30	28	.00
22	4.8	.00	.00	.00	.00	.00	.00	.00	6.2	27	26	.00
23	4.0	.00	.00	.00	.00	.00	.00	.00	5.3	25	23	.00
24	3.2	.00	.00	.00	.00	.00	.00	.00	4.9	22	21	.00
25	2.2	.00	.00	.00	.00	.00	.00	.00	4.0	21	19	.00
26	1.2	.00	.00	.00	.00	.00	.00	.00	4.0	21	17	.00
27	.56	.00	.00	.00	.00	.00	.00	.00	5.1	27	21	.00
28	.24	.00	.00	.00	.00	.00	.00	.00	7.2	28	34	.00
29	.01	.00	.00	.00	---	.00	.00	.00	9.9	25	27	.03
30	.00	.00	.00	.00	---	.00	.00	.00	11	22	22	1.1
31	.00	---	.02	.00	---	.00	---	.00	---	20	24	---
TOTAL	341.41	0.00	0.02	9.06	0.00	0.00	0.82	0.00	370.20	714	630.3	206.06
MEAN	11.0	.000	.001	.29	.000	.000	.027	.000	12.3	23.0	20.3	6.87
MAX	29	.00	.02	1.5	.00	.00	.82	.00	26	33	34	27
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	2.1	.00
AC-FT	677	.00	.04	18	.00	.00	1.6	.00	734	1420	1250	409

CAL YR 1989 TOTAL 2017.35 MEAN 5.53 MAX 41 MIN .00 AC-FT 4000
WTR YR 1990 TOTAL 2271.87 MEAN 6.22 MAX 34 MIN .00 AC-FT 4510

CALOOSAHATCHEE RIVER

02293243 COURTNEY CANAL AT COPE CORAL, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.56	4.14	3.61	4.36	4.00	4.18	3.82	3.30	3.44	4.61	4.63	4.73
2	4.53	4.12	3.57	4.38	3.99	4.20	3.79	3.28	3.75	4.68	4.64	4.70
3	4.50	4.11	3.55	4.39	3.98	4.23	3.79	3.27	4.60	4.67	4.63	4.62
4	4.47	4.09	3.52	4.39	3.95	4.25	3.77	3.25	4.68	4.66	4.64	4.66
5	4.44	4.08	3.50	4.39	3.93	4.25	3.75	3.24	4.73	4.65	4.62	4.68
6	4.40	4.08	3.49	4.37	3.89	4.25	3.73	3.23	4.82	4.63	4.49	4.59
7	4.38	4.07	3.48	4.36	3.86	4.25	3.73	3.21	4.80	4.60	4.43	4.55
8	4.39	4.06	3.46	4.36	3.84	4.24	3.71	3.18	4.80	4.57	4.41	4.52
9	4.37	4.06	3.54	4.35	3.82	4.22	3.68	3.14	4.81	4.56	4.43	4.52
10	4.39	4.05	3.56	4.34	3.81	4.20	3.64	3.15	4.79	4.67	4.44	4.50
11	4.46	4.02	3.57	4.34	3.88	4.20	3.62	3.15	4.75	4.81	4.46	4.51
12	4.43	3.99	3.59	4.35	3.91	4.20	3.63	3.12	4.71	4.79	4.60	4.51
13	4.41	3.96	3.65	4.35	3.89	4.19	3.56	3.11	4.65	4.77	4.68	4.48
14	4.39	3.92	3.68	4.33	3.87	4.18	3.53	3.10	4.62	4.74	4.74	4.45
15	4.38	3.89	3.69	4.32	3.83	4.15	3.50	3.09	4.61	4.75	4.72	4.44
16	4.36	3.91	3.69	4.30	3.80	4.13	3.49	3.08	4.59	4.74	4.72	4.43
17	4.33	3.89	3.70	4.29	3.78	4.04	3.46	3.06	4.57	4.72	4.81	4.41
18	4.31	3.87	3.70	4.27	3.76	3.99	3.45	3.05	4.56	4.71	4.82	4.40
19	4.32	3.85	3.69	4.25	3.74	3.99	3.45	3.03	4.54	4.77	4.77	4.39
20	4.31	3.83	3.71	4.23	3.74	3.99	3.43	3.01	4.52	4.77	4.76	4.37
21	4.29	3.82	3.76	4.21	3.74	3.99	3.40	3.03	4.50	4.75	4.73	4.35
22	4.27	3.80	3.80	4.20	3.73	3.97	3.38	3.05	4.49	4.72	4.71	4.34
23	4.26	3.79	3.94	4.17	3.82	3.94	3.36	3.06	4.47	4.69	4.68	4.33
24	4.25	3.79	4.00	4.15	3.98	3.92	3.34	3.08	4.47	4.67	4.65	4.31
25	4.23	3.77	4.04	4.12	4.03	3.89	3.31	3.09	4.45	4.66	4.63	4.28
26	4.21	3.75	4.10	4.11	4.08	3.87	3.28	3.07	4.45	4.66	4.62	4.26
27	4.19	3.73	4.15	4.06	4.12	3.85	3.26	3.09	4.47	4.72	4.68	4.25
28	4.19	3.70	4.20	4.03	4.15	3.82	3.23	3.28	4.51	4.73	4.83	4.25
29	4.16	3.67	4.24	4.01	---	3.79	3.32	3.30	4.56	4.70	4.73	4.33
30	4.14	3.65	4.29	4.01	---	3.76	3.31	3.33	4.58	4.67	4.67	4.39
31	4.14	---	4.32	4.00	---	3.80	---	3.38	---	4.64	4.69	---
TOTAL	134.46	117.46	116.79	131.79	108.92	125.93	105.72	97.81	136.29	145.48	144.06	133.55
MEAN	4.34	3.92	3.77	4.25	3.89	4.06	3.52	3.16	4.54	4.69	4.65	4.45
MAX	4.56	4.14	4.32	4.39	4.15	4.25	3.82	3.38	4.82	4.81	4.83	4.73
MIN	4.14	3.65	3.46	4.00	3.73	3.76	3.23	3.01	3.44	4.56	4.41	4.25

WTR YR 1990 TOTAL 1498.26 MEAN 4.10 MAX 4.83 MIN 3.01

CALOOSAHATCHEE RIVER

02293245 CAMELOT CANAL AT CONTROL AT CAPE CORAL, FL

LOCATION.--Lat 26°32'35", long 82°00'33", in NE¼ sec.21, T.45 S., R.23 E., Lee County, Hydrologic Unit 03090205, (Pine Island Center Quadrangle), near right bank on upstream side of boat lock, 0.1 mi west of Chiquita Blvd and 0.3 mi south of El Dorado Parkway at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated gage heights.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 3.72 ft Nov. 23, 1988; minimum, 0.35 ft May 21, 29, 30, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 1.95 ft Sept. 1; minimum, 0.56 ft Feb. 6, 9.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.53	.98	.84	.83	.61	.76	.97	1.13	1.42	1.11	1.16	1.78
2	1.53	1.02	.80	.78	.61	.80	.96	1.07	1.34	1.10	1.12	1.84
3	1.49	1.07	.80	.75	.61	.92	.98	1.03	1.42	1.10	1.09	1.75
4	1.40	1.07	.75	.73	.62	.97	.93	1.00	1.39	1.10	1.09	1.72
5	1.34	1.06	.73	.73	.64	.97	.85	.99	1.36	1.09	1.18	1.72
6	1.30	1.06	.72	.73	.59	.95	.82	1.00	1.33	1.08	1.23	1.66
7	1.30	1.06	.71	.74	.59	.93	.83	.99	1.28	1.05	1.22	1.61
8	1.31	1.06	.73	.75	.60	.88	.83	.92	1.31	1.04	1.22	1.59
9	1.29	1.13	.86	.75	.60	.85	.78	.92	1.39	1.04	1.26	1.57
10	1.28	1.17	.84	.75	.61	.87	.75	1.06	1.36	1.07	1.28	1.53
11	1.35	1.13	.81	.74	.72	.88	.77	1.18	1.33	1.14	1.28	1.51
12	1.33	1.08	.82	.74	.71	.90	.77	1.11	1.28	1.19	1.27	1.54
13	1.30	1.06	1.01	.73	.66	.88	.71	1.08	1.20	1.24	1.34	1.51
14	1.31	1.08	.98	.67	.64	.87	.69	1.06	1.13	1.26	1.53	1.50
15	1.31	1.27	.93	.64	.63	.89	.70	1.05	1.09	1.29	1.55	1.49
16	1.33	1.54	.90	.63	.65	.93	.74	1.01	1.07	1.26	1.57	1.51
17	1.37	1.49	.86	.62	.67	.99	.74	.99	1.04	1.23	1.70	1.54
18	1.40	1.34	.82	.63	.66	1.01	.75	.97	1.01	1.24	1.80	1.51
19	1.47	1.21	.79	.63	.65	.92	.73	.92	.99	1.24	1.81	1.45
20	1.40	1.12	.79	.63	.66	.89	.71	.91	1.00	1.24	1.81	1.38
21	1.26	1.06	.79	.63	.66	.80	.67	.96	1.04	1.29	1.79	1.37
22	1.15	1.03	.77	.65	.65	.77	.69	.99	1.09	1.39	1.71	1.35
23	1.07	1.04	.82	.63	.79	.74	.70	1.02	1.13	1.45	1.60	1.33
24	1.01	1.01	.77	.62	.92	.73	.72	1.10	1.19	1.41	1.51	1.28
25	.97	.94	.72	.63	.85	.75	.73	1.23	1.19	1.37	1.45	1.19
26	.95	.94	.73	.68	.78	.76	.73	1.27	1.15	1.38	1.40	1.16
27	.93	.95	.73	.62	.73	.77	.76	1.45	1.13	1.38	1.38	1.14
28	.92	.95	.75	.61	.73	.77	.81	1.70	1.10	1.34	1.48	1.15
29	.90	.95	.76	.60	---	.77	1.19	1.74	1.11	1.28	1.50	1.19
30	.91	.90	.77	.62	---	.81	1.18	1.65	1.16	1.23	1.51	1.24
31	.96	---	.79	.62	---	.91	---	1.55	---	1.20	1.62	---
TOTAL	38.37	32.77	24.89	21.11	18.84	26.64	24.19	35.05	36.03	37.83	44.46	44.11
MEAN	1.24	1.09	.80	.68	.67	.86	.81	1.13	1.20	1.22	1.43	1.47
MAX	1.53	1.54	1.01	.83	.92	1.01	1.19	1.74	1.42	1.45	1.81	1.84
MIN	.90	.90	.71	.60	.59	.73	.67	.91	.99	1.04	1.09	1.14

WTR YR 1990 TOTAL 384.29 MEAN 1.05 MAX 1.84 MIN .59

CALOOSAHATCHEE RIVER

02293246 CAMELOT CANAL BELOW CONTROL AT CAPE CORAL, FL

LOCATION.--Lat 26°32'35", long 80°00'32", in NE¼ sec.21, T.45 S., R.23 E., Lee County, Hydrologic Unit 03090205, (Pine Island Quadrangle), near right bank on downstream side of boat lock headwall, 0.1 mi west of Chiquita Blvd. and 0.3 mi south of El Dorado Parkway at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily gage heights. Stage is always tidal. The stage record published is the maximum and minimum tide event for each calendar date.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 4.48 ft Nov. 23, 1988; minimum, -1.61 ft Dec. 24, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.47 ft Dec. 13; minimum, -1.61 ft Dec. 24.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL HIGH (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.68	1.78	.99	1.49	1.22	1.97	1.60	---	---	1.36	1.66	1.87
2	1.90	1.83	1.07	.50	1.08	2.20	1.61	---	---	1.58	1.57	1.83
3	1.60	2.03	1.18	.79	1.27	1.96	1.24	---	---	1.65	1.64	1.94
4	1.44	1.56	.49	1.10	1.37	1.68	1.17	---	---	1.81	1.82	1.91
5	1.51	1.57	.90	1.11	.64	1.42	1.30	---	---	1.63	2.11	1.81
6	1.75	1.63	1.08	1.17	1.22	1.59	1.42	---	---	1.68	1.90	1.78
7	1.80	1.48	1.27	1.40	1.39	1.24	1.49	---	---	1.83	1.90	1.80
8	1.80	1.89	1.90	1.34	1.51	1.29	1.23	---	---	1.76	1.93	1.93
9	1.64	2.02	1.29	1.28	1.59	1.66	1.03	---	---	1.65	1.85	1.93
10	1.80	1.64	1.33	1.24	1.50	1.68	1.33	---	---	1.86	1.72	1.95
11	1.61	1.67	1.67	1.31	1.65	1.63	1.68	---	---	1.65	1.86	1.91
12	1.61	1.79	2.42	1.61	.87	1.51	---	---	---	1.73	1.87	1.94
13	1.65	1.91	2.44	1.07	.85	1.33	---	---	---	1.59	2.00	1.92
14	1.70	2.27	1.02	.39	1.02	1.70	---	---	---	1.80	2.03	1.97
15	1.84	2.41	1.10	.66	1.69	1.95	---	---	---	1.61	2.13	2.04
16	2.04	2.42	1.38	.90	1.37	1.98	---	---	---	1.49	2.22	2.02
17	2.15	1.18	.87	1.01	1.03	1.95	---	---	---	1.61	2.41	2.11
18	2.07	1.02	.94	1.10	1.17	.73	---	---	---	1.81	2.37	1.91
19	2.21	.91	.96	.98	1.19	1.17	---	---	1.82	1.94	2.31	1.51
20	.64	1.11	.92	1.11	1.34	.76	---	---	2.00	2.10	2.32	1.73
21	.72	1.34	.67	1.10	1.36	.86	---	---	2.14	2.19	2.10	1.72
22	.90	1.57	.30	.86	1.70	1.02	---	---	2.06	2.26	1.73	1.81
23	.86	1.40	-.10	.94	1.74	1.16	---	---	2.15	1.96	1.67	1.80
24	.97	1.01	.14	1.62	1.48	1.66	---	---	2.04	1.75	1.60	1.63
25	1.09	1.55	1.16	1.65	.90	1.77	---	---	1.76	1.70	1.73	1.70
26	1.20	1.51	1.55	1.64	.41	1.43	---	---	1.63	1.53	1.76	1.77
27	1.17	1.67	1.55	.64	.90	1.52	---	---	1.36	1.50	1.71	1.57
28	1.26	1.58	1.50	1.00	1.53	1.58	---	---	1.14	1.45	1.90	1.84
29	1.53	1.62	1.64	1.11	---	2.01	---	---	1.18	1.61	1.77	1.63
30	1.69	.70	1.52	1.09	---	2.11	---	---	1.35	1.72	1.76	1.79
31	1.92	---	1.61	.84	---	1.75	---	---	---	1.66	1.95	---
TOTAL	47.75	48.07	36.76	34.05	34.99	48.27	---	---	---	53.47	59.30	55.07
MEAN	1.54	1.60	1.19	1.10	1.25	1.56	---	---	---	1.72	1.91	1.84
MAX	2.21	2.42	2.44	1.65	1.74	2.20	---	---	---	2.26	2.41	2.11
MIN	.64	.70	-.10	.39	.41	.73	---	---	---	1.36	1.57	1.51

CAL YR 1989 TOTAL 538.97 MEAN 1.48 MAX 2.44 MIN -.10

CALOOSAHATCHEE RIVER

02293246 CAMELOT CANAL BELOW CONTROL AT CAPE CORAL, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
TIDAL LOW (DAILY) VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.16	-.79	-.40	-.42	.26	.02	---	---	.27	.09	.28
2	.45	.20	-.40	-.86	-.15	.35	.00	---	---	.23	-.17	.20
3	.01	.36	-.49	-.41	-.30	.59	.15	---	---	.07	.05	.46
4	.05	.06	-.89	-.15	-.23	.21	-.20	---	---	.07	.16	.38
5	.21	.19	-.26	-.21	-.48	.05	.01	---	---	-.05	.39	.33
6	.39	.33	.13	-.28	-.88	-.10	.14	---	---	-.03	.16	1.07
7	.29	.33	.07	-.43	-.51	-.16	.33	---	---	.10	.37	.34
8	.31	.70	.12	-.36	-.36	-.24	.05	---	---	.00	.51	.31
9	.21	.94	-.09	-.49	-.19	-.07	-.34	---	---	-.10	.57	.30
10	.70	.30	-.49	-.54	-.03	.31	-.08	---	---	.14	.61	.36
11	.31	-.10	-.47	-.58	.06	.30	-.03	---	---	.13	.51	.29
12	.35	-.17	-.25	-.28	-.60	.28	-.11	---	---	.37	.54	.23
13	.10	-.15	-.11	-.76	-.27	.12	---	---	---	.39	.48	.24
14	.11	.05	-.84	-.91	-.06	.45	---	---	---	.56	.59	.36
15	.09	.35	-.51	-.44	.17	.56	---	---	---	.30	.41	.38
16	.04	.31	-.09	-.21	.35	.56	---	---	---	.14	.41	.41
17	.24	-.61	-.43	-.10	.08	.61	---	---	---	.09	.51	.57
18	.18	-.51	-.14	-.03	-.33	-.24	---	---	.06	-.01	.44	.33
19	.11	-.11	.00	-.18	-.17	-.28	---	---	.05	-.06	.62	.13
20	-1.22	.02	.01	-.20	-.24	-.29	---	---	-.01	.15	.63	.14
21	-.54	.33	-.12	-.35	-.35	-.83	---	---	-.03	.25	.64	.34
22	-.19	.59	-.58	-.44	-.15	-.51	---	---	-.06	.29	.40	.18
23	.00	.58	-.90	-.63	.16	-.31	---	---	.07	.23	.50	.39
24	.01	-.36	-1.61	-.62	-.52	-.26	---	---	.00	.19	.45	.13
25	-.04	-.32	-1.18	-.15	-.66	.18	---	---	.04	.50	.62	.00
26	.01	.09	-.27	-.73	-.98	-.11	---	---	.12	.51	.51	.39
27	.04	-.11	-.17	-1.03	-.58	-.11	---	---	.17	.45	.40	.27
28	-.09	-.16	-.30	-.55	.09	-.16	---	---	.16	.44	.44	.18
29	-.25	-.17	-.22	-.23	---	.22	---	---	.16	.43	.44	.48
30	.19	-1.07	-.21	-.21	---	.39	---	---	.35	.35	.32	.42
31	.25	---	-.03	-.43	---	.27	---	---	---	.15	.35	---
TOTAL	2.67	2.05	-11.51	-13.19	-7.55	2.04	---	---	---	6.55	12.95	9.89
MEAN	.09	.07	-.37	-.43	-.27	.07	---	---	---	.21	.42	.33
MAX	.70	.94	.13	-.03	.35	.61	---	---	---	.56	.64	1.07
MIN	-1.22	-1.07	-1.61	-1.03	-.98	-.83	---	---	---	-.10	-.17	.00

CAL YR 1989 TOTAL -19.37 MEAN -.05 MAX .94 MIN -1.61

CHARLOTTE HARBOR AND COASTAL AREA

02293345 SHADROE CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°39'05", long 82°02'10", in SW¼ sec.8 T.44 S., R.23 E., Lee County, Hydrologic Unit 03100103, (Matlacha Quadrangle), near right bank on downstream side of wingwall of bridge on Embers Parkway, 75 ft west of N.W. 29th Place, 275 ft east of State Road 765 (Burnt Store Road) and 0.3 mi upstream of weir, at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. State Road Department Bench Mark.

REMARKS.--No estimated daily stage and discharge. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 387 ft³/s Aug. 10, 1987, gage height, 4.21 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 58 ft³/s May 27, gage height, 2.81 ft; minimum gage height 2.30 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	3.5	.83	2.2	.99	.76	.56	.00	4.9	9.7	3.5	9.1
2	12	3.4	.75	1.3	1.0	.75	.45	.00	12	10	3.2	9.1
3	9.3	3.4	.71	1.0	1.8	.80	.42	.00	30	16	3.0	8.2
4	7.9	2.7	.62	1.0	2.0	.81	.21	.00	15	11	9.1	7.9
5	7.3	2.6	.57	1.0	1.5	.75	.07	.00	10	8.1	10	6.9
6	5.8	1.6	.62	1.7	.88	.76	.00	.00	9.0	7.1	5.8	5.5
7	6.3	.95	.69	2.2	.87	.78	.03	.00	9.2	6.4	4.9	2.2
8	8.3	.87	1.0	1.4	.88	.66	.13	.00	15	6.3	4.4	1.6
9	6.7	.76	5.4	1.0	.88	.54	.16	.00	15	8.1	3.4	2.2
10	10	.75	2.0	1.0	.90	.53	.00	.00	12	16	3.1	1.8
11	15	.67	.99	1.3	4.5	.54	.00	.00	9.6	16	2.5	1.0
12	9.5	.68	1.0	1.5	3.3	.50	.00	.00	8.7	10	4.8	1.3
13	8.2	.76	2.0	.97	.98	.47	.00	.00	6.3	19	11	1.3
14	9.0	.88	.95	.88	.89	.41	.00	.00	5.0	14	12	1.2
15	8.0	.88	.82	.96	.87	.45	.00	.00	4.7	14	7.3	1.4
16	7.3	1.6	.87	1.2	.87	.43	.00	.00	4.3	10	7.2	1.7
17	6.4	.85	.88	.99	.87	.37	.00	.00	3.8	9.1	9.1	7.1
18	5.4	.67	1.5	.88	.87	.32	.00	.00	4.4	9.4	11	5.2
19	5.6	.62	2.2	.97	.87	.25	.03	.00	3.5	11	14	3.3
20	4.3	.62	2.9	1.6	.87	.16	.00	.00	2.9	8.3	13	2.2
21	3.3	.63	3.5	1.0	.88	.01	.00	.02	2.4	8.7	8.9	2.2
22	3.5	.62	3.0	.96	.88	.00	.00	.26	1.8	7.8	7.6	2.2
23	3.6	.69	7.7	.87	9.2	.00	.00	.62	.99	7.2	6.9	2.2
24	3.9	.59	2.7	.88	8.4	.00	.00	.81	2.5	5.8	6.2	2.9
25	4.7	.50	2.2	1.0	2.6	.00	.00	.85	1.6	5.4	6.4	3.1
26	3.5	.57	2.2	.98	.92	.00	.00	.64	1.7	7.4	8.5	2.2
27	2.7	.73	2.2	.88	.81	.00	.00	7.4	4.5	7.5	12	2.2
28	1.9	.81	2.2	.87	.75	.00	.00	32	5.8	18	17	3.4
29	1.2	2.1	2.2	.87	---	.00	.00	13	6.3	8.4	12	6.4
30	2.2	1.3	2.2	.87	---	.00	.00	7.7	5.6	5.6	9.6	6.2
31	3.3	---	2.2	.91	---	.44	---	5.7	---	4.1	9.2	---
TOTAL	200.1	37.30	59.60	35.14	51.03	11.49	2.06	69.00	218.49	305.4	246.6	113.2
MEAN	6.45	1.24	1.92	1.13	1.82	.37	.069	2.23	7.28	9.85	7.95	3.77
MAX	15	3.5	7.7	2.2	9.2	.81	.56	32	30	19	17	9.1
MIN	1.2	.50	.57	.87	.75	.00	.00	.00	.99	4.1	2.5	1.0
AC-FT	397	74	118	70	101	23	4.1	137	433	606	489	225

CAL YR 1989 TOTAL 1277.56 MEAN 3.50 MAX 31 MIN .00 AC-FT 2530
WTR YR 1990 TOTAL 1349.41 MEAN 3.70 MAX 32 MIN .00 AC-FT 2680

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.61	2.53	2.49	2.50	2.48	2.46	2.47	2.42	2.51	2.55	2.51	2.55
2	2.59	2.53	2.48	2.49	2.48	2.46	2.47	2.41	2.55	2.56	2.51	2.55
3	2.58	2.53	2.48	2.49	2.49	2.46	2.46	2.41	2.66	2.59	2.51	2.54
4	2.57	2.52	2.47	2.49	2.49	2.47	2.45	2.40	2.58	2.56	2.54	2.54
5	2.57	2.52	2.47	2.49	2.48	2.46	2.44	2.40	2.56	2.54	2.56	2.53
6	2.56	2.51	2.47	2.50	2.47	2.46	2.44	2.39	2.55	2.53	2.53	2.52
7	2.56	2.51	2.48	2.50	2.47	2.46	2.44	2.38	2.55	2.53	2.52	2.50
8	2.57	2.50	2.49	2.49	2.47	2.45	2.45	2.35	2.58	2.53	2.52	2.49
9	2.56	2.49	2.53	2.49	2.47	2.44	2.45	2.34	2.59	2.54	2.51	2.50
10	2.58	2.49	2.51	2.49	2.47	2.44	2.44	2.35	2.57	2.59	2.51	2.50
11	2.61	2.48	2.50	2.49	2.51	2.44	2.45	2.38	2.55	2.59	2.50	2.49
12	2.58	2.48	2.50	2.48	2.50	2.44	2.45	2.37	2.55	2.56	2.52	2.49
13	2.57	2.49	2.50	2.48	2.48	2.44	2.44	2.37	2.53	2.61	2.56	2.49
14	2.58	2.49	2.49	2.47	2.47	2.43	2.43	2.37	2.52	2.58	2.57	2.49
15	2.57	2.49	2.48	2.48	2.47	2.44	2.43	2.36	2.52	2.58	2.54	2.49
16	2.56	2.50	2.48	2.48	2.47	2.43	2.43	2.36	2.52	2.56	2.54	2.50
17	2.55	2.49	2.48	2.48	2.47	2.43	2.43	2.35	2.51	2.55	2.55	2.53
18	2.54	2.47	2.49	2.47	2.47	2.43	2.43	2.34	2.52	2.55	2.56	2.52
19	2.54	2.47	2.50	2.48	2.47	2.42	2.44	2.33	2.51	2.56	2.58	2.51
20	2.54	2.47	2.51	2.49	2.47	2.41	2.43	2.31	2.50	2.54	2.58	2.50
21	2.53	2.47	2.51	2.48	2.47	2.40	2.41	2.35	2.50	2.55	2.55	2.50
22	2.53	2.47	2.51	2.48	2.47	2.39	2.41	2.42	2.50	2.54	2.54	2.50
23	2.53	2.48	2.54	2.47	2.53	2.38	2.40	2.45	2.49	2.54	2.53	2.50
24	2.53	2.47	2.50	2.47	2.53	2.38	2.40	2.46	2.50	2.53	2.53	2.50
25	2.54	2.46	2.50	2.48	2.49	2.38	2.40	2.47	2.49	2.52	2.53	2.50
26	2.53	2.47	2.50	2.48	2.47	2.37	2.39	2.45	2.50	2.54	2.54	2.49
27	2.52	2.48	2.50	2.47	2.46	2.37	2.38	2.50	2.52	2.54	2.56	2.49
28	2.52	2.48	2.50	2.47	2.46	2.37	2.38	2.67	2.53	2.60	2.59	2.50
29	2.51	2.50	2.50	2.47	---	2.36	2.42	2.56	2.53	2.54	2.57	2.52
30	2.52	2.50	2.50	2.47	---	2.35	2.42	2.53	2.52	2.52	2.55	2.52
31	2.53	---	2.50	2.47	---	2.43	---	2.52	---	2.51	2.55	---
TOTAL	79.18	74.74	77.36	76.94	69.43	75.05	72.88	74.77	76.01	79.13	78.76	75.25
MEAN	2.55	2.49	2.50	2.48	2.48	2.42	2.43	2.41	2.53	2.55	2.54	2.51
MAX	2.61	2.53	2.54	2.50	2.53	2.47	2.47	2.67	2.66	2.61	2.59	

CHARLOTTE HARBOR AND COSTAL AREA

02293346 HORSESHOE CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°40'49", long 82°02'19", in SW¼ sec.5, T.44 S., R.23 E., Lee County, Hydrologic Unit 03100103, (Matlacha Quadrangle), on left bank, 100 ft north of Diplomat Parkway and 200 ft east of State Road 765 (Burnt Store Road) in Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. State Road Department bench mark.

REMARKS.--Estimated daily stage and discharge, May 6-18. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 617 ft³/s Oct. 12, 1987, gage height, 4.27 ft; no flow for many days during most water years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 354 ft³/s May 27, gage height, 3.76 ft; no flow for many days; minimum gage height, 2.39 ft May 4,

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	2.3	2.4	5.1	4.2	4.9	3.8	.01	34	25	25	18
2	6.3	2.0	2.0	4.6	3.9	4.1	2.2	.00	53	27	24	20
3	5.8	2.0	1.9	4.6	4.1	4.6	1.9	.00	160	36	22	18
4	4.8	2.0	1.5	4.8	3.7	4.6	1.3	.00	80	30	38	18
5	4.3	2.1	1.5	5.0	3.5	4.7	1.6	.11	57	27	34	15
6	4.6	2.0	1.6	5.4	2.8	4.1	1.3	.01	49	25	29	12
7	4.8	2.0	1.7	5.4	2.8	4.8	1.2	.01	43	24	23	11
8	5.8	2.2	2.0	5.3	3.3	4.2	1.5	.00	50	24	21	11
9	5.4	2.1	3.8	4.8	3.2	3.4	2.0	.00	82	22	19	12
10	5.9	2.1	3.6	4.9	2.9	3.6	1.3	.01	82	26	18	11
11	7.3	1.8	3.1	5.4	4.8	3.4	1.1	.05	59	28	17	10
12	5.6	1.6	2.7	4.8	4.4	3.1	1.0	.01	51	27	15	9.8
13	5.6	1.6	2.9	4.6	3.7	2.9	.66	.01	42	46	33	9.9
14	6.1	1.6	2.5	4.3	3.9	3.0	.81	.01	37	37	62	10
15	5.3	1.4	2.1	4.4	3.0	3.0	.97	.01	34	35	50	9.7
16	4.7	1.5	2.1	4.5	2.9	3.1	2.0	.10	30	32	47	10
17	4.8	1.2	2.6	4.2	3.0	2.8	1.0	.05	29	29	42	14
18	4.2	1.7	2.6	4.2	2.8	2.9	.48	.05	30	29	37	13
19	5.0	1.6	2.7	4.2	2.7	2.6	.13	.08	25	37	35	11
20	3.9	1.5	3.7	4.5	3.1	1.9	.11	.08	19	35	32	12
21	3.4	1.3	4.1	4.7	3.0	2.4	.27	2.3	18	38	27	12
22	3.3	1.5	4.4	4.7	2.6	2.3	.23	1.2	17	33	23	11
23	3.0	1.6	6.4	4.6	7.0	1.1	.09	1.9	16	33	21	11
24	2.8	1.9	4.3	4.6	7.3	.90	.01	2.2	18	29	20	10
25	2.9	1.8	4.5	4.6	6.2	1.1	.00	2.2	15	26	19	10
26	2.6	1.3	4.8	3.6	5.1	.91	.07	1.7	16	27	18	11
27	2.5	1.4	4.6	3.6	5.0	.80	.42	.37	16	37	18	11
28	2.6	1.5	4.4	4.0	4.4	.66	.19	216	17	46	29	14
29	2.1	4.1	4.4	3.8	---	.74	.15	62	17	33	28	17
30	2.4	3.2	4.8	4.4	---	.36	.05	38	17	30	21	19
31	2.2	---	5.2	4.0	---	4.0	---	30	---	28	18	---
TOTAL	137.7	55.9	100.9	141.6	109.3	86.97	27.84	395.10	1213	961	865	381.4
MEAN	4.44	1.86	3.25	4.57	3.90	2.81	.93	12.7	40.4	31.0	27.9	12.7
MAX	7.7	4.1	6.4	5.4	7.3	4.9	3.8	216	160	46	62	20
MIN	2.1	1.2	1.5	3.6	2.6	.36	.00	.00	15	22	15	9.7
AC-FT	273	111	200	281	217	173	55	784	2410	1910	1720	757

CAL YR 1989 TOTAL 3724.84 MEAN 10.2 MAX 208 MIN .00 AC-FT 7390
WTR YR 1990 TOTAL 4475.71 MEAN 12.3 MAX 216 MIN .00 AC-FT 8880

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.74	2.64	2.62	2.62	2.59	2.60	2.60	2.50	2.83	2.74	2.76	2.72
2	2.73	2.64	2.61	2.62	2.59	2.59	2.57	2.48	2.91	2.76	2.75	2.73
3	2.72	2.64	2.61	2.62	2.59	2.60	2.57	2.47	3.28	2.80	2.74	2.72
4	2.71	2.64	2.60	2.62	2.59	2.60	2.56	2.44	3.02	2.77	2.82	2.72
5	2.70	2.64	2.60	2.62	2.58	2.60	2.56	2.50	2.93	2.75	2.82	2.70
6	2.70	2.64	2.60	2.63	2.57	2.59	2.56	2.50	2.89	2.74	2.79	2.67
7	2.70	2.63	2.60	2.63	2.57	2.60	2.55	2.50	2.87	2.73	2.75	2.66
8	2.71	2.63	2.61	2.63	2.58	2.59	2.56	2.49	2.90	2.73	2.73	2.65
9	2.71	2.63	2.63	2.62	2.58	2.58	2.57	2.48	3.01	2.72	2.73	2.66
10	2.71	2.63	2.63	2.62	2.58	2.58	2.56	2.50	3.03	2.74	2.72	2.65
11	2.73	2.63	2.62	2.62	2.60	2.58	2.55	2.51	2.94	2.75	2.71	2.64
12	2.71	2.62	2.61	2.61	2.59	2.58	2.55	2.50	2.90	2.75	2.70	2.64
13	2.71	2.62	2.61	2.61	2.59	2.57	2.54	2.50	2.86	2.85	2.79	2.64
14	2.71	2.62	2.61	2.60	2.59	2.58	2.54	2.50	2.83	2.81	2.95	2.64
15	2.71	2.62	2.60	2.61	2.58	2.58	2.55	2.50	2.81	2.80	2.90	2.63
16	2.70	2.62	2.60	2.61	2.57	2.58	2.57	2.52	2.79	2.79	2.88	2.63
17	2.69	2.61	2.61	2.60	2.58	2.57	2.55	2.51	2.79	2.77	2.86	2.66
18	2.68	2.61	2.61	2.60	2.57	2.57	2.53	2.51	2.79	2.77	2.83	2.66
19	2.69	2.61	2.61	2.60	2.57	2.57	2.52	2.51	2.76	2.81	2.82	2.64
20	2.68	2.61	2.62	2.61	2.58	2.56	2.52	2.52	2.72	2.80	2.81	2.64
21	2.67	2.61	2.62	2.60	2.58	2.57	2.53	2.56	2.72	2.82	2.78	2.64
22	2.67	2.61	2.62	2.60	2.57	2.56	2.52	2.55	2.71	2.79	2.75	2.63
23	2.67	2.61	2.65	2.60	2.62	2.55	2.51	2.57	2.69	2.79	2.74	2.63
24	2.66	2.62	2.62	2.60	2.63	2.55	2.50	2.57	2.71	2.78	2.73	2.63
25	2.66	2.62	2.63	2.60	2.62	2.55	2.48	2.57	2.69	2.76	2.72	2.63
26	2.66	2.61	2.63	2.58	2.60	2.55	2.51	2.56	2.69	2.77	2.72	2.62
27	2.65	2.61	2.63	2.58	2.60	2.54	2.53	2.70	2.70	2.82	2.72	2.63
28	2.65	2.61	2.62	2.59	2.59	2.54	2.52	3.43	2.70	2.87	2.79	2.64
29	2.64	2.64	2.63	2.59	---	2.54	2.52	2.96	2.69	2.80	2.78	2.67
30	2.65	2.63	2.63	2.59	---	2.53	2.51	2.85	2.69	2.78	2.74	2.69
31	2.64	---	2.62	2.59	---	2.59	---	2.81	---	2.77	2.72	---
TOTAL	83.36	78.70	81.11	80.82	72.45	79.74	76.21	80.07	84.85	86.13	86.05	79.71
MEAN	2.69	2.62	2.62	2.61	2.59	2.57	2.54	2.58	2.83	2.78	2.78	2.66
MAX	2.74	2.64	2.65	2.63	2.63	2.60	2.60	3.43	3.28	2.87	2.95	

CHARLOTTE HARBOR AND COSTAL AREA

02293347 HERMOSA CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°40'08", long 82°02'18", in SW¼ sec.5, T.44 S., R.23 E., Lee County, Hydrologic Unit 03100103, (Matlacha Quadrangle), on right bank, 150 ft upstream of bridge on State Road 765 (Burnt Store Road) and south of NW 9th Terrace in Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. State Road Department bench mark.

REMARKS.--Estimated stage and discharge July 17-20, and Sept. 2-5. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 370 ft³/s Oct. 12, 1987; minimum gage height, 4.00 ft July 19, 1987; no flow for some days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 233 ft³/s May 28, gage height, 3.59 ft; minimum discharge, .18 ft³/s May 9, 10, gage height, 2.43 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	16	13	9.1	6.1	6.7	4.9	.89	34	12	14	30
2	30	15	11	9.4	5.7	5.7	2.9	.91	46	16	13	26
3	30	15	10	9.3	5.5	5.1	1.5	.90	100	19	11	26
4	30	14	9.3	8.6	5.2	6.2	.99	.85	62	15	23	26
5	29	12	8.8	8.5	5.4	6.0	.97	.75	47	11	20	26
6	27	12	8.7	8.7	5.2	5.7	.96	.63	42	10	13	20
7	27	12	8.8	8.7	4.2	6.6	.92	.58	38	10	11	18
8	29	11	9.1	8.3	3.7	7.9	1.0	.44	45	10	9.4	17
9	28	11	13	9.3	4.6	6.1	1.4	.28	51	10	4.3	16
10	28	11	11	10	3.9	4.8	1.0	.57	58	14	3.1	15
11	32	11	9.8	10	6.1	5.3	.92	.91	42	18	3.6	14
12	28	10	8.7	9.3	7.5	4.3	.91	.81	38	17	3.5	14
13	26	11	9.4	9.0	6.0	3.4	.91	.73	32	29	12	13
14	28	11	10	8.5	5.3	3.2	.78	.76	27	23	35	13
15	24	11	9.0	7.6	4.1	3.0	.74	.73	23	22	29	12
16	23	12	8.0	8.3	2.9	2.3	.74	.86	20	20	28	11
17	22	12	8.6	7.1	2.8	1.4	.72	.77	19	19	26	19
18	21	12	9.1	6.8	3.1	1.2	.70	.70	18	22	23	14
19	21	10	8.2	6.8	2.3	1.4	.91	.62	13	22	23	12
20	20	9.2	9.1	7.2	2.6	1.2	.95	.51	5.6	22	22	11
21	18	8.8	10	6.4	3.1	1.5	.81	1.1	4.3	24	19	10
22	18	9.1	8.9	6.9	2.4	1.1	.69	.90	4.6	18	15	9.1
23	18	9.8	14	6.6	9.4	1.0	.68	1.0	2.9	21	14	9.3
24	17	11	11	6.1	13	.90	.67	1.1	5.0	17	14	6.4
25	17	11	9.2	5.9	10	.93	.70	1.5	3.4	16	21	6.2
26	17	9.1	9.2	4.8	9.1	.92	.63	1.0	4.2	16	22	6.3
27	17	9.3	10	5.1	8.2	.89	.55	19	5.8	26	28	8.4
28	16	9.4	9.5	4.9	7.0	.94	.51	152	5.3	31	28	14
29	15	12	9.2	4.9	---	.95	.75	69	5.9	19	27	15
30	16	15	9.3	4.6	---	.88	.79	48	6.4	17	30	18
31	16	---	9.3	4.9	---	8.0	---	39	---	15	29	---
TOTAL	721	342.7	302.2	231.6	154.4	105.51	31.60	347.80	808.4	561	573.9	455.7
MEAN	23.3	11.4	9.75	7.47	5.51	3.40	1.05	11.2	26.9	18.1	18.5	15.2
MAX	33	16	14	10	13	8.0	4.9	152	100	31	35	30
MIN	15	8.8	8.0	4.6	2.3	.88	.51	.28	2.9	10	3.1	6.2
AC-FT	1430	680	599	459	306	209	63	690	1600	1110	1140	904

CAL YR 1989 TOTAL 7699.44 MEAN 21.1 MAX 137 MIN .00 AC-FT 15270
WTR YR 1990 TOTAL 4635.81 MEAN 12.7 MAX 152 MIN .28 AC-FT 9200

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

CAL YR 1989	TOTAL 960.77	MEAN 2.63	MAX 3.33	MIN 2.32
WTR YR 1990	TOTAL 947.72	MEAN 2.60	MAX 3.39	MIN 2.44

CHARLOTTE HARBOR AND COASTAL AREA

264437081550100 GATOR SLOUGH AT U.S. 41 NEAR FT. MYERS, FL

LOCATION (REVISED).--Lat 26°44'37", long 81°55'01", in SW¼ sec.9, T.43 S., R.24 E., Lee County, Hydrologic Unit 03100103, 200 ft upstream of bridge on U.S. Highway 41, 6.3 mi north of Ft. Myers and about 11 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--1973 to 1984 (annual maximum gage heights only), June 1984 to current year. Prior to 1984, published as Gator Slough near Ft. Myers, FL.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to April 26, 1988, at site 200 ft downstream on upstream side of bridge on U.S. Highway 41 at datum -1.07 ft lower.

REMARKS.--Daily stage and discharge estimated for Mar. 21 - Apr. 12, June 20 - July 13, Aug. 8 - Sept. 7, and Sept. 25-30. Records poor. Gage stops recording stage before slough stops flowing.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 290 ft³/s July 14, 1988, gage height, 18.58 ft; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8.4 ft³/s May 28, gage height, 16.08 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	.23	.04	.00	.00	.00	.00	.00	1.0	1.6	1.5	.59
2	2.7	.21	.04	.00	.00	.00	.00	.00	1.0	2.3	1.5	.72
3	2.0	.21	.04	.00	.00	.00	.00	.00	1.1	3.3	1.4	.66
4	1.5	.21	.03	.00	.00	.00	.00	.00	1.2	4.0	1.4	.66
5	1.1	.21	.02	.00	.00	.00	.00	.00	1.2	3.2	1.4	.72
6	.91	.21	.02	.00	.00	.00	.00	.00	1.2	2.7	1.3	.72
7	.75	.19	.02	.00	.00	.00	.00	.00	1.5	2.4	1.2	.73
8	.74	.18	.01	.00	.00	.00	.00	.00	3.9	2.1	1.2	.73
9	.66	.18	.01	.00	.00	.00	.00	.00	3.9	1.9	1.6	.78
10	.85	.18	.00	.00	.00	.00	.00	.00	5.0	1.9	1.4	.80
11	1.9	.18	.00	.00	.00	.00	.00	.00	3.9	2.1	1.3	.74
12	1.8	.16	.00	.00	.00	.00	.00	.00	3.3	2.3	1.1	.73
13	1.6	.15	.00	.00	.00	.00	.00	.00	2.8	2.6	1.3	.79
14	1.4	.13	.00	.00	.00	.00	.00	.00	2.3	3.5	2.4	.74
15	1.2	.12	.00	.00	.00	.00	.00	.00	2.0	3.4	2.7	.73
16	.99	.12	.00	.00	.00	.00	.00	.00	1.9	2.9	2.1	.73
17	.86	.12	.00	.00	.00	.00	.00	.00	2.1	2.4	1.3	.79
18	.74	.10	.00	.00	.00	.00	.00	.00	2.3	2.1	1.1	.73
19	.74	.10	.00	.00	.00	.00	.00	.00	2.2	2.0	1.0	.73
20	.61	.10	.00	.00	.00	.00	.00	.00	2.2	1.9	1.1	.71
21	.49	.09	.00	.00	.00	.00	.00	.00	2.0	1.8	1.1	.73
22	.43	.08	.00	.00	.00	.00	.00	.00	1.9	1.7	.95	.73
23	.37	.08	.00	.00	.00	.00	.00	.00	1.9	1.6	.87	.67
24	.33	.07	.00	.00	.00	.00	.00	.00	1.8	1.5	.87	.69
25	.33	.07	.00	.00	.00	.00	.00	.00	1.7	1.4	.80	1.0
26	.30	.07	.00	.00	.00	.00	.00	.00	1.7	1.4	.80	.95
27	.29	.07	.00	.00	.00	.00	.00	.00	1.6	1.3	.80	.95
28	.29	.06	.00	.00	.00	.00	.00	.00	1.8	1.7	.95	1.0
29	.29	.06	.00	.00	---	.00	.00	.89	1.8	2.6	.72	1.1
30	.29	.05	.00	.00	---	.00	.00	.79	1.9	1.8	.66	1.2
31	.26	---	.00	.00	---	.00	---	.87	---	1.5	.66	---
TOTAL	29.82	3.99	0.23	0.00	0.00	0.00	0.00	4.35	64.0	70.1	38.48	23.55
MEAN	.96	.13	.007	.000	.000	.000	.000	.14	2.13	2.26	1.24	.78
MAX	3.1	.23	.04	.00	.00	.00	.00	1.8	5.0	4.0	2.7	1.2
MIN	.26	.05	.00	.00	.00	.00	.00	.00	1.0	1.3	.66	.59
AC-FT	59	7.9	.5	.00	.00	.00	.00	8.6	127	139	76	47

WTR YR 1990 TOTAL 234.52 MEAN .64 MAX 5.0 MIN .00 AC-FT 465

CHARLOTTE HARBOR AND COASTAL AREA

264437081550100 GATOR SLOUGH AT U.S. 41 NEAR FT. MYERS, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.89	15.61	15.56	15.52	15.49	15.48	15.47	15.57	15.66	15.61	15.62	15.54
2	15.86	15.61	15.56	15.51	15.49	15.48	15.47	15.57	15.65	15.66	15.62	15.56
3	15.81	15.61	15.56	15.51	15.49	15.48	15.63	15.57	15.65	15.73	15.61	15.55
4	15.77	15.61	15.55	15.51	15.49	15.48	15.63	15.57	15.65	15.77	15.61	15.55
5	15.73	15.61	15.55	15.51	15.49	15.48	15.63	15.57	15.65	15.72	15.61	15.56
6	15.70	15.61	15.55	15.51	15.49	15.48	15.63	15.56	15.64	15.69	15.61	15.56
7	15.69	15.60	15.55	15.51	15.49	15.48	15.63	15.56	15.66	15.67	15.60	15.56
8	15.69	15.60	15.55	15.51	15.49	15.48	15.62	15.56	15.82	15.65	15.60	15.56
9	15.68	15.60	15.55	15.51	15.49	15.48	15.62	15.56	15.82	15.63	15.64	15.56
10	15.70	15.60	15.54	15.51	15.49	15.48	15.62	15.57	15.86	15.63	15.62	15.56
11	15.81	15.60	15.54	15.51	15.49	15.48	15.62	15.58	15.81	15.65	15.60	15.55
12	15.80	15.59	15.54	15.51	15.49	15.48	15.61	15.58	15.77	15.67	15.59	15.55
13	15.78	15.59	15.54	15.51	15.49	15.48	15.60	15.58	15.73	15.69	15.61	15.55
14	15.77	15.59	15.54	15.51	15.49	15.48	15.60	15.58	15.69	15.75	15.70	15.54
15	15.74	15.59	15.53	15.51	15.48	15.48	15.60	15.57	15.66	15.75	15.72	15.54
16	15.72	15.59	15.53	15.51	15.48	15.48	15.60	15.57	15.64	15.72	15.68	15.54
17	15.71	15.59	15.53	15.50	15.48	15.48	15.60	15.57	15.66	15.68	15.62	15.54
18	15.69	15.58	15.54	15.50	15.48	15.48	15.60	15.57	15.66	15.66	15.60	15.53
19	15.69	15.58	15.54	15.50	15.48	15.48	15.59	15.57	15.65	15.65	15.59	15.53
20	15.68	15.58	15.54	15.50	15.48	15.47	15.59	15.57	15.64	15.64	15.60	15.52
21	15.66	15.57	15.54	15.50	15.48	15.47	15.59	15.56	15.63	15.64	15.60	15.52
22	15.65	15.57	15.53	15.50	15.48	15.47	15.59	15.56	15.62	15.63	15.58	15.52
23	15.64	15.57	15.53	15.50	15.48	15.47	15.59	15.56	15.62	15.62	15.57	15.51
24	15.63	15.57	15.53	15.50	15.48	15.47	15.58	15.56	15.61	15.62	15.57	15.51
25	15.63	15.57	15.52	15.50	15.48	15.47	15.58	15.56	15.61	15.61	15.56	15.54
26	15.62	15.57	15.52	15.49	15.48	15.47	15.58	15.56	15.61	15.60	15.56	15.54
27	15.62	15.57	15.52	15.49	15.48	15.47	15.58	15.55	15.60	15.60	15.56	15.53
28	15.62	15.57	15.52	15.49	15.48	15.47	15.58	15.71	15.61	15.72	15.58	15.54
29	15.62	15.57	15.52	15.49	---	15.47	15.57	15.65	15.61	15.71	15.56	15.55
30	15.62	15.56	15.52	15.49	---	15.47	15.57	15.64	15.62	15.65	15.55	15.56
31	15.61	---	15.52	15.49	---	15.47	---	15.64	---	15.62	15.55	---
TOTAL	486.83	467.63	481.66	480.61	433.58	479.76	467.77	482.95	470.11	485.64	483.69	466.27
MEAN	15.70	15.59	15.54	15.50	15.48	15.48	15.59	15.58	15.67	15.67	15.60	15.54
MAX	15.89	15.61	15.56	15.52	15.49	15.48	15.63	15.71	15.86	15.77	15.72	15.56
MIN	15.61	15.56	15.52	15.49	15.48	15.47	15.47	15.55	15.60	15.60	15.55	15.51

WTR YR 1990 TOTAL 5686.50 MEAN 15.58 MAX 15.89 MIN 15.47

CHARLOTTE HARBOR AND COASTAL AREA

264139082022100 GATOR SLOUGH AT SR 765 NEAR FT. MYERS, FL

LOCATION.--Lat 26°41'39", long 82°02'01" in NW¼ sec.32, T.43 S., R.23 E., Lee County, Hydrologic Unit 03100103, 100 ft upstream from bridge on State Highway 765 (Burnt Store Road) in Cape Coral, 2.7 mi upstream from mouth and 12 mi northwest of Ft. Myers.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--1973-83 (annual maximum gage heights, only), May 1984 to current year. Prior to 1984, published as "near Pine Island."

GAGE.--Water-stage recorder and concrete control. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated discharge and stage Dec. 26 to Jan. 26. Records poor.

AVERAGE DISCHARGE.--5 years (water years 85-88, 90) 37.1 ft³/s, 26,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 901 ft³/s Aug. 21, 1986, gage height, 4.51 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 204 ft³/s May 28, gage height, 3.15 ft; no flow for many days; minimum gage height, 2.46 ft May 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	18	9.0	5.0	5.0	5.0	5.2	.30	45	19	43	48
2	5.8	17	8.2	5.0	4.9	5.4	3.2	.40	55	31	38	54
3	7.0	16	7.4	3.7	4.9	5.4	2.8	.48	109	52	33	50
4	8.9	16	7.5	3.7	5.2	4.5	1.8	.32	75	62	52	46
5	11	16	6.5	3.7	3.4	4.7	1.5	.04	63	49	57	39
6	13	16	6.5	2.4	2.6	5.1	1.5	.00	52	39	46	32
7	16	14	7.4	3.7	2.2	5.1	1.5	.04	45	36	40	28
8	21	13	9.6	2.4	2.7	4.5	2.0	.00	50	31	49	27
9	26	12	15	2.4	3.5	3.4	1.6	.00	85	27	69	25
10	30	12	11	2.4	4.0	2.9	.73	.68	135	27	57	24
11	42	11	9.9	3.7	6.5	2.8	1.1	1.3	117	31	43	22
12	41	9.9	10	3.7	5.0	2.5	1.0	.42	87	31	36	21
13	37	9.9	9.6	3.7	3.2	2.5	.64	.58	65	46	54	21
14	47	9.9	8.6	3.7	2.8	2.4	.31	.60	50	44	163	21
15	44	9.7	8.2	5.0	3.2	2.8	.50	1.2	42	45	173	20
16	38	9.0	8.6	6.5	3.2	3.3	.73	3.2	37	42	136	18
17	35	8.2	9.3	5.0	2.6	3.7	.48	1.1	34	39	100	18
18	32	7.4	9.1	5.0	2.4	2.2	.58	.52	33	39	81	19
19	30	6.5	11	5.0	2.7	2.1	1.8	.32	27	52	70	17
20	27	6.5	7.9	6.5	2.8	.97	1.2	.06	20	61	73	16
21	25	6.3	8.1	5.0	2.4	1.2	.46	1.8	18	75	73	15
22	24	6.5	5.4	3.7	2.7	.86	.52	1.8	19	97	60	15
23	23	8.3	5.3	3.7	7.8	1.1	84	2.1	17	84	51	13
24	22	8.2	6.2	2.4	10	1.1	1.2	2.0	19	56	46	12
25	22	8.2	6.3	3.7	6.9	1.2	.81	2.2	16	47	44	12
26	21	7.3	6.5	3.7	4.9	1.1	.28	1.3	16	43	42	11
27	21	6.5	6.5	3.3	4.5	1.1	.19	15	18	49	42	9.9
28	19	7.2	5.0	3.7	4.1	1.1	.34	175	18	60	57	12
29	17	14	5.0	3.7	---	.87	2.2	96	18	51	64	16
30	20	12	3.7	3.9	---	1.2	.44	64	17	48	56	18
31	19	---	3.7	4.7	---	7.8	---	53	---	46	50	---
TOTAL	749.3	322.5	242.0	123.7	116.1	89.90	37.45	425.76	1402	1459	1998	699.9
MEAN	24.2	10.7	7.81	3.99	4.15	2.90	1.25	13.7	46.7	47.1	64.5	23.3
MAX	47	18	15	6.5	10	7.8	5.2	175	135	97	173	54
MIN	4.6	6.3	3.7	2.4	2.2	.86	.19	.00	16	19	33	9.9
AC-FT	1490	640	480	245	230	178	74	844	2780	2890	3960	1390

WTR YR 1990 TOTAL 7665.61 MEAN 21.0 MAX 175 MIN .00 AC-FT 15200

CHARLOTTE HARBOR AND COASTAL AREA

264139082022100 GATOR SLOUGH AT SR 765 NEAR FT. MYERS, FL

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.76	2.62	2.57	2.55	2.55	2.55	2.55	2.50	2.72	2.61	2.69	2.70
2	2.74	2.62	2.57	2.55	2.55	2.55	2.54	2.50	2.76	2.66	2.68	2.72
3	2.73	2.61	2.57	2.54	2.55	2.55	2.53	2.50	2.92	2.73	2.66	2.71
4	2.72	2.61	2.57	2.54	2.55	2.55	2.52	2.50	2.83	2.77	2.72	2.70
5	2.71	2.61	2.56	2.54	2.54	2.55	2.52	2.49	2.79	2.72	2.74	2.67
6	2.70	2.61	2.56	2.53	2.53	2.55	2.52	2.49	2.76	2.69	2.70	2.64
7	2.69	2.60	2.57	2.54	2.53	2.55	2.52	2.49	2.73	2.67	2.68	2.63
8	2.69	2.60	2.58	2.53	2.53	2.55	2.53	2.48	2.75	2.65	2.71	2.62
9	2.69	2.59	2.61	2.53	2.54	2.54	2.52	2.47	2.85	2.63	2.78	2.62
10	2.68	2.59	2.59	2.53	2.54	2.53	2.51	2.49	2.99	2.63	2.74	2.62
11	2.72	2.59	2.58	2.54	2.56	2.53	2.52	2.50	2.95	2.65	2.69	2.61
12	2.72	2.58	2.58	2.54	2.55	2.53	2.52	2.49	2.86	2.65	2.67	2.61
13	2.70	2.58	2.58	2.54	2.54	2.53	2.51	2.49	2.80	2.70	2.72	2.60
14	2.74	2.58	2.57	2.54	2.53	2.53	2.51	2.49	2.76	2.70	3.03	2.61
15	2.72	2.58	2.57	2.55	2.54	2.53	2.51	2.49	2.73	2.70	3.06	2.60
16	2.71	2.58	2.57	2.56	2.54	2.54	2.51	2.51	2.71	2.69	2.97	2.60
17	2.69	2.57	2.58	2.55	2.53	2.54	2.51	2.50	2.70	2.68	2.87	2.60
18	2.68	2.57	2.58	2.55	2.53	2.53	2.51	2.49	2.70	2.68	2.82	2.61
19	2.67	2.56	2.59	2.55	2.53	2.53	2.52	2.49	2.67	2.72	2.78	2.60
20	2.66	2.56	2.57	2.56	2.53	2.51	2.52	2.48	2.64	2.75	2.79	2.59
21	2.65	2.56	2.57	2.55	2.53	2.52	2.50	2.50	2.63	2.80	2.79	2.59
22	2.65	2.56	2.55	2.54	2.53	2.51	2.50	2.50	2.63	2.86	2.74	2.59
23	2.65	2.57	2.55	2.54	2.56	2.52	2.50	2.51	2.62	2.82	2.71	2.58
24	2.64	2.57	2.56	2.53	2.58	2.52	2.51	2.52	2.62	2.74	2.69	2.58
25	2.64	2.57	2.56	2.54	2.56	2.52	2.50	2.52	2.61	2.71	2.69	2.58
26	2.64	2.56	2.56	2.54	2.55	2.52	2.49	2.51	2.61	2.69	2.68	2.58
27	2.63	2.56	2.56	2.54	2.55	2.52	2.49	2.57	2.61	2.71	2.68	2.57
28	2.63	2.56	2.55	2.54	2.54	2.52	2.50	3.08	2.61	2.75	2.73	2.58
29	2.62	2.60	2.55	2.54	---	2.51	2.52	2.88	2.61	2.72	2.75	2.60
30	2.63	2.59	2.54	2.54	---	2.52	2.50	2.78	2.61	2.71	2.73	2.61
31	2.63	---	2.54	2.55	---	2.56	---	2.75	---	2.71	2.71	---
TOTAL	83.13	77.51	79.61	78.81	71.19	78.51	75.41	78.96	81.78	83.90	85.40	78.52
MEAN	2.68	2.58	2.57	2.54	2.54	2.53	2.51	2.55	2.73	2.71	2.75	2.62
MAX	2.76	2.62	2.61	2.56	2.58	2.56	2.55	3.08	2.99	2.86	3.06	2.72
MIN	2.62	2.56	2.54	2.53	2.53	2.51	2.49	2.47	2.61	2.61	2.66	2.57

WTR YR 1990 TOTAL 952.73 MEAN 2.61 MAX 3.08 MIN 2.47

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging station. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analysis, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in a table of annual maximum stage and discharge. Discharge measurements made at miscellaneous sites for both low flows and high flows are given in a second table.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The data of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given in the period of record represent water year for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record station during the water year 1988

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Annual Maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Caloosahatchee River							
02292730	Jacks Branch near La Belle, FL	Lat 26°49'40", long 81°33'03", in NE¼ sec.18, T.42 S., R.28 E., Glades County, Hydrologic Unit 03090205, at bridge on State Highway 720, 11.8 mi northwest of La Belle. Datum of gage is National Geodetic Vertical Datum of 1929.		1983-90	08-29-90	37.55	1,150

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons



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