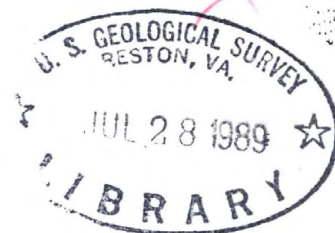


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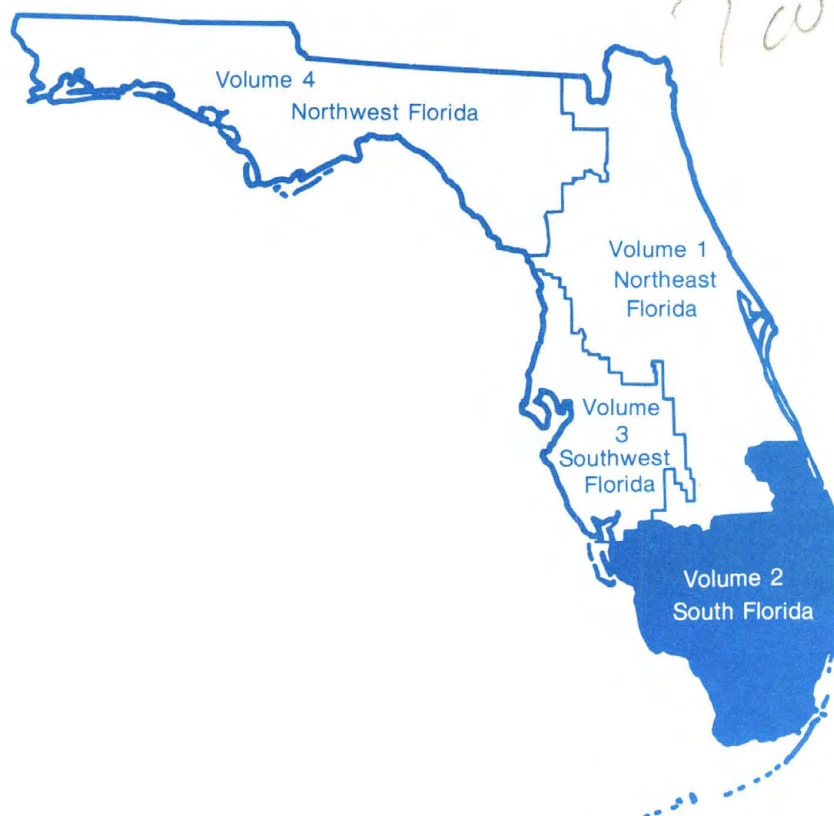
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Water Resources Data Florida Water Year 1988



Volume 2A. South Florida Surface Water



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-88-2A
Prepared in cooperation with the State of Florida
and with other agencies

CALENDAR FOR WATER YEAR 1988

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Water Resources Data Florida Water Year 1988

Volume 2A. South Florida Surface Water

by W.J. Haire, C. Price, C. Lietz , E. Workman



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-88-2A
Prepared in cooperation with the State of Florida
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, 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, 1988
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 and J. J. Fontana under the supervision of W. J. Haire, A. C. Lietz, 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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15. Supplementary Notes Prepared in cooperation with the State of Florida and other agencies.				
16. Abstract (Limit: 200 words) Water resources data for the 1988 water year in Florida consists of continuous or daily discharge for 338 streams, periodic discharge for 34 streams, miscellaneous discharge for 28 streams, continuous or daily stage for 152 streams, periodic stage for 29 streams, peak discharge for 71 streams, continuous daily tide stage for 8 streams, and peak stage for 84 streams; continuous or daily elevations for 73 lakes, periodic elevations for 72 lakes; continuous ground-water levels for 490 wells, periodic ground-water levels for 1,620 wells, and miscellaneous water level measurements for 2,678 wells; quality of water data for 158 surface-water sites and 884 wells. The data for South Florida include continuous or daily discharge for 65 streams, periodic discharge for 2 streams, peak discharge for 4 streams, continuous or daily stage for 82 streams, periodic stage for 16 streams, peak discharge for 2 streams, and peak stage for 12 streams; continuous elevations for 1 lake and periodic elevations for 5 lakes; continuous ground-water levels for 179 wells, periodic ground-water levels for 298 wells, and miscellaneous water-level measurements for 250 wells; quality-of-water for 6 surface-water sites and 558 wells. This data represent the National Water Data System records collected by the U.S. Geological Survey and cooperation 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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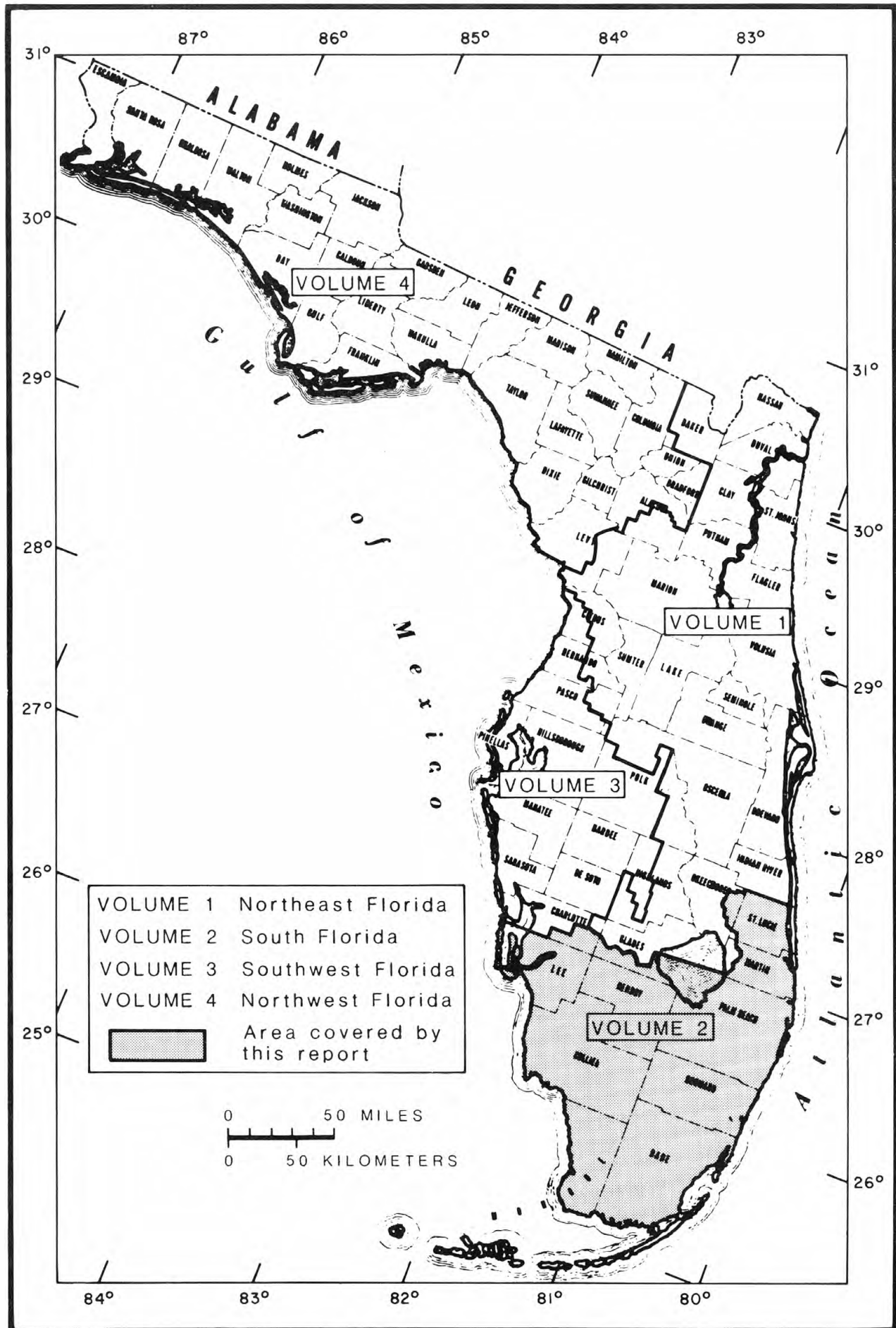


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[Letters after station names designate type of data: (d) discharge,
(g) gage height, (b) biological, (q) quality, (e) elevation]

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WATER RESOURCES DATA - FLORIDA, 1988
Volume 2A: South Florida

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 65 streams, periodic discharge for 2 streams, continuous or daily stage for 82 streams, periodic stage for 2 streams, peak discharge for 3 streams, and peak stage for 12 streams; continuous elevations for 1 lake, periodic elevations for 5 lakes; continuous ground-water levels for 179 wells, periodic ground-water levels for 298 wells, and miscellaneous water-level measurements for 250 wells; quality-of-water data for 6 surface-water sites and 558 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-88-2A." 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.

SUMMARY OF HYDROLOGIC CONDITIONS

The 1988 water year started with Hurricane Floyd contributing 25% more rainfall than normal for October. However the volume was not enough to erase the wet season deficit. The total wet season rainfall was 6 inches below the historic average. In November a tropical depression and a succession of moisture laden cold fronts accounted for almost four times the average rainfall. Lake Okeechobee rose over 1.50 ft during the month. Most of South Florida received well below average precipitation during December, except the lower east coast, which received just over the long-term normal rainfall. There was near normal rainfall during January. Lake Okeechobee was approximately one foot above the 10 year average stage by the end of January. Near normal dry season rainfall occurred during February and above average rainfall occurred during March. An average of 0.6 inches of precipitation, less than 25% of normal rainfall for April occurred until a low pressure system provided relief at the end of April. A triad of rain events during May provided well-needed replenishment to surface and ground water supplies along the east coast, but was ineffective in averting a water shortage restriction along the southwest coast between Ft. Myers and Naples. Zero releases were made through the S-12 structures and S-333 to Everglades National Park during May and part of June. The dry season continued through June with the Caloosahatchee River Basin and Collier County receiving less than 50% of normal rainfall, but the lower east coast receiving heavy rains and local flooding. The onset of wet season generated enough rainfall to call for releases through the S-12 structures and S-333 to Everglades National Park later in June. During July typical wet season rainfall patterns were established. Several tropical waves passed through South Florida during July but this didn't relieve the water shortage area in Lee and Collier counties that received less than normal precipitation for the eighth consecutive month. August brought heavy rains and threats of tropical disturbances. Tropical storm Chris came close but veered north while still east of the coast. Precipitation of over 18 inches resulted in high stages in the C-111 basin necessitating the removal of the earthen plug at the S-197 station on August 15 and was not replaced until a week later. Weather conditions changed radically from August to September. During September many parts of South Florida received the lowest rainfall ever recorded.

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 1988 water year that began October 1, 1987, and ended September 30, 1988. 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.)

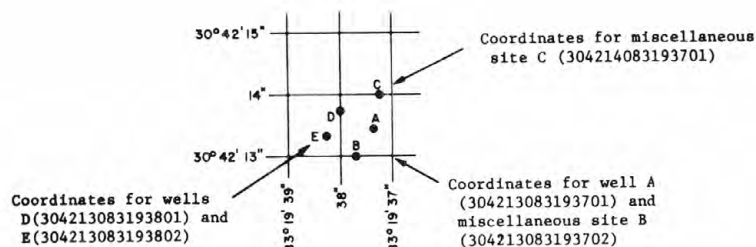


Figure 3. System for numbering wells and miscellaneous sites.
(latitude and longitude)

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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.

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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 $1 \text{ ft}^3/\text{s}$; to the nearest tenth between 1.0 and $10 \text{ ft}^3/\text{s}$; to whole numbers between 10 and $1,000 \text{ ft}^3/\text{s}$; and to 3 significant figures for more than $1,000 \text{ ft}^3/\text{s}$. 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.

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.

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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 **W**ater Data **S**torage and **R**etrieval 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

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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/m^3), and periphyton and benthic organisms in grams per square mile (g/m^2).

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 ($\mu\text{g}/\text{g}$) 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 ($\mu\text{g}/\text{L}$, $\mu\text{g}/\text{L}$) 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.

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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, 1988, is called the "1988 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.

PUBLICATIONS ON 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 publications, 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, 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.
- 2-E1. APPLICATION OF BOREHOLE GEOPHYSICS TO WATER-RESOURCES INVESTIGATIONS, by W.S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. GENERAL FIELD AND OFFICE PROCEDURES FOR INDIRECT DISCHARGE MEASUREMENTS, by M.A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. MEASUREMENT OF PEAK DISCHARGE BY THE SLOPE-AREA METHOD, by Tate Dalrymple and M.A. Benson, USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. MEASUREMENT OF PEAK DISCHARGE AT CULVERTS BY INDIRECT METHODS, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. MEASUREMENT OF PEAK DISCHARGE AT WIDTH CONTRACTIONS BY INDIRECT METHODS, by H.F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. MEASUREMENT OF PEAK DISCHARGE AT DAMS BY INDIRECT METHODS, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. GENERAL PROCEDURE FOR GAGING STREAMS, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. STAGE MEASUREMENTS AT GAGING STATIONS, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. DISCHARGE MEASUREMENTS AT GAGING STATIONS, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. MEASUREMENT OF TIME OF TRAVEL AND DISPERSION IN STREAMS BY DYE TRACING, by E.F. Hubbard, F.A. Kilpatrick, L.A. Martens, and J.F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A10. DISCHARGE RATINGS AT GAGING STATIONS, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. MEASUREMENT OF DISCHARGE BY MOVING-BOAT METHOD, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. FLUOROMETRIC PROCEDURES FOR DYE TRACING, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. COMPUTATION OF CONTINUOUS RECORDS OF STREAMFLOW, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. USE OF FLUMES IN MEASURING DISCHARGE, by F.A. Kilpatrick and V.R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. COMPUTATION OF WATER-SURFACE PROFILES IN OPEN CHANNELS, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. MEASUREMENT OF DISCHARGE USING TRACERS, by F.A. Kilpatrick and E.D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. ACOUSTIC VELOCITY METER SYSTEMS, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-B1. AQUIFER-TEST DESIGN, OBSERVATION, AND DATA ANALYSIS, by R.W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. INTRODUCTION TO GROUND-WATER HYDRAULICS, A PROGRAMED TEXT FOR SELF-INSTRUCTION, by G.D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. TIP CURVES FOR SELECTED PROBLEMS OF FLOW TO WELLS IN CONFINED AQUIFERS, by J.E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B5. DEFINITION OF BOUNDARY AND INITIAL CONDITIONS IN THE ANALYSIS OF SATURATED GROUND-WATER FLOW SYSTEMS--AN INTRODUCTION, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-B6. THE PRINCIPLE OF SUPERPOSITION AND ITS APPLICATION IN GROUND-WATER HYDRAULICS, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-C1. FLUVIAL SEDIMENT CONCEPTS, by H.P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. FIELD METHODS FOR MEASUREMENT OF FLUVIAL SEDIMENT, by H.P. Guy and V.W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. COMPUTATION OF FLUVIAL-SEDIMENT DISCHARGE, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. SOME STATISTICAL TOOLS IN HYDROLOGY, by H.C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. FREQUENCY CURVES, by H.C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. LOW-FLOW INVESTIGATIONS, by H.C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. STORAGE ANALYSES FOR WATER SUPPLY, by H.C. Riggs and C.H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. REGIONAL ANALYSES OF STREAMFLOW CHARACTERISTICS, by H.C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. COMPUTATION OF RATE AND VOLUME OF STREAM DEPLETION BY WELLS, by C.T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. METHODS FOR DETERMINATION OF INORGANIC SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by M.W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. DETERMINATION OF MINOR ELEMENTS IN WATER BY EMISSION SPECTROSCOPY, by P.R. Barnett and E.C. Mallor, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. METHODS FOR ANALYSIS OF ORGANIC SUBSTANCES IN WATER, by D.F. Goerlitz and Eugene Brown: USGS--TWRI 5, Chapter A3. 1972. 40 pages.
- 5-A4. METHODS FOR COLLECTION AND ANALYSIS OF AQUATIC BIOLOGICAL AND MICROBIOLOGICAL SAMPLES, edited by P.E. Greeson, T.A. Ehlike, G.A. Irwin, B.W. Lium, and K.V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. METHODS FOR DETERMINATION OF RADIOACTIVE SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. QUALITY ASSURANCE PRACTICES FOR THE CHEMICAL AND BIOLOGICAL ANALYSES OF WATER AND FLUVIAL SEDIMENTS, by L.C. Friedman and D.E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. LABORATORY THEORY AND METHODS FOR SEDIMENT ANALYSIS, by H.P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. A MODULAR THREE-DIMENSIONAL FINITE-DIFFERENCE GROUND-WATER FLOW MODEL, by M.G. McDonald and A.W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 7-C1. FINITE DIFFERENCES MODEL FOR AQUIFER SIMULATION IN TWO DIMENSIONS WITH RESULTS OF NUMERICAL EXPERIMENTS, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. COMPUTER MODEL OF TWO-DIMENSIONAL SOLUTE TRANSPORT AND DISPERSION IN GROUND WATER, by L.F. Konikow and J.D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. A MODEL FOR SIMULATION OF FLOW IN SINGULAR AND INTERCONNECTED CHANNELS, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. METHODS OF MEASURING WATER LEVELS IN DEEP WELLS, by M.S. Garber and F.C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. INSTALLATION AND SERVICE MANUAL FOR U.S. GEOLOGICAL SURVEY MANOMETERS, by J.D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. CALIBRATION AND MAINTENANCE OF VERTICAL-AXIS TYPE CURRENT METERS, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

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Volume 2A: South Florida

SELECTED REFERENCES

- American Public Health Association, and others 1965, Standard methods for the examination of water and waste-water, 12th edition: American Public Health Association, New York, 769 p.
- California State Water Quality Control Board, 1963, Water quality criteria; Pub. 3-A, 226 p.
- Conover, C.S., and Leach, S.D., 1975, River basin and hydrologic unit map of Florida: Florida Bureau of Geology Map Series 72.
- Ellis, M.M., Westfall, B.A., and Ellis, M.D., 1946, Determination of water quality, U.S. Fish and Wildlife Reserve Report 9, 122 p.
- Florida Department of Environmental Regulation, 1983, Water quality standards: Chapter 17-3 in Florida Administrative Code.
- 1984, Public drinking water systems: Chapter 17-22 in Florida Administrative Code.
- Hem, J.D., 1970, Study and interpretations of the chemical characteristics of natural water: U.S. Geological Survey Water-Supply Paper 1473, second edition, 363 p.
- Kirkor, Teodor, 1951, Protecting public waters from pollution in the USSR: Sewage Works Journal, v. 23, p. 938.
- Langbein, W.B., and Iseri, K.T., 1960, General introduction and hydrologic definitions: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.
- Maier, F.J., 1950, Fluoridation of public water supplies: Journal of the American Water Works Association, v. 42, pt. 1, p. 1120-1132.
- Maxcy, K.F., 1950, Report on the relation of nitrite concentrations in well waters to the occurrence of methemoglobinemia: National Research Council, Sanitary Engineering and Environment Bulletin, Appendix D, 271 p.
- Paynter, O.E., 1960, The chronic toxicity of dodecylbenzene sodium sulfonate: U.S. Public Health Conference on Physiological Aspects of Water Quality Proc., Washington, D.C., Sept. 8-9, 1960, 175-179 p.
- Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Publishing Corporation, New York, 7th ed., 285 p.
- Swenson, H.A., and Baldwin, H.L., 1965, A primer on water quality: Washington, U.S. Government Printing Office, 27 p.
- U.S. Environmental Protection Agency, 1975, National interim primary drinking water regulations: Federal Register, v. 40, no. 51, March 14, p. 11990-11998.
- 1976 (1977), Quality criteria for water: U.S. Government Printing Office, 256 p.
- 1977, National secondary drinking water regulations: Federal Register, v. 42, no. 62, March 31, 1977, p. 17143-17146.
- U.S. Public Health Service, 1962, Drinking water standards: U.S. Department of Health, Education, and Welfare, Public Health Service: Pub. no. 956.
- Wayman, C.H., Robertson, J.B., and Page, H.G., 1962, Foaming characteristics of synthetic detergent solutions: U.S. Geological Survey Professional Paper 450D, art. 178, D198 p.

STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

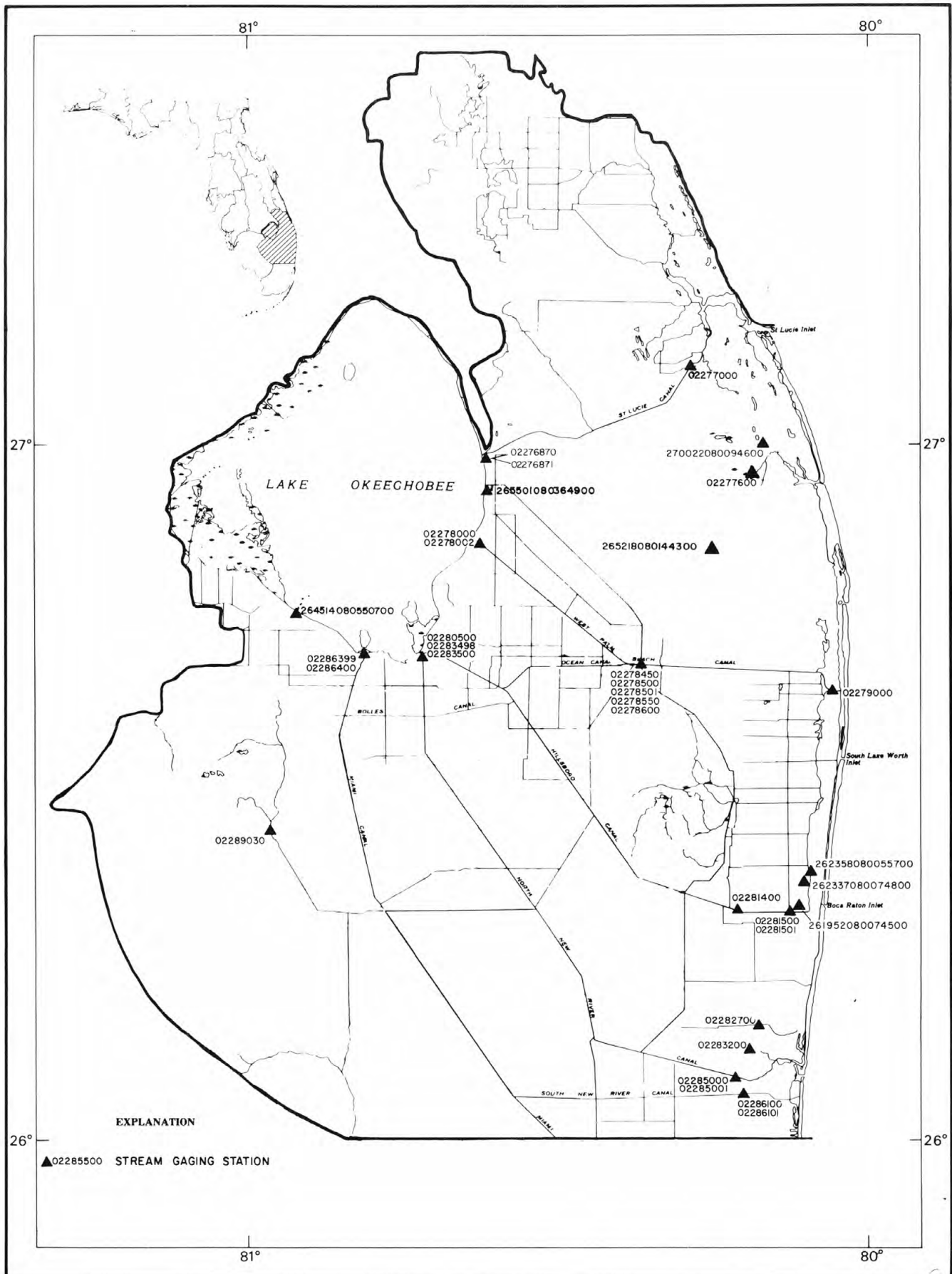


FIGURE 4 . Location of gaging stations in the portion of the Everglades and the southeastern coastal area north of latitude 26 degrees

EVERGLADES AND SOUTHEASTERN COASTAL AREA

21

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 Everglades Drainage 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 (levels by U.S. Army Corps of Engineers). 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.--Flow regulated by lock near Stuart.

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

AVERAGE DISCHARGE.--36 years, 808 ft³/s, 585,400 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, 3,660 ft³/s Nov. 4; minimum daily discharge, 259 ft³/s Oct. 5.

DISCHARGE, IN 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	269	270	273	310	274	762	2150	1460	557	277	696	828
2	266	266	281	339	284	689	1650	1590	285	843	392	747
3	269	716	280	295	287	413	1260	1380	284	1760	357	705
4	276	3660	262	271	278	282	1050	1030	287	1720	521	468
5	259	1930	276	286	287	442	879	815	286	1270	368	591
6	273	1470	288	276	280	561	815	681	533	698	439	464
7	266	1910	278	281	283	929	774	661	398	549	796	514
8	273	1070	280	273	628	1120	554	402	471	560	1020	579
9	273	879	286	272	697	1080	303	287	570	632	1000	754
10	280	784	292	280	874	1280	303	285	458	467	1240	585
11	287	718	285	294	307	1710	286	281	307	432	1730	480
12	348	604	277	278	559	1750	273	290	544	434	872	564
13	852	732	282	279	321	1420	289	287	430	495	622	474
14	278	711	285	277	520	1080	302	294	272	323	820	305
15	268	441	273	273	290	934	290	297	283	421	1170	320
16	264	405	275	286	311	847	291	284	290	346	1290	268
17	271	279	266	305	346	817	303	273	283	492	1250	272
18	282	401	270	277	381	440	288	269	293	388	1090	290
19	268	523	276	273	294	746	282	286	305	386	1200	268
20	269	876	276	285	364	579	281	293	424	386	1640	276
21	269	777	280	293	395	704	285	303	529	342	1360	264
22	276	573	272	274	318	1030	300	284	332	430	2480	268
23	276	578	264	286	294	1740	296	290	417	768	1450	264
24	288	452	266	288	1120	1730	307	272	273	748	1340	279
25	290	371	301	279	1580	1410	282	276	287	685	1180	294
26	269	582	284	279	1640	1040	300	282	393	865	1460	268
27	273	592	305	276	1440	1130	291	281	283	626	1170	266
28	280	521	303	288	1060	689	280	304	287	843	957	279
29	288	288	291	294	965	705	293	302	276	1070	1340	271
30	280	283	285	751	---	1450	1180	285	276	635	908	271
31	273	---	285	282	---	2160	---	544	---	500	969	---
TOTAL	9153	23662	8697	9300	16677	31669	16437	14868	10913	20391	33127	12476
MEAN	295	789	281	300	575	1022	548	480	364	658	1069	416
MAX	852	3660	305	751	1640	2160	2150	1590	570	1760	2480	828
MIN	259	266	262	271	274	282	273	269	272	277	357	264
AC-FT	18150	46930	17250	18450	33080	62820	32600	29490	21650	40450	65710	24750

CAL YR 1987 TOTAL 92517 MEAN 253 MAX 3660 MIN 12 AC-FT 183500
WTR YR 1988 TOTAL 207370 MEAN 567 MAX 3660 MIN 259 AC-FT 411300

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.50	14.12	14.34	14.49	14.44	14.21	13.99	14.31	14.68	14.37	14.45	14.00
2	13.47	14.20	14.06	14.40	14.27	14.08	14.22	14.20	14.41	14.30	14.18	14.01
3	13.55	14.51	14.12	14.32	14.64	14.21	14.28	14.10	14.31	13.93	14.50	13.98
4	13.42	14.41	14.51	14.27	14.35	14.24	14.25	14.34	14.29	13.94	14.35	14.06
5	13.44	14.37	14.30	14.48	14.20	14.39	14.30	14.34	14.41	14.07	14.28	14.07
6	13.52	14.31	14.32	14.18	14.38	14.26	14.43	14.32	14.63	14.25	14.48	14.06
7	13.52	14.38	13.96	14.05	14.33	14.12	14.52	14.25	14.37	14.89	14.32	14.16
8	13.36	14.39	14.27	14.42	14.55	14.08	14.38	14.21	14.37	14.44	14.62	14.13
9	13.17	14.35	14.19	14.50	14.53	14.18	13.87	14.33	14.50	14.56	14.28	14.12
10	13.22	14.25	14.08	14.31	14.44	14.47	14.29	14.15	14.23	14.46	14.53	14.10
11	13.57	14.20	14.25	14.30	14.29	14.15	14.16	14.25	14.47	14.27	14.33	14.12
12	14.13	14.35	14.51	14.44	14.48	13.98	14.58	14.29	14.40	14.44	14.11	14.07
13	14.44	14.35	14.57	14.43	14.48	14.15	14.23	14.19	14.10	14.37	14.13	14.12
14	14.11	14.20	14.30	14.48	14.40	14.19	14.39	14.29	14.12	14.26	14.39	13.96
15	14.10	14.35	14.09	14.45	14.26	14.32	14.26	14.23	14.14	14.41	14.25	14.04
16	14.12	14.26	14.16	14.45	14.43	14.08	14.47	14.19	14.07	14.47	14.41	13.77
17	14.21	14.35	14.26	14.45	14.51	14.10	14.48	14.38	14.21	14.39	14.24	13.88
18	14.20	14.47	14.18	14.37	14.47	14.32	14.02	14.34	14.17	14.36	14.43	14.26
19	14.22	14.25	14.28	14.29	14.49	14.32	14.28	14.40	14.14	14.34	14.31	14.31
20	14.23	14.40	14.23	14.17	14.50	14.52	14.21	14.46	14.50	14.28	14.41	14.08
21	14.23	14.31	14.11	14.34	14.30	14.40	14.23	14.36	14.51	14.25	14.26	14.19
22	14.13	14.30	14.04	14.64	14.27	14.42	14.28	14.30	14.47	14.42	14.63	14.23
23	14.04	14.35	14.37	14.72	14.38	14.04	14.41	14.18	14.39	14.42	14.33	14.01
24	14.15	14.19	14.52	14.51	14.18	14.09	14.37	14.40	14.34	14.40	14.10	14.03
25	14.25	14.41	14.57	14.05	14.00	14.18	14.43	14.27	14.42	14.33	14.31	14.23
26	14.27	14.40	14.44	13.79	14.05	14.33	14.23	14.19	14.42	14.35	14.12	13.99
27	14.33	14.41	14.51	14.35	14.26	14.35	14.40	14.28	14.31	14.40	14.10	14.05
28	14.26	14.17	14.17	14.28	14.23	14.38	14.21	14.17	14.30	14.43	14.16	14.15
29	14.09	14.25	14.19	14.71	13.99	14.24	14.22	14.26	14.10	14.35	14.28	14.18
30	14.00	14.36	14.17	14.56	---	13.97	14.22	14.38	14.31	14.36	14.03	14.17
31	14.00	---	14.16	14.47	---	13.99	---	14.51	---	14.36	14.17	---
MEAN	13.91	14.32	14.27	14.38	14.35	14.22	14.29	14.29	14.34	14.35	14.31	14.08
MAX	14.44	14.51	14.57	14.72	14.64	14.52	14.58	14.51	14.68	14.89	14.63	14.31
MIN	13.17	14.12	13.96	13.79	13.99	13.97	13.87	14.10	14.07	13.93	14.03	13.77

WTR YR 1988 MEAN 14.26 MAX 14.89 MIN 13.17

EVERGLADES AND SOUTHEASTERN COASTAL AREA

23

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.

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

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--5 years (water years 1981, 1985-88), 9,59 ft³/s, 6,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 229 ft³/s Nov. 24, 1984, gage height, 6.16 ft; minimum, 0.02 ft³/s June 3, 4, gage height, 1.24 ft.; minimum gage height, 1.06 ft, May 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 328 ft³/s Nov. 4, gage height, 6.58 ft; minimum, 0.39 ft³/s Apr. 29, gage height, 1.50 ft.

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

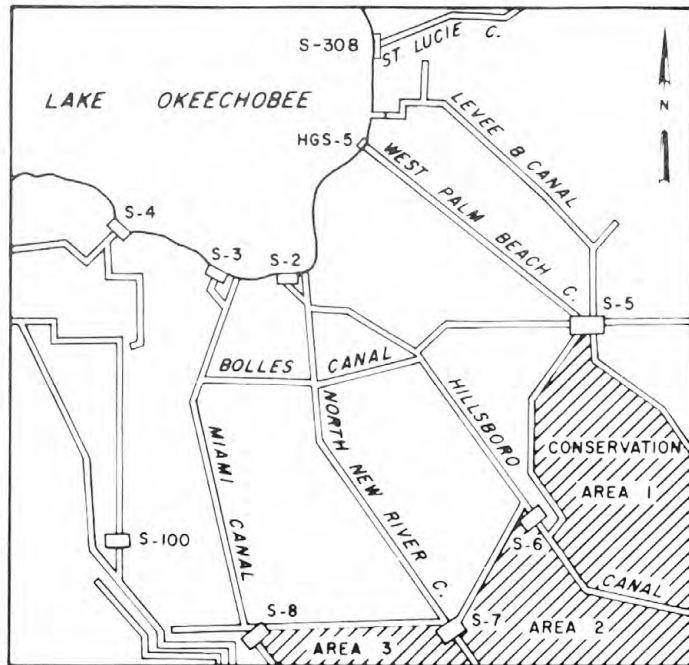
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	15	27	4.6	5.1	7.8	7.7	3.1	8.7	5.7	5.2	14
2	4.1	25	25	5.0	4.9	7.1	7.1	5.1	8.2	7.0	4.7	13
3	3.6	37	22	5.7	4.6	6.6	6.5	5.3	6.7	6.7	4.2	12
4	3.0	203	21	5.7	4.4	6.2	5.9	4.8	5.4	6.1	3.8	11
5	2.4	101	20	5.6	4.2	6.6	5.3	4.4	5.7	5.5	3.5	9.5
6	2.0	82	18	5.6	4.1	7.2	4.8	3.8	8.2	6.1	3.2	9.2
7	1.8	76	16	5.6	3.8	7.2	4.2	3.4	9.5	8.0	3.1	8.6
8	1.4	68	15	5.6	8.8	7.1	3.8	3.1	12	8.9	3.3	8.3
9	1.3	64	14	5.9	13	6.8	3.5	2.6	11	9.0	3.2	7.6
10	2.3	60	14	8.0	14	6.9	3.3	2.3	9.9	9.1	3.3	7.0
11	6.3	59	13	9.3	14	6.8	3.4	2.0	20	8.2	3.5	6.5
12	86	55	12	9.3	14	6.6	3.2	1.7	23	7.2	3.3	6.0
13	90	51	12	8.9	13	6.2	3.0	1.5	21	11	3.1	5.3
14	51	47	11	8.5	12	6.3	2.8	2.3	18	28	3.3	4.8
15	45	43	11	8.2	12	5.8	2.6	3.3	16	18	5.2	4.4
16	38	39	10	7.7	14	5.4	2.4	3.3	14	14	5.9	4.2
17	33	37	9.4	7.2	14	5.1	2.1	3.2	13	12	6.0	3.9
18	30	35	9.0	6.9	13	4.8	1.9	3.4	11	11	5.7	3.7
19	28	57	8.7	6.5	12	10	1.7	3.3	11	11	5.2	3.4
20	26	76	8.3	6.2	12	14	1.5	3.3	10	11	16	3.1
21	23	60	7.8	5.8	12	13	1.2	3.2	14	9.8	37	2.9
22	20	53	7.2	5.9	12	13	1.1	2.8	17	9.1	28	2.6
23	17	49	6.8	5.7	12	12	1.1	2.6	14	8.5	23	2.2
24	16	46	6.5	5.8	12	11	1.1	2.3	12	9.3	20	1.9
25	15	42	6.0	6.6	12	10	.95	2.0	10	8.8	18	1.8
26	14	39	5.6	6.7	11	9.8	.85	1.8	8.7	8.3	20	1.6
27	13	36	5.4	6.5	9.8	11	.70	1.5	7.5	7.7	20	1.5
28	12	34	5.2	6.2	9.1	10	.59	1.3	6.6	7.2	18	1.3
29	11	31	4.9	5.9	8.3	9.8	.49	1.2	5.9	6.6	18	1.2
30	9.8	29	4.7	5.6	---	9.0	.90	1.5	5.5	6.1	16	1.3
31	9.3	---	4.6	5.3	---	8.4	---	4.8	---	5.7	15	---
TOTAL	618.8	1649	361.1	202.0	295.1	257.5	85.68	90.2	343.5	290.6	327.7	163.8
MEAN	20.0	55.0	11.6	6.52	10.2	8.31	2.86	2.91	11.5	9.37	10.6	5.46
MAX	90	203	27	9.3	14	14	7.7	5.3	23	28	37	14
MIN	1.3	15	4.6	4.6	3.8	4.8	.49	1.2	5.4	5.5	3.1	1.2
AC-FT	1230	3270	716	401	585	511	170	179	681	576	650	325

CAL YR 1987 TOTAL 3767.76 MEAN 10.3 MAX 203 MIN .29 AC-FT 7470
WTR YR 1988 TOTAL 4684.98 MEAN 12.8 MAX 203 MIN .49 AC-FT 9290

270022080094600 KITCHINGS CREEK NEAR HOBE SOUND, FL

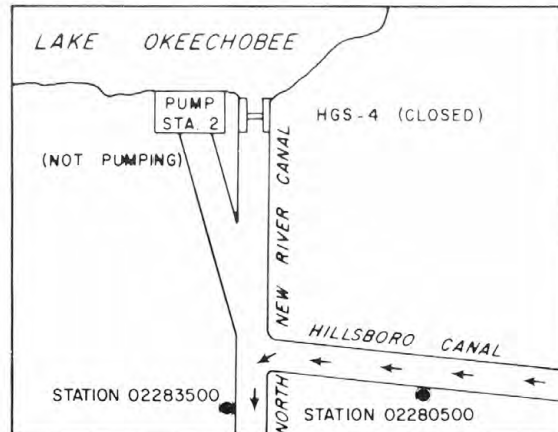
GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.02	3.12	3.72	2.17	2.22	2.59	2.59	2.03	2.66	2.35	2.23	3.10
2	2.11	3.63	3.62	2.22	2.20	2.53	2.53	2.29	2.62	2.50	2.17	3.00
3	2.04	3.93	3.52	2.29	2.17	2.48	2.46	2.31	2.46	2.46	2.11	2.90
4	1.94	5.99	3.47	2.30	2.14	2.43	2.40	2.26	2.33	2.40	2.05	2.80
5	1.86	5.34	3.43	2.29	2.11	2.47	2.33	2.20	2.35	2.33	2.00	2.70
6	1.79	5.16	3.32	2.29	2.10	2.53	2.26	2.13	2.62	2.40	1.96	2.68
7	1.75	5.09	3.20	2.29	2.07	2.54	2.20	2.07	2.74	2.60	1.96	2.63
8	1.68	4.92	3.12	2.29	2.63	2.53	2.15	2.02	2.99	2.69	1.98	2.60
9	1.65	4.82	3.08	2.31	3.07	2.50	2.10	1.95	2.90	2.69	1.97	2.53
10	1.83	4.74	3.06	2.54	3.11	2.51	2.08	1.90	2.78	2.70	1.98	2.47
11	2.36	4.70	2.98	2.66	3.15	2.50	2.09	1.84	3.46	2.62	2.02	2.41
12	4.24	4.60	2.94	2.66	3.12	2.47	2.05	1.80	3.59	2.52	1.99	2.36
13	5.18	4.49	2.89	2.62	3.07	2.43	2.03	1.76	3.52	2.74	1.97	2.29
14	4.50	4.37	2.85	2.59	3.02	2.45	2.00	1.89	3.40	3.75	1.99	2.22
15	4.31	4.26	2.81	2.56	3.00	2.39	1.96	2.05	3.26	3.31	2.24	2.18
16	4.12	4.16	2.75	2.51	3.14	2.34	1.93	2.05	3.12	3.04	2.32	2.15
17	3.94	4.09	2.67	2.46	3.12	2.30	1.89	2.04	3.00	2.90	2.33	2.12
18	3.85	4.01	2.64	2.43	3.07	2.26	1.85	2.07	2.87	2.79	2.30	2.08
19	3.75	4.52	2.61	2.39	3.02	2.82	1.81	2.06	2.86	2.77	2.24	2.05
20	3.66	5.06	2.57	2.35	2.96	3.09	1.76	2.05	2.82	2.76	2.95	2.02
21	3.57	4.73	2.52	2.31	3.00	3.09	1.72	2.03	3.11	2.70	4.07	1.98
22	3.44	4.56	2.46	2.32	3.01	3.03	1.70	1.99	3.34	2.62	3.76	1.94
23	3.30	4.44	2.42	2.29	2.99	2.97	1.69	1.94	3.11	2.58	3.59	1.88
24	3.18	4.34	2.39	2.30	3.01	2.90	1.68	1.91	2.95	2.65	3.42	1.83
25	3.10	4.26	2.33	2.40	2.96	2.85	1.66	1.85	2.80	2.60	3.34	1.80
26	3.02	4.16	2.29	2.41	2.89	2.80	1.64	1.80	2.66	2.56	3.44	1.77
27	2.96	4.06	2.26	2.38	2.80	2.86	1.60	1.76	2.55	2.50	3.43	1.75
28	2.89	3.98	2.24	2.35	2.73	2.85	1.56	1.72	2.46	2.45	3.35	1.72
29	2.79	3.88	2.21	2.32	2.65	2.80	1.53	1.69	2.38	2.39	3.32	1.70
30	2.72	3.78	2.18	2.29	---	2.72	1.61	1.75	2.33	2.32	3.23	1.72
31	2.66	---	2.17	2.25	---	2.66	---	2.24	---	2.29	3.14	---
MEAN	2.97	4.44	2.80	2.38	2.78	2.64	1.96	1.98	2.87	2.64	2.61	2.25
MAX	5.18	5.99	3.72	2.66	3.15	3.09	2.59	2.31	3.59	3.75	4.07	3.10
MIN	1.65	3.12	2.17	2.17	2.07	2.26	1.53	1.69	2.33	2.29	1.96	1.70

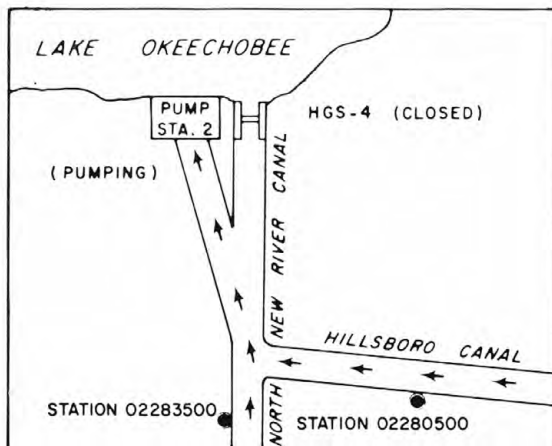


LOCATION

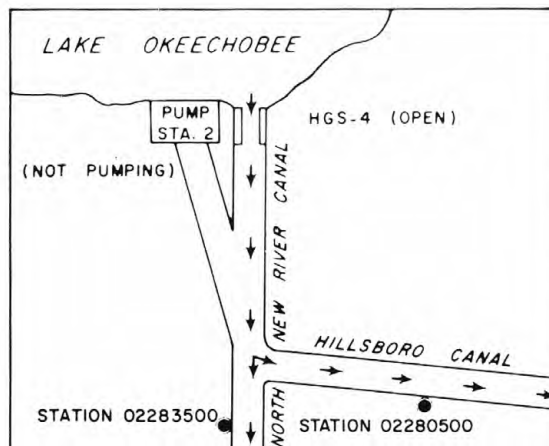
TYPICAL FLOW PATTERNS AT HURRICANE GATE STRUCTURES



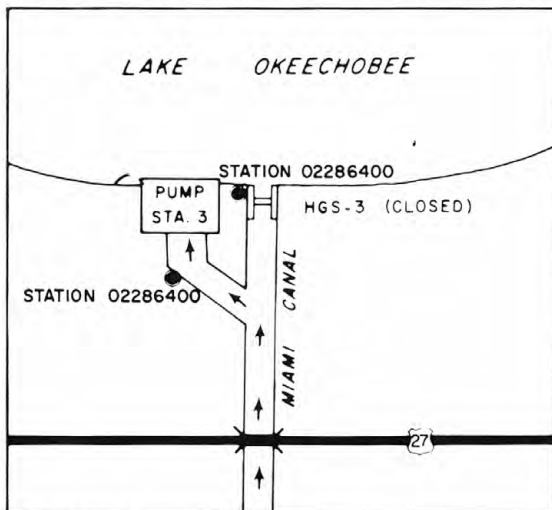
NORTH NEW RIVER CANAL - HILLSBORO CANAL



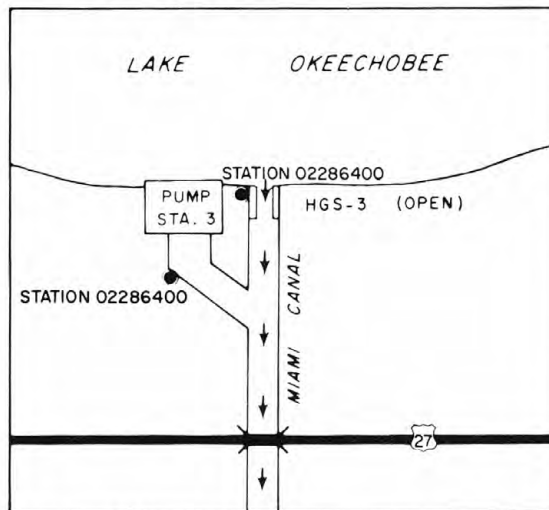
NORTH NEW RIVER CANAL - HILLSBORO CANAL



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 (revised).

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, electromagnetic velocity meter 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.

REMARKS.--No estimated daily discharges. 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.--28 years (Water years 1932-52, 1982-88), 1,050 ft³/s, 760,700 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, 3,280 ft³/s Oct. 12, 1987; minimum gage height, 10.28 ft Mar. 5, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,230 ft³/s Apr. 1; maximum gage height, 16.87 ft Apr. 12; maximum daily reverse flow, 3,280 ft³/s Oct. 12; no flow for many days; minimum gage height, 13.10 ft Oct. 6.

DISCHARGE, IN 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	-1320	-953	.00	167	.00	793	2230	844	.00	253	.00	.00
2	-665	-1440	.00	.00	452	947	1530	1170	.00	662	.00	.00
3	-512	-1220	600	.00	389	729	1310	1200	47	1680	.00	.00
4	-1310	.00	344	223	179	373	1180	1150	191	1670	.00	.00
5	-738	.00	446	290	239	132	1170	878	194	1360	.00	.00
6	-539	.00	127	155	228	.00	1140	712	16	646	.00	.00
7	-755	.00	237	394	53	677	1080	695	.00	.00	.00	.00
8	-1290	.00	104	283	.00	400	262	266	9.5	.00	.00	.00
9	-1070	.00	14	147	.00	1220	432	149	22	.00	.00	.00
10	-1330	.00	119	43	.00	945	218	247	.00	.00	.00	.00
11	-1380	.00	117	74	.00	1440	180	329	.00	.00	.00	.00
12	-3280	.00	49	.00	.00	1660	194	262	.00	.00	.00	.00
13	-3090	.00	.00	.00	.00	1210	313	245	.00	.00	.00	.00
14	-2090	.00	.00	.00	.00	1130	315	263	.00	.00	.00	.00
15	-1310	.00	54	.00	.00	691	279	143	.00	.00	.00	.00
16	-1320	.00	123	.00	.00	624	320	229	111	.00	.00	.00
17	-1250	.00	96	.00	.00	608	72	188	273	.00	.00	330
18	-1510	.00	70	.00	.00	226	210	29	271	.00	.00	69
19	-1340	.00	16	9.7	.00	.00	545	82	272	.00	.00	.00
20	-1260	.00	17	191	.00	.00	266	.00	61	.00	.00	40
21	-1690	.00	96	205	.00	.00	443	26	.00	.00	.00	192
22	-1650	.00	320	149	.00	539	483	202	.00	.00	.00	47
23	-630	.00	295	.00	.00	1330	421	278	.00	.00	.00	148
24	-525	.00	.00	.00	704	1620	276	136	.00	.00	.00	334
25	-739	.00	.00	142	1510	1210	261	63	.00	.00	.00	98
26	-625	.00	.00	693	1540	847	289	266	.00	.00	.00	188
27	-693	.00	.00	496	1410	478	291	326	55	.00	.00	322
28	-208	.00	132	.00	707	411	245	323	54	.00	.00	266
29	.00	.00	326	.00	977	361	408	339	196	.00	.00	275
30	.00	.00	235	.00	---	1280	1060	122	265	.00	.00	141
31	.00	---	229	.00	---	2040	---	.00	---	.00	.00	---
TOTAL	34119.00	-3613.00	4166.00	3661.70	8388.00	23921.00	17423	11162.00	2037.50	6271.00	.00	2450.00
MEAN	-1101	-120	134	118	289	772	581	360	67.9	202	.000	81.7
MAX	.00	.00	600	693	1540	2040	2230	1200	273	1680	.00	334
MIN	-3280	-1440	.00	.00	.00	.00	72	.00	.00	.00	.00	.00
AC-FT	-67680	-7170	8260	7260	16640	47450	34560	22140	4040	12440	.00	4860

CAL YR 1987 TOTAL 20290.10 MEAN 55.6 MAX 3550 MIN -3280 AC-FT 40250
WTR YR 1988 TOTAL 41748.20 MEAN 114 MAX 2230 MIN -3280 AC-FT 82810

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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02276870 ST. LUCIE CANAL AT LAKE OKEECHOBEE, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.63	14.17	16.02	16.07	16.15	16.33	16.19	15.77	15.18	15.27	15.47	15.99
2	13.55	14.19	15.99	16.09	16.16	16.28	16.18	15.55	15.18	15.16	15.46	15.98
3	13.60	14.40	16.01	16.13	16.16	16.26	16.18	15.52	15.20	15.14	15.46	15.98
4	13.49	14.82	16.17	16.11	16.17	16.29	16.21	15.58	15.23	15.09	15.47	15.99
5	13.50	14.90	16.04	16.05	16.14	16.28	16.19	15.72	15.21	15.05	15.47	16.07
6	13.54	14.89	15.98	16.04	16.11	16.30	16.21	15.76	15.23	14.97	15.46	16.10
7	13.55	14.87	15.95	16.04	16.03	16.29	16.41	15.62	15.31	14.91	15.48	16.08
8	13.45	14.93	15.98	16.08	16.21	16.28	16.23	15.45	15.51	15.06	15.47	16.04
9	13.35	15.00	16.03	16.05	16.29	16.33	16.07	15.45	15.53	15.21	15.45	16.04
10	13.38	15.09	16.07	16.06	16.29	16.58	16.06	15.47	15.49	15.23	15.53	16.04
11	13.58	15.17	16.12	16.11	16.33	16.32	16.20	15.47	15.46	15.22	15.56	16.02
12	13.71	15.01	16.11	16.08	16.45	16.26	16.41	15.42	15.27	15.18	15.52	15.98
13	14.03	15.01	16.10	16.13	16.36	16.29	16.19	15.40	15.29	15.24	15.55	15.96
14	13.99	15.02	16.09	16.07	16.27	16.42	16.02	15.47	15.31	15.25	15.62	15.99
15	14.08	15.02	16.14	16.09	16.34	16.37	15.96	15.48	15.32	15.27	15.63	16.08
16	14.13	14.96	16.22	16.01	16.37	16.23	15.95	15.46	15.36	15.23	15.63	16.09
17	14.20	15.02	16.11	16.08	16.29	16.16	15.91	15.49	15.34	15.23	15.70	16.10
18	14.22	15.09	16.09	16.10	16.29	16.18	15.92	15.49	15.29	15.25	15.73	16.15
19	14.25	15.21	16.08	16.09	16.33	16.51	15.96	15.47	15.26	15.23	15.73	16.16
20	14.27	15.42	16.11	16.10	16.38	16.42	15.87	15.46	15.28	15.27	15.75	16.16
21	14.26	15.36	16.11	16.16	16.34	16.39	15.87	15.41	15.29	15.32	15.81	16.16
22	14.21	15.37	16.13	16.20	16.29	16.38	15.83	15.43	15.30	15.35	15.90	16.15
23	14.17	15.47	16.10	16.13	16.33	16.30	15.82	15.41	15.32	15.43	15.89	16.12
24	14.24	15.52	16.12	16.12	16.37	16.32	15.81	15.37	15.30	15.46	15.89	16.08
25	14.28	15.59	16.13	16.31	16.36	16.32	15.79	15.34	15.25	15.48	15.92	16.06
26	14.30	15.71	16.15	16.22	16.33	16.34	15.82	15.38	15.26	15.48	15.96	16.02
27	14.32	15.80	16.15	16.14	16.38	16.34	15.80	15.34	15.30	15.46	15.97	15.97
28	14.30	15.87	16.18	16.06	16.40	16.30	15.75	15.30	15.28	15.45	16.01	15.93
29	14.19	15.98	16.26	16.09	16.34	16.28	15.66	15.28	15.26	15.45	15.98	15.93
30	14.13	16.03	16.09	16.08	---	16.26	15.58	15.23	15.28	15.44	15.99	15.86
31	14.11	---	16.04	16.13	---	16.20	---	15.19	---	15.42	16.00	---
MEAN	13.94	15.16	16.09	16.10	16.28	16.32	16.00	15.46	15.30	15.26	15.69	16.04
MAX	14.32	16.03	16.26	16.31	16.45	16.58	16.41	15.77	15.53	15.48	16.01	16.16
MIN	13.35	14.17	15.95	16.01	16.03	16.16	15.58	15.19	15.18	14.91	15.45	15.86
CAL YR 1987	MEAN 14.80		MAX 16.26	MIN 13.35								
WTR YR 1988	MEAN 15.63		MAX 16.58	MIN 13.35								

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02276871 ST. LUCIE CANAL BELOW S-308 AT PORT MAYACA, 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 downstream of structure 308 at Lake Okeechobee, 0.1 mi west of U.S. Highway 441, and 24 miles upstream from control structure 80. (Revised).

DRAINAGE AREA.--Indeterminate.

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

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

REMARKS.--Water level affected by regulation of control structure 308 gates and lock at Lake Okeechobee, and structure 80.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 18.13 ft Mar. 1, 1983; minimum gage height, 8.95 ft Jan. 14, 17, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 15.52 ft Nov. 3; minimum gage height, 13.24 ft Oct. 9.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.69	14.25	14.34	14.54	14.46	14.23	14.47	14.40	14.75	14.30	14.51	14.13
2	13.56	14.33	14.06	14.43	14.30	14.13	14.51	14.44	14.41	14.39	14.21	14.08
3	13.61	14.65	14.17	14.34	14.65	14.23	14.41	14.33	14.26	14.25	14.47	14.06
4	13.54	14.73	14.42	14.31	14.33	14.20	14.31	14.42	14.22	14.28	14.45	14.04
5	13.51	14.49	14.34	14.51	14.20	14.38	14.33	14.30	14.40	14.27	14.28	14.02
6	13.55	14.43	14.37	14.25	14.35	14.24	14.43	14.30	14.60	14.33	14.50	14.01
7	13.57	14.65	14.10	14.15	14.41	14.26	14.43	14.31	14.33	15.01	14.43	14.13
8	13.50	14.50	14.38	14.44	14.59	14.18	14.36	14.29	14.32	14.49	14.61	14.11
9	13.38	14.43	14.26	14.54	14.52	14.35	13.86	14.37	14.45	14.51	14.31	14.13
10	13.43	14.27	14.13	14.36	14.47	14.46	14.28	14.16	14.23	14.44	14.56	14.13
11	13.61	14.21	14.28	14.31	14.26	14.41	14.04	14.21	14.47	14.26	14.48	14.17
12	13.91	14.41	14.54	14.48	14.39	14.24	14.34	14.30	14.48	14.45	14.22	14.16
13	14.18	14.42	14.60	14.43	14.44	14.25	14.13	14.19	14.17	14.32	14.17	14.21
14	14.06	14.27	14.33	14.48	14.41	14.20	14.37	14.28	14.18	14.21	14.39	14.01
15	14.11	14.43	14.10	14.44	14.21	14.34	14.23	14.24	14.19	14.36	14.31	14.06
16	14.16	14.41	14.18	14.50	14.39	14.11	14.40	14.21	14.08	14.43	14.43	13.81
17	14.23	14.39	14.28	14.44	14.52	14.15	14.47	14.33	14.21	14.37	14.34	13.91
18	14.26	14.49	14.23	14.35	14.49	14.30	13.99	14.32	14.18	14.33	14.42	14.24
19	14.28	14.27	14.35	14.28	14.44	14.22	14.13	14.33	14.14	14.33	14.47	14.31
20	14.29	14.40	14.25	14.16	14.40	14.50	14.18	14.43	14.49	14.27	14.51	14.08
21	14.32	14.36	14.14	14.27	14.28	14.38	14.20	14.34	14.50	14.22	14.25	14.17
22	14.26	14.37	14.08	14.60	14.29	14.54	14.23	14.24	14.43	14.40	14.85	14.21
23	14.18	14.43	14.50	14.70	14.37	14.40	14.35	14.14	14.37	14.43	14.38	13.99
24	14.24	14.30	14.61	14.53	14.31	14.39	14.30	14.36	14.32	14.42	14.23	14.01
25	14.30	14.52	14.61	13.97	14.29	14.38	14.37	14.21	14.42	14.32	14.36	14.21
26	14.31	14.46	14.48	13.80	14.33	14.37	14.15	14.12	14.37	14.37	14.18	13.99
27	14.33	14.46	14.53	14.37	14.42	14.38	14.34	14.26	14.23	14.39	14.16	14.06
28	14.32	14.19	14.20	14.28	14.27	14.46	14.21	14.16	14.22	14.44	14.18	14.15
29	14.18	14.25	14.21	14.75	14.05	14.32	14.24	14.30	14.06	14.43	14.49	14.18
30	14.10	14.34	14.22	14.67	---	14.24	14.41	14.40	14.22	14.41	14.20	14.20
31	14.13	---	14.26	14.52	---	14.46	---	14.54	---	14.41	14.28	---
MEAN	13.97	14.40	14.31	14.39	14.37	14.31	14.28	14.30	14.32	14.38	14.38	14.10
MAX	14.33	14.73	14.61	14.75	14.65	14.54	14.51	14.54	14.75	15.01	14.85	14.31
MIN	13.38	14.19	14.06	13.80	14.05	14.11	13.86	14.12	14.06	14.21	14.16	13.81

CAL YR 1987 MEAN 14.15 MAX 14.89 MIN 13.38
WTR YR 1988 MEAN 14.29 MAX 15.01 MIN 13.38

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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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.--Records good, except those for estimated daily discharge, which are poor. This station provides information on the freshwater inflow to the Loxahatchee estuary from the headwaters area.

AVERAGE DISCHARGE.--17 years, 68.2 ft³/s, 49,410 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, 540 ft³/s Nov. 4; maximum gage height, 13.36 ft Nov. 4; minimum daily discharge, 6.0 ft³/s Apr. 9; minimum gage height, 8.42 ft Mar. 29.

DISCHARGE, IN 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	75	75	94	70	56	88	e21	13	108	89	99	91
2	74	86	94	70	57	84	e20	22	92	88	98	96
3	74	125	93	74	53	85	e25	21	94	86	98	90
4	72	540	93	75	51	78	e17	20	90	84	94	86
5	69	409	92	74	50	76	e13	17	113	82	90	83
6	66	230	92	73	50	78	e15	16	224	83	89	83
7	63	164	92	72	49	77	e13	15	178	92	96	83
8	60	111	91	73	60	76	e 9.2	14	164	113	123	83
9	53	90	91	75	65	76	6.0	14	125	180	113	81
10	38	78	92	87	62	76	9.5	12	106	178	107	80
11	41	70	92	93	60	78	e27	11	110	130	106	79
12	87	63	89	94	63	76	e30	13	104	110	103	78
13	173	59	88	93	70	74	e21	40	98	134	101	76
14	136	55	87	91	72	78	e14	53	98	262	133	75
15	117	53	87	89	73	78	e19	43	96	271	268	74
16	110	50	86	86	79	75	43	41	92	183	223	73
17	107	48	84	83	78	72	46	34	91	136	177	72
18	100	85	83	82	77	71	e40	21	91	119	170	72
19	96	144	82	76	82	92	e43	15	87	113	139	71
20	92	166	81	63	82	97	e28	17	86	123	264	71
21	84	107	80	59	83	90	24	44	99	118	253	71
22	79	90	79	59	85	86	40	23	123	110	180	70
23	75	84	78	57	86	67	40	e30	119	109	151	69
24	73	101	79	58	98	e28	36	e48	99	114	119	68
25	71	104	79	59	98	e25	15	e43	92	108	88	68
26	70	102	76	59	97	e24	6.1	e30	88	105	81	67
27	74	101	74	56	95	e22	e28	52	85	107	75	65
28	74	100	72	55	93	e22	e40	57	85	120	71	65
29	72	98	72	55	92	e23	e41	56	89	112	76	64
30	70	96	71	54	---	e22	e28	62	89	106	85	63
31	69	---	70	53	---	e21	---	77	---	102	80	---
TOTAL	2514	3684	2613	2217	2116	2015	757.8	974	3215	3867	3950	2267
MEAN	81.1	123	84.3	71.5	73.0	65.0	25.3	31.4	107	125	127	75.6
MAX	173	540	94	94	98	97	46	77	224	271	268	96
MIN	38	48	70	53	49	21	6.0	11	85	82	71	63
AC-FT	4990	7310	5180	4400	4200	4000	1500	1930	6380	7670	7830	4500

CAL YR 1987 TOTAL 21724.2 MEAN 59.5 MAX 540 MIN 7.8 AC-FT 43090
WTR YR 1988 TOTAL 30189.8 MEAN 82.5 MAX 540 MIN 6.0 AC-FT 59880

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277600 LOXAHATCHEE RIVER NEAR JUPITER, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.98	10.17	10.57	9.99	9.64	10.43	9.87	10.60	11.61	11.48	11.55	11.49
2	9.98	10.43	10.55	10.01	9.66	10.35	10.12	10.78	11.50	11.47	11.54	11.53
3	9.97	10.89	10.54	10.10	9.55	10.35	10.12	10.77	11.51	11.45	11.54	11.49
4	9.92	13.29	10.53	10.13	9.51	10.18	9.71	10.75	11.49	11.44	11.51	11.46
5	9.86	12.80	10.52	10.11	9.48	10.15	8.72	10.70	11.62	11.42	11.49	11.43
6	9.78	11.95	10.51	10.08	9.46	10.19	8.86	10.68	12.26	11.43	11.48	11.43
7	9.70	11.50	10.51	10.04	9.45	10.18	8.81	10.65	12.03	11.50	11.53	11.43
8	9.63	10.94	10.50	10.07	9.73	10.15	9.38	10.63	11.96	11.65	11.71	11.43
9	9.42	10.51	10.49	10.12	9.88	10.16	10.43	10.63	11.72	12.05	11.65	11.41
10	8.99	10.23	10.52	10.41	9.80	10.16	10.54	10.60	11.60	12.04	11.61	11.40
11	9.08	10.02	10.51	10.54	9.75	10.18	10.30	10.58	11.63	11.76	11.60	11.40
12	10.15	9.84	10.45	10.56	9.81	10.14	9.46	10.61	11.59	11.63	11.58	11.39
13	11.47	9.73	10.42	10.53	10.01	10.11	9.09	11.02	11.54	11.75	11.56	11.37
14	11.17	9.64	10.39	10.49	10.04	10.20	8.73	11.16	11.55	12.43	11.75	11.37
15	10.96	9.55	10.39	10.44	10.06	10.19	9.36	11.05	11.53	12.47	12.46	11.36
16	10.84	9.47	10.38	10.39	10.21	10.12	11.05	11.03	11.50	12.06	12.26	11.35
17	10.77	9.43	10.34	10.32	10.20	10.06	11.09	10.94	11.50	11.80	12.03	11.34
18	10.64	10.27	10.31	10.28	10.17	10.03	10.94	10.76	11.50	11.69	11.99	11.34
19	10.56	11.28	10.29	10.16	10.29	10.52	10.41	10.66	11.46	11.64	11.82	11.33
20	10.47	11.48	10.27	9.81	10.29	10.63	9.93	10.65	11.45	11.72	12.40	11.33
21	10.30	10.82	10.26	9.73	10.32	10.48	10.77	11.07	11.55	11.68	12.39	11.33
22	10.18	10.47	10.23	9.72	10.37	10.38	11.02	10.94	11.71	11.63	12.04	11.32
23	10.09	10.34	10.20	9.68	10.39	9.90	11.02	10.65	11.69	11.62	11.89	11.31
24	10.05	10.69	10.21	9.69	10.65	8.78	10.98	9.95	11.55	11.66	11.69	11.30
25	10.02	10.76	10.21	9.73	10.65	8.65	10.64	9.50	11.50	11.61	11.47	11.30
26	10.01	10.73	10.14	9.70	10.62	8.60	10.44	9.70	11.47	11.59	11.41	11.29
27	10.11	10.70	10.10	9.65	10.57	8.55	10.23	11.15	11.45	11.61	11.36	11.28
28	10.11	10.67	10.06	9.61	10.55	8.51	10.20	11.20	11.45	11.69	11.33	11.28
29	10.07	10.63	10.04	9.60	10.52	8.88	10.21	11.19	11.48	11.64	11.37	11.27
30	10.05	10.60	10.02	9.59	---	9.45	10.23	11.24	11.48	11.60	11.45	11.26
31	10.02	---	10.00	9.56	---	9.61	---	11.38	---	11.57	11.40	---
MEAN	10.14	10.66	10.34	10.03	10.06	9.88	10.09	10.75	11.60	11.70	11.71	11.37
MAX	11.47	13.29	10.57	10.56	10.65	10.63	11.09	11.38	12.26	12.47	12.46	11.53
MIN	8.99	9.43	10.00	9.56	9.45	8.51	8.72	9.50	11.45	11.42	11.33	11.26

CAL YR 1987 MEAN 9.59 MAX 13.29 MIN 7.73
WTR YR 1988 MEAN 10.69 MAX 13.29 MIN 8.51

EVERGLADES AND SOUTHEASTERN COASTAL AREA

31

02278000 WEST PALM BEACH CANAL AT HGS-5, AT CANAL POINT, FL

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 hurricane gate structure 5 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 electromagnetic velocity meter, 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 electromagnetic velocity meter.

REMARKS.--Records fair, except those for estimated discharges, 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 5 or from continuous velocity record obtained from recording electromagnetic velocity meter.

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

AVERAGE DISCHARGE.--48 years (Water years 1940-88), 151 ft³/s, 109,400 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, 450 ft³/s May 6-12, 17, 18, 27, 28(estimated); maximum gage height, 17.03 ft Feb. 12; no flow for many days; minimum gage height, 13.20 ft Oct. 1.

DISCHARGE, IN 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	.00	.00	.00	.00	.00	.00	.00	274	.00	150	.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	225	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	450	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	450	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	450	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	450	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	450	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	450	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	450	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	300	.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	225	200	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	450	400	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	450	400	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	225	400	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	200	.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	225	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	225	.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	225	100	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	450	300	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	450	300	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	225	300	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
MEAN	.000	.000	.000	.000	.000	.000	.000	229	86.7	4.84	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	450	400	150	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1987 MEAN 58.5 MAX 408 MIN .00
WTR YR 1988 MEAN 26.9 MAX 450 MIN .00

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.64	14.20	15.96	16.00	16.07	16.28	16.12	15.62	15.14	15.21	15.43	15.91
2	13.57	14.25	15.97	16.03	16.09	16.21	16.10	15.58	15.18	15.16	15.41	15.91
3	13.61	14.38	15.96	16.06	16.10	16.16	16.09	15.47	15.18	15.13	15.42	15.92
4	13.57	14.75	16.09	16.08	16.10	16.19	16.12	15.53	15.18	15.09	15.44	15.92
5	13.55	14.85	16.05	16.15	16.12	16.23	16.13	15.68	15.09	15.10	15.43	15.94
6	13.53	14.95	15.95	16.04	16.29	16.27	16.15	15.73	15.16	14.97	15.42	15.92
7	13.51	14.88	15.89	15.96	16.06	16.26	16.40	15.54	15.26	14.94	15.42	15.97
8	13.56	14.89	15.91	16.02	16.21	16.21	16.19	15.40	15.36	15.04	15.42	15.94
9	13.38	14.94	15.97	16.06	16.28	16.23	16.02	15.36	15.43	15.16	15.41	15.97
10	13.42	15.02	16.01	16.06	16.27	16.50	15.99	15.36	15.43	15.19	15.45	16.00
11	13.54	15.17	16.06	16.15	16.27	16.30	16.10	15.37	15.44	15.16	15.51	15.99
12	13.78	15.08	16.04	16.06	16.41	16.17	16.25	15.32	15.31	15.13	15.48	15.95
13	14.20	14.99	16.03	16.07	16.37	16.20	16.17	15.33	15.31	15.17	15.54	15.95
14	14.09	14.97	16.01	16.10	16.23	16.40	15.95	15.42	15.29	15.22	15.53	15.96
15	14.10	14.97	16.03	16.11	16.23	16.41	15.89	15.43	15.32	15.23	15.55	16.03
16	14.16	14.90	16.23	16.00	16.33	16.24	15.87	15.39	15.32	15.19	15.60	16.04
17	14.19	14.94	16.17	16.00	16.24	16.12	15.85	15.39	15.26	15.19	15.65	16.07
18	14.23	15.04	16.08	16.02	16.23	16.07	15.80	15.40	15.20	15.21	15.68	16.12
19	14.22	15.14	16.01	16.00	16.25	16.51	15.82	15.38	15.18	15.18	15.67	16.12
20	14.23	15.46	16.04	16.00	16.28	16.42	15.81	15.40	15.23	15.21	15.69	16.12
21	14.25	15.45	16.04	16.04	16.41	16.34	15.80	15.34	15.25	15.26	15.76	16.10
22	14.27	15.36	16.06	16.22	16.29	16.33	15.77	15.36	15.26	15.28	15.83	16.08
23	14.20	15.43	16.05	16.15	16.29	16.24	15.76	15.33	15.26	15.36	15.84	16.05
24	14.21	15.49	16.05	16.11	16.32	16.25	15.74	15.29	15.25	15.44	15.84	16.01
25	14.27	15.53	16.05	16.26	16.44	16.25	15.69	15.33	15.21	15.44	15.87	15.99
26	14.27	15.65	16.08	16.21	16.43	16.26	15.71	15.32	15.20	15.44	15.88	15.98
27	14.25	15.75	16.09	16.19	16.36	16.28	15.72	15.28	15.23	15.42	15.90	15.95
28	14.28	15.82	16.12	16.16	16.34	16.25	15.70	15.21	15.20	15.40	15.92	15.92
29	14.26	15.92	16.35	16.07	16.29	16.23	15.64	15.17	15.18	15.43	15.93	15.91
30	14.15	15.99	16.15	16.01	---	16.21	15.50	15.10	15.19	15.41	15.95	15.83
31	14.13	---	15.98	16.05	---	16.14	---	15.10	---	15.39	15.94	---
MEAN	13.96	15.14	16.05	16.08	16.26	16.26	15.93	15.38	15.25	15.23	15.64	15.99
MAX	14.28	15.99	16.35	16.26	16.44	16.51	16.40	15.73	15.44	15.44	15.95	16.12
MIN	13.38	14.20	15.89	15.96	16.06	16.07	15.50	15.10	15.09	14.94	15.41	15.83
CAL YR 1987	MEAN	14.75	MAX	16.35	MIN	13.34						
WTR YR 1988	MEAN	15.59	MAX	16.51	MIN	13.38						

EVERGLADES AND SOUTHEASTERN COASTAL AREA

33

02278002 WEST PALM BEACH CANAL BELOW HGS-5, AT CANAL POINT, FL

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.--Water level materially affected by operation of gate structure No. 5, 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, 14.03 ft Nov. 4; minimum, 8.54 ft Aug. 13.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.69	11.70	10.30	11.12	11.07	11.30	10.79	11.19	11.19	10.91	11.09	9.75
2	9.65	10.97	10.78	11.18	11.05	11.00	10.73	9.36	11.24	10.21	10.92	10.40
3	10.62	11.67	11.05	11.37	10.89	10.89	10.84	10.19	10.92	10.03	11.10	10.69
4	10.95	13.75	10.78	11.41	10.86	10.90	11.12	10.54	10.75	10.42	11.43	10.97
5	10.96	13.32	10.79	11.14	10.99	11.25	11.62	10.89	11.18	10.40	10.91	11.16
6	10.65	12.02	10.87	10.89	10.91	11.11	11.40	---	10.76	10.22	10.43	10.92
7	10.38	11.39	10.81	10.70	10.83	11.63	11.51	---	10.37	10.99	10.06	10.51
8	10.53	10.66	10.87	10.82	11.19	11.62	11.51	---	9.69	10.53	11.15	11.16
9	10.75	9.98	11.08	10.90	10.49	11.57	11.31	---	10.66	11.10	12.07	11.05
10	10.97	9.63	11.22	10.19	10.74	11.44	11.25	---	10.52	10.26	11.29	10.02
11	9.61	9.17	11.17	11.73	10.93	9.38	11.31	---	10.28	10.86	11.72	10.27
12	11.72	9.01	11.15	9.98	10.80	10.24	11.41	---	10.27	11.25	10.87	10.76
13	13.59	9.02	10.98	10.74	10.87	10.43	11.54	---	10.39	11.13	9.26	11.19
14	12.89	10.42	10.93	10.73	10.79	10.82	11.39	---	10.92	11.12	11.13	11.20
15	11.28	11.15	10.77	10.51	10.75	11.24	11.13	---	10.59	10.48	12.40	11.22
16	9.44	11.37	10.80	10.16	11.29	11.00	11.11	---	10.42	10.13	11.74	10.78
17	10.03	10.77	10.68	10.55	11.35	10.70	11.11	---	11.33	10.99	11.74	10.31
18	10.40	10.10	10.85	10.86	11.25	10.84	11.04	---	11.69	11.04	10.81	10.07
19	11.21	9.96	11.04	10.92	11.12	11.71	10.93	---	11.87	10.43	10.60	10.16
20	10.63	10.34	11.12	10.77	11.10	9.71	10.93	---	11.57	10.01	10.45	10.35
21	10.49	9.78	11.26	10.74	11.52	10.72	10.84	---	10.69	11.39	10.65	11.09
22	10.86	10.10	10.97	11.25	11.78	10.76	10.90	---	10.46	11.92	11.59	11.52
23	10.84	10.33	10.81	11.26	11.50	10.78	11.09	---	10.49	11.08	10.69	11.50
24	10.75	10.52	11.26	11.16	10.97	10.45	11.12	---	10.74	11.96	9.89	11.42
25	10.53	10.72	11.17	11.04	11.11	10.30	11.29	---	10.94	10.83	11.07	11.51
26	10.22	11.64	11.13	9.77	10.84	10.20	11.22	---	10.99	10.29	11.32	11.45
27	10.21	11.15	11.01	11.29	10.69	11.32	11.05	---	10.75	10.13	10.22	10.91
28	10.66	9.52	10.92	11.08	10.96	11.06	11.17	---	11.22	10.75	10.18	10.86
29	10.78	10.49	10.86	11.28	11.17	10.79	11.14	---	11.52	11.42	11.09	10.97
30	11.03	10.10	10.94	10.97	---	10.95	11.32	---	11.64	9.86	9.71	10.90
31	11.18	---	10.96	11.04	---	10.89	---	---	---	10.39	11.08	---
MEAN	10.79	10.69	10.95	10.89	11.03	10.87	11.17	---	10.87	10.73	10.92	10.84
MAX	13.59	13.75	11.26	11.73	11.78	11.71	11.62	---	11.87	11.96	12.40	11.52
MIN	9.44	9.01	10.30	9.77	10.49	9.38	10.73	---	9.69	9.86	9.26	9.75

CAL YR 1987 MEAN 10.84 MAX 13.75 MIN 9.01

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

REMARKS.--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.

AVERAGE DISCHARGE.--12 years, 4.17 ft³/s, 3,020 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 each year; minimum gage height, 8.80 ft Nov. 1, 4, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 654 ft³/s Mar. 24; maximum gage height, 16.45 ft Aug. 21; maximum daily reverse flow, 989 ft³/s Oct. 13; no flow for many days; minimum gage height, 10.92 ft Mar. 16.

DISCHARGE, IN 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	1.2	-176	-148	-.10	2.7	.00	346	238	-97	36	82	-432
2	-26	-318	-164	-.10	.00	.00	268	61	16	11	161	-358
3	9.8	-435	-160	.20	.00	.00	427	39	64	20	1.4	-240
4	-.90	-686	-79	.00	.00	-1.2	454	.00	105	19	.20	-167
5	21	-886	-136	.00	-.10	-1.4	425	-2.4	288	71	-.70	-86
6	30	-799	-172	.00	-.50	.00	392	272	306	36	.40	-70
7	57	-635	-169	.00	-1.3	.00	468	336	194	-53	6.6	-96
8	66	-487	-85	.00	-1.1	-1.5	460	264	59	-129	7.9	-126
9	77	-387	-36	.00	-.60	-2.4	450	218	-25	-194	.00	-100
10	71	-283	-41	.00	-.10	-2.6	446	191	-31	-167	.20	-24
11	-26	e-127	-50	.00	-.60	.00	445	246	-19	-110	-50	-8.8
12	-219	e-57	-24	.00	2.8	.00	414	313	.00	-76	-60	-5.0
13	-989	e-4.6	-29	.00	-2.8	-2.5	369	341	.00	-160	-3.3	-4.6
14	-945	e-192	-4.1	.00	-2.0	-3.0	358	320	.00	-144	.00	-4.7
15	-734	e-315	-9.5	-.20	-3.4	-1.6	354	303	1.8	-176	-135	-2.2
16	-614	e-307	-19	.00	-2.1	-2.8	350	327	157	-177	-456	.00
17	-555	e-313	.00	.00	-1.8	-3.1	349	352	273	-115	-528	.00
18	-478	e-306	-.40	.00	.00	-4.8	353	307	302	-89	e-521	.00
19	-405	e-253	.00	.00	-2.3	-11	368	251	320	-182	e-544	.00
20	-326	e-224	.00	.00	-3.5	-16	337	197	258	-198	-582	.00
21	-258	e-284	.00	.00	-3.5	67	341	159	216	-211	-547	.00
22	-197	e-258	-.30	.00	.00	618	353	261	198	-297	-647	-2.5
23	-179	e-232	.00	-.20	.00	523	378	331	218	-242	-581	111
24	-117	e-219	.00	-.10	-.60	654	374	304	236	-253	-511	346
25	-57	e-161	.00	-.10	.00	453	370	258	245	-215	-417	271
26	-33	e-176	.00	.00	-.10	.00	358	223	236	-236	-347	253
27	54	e-245	.00	-2.8	.00	-2.3	348	296	169	-177	-425	237
28	69	-245	-.70	-.10	.00	288	208	337	108	-181	-395	257
29	9.9	-210	-3.9	-.10	-.40	382	364	320	40	-103	-422	443
30	11	-176	-.60	-2.2	---	486	469	279	38	-38	-446	495
31	10	---	-2.5	1.3	---	403	---	13	---	-7.3	-429	---
TOTAL	-5672.00	-9396.6	-1334.00	-4.50	-21.30	3817.80	11396	7354.60	3875.80	-3737.3	-7787.30	686.20
MEAN	-183	-313	-43.0	-.15	-.73	123	380	237	129	-121	-251	22.9
MAX	77	-4.6	.00	1.3	2.8	654	469	352	320	71	161	495
MIN	-989	-886	-172	-2.8	-3.5	-16	208	-2.4	-97	-297	-647	-432
AC-FT	-11250	-18640	-2650	-8.9	-42	7570	22600	14590	7690	-7410	-15450	1360

CAL YR 1987 TOTAL 15121.20 MEAN 41.4 MAX 626 MIN -989 AC-FT 29990
WTR YR 1988 TOTAL -822.60 MEAN -2.25 MAX 654 MIN -989 AC-FT -1630

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

35

265501080364900 LEVEE 8 CANAL NEAR CANAL POINT, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.65	14.27	16.16	12.80	11.41	11.49	15.22	15.69	15.23	15.21	14.88	16.30
2	13.59	14.35	16.16	12.81	11.21	11.34	15.23	15.60	15.22	15.17	14.38	16.25
3	13.63	14.57	16.15	12.91	11.62	11.41	15.20	15.49	15.21	15.15	13.35	16.18
4	13.56	15.24	16.21	12.91	12.12	11.44	15.19	14.79	15.13	15.09	12.96	16.14
5	13.55	15.37	16.21	12.84	11.87	12.20	15.21	13.55	14.66	14.97	12.71	16.12
6	13.56	15.44	16.14	12.80	11.64	12.47	15.17	12.82	14.59	14.92	11.92	16.09
7	13.56	15.39	16.10	12.63	11.61	12.25	15.25	14.45	15.05	15.00	11.65	16.13
8	13.52	15.35	16.07	12.26	11.64	12.07	15.16	14.81	15.25	15.14	12.00	16.13
9	13.37	15.32	16.10	12.16	12.10	12.01	15.00	14.99	15.11	15.29	12.85	16.15
10	13.40	15.32	16.14	12.80	12.50	12.02	15.03	15.06	14.84	15.32	13.92	16.11
11	13.58	15.33	16.13	13.10	12.44	11.97	15.10	14.75	14.55	15.28	15.50	15.96
12	13.97	e15.08	15.90	13.52	12.29	11.69	15.21	14.35	14.24	15.23	15.67	15.77
13	14.55	e14.99	15.80	13.25	12.14	11.29	15.17	14.26	13.92	15.31	14.91	15.58
14	14.50	e14.97	15.74	12.85	12.11	11.14	15.14	14.44	13.60	15.32	14.49	15.38
15	14.52	e14.97	15.61	12.61	12.02	11.02	15.11	14.48	13.32	15.40	15.48	15.02
16	14.49	e14.90	14.52	12.44	11.89	10.99	15.09	14.42	13.73	15.39	16.01	14.52
17	14.50	e14.94	13.42	12.32	12.35	11.15	15.09	14.59	14.56	15.36	16.14	13.95
18	14.49	e15.04	13.18	12.28	12.27	11.31	15.10	14.78	14.55	15.37	16.19	13.29
19	14.47	e15.14	13.21	12.55	12.14	11.83	15.02	14.97	14.52	15.39	16.16	12.47
20	14.44	e15.46	13.27	12.59	12.05	12.75	15.01	15.14	14.74	15.42	16.21	12.50
21	14.43	e15.45	13.25	11.87	12.22	13.90	15.04	15.14	14.88	15.50	16.25	13.21
22	14.39	e15.36	13.20	11.58	12.02	15.62	14.87	14.82	14.94	15.57	16.37	13.55
23	14.32	e15.43	13.09	11.63	11.83	16.16	14.79	14.55	14.84	15.61	16.35	14.10
24	14.33	e15.49	13.24	11.56	11.94	16.18	14.78	14.60	14.74	15.69	16.28	15.34
25	14.36	e15.53	13.33	11.55	11.53	15.95	14.76	14.84	14.58	15.66	16.25	15.68
26	14.34	e15.65	13.25	11.50	11.22	13.47	14.81	14.89	14.55	15.69	16.21	15.74
27	14.13	e15.75	13.14	13.21	11.01	13.08	14.78	14.55	14.80	15.63	16.26	15.69
28	14.19	16.09	13.06	13.22	11.17	13.29	14.14	14.35	14.99	15.62	16.29	15.58
29	14.23	16.16	12.90	13.23	11.52	15.13	13.55	14.36	15.18	15.59	16.32	15.57
30	14.14	16.25	12.73	12.44	---	15.26	15.48	14.51	15.21	15.53	16.37	15.69
31	14.14	---	12.75	11.74	---	15.22	---	15.09	---	15.40	16.33	---
MEAN	14.06	15.29	14.59	12.51	11.86	12.81	14.99	14.68	14.69	15.36	15.05	15.21
MAX	14.55	16.25	16.21	13.52	12.50	16.18	15.48	15.69	15.25	15.69	16.37	16.30
MIN	13.37	14.27	12.73	11.50	11.01	10.99	13.55	12.82	13.32	14.92	11.65	12.47

CAL YR 1987 MEAN 13.96 MAX 16.25 MIN 10.68
WTR YR 1988 MEAN 14.26 MAX 16.37 MIN 10.99

e Estimated

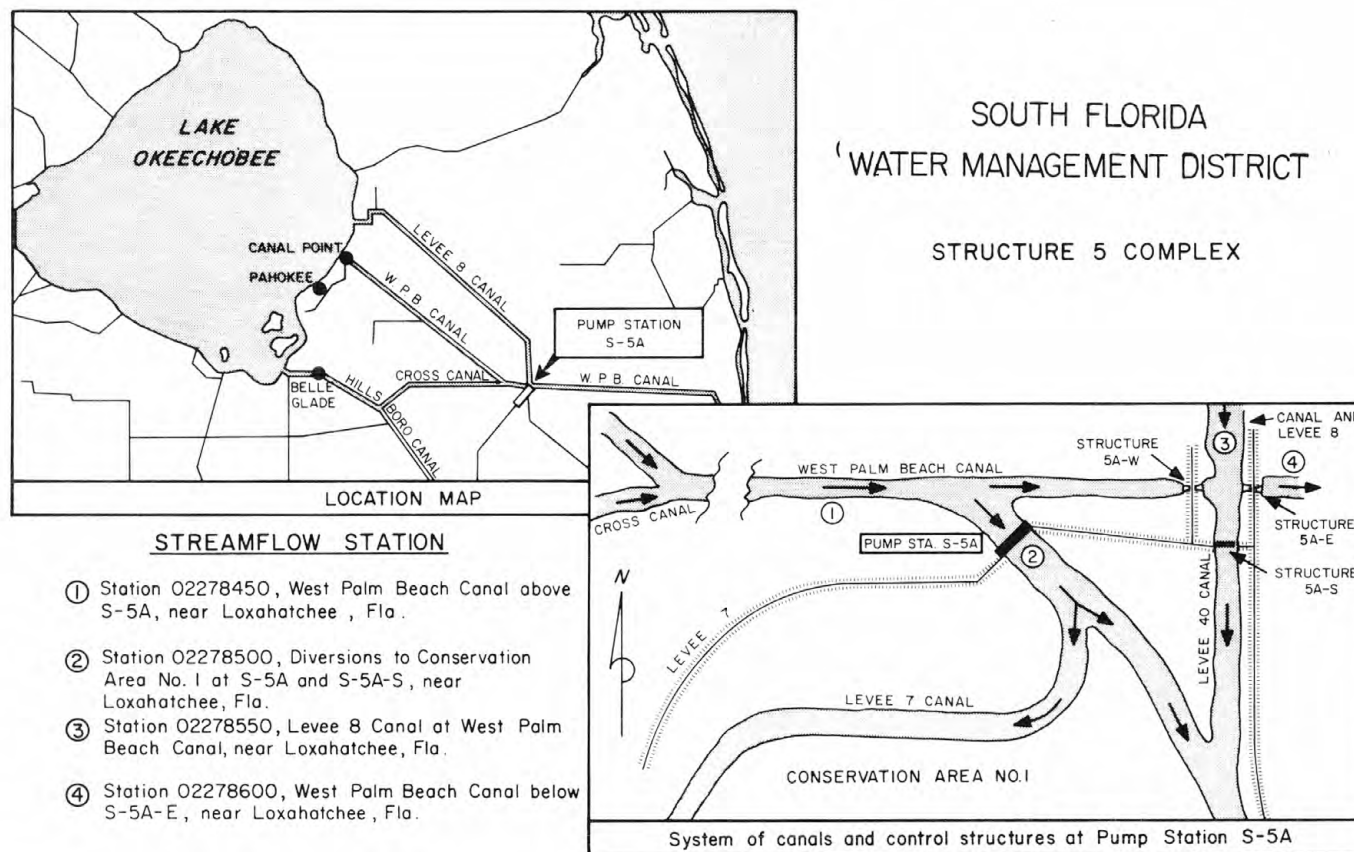


FIGURE 6. South Florida Water Management District, Structure 5 Complex.

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.--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 hurricane gate structure 5 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.--31 years, 401 ft³/s, 290,500 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, 4,810 ft³/s Oct. 13; maximum gage height, 12.50 ft Aug. 1; maximum daily reverse flow, 627 ft³/s Jan. 26; no flow for many days during the year; minimum gage height, 8.55 ft Sept. 6.

DISCHARGE, IN 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	1380	1260	614	-125	.00	.00	.00	e1520	-23	.00	1250	1370
2	141	2280	.00	-124	.00	.00	-72	e951	.00	.00	499	424
3	.00	2830	.00	-118	.00	.00	-109	.00	.00	.00	.00	.00
4	.00	4650	480	-42	-93	.00	-121	.00	-332	.00	.00	.00
5	.00	4750	.00	.00	-47	1030	-35	-272	-366	.00	662	.00
6	.00	3690	.00	.00	.00	.00	.00	-45	381	.00	580	1190
7	-58	3180	.00	.00	.00	.00	.00	.00	731	928	-28	.00
8	-138	2600	.00	.00	1300	.00	.00	.00	51	2220	1050	.00
9	-123	1880	.00	192	675	.00	.00	.00	.00	2370	1770	822
10	1170	1730	.00	1270	.00	1420	.00	-74	.00	1370	1990	.00
11	889	1130	-106	1960	714	181	.00	-150	.00	417	2360	.00
12	2670	869	.00	396	.00	.00	.00	-88	.00	730	1860	.00
13	4810	447	.00	752	.00	.00	.00	-57	.00	.00	197	.00
14	4310	.00	.00	.00	.00	.00	.00	-45	.00	590	646	.00
15	2990	.00	-86	697	.00	.00	.00	-156	.00	1130	2250	.00
16	1690	.00	-169	.00	.00	.00	.00	-154	-81	.00	3100	.00
17	756	721	-244	.00	.00	.00	.00	-72	-212	.00	2890	.00
18	696	579	-290	.00	.00	.00	.00	.00	-249	626	2430	-98
19	.00	.00	-281	.00	.00	1620	.00	.00	-232	1350	2210	-124
20	685	781	-281	.00	.00	116	.00	.00	-87	812	2040	-207
21	.00	.00	-151	.00	39	.00	e-65	-247	.00	1180	2270	-302
22	.00	.00	.00	.00	-116	.00	e-202	-396	-205	2840	2730	-288
23	.00	.00	-183	.00	-123	.00	e-199	-278	-121	3300	2280	-109
24	.00	.00	-189	.00	839	.00	e-193	-80	-371	3740	984	.00
25	.00	.00	-141	1290	146	.00	e-68	.00	-451	3070	849	.00
26	-66	1580	-140	-627	159	.00	.00	-232	-273	2960	1470	.00
27	-180	3400	-140	-372	43	.00	.00	-283	-75	2720	1650	-66
28	-166	1280	-141	.00	.00	655	.00	-200	.00	2610	649	-255
29	-165	1170	-138	718	.00	.00	.00	-229	.00	3080	2570	-376
30	-101	613	-128	.00	---	.00	.00	-105	.00	2070	1030	-469
31	.00	---	-129	.00	---	.00	---	898	---	472	1460	---
TOTAL	21190.00	41420.00	-1843.00	5867.00	3536.00	5022.00	-1064.00	206.00	-1915.00	40585.00	45698.00	1512.00
MEAN	684	1381	-59.5	189	122	162	-35.5	6.65	-63.8	1309	1474	50.4
MAX	4810	4750	614	1960	1300	1620	.00	1520	731	3740	3100	1370
MIN	-180	.00	-290	-627	-123	.00	-202	-396	-451	.00	-28	-469
AC-FT	42030	82160	-3660	11640	7010	9960	-2110	409	-3800	80500	90640	3000

CAL YR 1987 TOTAL 104428.50 MEAN 286 MAX 4810 MIN -710 AC-FT 207100
WTR YR 1988 TOTAL 160214.00 MEAN 438 MAX 4810 MIN -627 AC-FT 317800

e Estimated

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

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.

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.

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, auxiliary deflection vane recorders 500 ft upstream and in Levee 8 Canal, and auxiliary water-stage recorders upstream from S-5A-W and downstream from S-5A-E. Prior to October 1981, all gages at datum 0.24 ft higher.

REMARKS.--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 hurricane gate structure 5, 20 mi upstream. Negative figures indicate releases from gate S-5A-S.

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

AVERAGE DISCHARGE.--31 years, 378 ft³/s, 273,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,040 ft³/s Mar. 28, 1970; maximum gage height, 14.26 ft present datum, Oct. 3, 1957; maximum daily reverse flow, 2,220 ft³/s Apr. 27, 1982; no flow for many days each year; minimum gage height, 6.86 ft Oct. 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,120 ft³/s Nov. 5; maximum gage height, 12.50 ft Aug. 1; maximum daily reverse flow, 1060 ft³/s Jan. 26; no flow for many days during the year; minimum gage height, 8.55 ft Sept. 6.

DISCHARGE, IN 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	1380	1260	614	-123	-283	.00	.00	e1520	.00	.00	1150	1370
2	141	2280	.00	-122	-163	.00	.00	e951	.00	.00	273	762
3	.00	2830	.00	-122	-130	.00	.00	.00	.00	.00	-370	349
4	.00	4650	480	-43	-125	-84	.00	182	.00	.00	-426	.00
5	.00	5120	.00	.00	-45	959	.00	.00	.00	.00	419	446
6	.00	4850	.00	.00	.00	.00	.00	.00	500	.00	580	1420
7	.00	4760	.00	.00	.00	.00	.00	.00	731	928	.00	.00
8	.00	4090	.00	.00	1300	.00	.00	.00	51	2220	736	.00
9	.00	3140	.00	192	675	.00	.00	.00	.00	2370	1340	822
10	1210	3140	.00	1270	.00	1420	.00	.00	.00	1370	1770	.00
11	889	2380	.00	1690	714	181	.00	.00	.00	417	2360	.00
12	2670	1830	.00	-59	.00	.00	.00	.00	.00	730	1860	.00
13	4810	1120	.00	281	.00	.00	.00	.00	.00	.00	197	.00
14	4310	.00	.00	-491	.00	.00	.00	.00	.00	590	646	.00
15	2990	.00	.00	198	.00	.00	.00	.00	.00	1130	2250	.00
16	1690	.00	.00	-511	.00	.00	.00	.00	.00	.00	3560	.00
17	756	721	-149	-517	.00	.00	.00	.00	.00	.00	3580	.00
18	696	579	-240	-511	.00	.00	.00	.00	.00	626	3340	.00
19	.00	.00	-242	-499	.00	1620	.00	.00	.00	1350	2640	.00
20	685	781	-238	-347	.00	116	.00	.00	.00	812	2880	-185
21	.00	.00	-134	-104	.00	.00	.00	.00	.00	1180	3460	-377
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	2840	3980	-349
23	.00	.00	-155	.00	.00	.00	.00	.00	.00	3300	2700	-145
24	.00	.00	-166	.00	839	.00	.00	.00	-60	3740	984	.00
25	.00	.00	-118	1150	.00	.00	.00	.00	-187	3070	849	.00
26	.00	1580	-118	-1060	.00	.00	.00	.00	-169	2960	1470	.00
27	.00	3400	-120	-498	.00	.00	.00	.00	-64	2720	1650	.00
28	.00	1280	-121	.00	-342	655	.00	.00	.00	2610	649	.00
29	.00	1170	-119	608	-304	.00	.00	.00	.00	3080	2570	.00
30	.00	613	-123	-265	---	.00	.00	.00	.00	2070	1030	.00
31	.00	---	-124	-279	---	.00	---	898	---	472	1460	---
TOTAL	22227.00	51574.00	-1073.00	-162.00	2136.00	4867.00	.00	3551.00	802.00	40585.00	49587.00	4113.00
MEAN	717	1719	-34.6	-5.23	73.7	157	.000	115	26.7	1309	1600	137
MAX	4810	5120	614	1690	1300	1620	.00	1520	731	3740	3980	1420
MIN	.00	.00	-242	-1060	-342	-84	.00	.00	-187	.00	-426	-377
AC-FT	44090	102300	-2130	-321	4240	9650	.00	7040	1590	80500	98360	8160

CAL YR 1987 TOTAL 95199.00 MEAN 261 MAX 5120 MIN -1400 AC-FT 188800
WTR YR 1988 TOTAL 178207.00 MEAN 487 MAX 5120 MIN -1060 AC-FT 353500

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

39

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.90	10.89	10.33	11.36	11.27	11.65	10.98	10.49	11.69	10.92	10.69	9.22
2	9.89	9.33	11.07	11.45	11.27	11.25	10.92	9.43	11.73	10.52	10.75	10.47
3	10.91	9.34	11.34	11.63	11.13	11.10	11.05	10.39	11.23	10.34	11.36	10.89
4	11.22	9.77	10.88	11.70	11.12	11.15	11.29	10.83	11.06	10.71	11.62	11.17
5	11.28	9.62	11.14	11.48	11.30	10.56	11.73	11.07	11.45	10.76	10.77	11.41
6	11.00	9.87	11.13	11.16	11.34	11.33	11.48	11.54	10.80	10.52	10.07	10.20
7	10.73	10.08	11.04	10.88	11.08	11.90	11.73	11.46	10.31	10.81	10.31	10.75
8	10.80	9.75	11.10	11.10	10.25	11.80	11.62	11.39	9.93	9.56	10.12	11.37
9	10.93	9.54	11.34	11.15	10.41	11.74	11.32	11.35	10.92	9.63	10.23	10.50
10	10.32	9.33	11.51	9.86	11.04	10.48	11.21	11.20	10.79	9.77	9.21	10.23
11	9.20	9.34	11.49	10.50	10.78	9.68	11.34	11.18	10.55	10.94	9.11	10.52
12	9.11	9.23	11.44	10.23	11.08	10.45	11.52	11.10	10.53	11.00	9.09	11.01
13	9.58	9.27	11.25	10.72	11.22	10.70	11.67	11.21	10.64	11.38	9.50	11.41
14	9.22	10.69	11.16	11.03	11.04	11.21	11.43	10.91	11.15	11.16	10.78	11.39
15	9.04	11.42	11.07	10.50	10.99	11.64	11.13	10.51	10.85	10.44	10.72	11.44
16	9.07	11.57	11.27	10.39	11.61	11.34	11.12	10.16	10.34	10.41	9.00	11.00
17	9.72	10.57	11.08	10.76	11.62	10.98	11.10	11.06	10.82	11.24	9.12	10.55
18	10.38	9.99	11.17	11.08	11.46	11.01	10.95	11.56	11.26	11.12	9.12	10.36
19	11.41	10.29	11.27	11.10	11.37	10.17	10.89	11.50	11.52	10.29	9.08	10.42
20	10.70	10.36	11.38	10.95	11.36	9.90	10.92	11.48	11.49	9.96	9.11	10.51
21	10.77	10.12	11.51	10.97	11.81	10.99	10.83	11.17	10.85	10.95	9.00	11.05
22	11.15	10.37	11.23	11.57	12.04	11.00	10.86	11.14	10.73	9.66	9.16	11.56
23	11.13	10.60	11.08	11.57	11.79	10.92	11.08	11.13	10.76	9.36	8.99	11.51
24	11.02	10.79	11.48	11.45	10.98	10.61	11.11	11.31	11.03	9.37	9.53	11.39
25	10.88	10.95	11.37	10.43	11.48	10.51	11.20	10.69	11.21	9.12	10.60	11.48
26	10.60	11.07	11.37	10.22	11.18	10.49	11.04	10.46	11.27	9.08	10.18	11.54
27	10.44	9.21	11.26	11.53	11.03	11.66	10.81	10.35	10.89	9.10	9.06	11.19
28	10.78	9.73	11.18	11.26	11.28	11.04	10.84	10.51	11.20	9.14	10.10	11.24
29	10.88	10.35	11.29	11.00	11.49	11.07	10.77	10.94	11.12	9.13	9.56	11.32
30	11.02	10.23	11.27	11.15	---	11.18	10.94	11.12	11.20	9.15	9.48	11.24
31	11.36	---	11.20	11.22	---	11.09	---	10.84	---	10.53	10.45	---
MEAN	10.47	10.12	11.22	11.01	11.24	10.99	11.16	10.95	10.98	10.20	9.87	10.94
MAX	11.41	11.57	11.51	11.70	12.04	11.90	11.73	11.56	11.73	11.38	11.62	11.56
MIN	9.04	9.21	10.33	9.86	10.25	9.68	10.77	9.43	9.93	9.08	8.99	9.22
CAL YR 1987	MEAN	10.80	MAX	12.03	MIN	9.04						
WTR YR 1988	MEAN	10.76	MAX	12.04	MIN	8.99						

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278501 CONSERVATION AREA NO. 1 BELOW S-5 COMPLEX, NEAR LOXAHATCHEE, FL

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.

DRAINAGE AREA.--Indeterminate.

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.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District bench marks). Prior to October 1981 at datum 0.24 ft higher.

REMARKS.--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 PERIOD OF RECORD.--Maximum gage height, 18.54 ft present datum, Sept. 26, 1960; minimum, 8.26 ft present datum, Apr. 20, 24, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 18.17 ft Nov. 9; minimum, 12.70 ft Apr. 30.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.92	16.35	17.30	16.79	16.26	15.40	14.96	14.25	13.75	14.83	16.59	16.34
2	15.93	16.57	17.22	16.78	16.24	15.34	14.90	15.03	13.77	14.79	16.41	16.21
3	15.83	16.91	17.13	16.80	16.22	15.30	14.87	14.45	13.79	14.78	16.09	16.12
4	15.77	17.46	17.11	16.77	16.21	15.33	14.81	14.25	13.80	14.77	15.71	15.97
5	15.74	17.67	17.07	16.72	16.15	15.49	14.71	14.07	13.79	14.71	15.64	15.95
6	15.74	17.77	17.04	16.73	16.07	15.36	14.66	13.91	14.17	14.75	15.68	16.16
7	15.72	17.86	17.04	16.77	16.07	15.35	14.54	13.91	14.74	15.15	15.60	16.05
8	15.67	17.84	17.05	16.78	16.25	15.39	14.47	13.88	14.89	15.96	15.67	16.00
9	15.63	17.92	17.09	16.78	16.29	15.41	14.48	13.87	14.72	16.21	15.77	16.02
10	15.86	17.98	17.10	16.90	16.23	15.71	14.45	13.84	14.67	16.20	16.01	15.97
11	15.98	17.88	17.10	16.98	16.23	15.52	14.39	13.77	14.64	16.02	16.28	15.87
12	16.36	17.73	17.09	16.96	16.18	15.38	14.36	13.69	14.65	15.96	16.37	15.87
13	16.89	17.61	17.08	16.87	16.09	15.29	14.18	13.63	14.77	15.88	16.23	15.87
14	17.08	17.46	17.08	16.78	16.07	15.26	14.13	13.60	14.84	15.97	16.14	15.89
15	17.00	17.38	17.10	16.72	16.09	15.12	14.07	13.60	14.81	16.15	16.37	15.86
16	16.79	17.35	17.03	16.65	16.01	15.06	13.93	13.61	14.81	16.09	16.62	15.83
17	16.66	17.35	17.00	16.61	15.98	15.00	13.85	13.61	14.82	15.87	16.74	15.80
18	16.65	17.31	16.99	16.54	15.94	14.99	13.79	13.70	14.81	15.74	16.79	15.78
19	16.53	17.31	16.99	16.49	15.94	15.34	13.66	13.70	14.78	15.92	16.73	15.76
20	16.51	17.28	16.98	16.45	15.91	15.07	13.71	13.66	14.77	15.98	16.78	15.72
21	16.47	17.25	16.98	16.43	15.84	14.94	13.80	13.57	14.78	15.86	16.93	15.67
22	16.40	17.21	16.97	16.35	15.85	14.85	13.74	13.43	14.83	16.13	16.97	15.64
23	16.39	17.19	16.93	16.33	15.85	14.87	13.64	13.34	14.83	16.47	16.97	15.64
24	16.38	17.15	16.94	16.35	15.98	14.86	13.58	13.35	14.81	16.70	16.73	15.62
25	16.36	17.14	16.95	16.45	15.88	14.78	13.50	13.28	14.73	16.78	16.55	15.60
26	16.35	17.28	16.93	16.29	15.80	14.79	13.38	13.25	14.71	16.87	16.50	15.57
27	16.34	17.60	16.92	16.20	15.73	15.07	13.16	13.19	14.72	16.90	16.52	15.54
28	16.32	17.53	16.91	16.23	15.58	15.19	13.00	13.22	14.76	16.96	16.39	15.52
29	16.28	17.44	16.84	16.30	15.48	15.09	12.84	13.26	14.75	17.04	16.63	15.50
30	16.24	17.37	16.78	16.28	---	15.02	12.76	13.32	14.81	16.97	16.51	15.48
31	16.24	---	16.80	16.28	---	15.00	---	13.71	---	16.79	16.28	---
MEAN	16.26	17.41	17.02	16.59	16.01	15.18	14.01	13.71	14.58	15.97	16.36	15.83
MAX	17.08	17.98	17.30	16.98	16.29	15.71	14.96	15.03	14.89	17.04	16.97	16.34
MIN	15.63	16.35	16.78	16.20	15.48	14.78	12.76	13.19	13.75	14.71	15.60	15.48

CAL YR 1987 MEAN 15.60 MAX 17.98 MIN 11.50
WTR YR 1988 MEAN 15.75 MAX 17.98 MIN 12.76

EVERGLADES AND SOUTHEASTERN COASTAL AREA

41

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.--Records fair, except those for estimated daily discharges, 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.--31 years, 146 ft³/s, 106,000 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, 1,420 ft³/s Nov. 7,8; maximum gage height, 18.54 ft Nov. 5; maximum daily reverse flow, 251 ft³/s Jan. 26; no flow for many days during the year; minimum gage height, 9.95 ft Aug. 7.

DISCHARGE, IN 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	.00	.00	.00	2.0	45	.00	328	.00	23	.00	542	353
2	.00	.00	.00	2.0	-37	.00	378	.00	.00	.00	438	534
3	.00	.00	.00	-4.0	-130	.00	351	.00	.00	.00	276	500
4	.00	.00	.00	-1.0	-32	-84	375	182	332	.00	209	439
5	.00	369	.00	.00	2.0	-71	425	378	366	.00	281	587
6	.00	1130	.00	.00	.00	.00	374	45	119	.00	305	512
7	58	1420	.00	.00	.00	.00	368	.00	.00	.00	395	415
8	161	1420	.00	.00	.00	.00	338	.00	.00	.00	193	425
9	123	1220	.00	.00	.00	.00	298	.00	.00	.00	175	437
10	41	1170	.00	.00	.00	.00	271	74	.00	.00	189	448
11	.00	1140	106	57	.00	.00	287	342	.00	.00	.00	444
12	.00	984	.00	68	.00	.00	303	280	.00	.00	364	426
13	.00	679	.00	107	.00	.00	e220	132	.00	.00	494	418
14	.00	.00	.00	64	.00	.00	e226	70	.00	.00	294	403
15	.00	.00	86	61	.00	.00	e241	234	.00	.00	.00	393
16	.00	.00	169	40	.00	.00	e234	202	81	.00	462	389
17	.00	.00	95	27	.00	.00	e228	92	212	.00	692	368
18	.00	.00	50	50	.00	.00	e236	.00	249	.00	911	429
19	.00	.00	39	73	.00	.00	e208	.00	232	.00	529	251
20	.00	.00	43	168	.00	.00	e185	.00	87	.00	841	22
21	.00	.00	17	52	e98	176	e279	247	.00	.00	1190	-75
22	.00	.00	.00	.00	e211	419	e347	396	205	.00	1250	22
23	.00	.00	28	.00	e212	403	e269	278	121	.00	712	-3.0
24	.00	.00	23	.00	e158	411	e265	80	311	.00	447	.00
25	.00	33	23	30	e136	430	e261	.00	264	.00	442	.00
26	66	18	22	-251	e142	138	e245	232	104	.00	242	.00
27	180	.00	20	-126	e54	177	e252	380	118	.00	.00	66
28	166	.00	20	.00	e23	281	e228	245	.00	271	247	255
29	165	.00	19	135	e-20	380	e54	229	.00	399	350	469
30	101	.00	5.0	138	---	398	.00	105	.00	409	352	512
31	.00	---	5.0	73	---	365	---	.00	---	526	361	---
TOTAL	1061.00	9583.00	770.00	765.00	862.00	3423.00	8074.00	4223.00	2824.00	1605.00	13183.00	9439.00
MEAN	34.2	319	24.8	24.7	29.7	110	269	136	94.1	51.8	425	315
MAX	180	1420	169	168	212	430	425	396	366	526	1250	587
MIN	.00	.00	.00	-251	-130	-84	.00	.00	.00	.00	.00	-75
AC-FT	2100	19010	1530	1520	1710	6790	16010	8380	5600	3180	26150	18720

CAL YR 1987 TOTAL 24893.90 MEAN 68.2 MAX 1420 MIN -1130 AC-FT 49380
WTR YR 1988 TOTAL 55812.00 MEAN 152 MAX 1420 MIN -251 AC-FT 110700

e Estimated

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.84	14.49	16.61	13.01	11.29	11.58	12.34	15.13	15.45	15.41	13.53	17.23
2	13.78	14.73	16.64	13.06	11.20	11.26	12.60	15.67	15.47	15.41	13.26	16.72
3	13.86	15.41	16.59	13.11	12.01	11.29	12.32	15.58	15.45	15.38	12.86	16.27
4	13.77	17.95	16.61	13.20	12.32	11.56	12.85	14.80	14.76	15.27	12.90	16.16
5	13.72	18.29	16.66	13.17	12.10	12.25	12.72	12.78	13.03	15.03	12.19	16.08
6	13.75	16.96	16.61	13.01	12.06	12.35	12.23	11.87	13.47	15.05	10.33	16.07
7	13.60	15.45	16.51	12.67	11.82	12.35	12.14	13.48	14.97	15.34	10.30	16.20
8	12.82	14.53	16.36	12.46	11.79	12.03	12.10	14.54	15.39	15.55	11.52	16.18
9	12.52	14.05	16.37	12.40	11.97	11.64	12.01	14.89	15.33	15.69	12.86	16.12
10	12.80	13.62	16.44	12.73	12.47	11.93	12.40	14.89	15.07	15.63	13.95	16.09
11	13.53	12.72	16.34	13.38	12.68	12.14	12.67	13.60	14.76	15.54	15.88	15.95
12	14.63	12.66	16.14	13.75	12.54	11.50	12.90	11.92	14.44	15.51	15.63	15.74
13	16.60	12.23	16.03	13.42	12.41	11.23	13.39	12.24	14.12	15.64	14.26	15.57
14	16.93	16.08	15.96	13.05	12.26	11.51	13.79	13.64	13.76	15.77	13.85	15.32
15	16.68	16.58	15.56	12.86	11.98	11.42	13.70	13.10	13.57	15.89	16.06	14.93
16	16.30	16.53	14.30	12.61	12.24	11.31	13.68	12.67	13.35	15.79	17.30	14.41
17	16.05	16.36	13.44	12.46	12.56	11.38	13.77	12.91	13.12	15.70	17.69	13.82
18	15.83	16.49	13.40	12.50	12.35	11.22	13.67	14.11	12.90	15.72	17.23	12.96
19	15.63	16.45	13.36	12.63	12.21	11.85	13.53	14.70	12.95	15.82	17.22	12.04
20	15.38	16.67	13.47	12.38	12.11	12.86	13.90	15.17	13.53	15.87	17.40	12.64
21	15.18	16.68	13.44	11.66	12.18	13.26	13.77	14.83	14.56	16.00	17.15	13.46
22	15.01	16.54	13.41	11.90	12.07	12.62	12.46	13.38	14.08	16.11	17.21	13.75
23	14.82	16.46	13.33	11.87	11.90	11.91	12.13	12.12	14.22	16.14	17.28	13.78
24	14.70	16.39	13.45	11.76	12.00	11.84	12.10	13.47	13.27	16.21	17.20	15.07
25	14.70	16.20	13.48	11.57	11.29	11.89	12.16	14.46	12.55	16.22	16.96	15.67
26	14.59	16.44	13.46	12.58	11.12	12.27	12.44	14.24	12.88	16.19	16.87	15.84
27	13.88	16.98	13.35	13.95	11.13	13.09	12.43	12.51	14.27	16.08	17.35	15.66
28	13.69	17.06	13.30	13.42	11.45	12.25	12.32	11.58	15.00	15.79	17.23	15.12
29	13.76	16.86	13.32	12.87	11.82	12.39	11.55	12.33	15.36	15.55	17.35	14.08
30	13.77	16.78	13.01	11.93	---	12.34	13.45	13.68	15.40	15.49	17.47	13.21
31	14.31	---	12.97	11.47	---	12.23	---	15.23	---	14.99	17.30	---
MEAN	14.53	15.82	14.84	12.67	11.98	11.96	12.78	13.73	14.22	15.67	15.34	15.07
MAX	16.93	18.29	16.66	13.95	12.68	13.26	13.90	15.67	15.47	16.22	17.69	17.23
MIN	12.52	12.23	12.97	11.47	11.12	11.22	11.55	11.58	12.55	14.99	10.30	12.04
CAL YR 1987	MEAN	13.35	MAX	18.29	MIN	10.06						
WTR YR 1988	MEAN	14.06	MAX	18.29	MIN	10.30						

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

LOCATION.--Lat°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 Loxahatchee.

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.--Records good, except those for estimated daily discharges, 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 hurricane gate structure 5, 20 miles 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.--33 years, 172 ft³/s, 124,600 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, 664 ft³/s Aug. 2; maximum gage height, 16.36 ft Nov. 4; no flow for many days; maximum daily reverse flow, 239 ft³/s Nov. 10; minimum gage height, 8.12 ft May 26.

DISCHARGE, IN 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	.00	.00	.00	.00	328	.00	328	.00	.00	.00	643	353
2	.00	.00	.00	.00	126	.00	306	.00	.00	.00	664	196
3	.00	.00	.00	.00	.00	.00	242	.00	.00	.00	646	151
4	.00	.00	.00	.00	.00	.00	254	.00	.00	.00	635	439
5	.00	.00	.00	.00	.00	.00	390	106	.00	.00	524	141
6	.00	-29	.00	.00	.00	.00	374	.00	.00	.00	305	282
7	.00	-155	.00	.00	.00	.00	368	.00	.00	.00	367	415
8	23	-74	.00	.00	.00	.00	338	.00	.00	.00	508	425
9	.00	-44	.00	.00	.00	.00	298	.00	.00	.00	608	437
10	.00	-239	.00	.00	.00	.00	271	.00	.00	.00	409	448
11	.00	-109	.00	328	.00	.00	287	192	.00	.00	.00	444
12	.00	23	.00	523	.00	.00	303	192	.00	.00	364	426
13	.00	6.4	.00	578	.00	.00	e220	75	.00	.00	494	418
14	.00	.00	.00	555	.00	.00	e226	25	.00	.00	294	403
15	.00	.00	.00	560	.00	.00	e241	78	.00	.00	.00	393
16	.00	.00	.00	551	.00	.00	e234	48	.00	.00	.00	389
17	.00	.00	.00	544	.00	.00	e228	20	.00	.00	.00	368
18	.00	.00	.00	561	.00	.00	e236	.00	.00	.00	.00	331
19	.00	.00	.00	572	.00	.00	e208	.00	.00	.00	103	127
20	.00	.00	.00	515	.00	.00	e185	.00	.00	.00	.00	.00
21	.00	.00	.00	156	e137	176	e214	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	e95	419	e145	.00	.00	.00	.00	83
23	.00	.00	.00	.00	e89	403	e70	.00	.00	.00	294	33
24	.00	.00	.00	.00	e158	411	e72	.00	.00	.00	447	.00
25	.00	33	.00	172	e282	430	e193	.00	.00	.00	442	.00
26	.00	18	.00	182	e301	138	e245	.00	.00	.00	242	.00
27	.00	.00	.00	.00	e97	177	e252	97	107	.00	.00	.00
28	.00	.00	.00	.00	e365	281	e228	45	.00	271	247	.00
29	.00	.00	.00	245	e284	380	e54	.00	.00	399	350	93
30	.00	.00	.00	403	---	398	.00	.00	.00	409	352	43
31	.00	---	.00	352	---	365	---	.00	---	526	361	---
TOTAL	23.00	-569.60	.00	6797.00	2262.00	3578.00	7010.00	878.00	107.00	1605.00	9299.00	6838.00
MEAN	.74	-19.0	.000	219	78.0	115	234	28.3	3.57	51.8	300	228
MAX	23	33	.00	578	365	430	390	192	107	526	664	448
MIN	.00	-239	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	46	-1130	.00	13480	4490	7100	13900	1740	212	3180	18440	13560

CAL YR 1987 TOTAL 34142.80 MEAN 93.5 MAX 708 MIN -239 AC-FT 67720
WTR YR 1988 TOTAL 37827.40 MEAN 103 MAX 664 MIN -239 AC-FT 75030

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.41	10.99	9.58	10.73	11.06	e11.05	10.49	10.49	10.75	10.29	12.18	11.37
2	10.88	11.89	9.22	11.26	10.77	e10.81	10.12	11.54	10.85	8.94	12.31	10.56
3	10.09	12.08	8.71	11.37	10.57	10.85	9.77	10.22	10.83	8.70	11.96	9.03
4	9.23	16.30	8.91	11.31	11.15	11.18	9.37	10.55	10.62	8.59	12.03	11.06
5	8.97	16.14	8.98	11.12	11.31	11.55	10.33	11.06	10.26	8.60	11.57	10.03
6	9.86	15.98	8.85	10.91	11.05	11.63	10.58	10.75	10.31	8.70	10.13	10.13
7	9.92	15.66	8.91	10.93	10.98	11.74	10.55	10.01	9.62	10.11	10.00	11.64
8	9.80	14.63	10.17	11.15	10.99	11.44	10.75	9.75	10.33	12.29	10.95	11.40
9	10.00	13.81	11.16	11.08	10.32	11.25	10.78	9.54	9.21	10.98	12.06	11.08
10	10.77	13.74	11.53	11.72	11.04	10.97	10.46	9.27	8.82	9.83	12.33	10.78
11	11.13	12.77	11.43	12.38	11.06	9.91	10.49	9.01	8.93	9.21	10.14	10.73
12	12.65	11.81	11.29	13.15	e10.93	10.67	10.47	9.86	9.32	9.51	10.63	10.94
13	14.14	11.24	11.12	12.70	e10.90	10.81	10.47	10.61	9.37	9.51	11.38	10.93
14	11.96	10.76	11.13	12.39	e10.80	11.47	10.40	10.30	9.23	11.92	11.07	11.02
15	10.27	10.31	11.32	12.18	e10.85	11.32	10.96	10.49	8.88	14.09	11.69	10.84
16	9.56	10.27	11.21	11.95	e10.89	11.06	11.09	10.54	8.58	13.30	13.07	10.41
17	9.32	10.28	11.01	11.82	e10.73	10.85	11.32	10.42	8.70	11.77	11.59	10.23
18	9.01	10.25	10.94	11.82	e10.84	10.74	11.03	10.61	9.57	10.26	11.51	10.06
19	9.48	10.25	10.85	11.93	e10.84	11.37	10.72	10.21	10.16	10.12	11.13	9.39
20	10.79	9.88	11.03	11.80	e10.81	11.64	10.28	10.62	10.44	10.47	12.54	8.68
21	10.76	9.53	11.01	10.83	e11.44	11.33	10.31	10.64	10.58	10.47	13.15	9.04
22	10.67	9.42	10.83	11.14	e12.00	11.23	10.70	10.16	10.54	9.53	11.64	9.65
23	10.97	9.10	10.96	11.08	e11.84	11.22	10.06	9.95	10.36	9.28	11.29	10.79
24	11.13	8.71	11.14	11.09	e11.89	11.13	9.92	9.77	10.08	9.29	11.92	10.20
25	10.71	9.12	11.06	11.19	e11.08	11.11	10.16	8.58	9.99	9.25	11.78	9.71
26	10.85	12.18	11.09	10.93	e10.88	9.95	10.85	8.40	9.53	9.30	11.38	9.33
27	10.67	13.75	11.12	10.56	e9.67	9.14	10.74	8.77	9.80	9.68	10.10	8.90
28	10.22	12.57	10.82	10.61	e9.91	10.16	10.95	10.04	10.63	10.28	10.36	8.80
29	10.25	10.97	10.54	11.28	e11.37	10.58	10.54	9.90	10.67	11.33	11.58	9.45
30	10.66	9.97	10.30	11.58	---	10.72	9.39	9.70	10.61	11.06	11.65	10.54
31	10.61	---	10.49	11.20	---	10.66	---	9.14	---	11.39	11.16	---
MEAN	10.54	11.81	10.54	11.46	10.96	10.95	10.47	10.03	9.92	10.26	11.49	10.22
MAX	14.14	16.30	11.53	13.15	12.00	11.74	11.32	11.54	10.85	14.09	13.15	11.64
MIN	8.97	8.71	8.71	10.56	9.67	9.14	9.37	8.40	8.58	8.59	10.00	8.68

CAL YR 1987 MEAN 10.66 MAX 16.30 MIN 8.53
WTR YR 1988 MEAN 10.72 MAX 16.30 MIN 8.40

e Estimated

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.--Records 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.--47 years (water years 1941-84, 1986-88), 707 ft³/s, 512,200 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, 1985, 1986, 1987; minimum gage height, 2.85 ft Dec. 3, 1953; Oct. 9, 1963, and Sept. 9, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,810 ft³/s Nov. 4; maximum gage height, 8.53 ft Mar. 25, 28, Apr. 13, 17-19, May 12; no flow for some days; minimum gage height, 6.00 ft Nov. 7.

DISCHARGE, IN 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	e908	396	480	e95	491	314	e553	e529	e1040	1250	1090	1350
2	e571	725	558	e390	480	182	e393	e789	595	895	1770	1220
3	632	1520	288	e494	.00	8.5	e463	e582	475	817	913	689
4	623	9810	530	e539	206	292	e216	e582	343	580	975	809
5	181	7860	442	358	189	342	e501	e86	401	519	936	883
6	246	7440	369	277	181	342	e297	e191	1350	677	653	774
7	267	5850	149	328	181	342	e339	e100	1600	2430	680	1050
8	50	2240	245	462	702	342	e281	e99	1630	3450	881	1070
9	295	1930	375	467	542	342	e361	e42	853	2290	1080	1070
10	558	2280	375	702	180	342	e198	e33	610	1130	1870	754
11	557	2000	325	863	284	335	e228	.00	604	912	1440	594
12	2300	1680	302	1130	208	334	e74	.00	621	860	1190	803
13	2080	1560	277	1260	113	94	e116	e200	540	1110	1270	878
14	1730	1310	343	1170	54	745	.00	e63	540	2170	1460	896
15	989	1250	259	1150	211	115	.00	e86	540	2430	2120	896
16	685	843	e368	1000	172	55	e115	.00	540	2170	2310	719
17	779	849	e171	831	70	31	e53	e302	456	1770	1780	618
18	783	966	e205	773	109	27	e70	.00	239	1270	1780	571
19	484	1040	e216	957	104	521	e150	e103	358	1520	1550	537
20	445	930	e200	868	100	182	.00	e13	339	1540	9590	1.8
21	367	727	e198	630	281	368	.00	e140	539	1520	3290	100
22	311	640	e194	252	429	629	.00	e17	498	1200	2100	307
23	373	835	e221	162	431	360	.00	.00	498	1170	1800	113
24	337	530	e341	294	701	366	.00	e152	214	1200	1820	17
25	209	342	e237	475	665	774	.00	.00	225	778	1570	230
26	251	1830	e238	620	692	581	.00	e136	271	728	1520	119
27	288	1830	e237	15	577	217	.00	.00	334	741	1290	.00
28	165	1600	e237	189	359	267	.00	.00	279	931	1230	.00
29	165	1260	e237	270	442	432	.00	e539	278	997	1310	.00
30	244	1090	e237	577	---	472	e716	e891	902	959	1340	.00
31	201	---	e237	626	---	706	---	e977	---	895	1340	---
TOTAL	18074	63163	9091	18224	9154.00	10459.5	5124.00	6652.00	17712	40909	53948	17068.80
MEAN	583	2105	293	588	316	337	171	215	590	1320	1740	569
MAX	2300	9810	558	1260	702	774	716	977	1630	3450	9590	1350
MIN	50	342	149	15	.00	8.5	.00	.00	214	519	653	.00
AC-FT	35850	125300	18030	36150	18160	20750	10160	13190	35130	81140	107000	33860

CAL YR 1987 TOTAL 187020.30 MEAN 512 MAX 9810 MIN .00 AC-FT 371000
WTR YR 1988 TOTAL 269579.30 MEAN 737 MAX 9810 MIN .00 AC-FT 534700

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.02	8.05	7.70	7.94	8.04	8.02	8.04	e8.05	8.10	7.82	8.07	7.18
2	8.12	8.03	7.94	8.12	7.97	7.88	8.08	e7.93	7.96	7.99	7.66	7.10
3	8.12	7.84	8.09	8.00	8.13	8.07	8.12	8.13	8.03	8.01	7.54	7.35
4	7.92	7.02	8.02	8.02	8.13	8.05	8.10	7.91	8.13	7.96	7.99	7.99
5	8.08	6.33	7.94	7.94	8.08	7.95	8.04	8.02	7.99	8.08	8.11	8.10
6	8.09	6.19	8.06	7.96	8.02	8.14	8.17	8.11	7.73	8.01	7.99	7.93
7	8.11	6.33	8.13	7.99	7.94	8.16	8.22	8.12	7.70	7.73	8.06	8.06
8	8.23	7.15	8.11	7.93	7.93	8.13	8.21	8.13	7.24	7.28	8.09	8.07
9	8.24	7.25	8.06	7.99	8.03	8.07	8.19	8.13	7.43	6.89	8.04	7.96
10	8.07	7.17	8.07	7.93	7.98	8.11	8.23	8.13	7.96	7.47	7.74	7.96
11	8.14	7.19	8.08	7.87	8.06	8.11	8.22	8.20	8.09	7.77	7.14	8.17
12	7.51	7.27	8.09	8.00	8.05	7.90	8.39	8.46	8.06	8.08	7.12	8.15
13	7.26	7.15	8.14	7.93	8.17	7.91	8.45	8.23	8.22	8.05	7.17	8.14
14	7.17	7.20	8.07	7.89	8.12	7.54	8.34	8.04	8.25	7.62	7.26	8.03
15	7.74	7.23	8.10	7.83	8.14	8.09	8.43	8.10	8.17	7.14	7.22	8.04
16	8.09	7.65	8.05	7.82	8.13	8.17	8.40	8.19	8.05	7.08	7.21	7.97
17	8.12	8.08	8.08	7.95	8.16	8.32	8.49	7.96	7.91	7.23	7.30	8.00
18	8.06	8.03	8.04	8.00	8.15	8.38	8.49	8.11	8.07	7.29	7.26	8.09
19	7.97	8.03	8.11	7.94	8.16	8.01	8.41	8.17	8.03	7.22	7.19	7.91
20	8.07	7.99	8.00	7.90	8.17	8.08	8.28	8.18	8.02	7.32	7.60	8.17
21	8.11	8.15	7.99	8.00	8.13	8.13	8.27	8.21	8.02	7.20	7.21	8.13
22	8.06	8.25	7.97	7.91	8.07	8.00	8.35	8.12	8.01	7.21	7.20	7.99
23	8.04	8.06	8.02	8.05	8.13	8.14	8.31	8.14	7.91	7.09	7.14	7.99
24	7.99	7.95	8.06	7.97	8.05	8.50	8.23	8.11	7.97	7.28	7.04	8.16
25	8.12	8.05	8.04	8.01	8.03	8.20	8.16	8.22	8.10	7.49	7.20	8.08
26	8.09	7.81	8.07	7.94	7.96	8.13	8.28	8.14	8.17	7.96	7.32	7.95
27	8.10	7.28	8.13	8.06	7.98	8.03	8.32	8.09	8.04	8.07	7.16	8.09
28	8.11	7.33	8.11	8.02	7.98	8.48	8.40	8.11	8.09	8.07	7.26	8.15
29	8.15	7.20	8.02	7.96	8.09	8.49	8.38	7.81	8.17	7.98	7.31	8.18
30	8.09	7.30	7.96	7.95	---	8.50	8.00	7.87	8.00	8.06	7.34	8.26
31	8.06	---	7.88	7.96	---	8.28	---	8.01	---	8.14	7.16	---
MEAN	8.00	7.49	8.04	7.96	8.07	8.13	8.27	8.10	7.99	7.63	7.45	7.98
MAX	8.24	8.25	8.14	8.12	8.17	8.50	8.49	8.46	8.25	8.14	8.11	8.26
MIN	7.17	6.19	7.70	7.82	7.93	7.54	8.00	7.81	7.24	6.89	7.04	7.10

CAL YR 1987 MEAN 7.99 MAX 8.76 MIN 6.19
WTR YR 1988 MEAN 7.92 MAX 8.50 MIN 6.19

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

47

02280500 HILLSBORO CANAL BELOW HGS-4, 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 hurricane gate structure 4 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. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records poor. Flow regulated by hurricane 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, or by the operation of pump station 2 (negative figures indicate flow reversed). Discharge computed from continuous velocity record obtained from electromagnetic velocity meter.

AVERAGE DISCHARGE.--31 years, -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, 565 ft³/s Mar. 19; maximum gage height, 13.08 ft July 23; maximum daily reverse flow, 1,100 ft³/s Nov. 5; minimum gage height, 9.36 ft Oct. 11.

DISCHARGE, IN 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	e35	e-200	e5.9	-123	-36	328	400	160	205	134	47	e-110
2	22	-309	-14	-122	-41	357	367	95	251	119	-249	e-25
3	33	-369	-49	-118	-6.9	403	366	133	258	95	-164	e10
4	31	-1020	-59	-122	-85	141	352	201	268	132	133	e10
5	40	-1100	-19	-136	-122	-187	344	204	253	46	-3.7	e90
6	34	-718	7.8	-88	-81	-215	367	262	86	-56	-239	e85
7	27	-366	-18	-87	-60	-137	391	284	15	-174	-133	e130
8	34	-346	-15	-30	-268	250	372	285	100	-404	97	-66
9	26	-258	-22	-71	-2.0	565	386	252	-83	-507	-227	-46
10	-268	-99	-24	-214	7.0	106	408	294	58	-418	-23	40
11	-52	-7.4	-18	-386	-6.0	343	406	418	55	-119	-84	87
12	-122	-100	-25	-101	7.8	485	382	445	60	-55	21	113
13	11	-58	-5.6	-159	4.9	311	336	305	40	-14	139	167
14	-10	-21	-14	-52	-17	410	291	113	-55	28	25	-26
15	-37	3.0	-80	-90	-24	414	321	86	35	53	-255	-68
16	-62	-20	4.2	-69	-88	365	321	349	141	51	-100	-103
17	e-44	-49	6.5	-45	-54	422	271	394	293	-31	-62	-42
18	e-38	-53	11	-93	-28	292	260	320	288	-39	-260	46
19	e-28	-76	10	-30	33	-4.0	243	255	158	-144	-394	92
20	-2.8	-52	7.0	-24	74	108	211	102	32	-72	-198	288
21	-16	-34	-7.6	-24	-96	299	188	152	21	-168	-155	360
22	-1.8	-3.3	-30	-45	-57	518	215	159	206	-409	e-502	316
23	27	-14	-62	-23	-34	515	223	273	206	-632	e-230	274
24	30	-16	-104	-35	-136	514	218	236	141	-628	e-475	273
25	23	-14	-95	-112	125	513	211	146	207	-21	e-250	266
26	129	e-72	-112	18	356	388	195	148	169	219	e-230	260
27	17	e-130	-109	79	383	83	188	243	164	166	e-450	191
28	e230	e-112	-103	5.3	396	169	183	330	67	90	e-240	62
29	e175	e-29	-99	-19	367	271	256	272	117	60	e-40	41
30	e20	e1.8	-125	-3.6	---	381	252	172	141	230	e-140	61
31	e-70	---	-130	-13	---	414	---	159	---	56	e-60	---
TOTAL	192.4	-5640.9	-1207.60	-2332.3	511.8	8822.0	8924	7247	3897	-2412	-4701.7	2776
MEAN	6.21	-188	-39.0	-75.2	17.6	285	297	234	130	-77.8	-152	92.5
MAX	230	3.0	11	79	396	565	408	445	293	230	139	360
MIN	-268	-1100	-130	-386	-268	-215	183	86	-83	-632	-502	-110
AC-FT	382	-11190	-2400	-4630	1020	17500	17700	14370	7730	-4780	-9330	5510

CAL YR 1987 TOTAL -3768.00 MEAN -10.3 MAX 425 MIN -1100 AC-FT -7470
WTR YR 1988 TOTAL 16075.70 MEAN 43.9 MAX 565 MIN -1100 AC-FT 31890

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02280500 HILLSBOROR CANAL BELOW HGS-4, NEAR SOUTH BAY, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.86	11.17	e10.66	11.03	10.99	11.91	11.86	12.24	11.35	11.03	12.10	10.08
2	10.42	11.34	10.50	11.12	10.97	11.86	11.75	10.82	11.56	11.03	11.04	10.58
3	11.26	11.98	10.74	11.37	10.91	11.89	11.75	10.61	11.24	11.17	10.64	10.69
4	11.38	12.29	11.05	11.37	10.88	11.50	11.72	10.88	10.89	11.14	11.60	10.96
5	11.44	11.81	10.96	11.05	11.02	11.44	11.84	11.04	10.95	11.11	11.69	11.13
6	11.39	11.37	10.91	10.98	10.74	11.33	11.82	11.47	11.33	10.59	11.27	11.28
7	11.15	12.34	10.87	10.73	10.60	11.11	11.77	11.44	10.90	11.03	10.83	10.57
8	10.84	11.21	10.88	10.68	11.11	11.31	11.54	11.28	10.37	11.02	11.44	10.72
9	10.94	10.84	11.09	10.77	11.15	11.95	11.39	11.17	10.14	11.13	11.16	10.85
10	11.19	10.59	11.27	11.38	11.04	11.69	11.45	11.00	10.44	10.61	10.86	10.44
11	9.95	10.72	11.20	11.90	11.23	11.22	11.61	11.32	10.18	11.33	12.12	10.78
12	11.31	10.42	11.18	10.76	11.05	11.77	11.75	11.53	10.32	11.19	11.36	11.17
13	12.44	10.88	11.04	11.20	10.83	11.84	11.69	11.51	10.72	11.36	10.73	11.14
14	11.49	10.90	11.01	11.16	10.67	11.99	11.54	10.76	10.89	11.64	12.06	11.08
15	10.36	10.88	11.07	11.13	10.67	12.09	11.48	10.08	10.53	11.77	12.24	10.90
16	11.06	10.87	11.00	11.03	11.10	11.94	11.42	10.30	10.47	10.47	11.96	10.56
17	10.63	11.05	10.89	10.83	11.10	11.88	11.44	11.63	11.30	11.59	10.95	10.17
18	10.88	10.91	11.02	10.78	10.88	11.58	11.48	11.77	11.49	11.55	10.88	9.88
19	11.21	10.80	11.10	10.62	10.84	11.11	11.39	11.60	11.21	11.65	10.88	10.13
20	11.24	10.78	11.12	10.56	11.06	10.78	11.86	11.29	10.35	10.59	10.59	10.86
21	11.11	10.36	11.09	10.56	11.40	10.93	11.90	11.09	10.42	11.51	10.61	11.32
22	10.99	10.80	10.81	10.93	11.67	11.64	11.87	10.82	11.22	12.29	11.64	11.50
23	10.93	10.85	10.67	11.01	11.21	11.79	11.78	10.98	11.72	12.36	11.01	11.65
24	10.76	10.86	10.95	11.07	11.51	11.74	11.69	11.51	11.38	12.01	10.55	11.77
25	10.56	11.07	10.83	11.27	11.51	11.68	11.62	10.89	11.20	12.41	10.97	11.88
26	10.48	e11.63	10.68	10.40	12.08	11.85	11.44	10.50	11.21	12.78	10.95	11.96
27	10.55	e11.43	10.57	11.32	11.97	11.63	11.37	10.53	11.33	12.46	10.29	12.00
28	10.54	e10.31	10.54	11.00	11.92	12.01	11.67	11.45	11.29	12.09	11.00	12.15
29	10.55	e11.03	10.68	11.32	11.96	11.94	11.86	11.75	10.85	11.95	11.90	11.44
30	10.69	e10.78	10.98	11.23	---	11.88	11.84	11.01	10.93	11.31	10.50	11.29
31	10.75	---	10.99	11.04	---	12.04	---	10.74	---	11.10	11.32	---
MEAN	10.98	11.08	10.91	11.02	11.17	11.66	11.65	11.13	10.94	11.46	11.20	11.03
MAX	12.44	12.34	11.27	11.90	12.08	12.09	11.90	12.24	11.72	12.78	12.24	12.15
MIN	9.95	10.31	10.50	10.40	10.60	10.78	11.37	10.08	10.14	10.47	10.29	9.88

CAL YR 1987 MEAN 10.97 MAX 12.48 MIN 9.80

WTR YR 1988 MEAN 11.19 MAX 12.78 MIN 9.88

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

49

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

LOCATION.--Lat 26°23'58", long 80°05'57", in NE¼NW¼ 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 adjustment of 1972.

REMARKS.--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, 6.00 ft Nov. 4, 1987; minimum, 2.72 ft Apr. 19, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 6.00 ft Nov. 4; minimum, 2.72 ft Apr. 19.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.44	4.36	4.55	4.41	4.35	4.36	3.77	4.43	4.43	4.64	4.69	4.57
2	4.48	4.35	4.54	4.36	4.34	4.33	3.74	4.43	4.44	4.61	4.68	4.55
3	4.45	4.42	4.52	4.39	4.34	4.34	3.71	4.39	4.41	4.57	4.67	4.54
4	4.43	5.33	4.52	4.39	4.33	4.33	3.65	4.37	4.38	4.55	4.64	4.54
5	4.41	4.98	4.51	4.35	4.31	4.31	3.57	4.36	4.38	4.52	4.58	4.52
6	4.41	4.87	4.50	4.36	4.29	4.31	3.53	4.33	4.72	4.54	4.57	4.48
7	4.41	4.79	4.49	4.35	4.30	4.28	3.45	4.30	4.89	4.69	4.59	4.59
8	4.38	4.76	4.50	4.38	4.37	4.27	3.40	4.25	4.89	4.90	4.62	4.69
9	4.36	4.94	4.76	4.39	4.36	4.27	3.37	4.21	4.82	4.88	4.59	4.63
10	4.39	4.89	4.70	4.42	4.36	4.25	3.32	4.21	4.74	4.81	4.61	4.59
11	4.40	4.82	4.68	4.43	4.37	4.23	3.28	4.22	4.69	4.75	4.66	4.57
12	4.60	4.75	4.66	4.43	4.36	4.22	3.24	4.17	4.67	4.74	4.69	4.55
13	4.61	4.72	4.64	4.42	4.34	4.20	3.17	4.11	4.65	4.73	4.69	4.54
14	4.60	4.71	4.62	4.41	4.35	4.17	3.11	4.05	4.61	4.71	4.69	4.54
15	4.57	4.67	4.62	4.42	4.38	4.13	3.06	4.04	4.59	4.69	4.74	4.53
16	4.55	4.64	4.59	4.41	4.35	4.13	2.99	4.02	4.58	4.67	4.72	4.50
17	4.53	4.62	4.55	4.41	4.34	4.17	2.94	3.98	4.55	4.65	4.70	4.48
18	4.51	4.61	4.54	4.42	4.33	4.17	2.88	4.03	4.52	4.68	4.66	4.47
19	4.49	4.61	4.53	4.42	4.31	4.20	2.79	4.04	4.60	4.70	4.64	4.47
20	4.47	4.60	4.53	4.42	4.30	4.20	3.25	4.01	4.58	4.69	4.75	4.47
21	4.45	4.56	4.53	4.42	4.33	4.19	3.35	3.94	4.55	4.67	4.74	4.44
22	4.42	4.56	4.52	4.39	4.31	4.17	3.36	3.86	4.55	4.65	4.73	4.44
23	4.41	4.55	4.51	4.37	4.37	4.13	3.34	3.78	4.53	4.64	4.66	4.43
24	4.41	4.53	4.51	4.39	4.43	4.12	3.27	3.70	4.50	4.63	4.63	4.43
25	4.40	4.53	4.50	4.39	4.40	4.11	3.19	3.64	4.47	4.63	4.60	4.41
26	4.40	4.62	4.49	4.37	4.39	4.10	3.07	3.57	4.47	4.76	4.58	4.41
27	4.38	4.62	4.48	4.36	4.39	4.08	3.01	3.54	4.47	4.77	4.57	4.40
28	4.37	4.60	4.47	4.35	4.39	4.02	3.01	3.70	4.52	4.68	4.56	4.40
29	4.35	4.58	4.44	4.35	4.38	3.93	3.03	3.76	4.50	4.68	4.55	4.39
30	4.35	4.56	4.42	4.35	---	3.91	3.30	4.17	4.51	4.68	4.55	4.36
31	4.34	---	4.41	4.37	---	3.86	---	4.41	---	4.68	4.58	---
MEAN	4.44	4.67	4.54	4.39	4.35	4.18	3.27	4.07	4.57	4.68	4.64	4.50
MAX	4.61	5.33	4.76	4.43	4.43	4.36	3.77	4.43	4.89	4.90	4.75	4.69
MIN	4.34	4.35	4.41	4.35	4.29	3.86	2.79	3.54	4.38	4.52	4.55	4.36

CAL YR 1987 MEAN 4.36 MAX 5.33 MIN 3.50
WTR YR 1988 MEAN 4.36 MAX 5.33 MIN 2.79

EVERGLADES AND SOUTHEASTERN COASTAL AREA

262337080074800 E-3 CANAL AT 51ST STREET, BOCA RATON, FL

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, in 2.2 mi west of I-95, Yamato 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 adjustment of 1972.

REMARKS.--Records poor. Station is part of a canal system operated by Lake Worth Drainage District.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 12.82 ft May 4, 1982; minimum, 8.38 ft March 12, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.69 ft June 6, July 1; minimum, 8.80 ft Feb. 7, 8.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.18	e9.58	e9.49	e9.57	9.34	e9.35	9.46	9.96	9.88	10.59	9.49	9.85
2	e9.98	e9.60	e9.48	e9.58	9.31	e9.29	e9.57	9.87	9.89	10.22	9.52	9.80
3	9.95	9.86	9.47	e9.59	9.30	e9.23	e9.58	9.70	9.79	10.03	9.50	9.72
4	9.71	e10.96	9.57	e9.60	e9.26	e9.25	e9.59	9.41	9.70	9.91	9.47	9.67
5	9.71	e10.19	e9.51	e9.54	e9.22	e9.24	e9.65	e9.44	9.44	9.90	9.49	9.61
6	9.78	e10.01	e9.45	e9.51	e9.20	e9.30	e9.66	9.39	9.95	9.89	9.49	9.54
7	9.78	e9.86	e9.41	9.52	8.88	e9.30	e9.64	9.39	10.27	e10.18	9.55	9.79
8	9.75	e9.78	9.50	9.57	8.84	e9.29	e9.59	9.36	10.20	e10.41	9.68	9.93
9	9.71	e10.09	9.93	9.56	e9.15	e9.25	9.42	9.31	9.94	e10.41	9.55	9.85
10	9.81	e9.86	e9.76	9.56	e9.23	e9.22	9.27	9.30	9.90	e10.36	9.46	9.62
11	9.89	e9.72	e9.78	e9.64	e9.22	e9.21	9.18	9.33	e9.88	e10.30	9.99	9.53
12	10.17	e9.78	e9.80	e9.58	e9.32	e9.19	e9.47	9.35	e9.89	e10.36	10.19	9.52
13	e9.84	e9.80	e9.76	e9.46	e9.27	e9.16	e9.59	9.37	9.90	e10.30	10.10	9.57
14	e10.00	e9.77	9.73	e9.38	e9.25	e9.15	9.49	9.39	e9.84	e10.34	9.97	9.57
15	e9.98	e9.75	e9.79	e9.41	e9.22	e9.10	9.41	9.39	e9.81	e10.44	10.12	9.55
16	9.88	e9.72	e9.81	e9.44	9.19	9.06	9.26	e9.42	9.75	e10.17	e9.95	9.53
17	9.94	e9.71	e9.74	e9.43	9.17	e9.05	8.95	e9.44	9.69	e9.87	e9.86	9.51
18	9.65	e9.70	9.70	e9.40	9.14	e9.24	8.90	e9.43	9.69	e9.88	e9.81	9.50
19	9.62	e9.74	9.71	e9.40	9.11	9.14	8.98	e9.52	10.00	e10.09	e9.77	9.46
20	9.65	e9.77	9.75	e9.39	9.11	9.12	9.67	e9.71	9.86	e10.16	9.98	9.44
21	9.65	e9.70	9.76	e9.36	9.15	e9.22	9.70	e9.74	9.89	e10.14	10.05	9.44
22	9.69	e9.67	9.76	e9.35	9.19	e9.14	e9.68	e9.75	9.88	e10.06	e9.88	9.44
23	9.64	e9.66	9.75	e9.31	e9.25	e9.16	e9.57	e9.75	9.86	e9.64	e9.81	9.40
24	9.58	e9.68	9.73	e9.30	e9.39	9.10	9.48	e9.74	9.87	e9.41	9.79	9.34
25	9.52	e9.66	9.72	e9.32	9.35	e9.36	9.41	e9.75	9.73	e9.57	9.67	9.33
26	9.53	e9.90	9.72	e9.30	9.41	e9.14	9.49	e9.76	9.71	e9.93	9.64	9.28
27	9.57	e9.96	e9.68	e9.28	e9.42	9.12	9.52	e9.79	9.73	9.85	9.61	9.20
28	9.58	9.82	e9.66	e9.27	9.40	9.10	9.57	e9.87	9.89	9.86	e9.59	9.14
29	9.58	9.54	e9.63	9.30	9.40	e9.10	9.59	e9.88	9.93	9.69	9.61	9.14
30	9.58	9.32	e9.61	9.35	---	9.10	9.51	e9.92	9.98	9.61	e9.58	9.46
31	9.57	---	e9.58	9.36	---	9.23	---	e9.99	---	9.56	9.72	---
MEAN	9.76	9.81	9.67	9.44	9.23	9.19	9.46	9.59	9.86	10.04	9.74	9.52
MAX	10.18	10.96	9.93	9.64	9.42	9.36	9.70	9.99	10.27	10.59	10.19	9.93
MIN	9.52	9.32	9.41	9.27	8.84	9.05	8.90	9.30	9.44	9.41	9.46	9.14

CAL YR 1987 MEAN 9.59 MAX 10.96 MIN 8.88
WTR YR 1988 MEAN 9.61 MAX 10.96 MIN 8.84

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

51

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 adjustment of 1972.

REMARKS.--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, 10.58 ft Nov. 4; minimum, 8.07 ft Oct. 12.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.56	9.45	9.40	9.38	9.19	9.24	9.39	9.72	9.79	10.02	9.32	9.59
2	9.64	9.46	9.38	9.38	9.17	9.13	9.41	9.67	9.77	9.68	9.37	9.52
3	9.48	9.58	9.38	9.37	9.14	9.05	9.41	9.41	9.58	9.61	9.35	9.48
4	9.57	10.21	9.40	9.39	9.09	9.07	9.43	9.25	9.37	9.60	9.35	9.42
5	9.55	9.74	9.34	9.37	9.05	9.08	9.52	9.33	9.32	9.59	9.34	9.35
6	9.67	9.71	9.26	9.38	9.00	9.12	9.51	9.33	9.60	9.67	9.33	9.34
7	9.64	9.59	9.21	9.37	8.59	9.17	9.49	9.28	9.72	9.71	9.38	9.52
8	9.60	9.58	9.24	9.43	8.63	9.14	9.46	9.23	9.70	9.71	9.46	9.57
9	9.57	9.76	9.65	9.42	8.99	9.09	9.23	9.17	9.56	9.71	9.31	9.48
10	9.70	9.57	9.52	9.43	9.04	9.08	9.02	9.14	9.58	9.64	9.37	9.28
11	9.74	9.41	9.58	9.46	9.08	9.07	8.94	9.21	9.62	9.65	9.70	9.14
12	9.34	9.62	9.55	9.43	9.12	9.03	9.18	9.26	9.62	9.72	9.89	9.31
13	9.71	9.61	9.48	9.36	9.14	9.01	9.36	9.29	9.62	9.62	9.70	9.41
14	9.66	9.59	9.48	9.30	9.10	9.01	9.42	9.31	9.60	9.66	9.60	9.37
15	9.76	9.57	9.58	9.35	9.08	8.98	9.20	9.30	9.57	9.85	9.64	9.35
16	9.69	9.55	9.58	9.38	9.08	8.94	8.98	9.27	9.55	9.77	9.56	9.33
17	9.57	9.54	9.52	9.36	9.03	8.88	8.81	9.27	9.60	9.52	9.50	9.32
18	9.44	9.54	9.50	9.34	9.00	9.02	8.70	9.32	9.59	9.53	9.48	9.31
19	9.52	9.57	9.58	9.34	8.99	9.04	8.96	9.37	9.66	9.60	9.45	9.30
20	9.53	9.58	9.62	9.31	9.02	9.02	9.52	9.51	9.60	9.64	9.66	9.29
21	9.51	9.52	9.64	9.28	9.05	9.11	9.44	9.52	9.67	9.65	9.59	9.30
22	9.57	9.47	9.63	9.29	9.11	9.03	9.49	9.52	9.63	9.61	9.42	9.28
23	9.47	9.47	9.61	9.27	9.17	9.01	9.38	9.51	9.63	9.31	9.32	9.24
24	9.41	9.48	9.60	9.24	9.33	8.95	9.29	9.50	9.66	9.06	9.47	9.19
25	9.35	9.47	9.58	9.27	9.33	9.22	9.25	9.51	9.56	9.09	9.44	9.15
26	9.42	9.61	9.57	9.27	9.29	9.11	9.46	9.50	9.58	9.49	9.41	9.11
27	9.46	9.60	9.55	9.24	9.31	8.98	9.47	9.52	9.60	9.53	9.40	9.07
28	9.47	9.35	9.51	9.21	9.31	8.90	9.46	9.60	9.74	9.56	9.38	9.04
29	9.47	9.13	9.48	9.23	9.29	8.90	9.47	9.61	9.73	9.42	9.41	9.07
30	9.47	9.12	9.45	9.22	---	8.91	9.30	9.66	9.77	9.40	9.40	9.36
31	9.45	---	9.40	9.22	---	9.21	---	9.74	---	9.36	9.51	---
MEAN	9.55	9.55	9.49	9.33	9.09	9.05	9.30	9.41	9.62	9.58	9.47	9.32
MAX	9.76	10.21	9.65	9.46	9.33	9.24	9.52	9.74	9.79	10.02	9.89	9.59
MIN	9.34	9.12	9.21	9.21	8.59	8.88	8.70	9.14	9.32	9.06	9.31	9.04

CAL YR 1987 MEAN 9.40 MAX 10.21 MIN 8.77
WTR YR 1988 MEAN 9.40 MAX 10.21 MIN 8.59

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.--Records poor. Flow affected by regulation downstream at Deerfield Beach and upstream storage releases at control structure S-39. Negative figures indicate flow to the west.

AVERAGE DISCHARGE.--12 years (1977-88), 210 ft³/s, 152,100 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, 759 ft³/s Jan. 15; maximum gage height, 10.31 ft Nov. 4; minimum daily discharge, 33 ft³/s May 14; minimum gage height, 4.96 ft Aug. 27.

DISCHARGE, IN 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	202	113	102	69	e287	137	185	508	71	250	729	648
2	203	117	110	143	e275	138	206	328	103	216	733	466
3	110	141	108	205	e127	129	183	92	67	160	733	94
4	102	437	85	193	e134	53	201	90	66	161	712	119
5	138	520	56	130	e132	65	207	38	63	137	574	116
6	82	514	74	78	e131	109	199	58	160	170	107	131
7	78	375	110	124	e134	95	189	129	306	316	91	e205
8	98	197	148	179	e193	106	171	152	442	404	411	e176
9	86	321	477	192	e282	152	111	126	316	403	666	e155
10	303	464	252	227	e155	130	154	140	129	366	666	e151
11	151	247	130	466	117	102	159	147	210	170	471	e154
12	422	146	119	678	159	114	151	140	208	192	541	e168
13	626	123	92	704	151	103	173	103	317	268	690	e166
14	425	175	130	734	151	107	168	33	316	715	675	e179
15	267	189	111	759	108	104	147	37	235	680	643	e176
16	203	175	134	746	128	126	155	53	252	560	639	e155
17	109	124	69	725	124	126	144	60	180	351	466	107
18	87	97	97	747	138	146	146	57	139	348	710	92
19	99	182	97	717	141	107	152	91	112	381	689	103
20	84	217	66	e572	67	106	119	180	125	359	532	127
21	71	93	83	e220	218	147	74	138	159	287	691	100
22	48	67	80	e141	115	137	145	123	90	223	726	140
23	60	86	142	e134	95	139	119	115	122	142	729	105
24	45	83	190	e131	207	152	108	59	118	143	731	133
25	36	76	132	e273	416	161	125	71	115	189	730	104
26	49	272	132	e247	471	140	162	46	101	153	630	115
27	55	570	125	e283	143	121	148	75	110	126	308	116
28	66	227	107	e286	93	157	128	35	161	414	428	114
29	89	96	111	e288	131	167	127	35	113	694	605	131
30	56	82	123	e288	---	184	127	51	147	709	595	154
31	55	---	128	e288	---	193	---	63	---	711	574	---
TOTAL	4505	6526	3920	10967	5023	3953	4583	3373	5053	10398	18225	4900
MEAN	145	218	126	354	173	128	153	109	168	335	588	163
MAX	626	570	477	759	471	193	207	508	442	715	733	648
MIN	36	67	56	69	67	53	74	33	63	126	91	92
AC-FT	8940	12940	7780	21750	9960	7840	9090	6690	10020	20620	36150	9720

CAL YR 1987 TOTAL 68838 MEAN 189 MAX 764 MIN 11 AC-FT 136500
WTR YR 1988 TOTAL 81426 MEAN 222 MAX 759 MIN 33 AC-FT 161500

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

53

02281400 HILLSBORO CANAL NEAR MARGATE, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.02	7.99	8.02	7.77	8.11	7.60	7.32	8.22	8.15	7.08	6.92	6.49
2	8.01	7.96	8.00	8.00	7.79	7.65	7.51	8.07	8.01	8.02	6.85	6.75
3	7.97	8.20	7.71	8.04	7.20	7.72	7.32	7.98	7.97	8.01	6.80	7.96
4	8.02	9.75	7.59	7.99	7.57	7.87	7.41	7.91	7.97	7.97	6.75	8.00
5	8.03	8.58	7.72	7.98	7.44	7.94	7.49	7.87	7.95	7.99	6.95	7.77
6	8.00	7.92	7.90	8.01	7.43	7.91	7.49	7.68	7.84	7.99	7.18	7.90
7	7.96	7.22	8.02	8.03	7.56	7.85	7.52	7.18	7.16	7.74	7.21	8.05
8	8.09	8.14	8.04	8.01	7.90	7.31	7.60	7.66	7.79	7.60	7.55	7.88
9	7.90	8.49	7.60	8.01	7.98	7.33	7.48	7.96	6.52	7.27	6.96	6.91
10	7.74	7.58	7.56	8.03	7.79	7.85	7.47	7.61	7.66	7.12	6.97	6.70
11	8.01	7.77	7.99	7.52	7.16	7.36	7.78	7.42	7.99	8.08	6.27	6.85
12	8.54	7.92	7.94	6.92	7.27	7.51	7.31	7.19	7.75	8.01	6.49	7.51
13	8.19	7.96	8.03	6.86	7.29	7.66	7.22	7.27	7.36	8.17	7.29	7.40
14	7.82	7.99	7.99	6.97	7.39	7.82	7.24	7.59	7.03	8.07	7.33	7.99
15	8.12	7.98	7.95	7.13	7.67	7.19	7.50	7.52	7.53	8.21	8.06	7.85
16	8.06	7.98	7.96	6.93	7.80	7.09	7.72	7.37	8.04	7.35	7.39	7.49
17	7.98	7.96	7.90	6.74	7.17	7.16	7.68	7.26	8.00	7.59	7.11	7.16
18	7.95	7.98	7.77	6.85	7.42	7.35	7.71	7.74	7.99	7.79	7.03	6.98
19	7.99	8.06	7.45	6.79	7.57	7.79	7.55	7.56	7.97	7.55	6.83	6.79
20	7.97	8.10	7.63	6.94	7.74	7.83	7.94	7.25	7.96	8.10	7.04	6.95
21	7.94	7.84	7.73	7.50	8.02	7.44	7.59	7.67	7.72	7.90	7.14	7.28
22	8.01	7.76	7.80	7.96	8.04	7.36	7.40	7.73	7.59	8.03	7.21	7.36
23	8.02	7.67	7.98	7.59	8.06	7.29	7.78	7.78	8.00	7.98	7.03	7.48
24	7.94	7.47	8.01	7.38	7.99	7.44	7.59	7.58	7.99	7.98	7.02	7.68
25	7.83	7.71	7.97	7.62	7.39	7.34	7.20	7.40	8.00	8.02	7.01	7.24
26	7.80	8.16	7.75	6.98	6.97	7.60	7.06	7.48	7.96	7.98	6.61	7.29
27	7.72	6.86	7.27	8.01	7.56	7.30	7.25	7.11	7.91	8.01	5.56	7.54
28	7.21	7.71	7.06	8.08	7.55	7.44	7.42	7.63	8.00	7.29	6.29	7.72
29	7.68	7.99	6.88	8.13	7.40	7.48	7.47	7.81	7.98	6.88	6.45	7.64
30	7.52	7.99	7.14	8.13	---	7.62	7.69	7.87	7.90	6.92	6.15	7.44
31	7.80	---	7.45	8.14	---	7.46	---	8.01	---	6.91	6.02	---
MEAN	7.93	7.96	7.74	7.58	7.59	7.53	7.49	7.63	7.79	7.73	6.89	7.40
MAX	8.54	9.75	8.04	8.14	8.11	7.94	7.94	8.22	8.15	8.21	8.06	8.05
MIN	7.21	6.86	6.88	6.74	6.97	7.09	7.06	7.11	6.52	6.88	5.56	6.49

CAL YR 1987 MEAN 7.69 MAX 9.75 MIN 6.15
WTR YR 1988 MEAN 7.60 MAX 9.75 MIN 5.56

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.--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.--47 years (water years 1941-86, 88), 313 ft³/s, 226,800 acre-ft/yr.

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, 3,180 ft³/s (estimated), Nov. 4; maximum gage height, 8.38 ft Nov. 9; minimum daily discharge, 20 ft³/s, estimated leakage, many days during year; minimum gage height, 2.10 ft Aug. 27.

DISCHARGE, IN 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	e642	e563	222	20	521	20	20	1370	466	711	1350	1100
2	e798	e440	100	303	272	20	20	895	494	626	1220	610
3	e191	e869	20	537	20	20	20	390	302	492	1290	20
4	e105	e3090	20	498	20	20	20	199	392	417	1270	20
5	e193	e3180	20	306	20	136	20	20	206	418	809	20
6	20	e2150	20	110	20	210	20	20	937	528	20	199
7	20	e983	110	212	20	20	20	20	1330	1100	20	412
8	22	e955	329	513	508	20	20	20	1400	1280	1050	942
9	e76	e1770	1270	510	405	20	20	20	1050	1320	1520	1360
10	e1060	e1230	530	737	118	123	20	20	451	1120	1540	1240
11	e562	e1070	198	1310	20	20	20	20	896	409	1380	1260
12	e2030	e795	209	1490	20	20	20	20	1110	491	1400	1440
13	e1540	379	109	1400	20	20	20	20	1260	874	1670	610
14	970	523	197	1430	20	105	20	20	1010	1570	1660	112
15	1040	497	109	1540	20	20	20	20	569	1700	1660	104
16	692	451	298	1420	214	20	20	20	664	1430	1390	20
17	e465	214	115	1310	20	20	20	20	504	1280	1200	20
18	e336	107	20	1370	20	20	20	20	396	1030	1440	20
19	e223	559	20	1350	20	271	20	20	305	948	1230	20
20	e209	808	20	1230	20	137	199	20	295	944	1370	20
21	e122	208	20	476	581	20	20	20	407	783	1280	20
22	20	20	116	107	211	20	20	20	176	672	1320	20
23	e124	20	292	20	205	20	20	20	318	530	1280	20
24	20	20	402	20	579	20	20	20	312	539	1290	20
25	20	109	128	803	992	20	20	20	374	628	1260	20
26	20	1090	107	686	566	20	20	20	242	410	1190	20
27	20	1150	20	275	20	20	20	20	327	306	684	20
28	20	446	20	363	20	20	20	20	411	1060	976	20
29	20	413	20	616	20	20	20	20	304	1520	1140	20
30	20	218	20	582	---	20	245	258	545	1520	1040	20
31	e164	---	20	629	---	20	---	389	---	1500	969	---
TOTAL	11764	24327	5101	22173	5512	1482	1004	4001	17453	28156	36918	9749
MEAN	379	811	165	715	190	47.8	33.5	129	582	908	1191	325
MAX	2030	3180	1270	1540	992	271	245	1370	1400	1700	1670	1440
MIN	20	20	20	20	20	20	20	20	176	306	20	20
AC-FT	23330	48250	10120	43980	10930	2940	1990	7940	34620	55850	73230	19340

WTR YR 1988 TOTAL 167640 MEAN 458 MAX 3180 MIN 20 AC-FT 332500

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

55

02281500 HILLSBORO CANAL NEAR DEERFIELD BEACH, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.58	7.72	7.85	7.68	7.61	7.48	7.14	6.90	7.89	5.68	3.37	2.81
2	7.54	7.73	7.84	7.77	7.48	7.52	7.31	7.51	7.63	7.58	3.06	4.65
3	7.78	7.58	7.58	7.67	7.07	7.58	7.14	7.70	7.75	7.66	3.14	7.86
4	7.86	6.22	7.49	7.65	7.44	7.78	7.23	7.76	7.72	7.68	3.50	7.89
5	7.80	4.17	7.64	7.76	7.33	7.81	7.30	7.82	7.78	7.72	4.70	7.65
6	7.90	4.10	7.81	7.87	7.31	7.75	7.32	7.63	6.63	7.64	7.06	7.69
7	7.86	4.77	7.87	7.82	7.42	7.76	7.36	7.08	4.70	6.11	7.11	7.72
8	7.96	7.61	7.75	7.68	7.49	7.20	7.46	7.54	3.86	5.55	5.72	7.07
9	7.76	6.08	5.33	7.65	7.70	7.19	7.39	7.86	3.11	5.14	3.64	4.54
10	6.38	4.16	7.10	7.55	7.65	7.71	7.35	7.50	7.27	6.01	3.70	4.01
11	7.65	6.66	7.83	5.63	7.05	7.24	7.67	7.31	7.36	7.74	3.23	4.21
12	6.05	7.33	7.77	3.53	7.15	7.38	7.22	7.07	6.53	7.64	3.41	5.16
13	4.32	7.71	7.90	3.30	7.17	7.54	7.10	7.16	5.03	7.14	4.23	6.13
14	5.89	7.68	7.82	3.40	7.25	7.69	7.11	7.52	5.70	4.02	4.12	7.83
15	7.51	7.66	7.81	3.74	7.55	7.09	7.39	7.46	6.92	4.44	4.34	7.69
16	7.59	7.65	7.75	3.55	7.62	6.97	7.60	7.31	7.57	4.33	3.61	7.36
17	7.69	7.77	7.79	3.22	7.03	7.02	7.57	7.18	7.65	6.44	5.05	7.04
18	7.74	7.84	7.67	3.33	7.26	7.18	7.59	7.67	7.71	6.90	3.55	6.87
19	7.80	7.66	7.35	3.31	7.41	7.58	7.42	7.48	7.77	6.54	3.14	6.67
20	7.79	7.54	7.55	4.15	7.63	7.67	7.73	7.08	7.74	7.35	3.56	6.81
21	7.80	7.64	7.63	6.74	7.61	7.29	7.51	7.50	7.38	7.27	3.30	7.17
22	7.93	7.64	7.67	7.83	7.85	7.21	7.27	7.57	7.46	7.57	3.35	7.21
23	7.87	7.54	7.76	7.49	7.88	7.12	7.68	7.62	7.76	7.68	3.19	7.37
24	7.85	7.33	7.72	7.23	7.60	7.26	7.49	7.48	7.76	7.63	3.22	7.55
25	7.75	7.55	7.82	6.79	5.74	7.16	7.08	7.27	7.73	7.62	3.23	7.13
26	7.72	6.57	7.61	6.03	4.96	7.45	6.91	7.41	7.79	7.71	3.15	7.17
27	7.62	3.33	7.16	7.67	7.43	7.18	7.11	6.97	7.68	7.75	4.18	7.41
28	7.11	7.21	6.96	7.66	7.46	7.28	7.28	7.55	7.70	5.42	4.01	7.59
29	7.56	7.69	6.77	7.57	7.29	7.32	7.32	7.73	7.75	3.59	2.92	7.49
30	7.44	7.82	7.01	7.57	---	7.45	7.44	7.72	7.31	3.64	2.66	7.29
31	7.69	---	7.31	7.57	---	7.27	---	7.79	---	3.63	2.59	---
MEAN	7.44	6.87	7.51	6.27	7.29	7.39	7.35	7.46	7.02	6.41	3.84	6.70
MAX	7.96	7.84	7.90	7.87	7.88	7.81	7.73	7.86	7.89	7.75	7.11	7.89
MIN	4.32	3.33	5.33	3.22	4.96	6.97	6.91	6.90	3.11	3.59	2.59	2.81
CAL YR 1987	MEAN 7.26		MAX 8.27	MIN 3.03								
WTR YR 1988	MEAN 6.79		MAX 7.96	MIN 2.59								

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.--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, 3.96 ft Nov. 26; minimum, -1.24 ft May 13.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	1.49	.61	.84	.94	.45	1.76	1.02	1.66	1.91	1.77
2	---	---	1.29	.82	.61	.87	.39	1.48	1.11	1.61	1.86	1.13
3	---	---	1.09	1.16	.36	.82	.46	1.04	1.09	1.48	1.81	.39
4	---	---	1.03	1.08	.36	.60	.45	.70	1.08	1.36	1.72	.45
5	---	---	.96	.93	.44	.52	.42	.36	.92	1.31	1.28	.49
6	---	---	.83	1.00	.60	.63	.46	.40	1.66	1.53	.65	.56
7	---	---	.88	1.30	1.07	.47	.59	.43	2.13	2.16	.56	.80
8	---	---	1.06	1.25	1.39	.42	.84	.46	2.56	2.33	1.44	1.45
9	---	---	2.08	1.25	1.21	.48	.77	.48	1.95	2.02	1.85	1.98
10	---	---	1.36	1.25	1.10	.55	.91	.46	1.02	1.69	1.87	1.90
11	---	---	1.13	1.72	.98	.51	.94	.42	1.35	1.07	1.74	2.06
12	---	---	1.10	1.82	.76	.41	.86	.42	1.66	1.07	1.85	2.30
13	e2.91	e1.31	.98	1.78	.61	.39	.80	.22	2.00	1.35	2.09	1.89
14	2.29	1.47	1.02	1.79	.70	.55	.75	.22	1.55	2.46	2.03	1.64
15	2.13	1.43	.85	1.92	.91	.41	.76	.38	1.27	2.76	2.70	1.60
16	2.03	1.54	.82	2.00	.83	.41	.72	.48	1.37	2.06	2.26	1.37
17	---	1.35	.60	1.85	.65	.41	.56	.51	1.23	1.55	1.57	1.18
18	---	1.10	.61	1.85	.76	.55	.59	.58	1.04	1.35	1.98	1.01
19	---	1.42	.71	1.87	.82	.62	.36	.56	.97	1.28	1.94	1.19
20	---	1.70	.65	1.71	.69	.29	.57	.39	.90	1.21	2.23	1.24
21	---	1.33	.63	1.26	1.00	.07	.63	.42	1.02	1.06	2.08	1.07
22	---	1.25	.70	.69	.77	.17	.58	.46	.93	.96	2.05	1.19
23	---	1.23	.94	.53	.90	.29	.57	.38	.99	.79	1.93	1.19
24	---	1.24	1.16	.67	.96	.19	.40	.41	.96	.85	1.94	1.19
25	---	1.24	.83	1.16	1.29	.15	.47	.54	1.00	.89	1.99	1.16
26	---	2.22	.66	.73	.99	.22	.72	.69	.90	.84	2.02	1.16
27	---	2.30	.59	.40	.90	.09	.77	.64	1.04	.87	1.56	1.10
28	---	1.52	.56	.56	1.14	.17	.76	.56	1.12	1.47	1.70	1.03
29	---	1.59	.50	.95	1.00	.26	.71	.59	1.02	1.81	1.82	1.15
30	---	1.48	.59	1.02	---	.27	.88	.76	1.20	1.85	1.69	1.19
31	---	---	.69	1.05	---	.33	---	.87	---	1.89	1.72	---
MEAN	---	---	.92	1.23	.85	.42	.64	.58	1.27	1.50	1.80	1.26
MAX	---	---	2.08	2.00	1.39	.94	.94	1.76	2.56	2.76	2.70	2.30
MIN	---	---	.50	.40	.36	.07	.36	.22	.90	.79	.56	.39

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

57

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 those for estimated daily discharges, which are poor. 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.--27 years, 62.9 ft³/s, 45,570 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, 1,310 ft³/s Aug. 15 estimated; maximum gage height, 4.97 ft July 14; no flow for many days; minimum gage height, 1.96 ft Aug. 19.

DISCHARGE, IN 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	93	.00	.00	.00	.00	148	.00	106	117	237	91	31
2	.00	.00	130	8.5	.00	6.4	.00	58	181	304	141	129
3	.00	204	.00	174	.00	.00	.00	25	.00	144	118	101
4	.00	558	124	.00	.00	.00	.00	.00	133	132	156	24
5	.00	271	.00	50	.00	.00	.00	.00	.00	41	55	171
6	.00	255	90	66	103	.00	.00	.00	137	151	210	.00
7	.00	178	51	.00	.00	.00	.00	.00	217	220	e125	121
8	.00	.00	112	181	.00	.00	.00	.00	451	126	e342	126
9	.00	255	395	.00	141	.00	.00	.00	203	222	e139	112
10	.00	116	112	114	72	104	.00	.00	211	35	e281	61
11	187	134	129	74	46	.00	.00	.00	220	212	e280	129
12	511	.00	115	.00	.00	.00	.00	.00	175	.00	e232	43
13	464	201	182	152	.00	.00	.00	.00	382	175	e168	90
14	298	162	.00	.00	.00	146	.00	.00	128	195	e574	162
15	87	158	128	107	.00	.00	.00	.00	212	211	e1310	112
16	.00	48	144	.00	97	.00	.00	.00	131	184	e334	.00
17	.00	.00	175	.00	.00	.00	.00	.00	160	103	232	.00
18	.00	.00	.00	122	77	.00	.00	.00	37	206	252	.00
19	.00	118	.00	.00	61	.00	.00	.00	181	120	222	169
20	.00	113	129	.00	.00	.00	.00	.00	142	172	395	.00
21	.00	25	.00	127	.00	.00	.00	.00	118	.00	175	.00
22	.00	25	149	.00	.00	.00	.00	.00	174	112	212	157
23	.00	194	.00	.00	57	.00	.00	.00	94	144	150	.00
24	.00	.00	45	65	106	.00	.00	.00	.00	274	120	.00
25	.00	156	101	98	.00	.00	.00	.00	.00	369	187	.00
26	.00	181	.00	.00	.00	.00	.00	.00	.00	285	396	103
27	.00	33	167	.00	.00	.00	.00	.00	101	172	143	23
28	.00	144	.00	.00	.00	.00	.00	.00	33	191	.00	.00
29	.00	77	.00	157	.00	.00	.00	152	.00	104	151	107
30	.00	116	162	.00	---	.00	32	262	63	183	.00	60
31	.00	---	.00	.00	---	.00	---	143	---	121	208	---
TOTAL	1640.00	3722.00	2640.00	1495.50	760.00	404.40	32.00	746.00	4001.00	5145.00	7399.00	2031.00
MEAN	52.9	124	85.2	48.2	26.2	13.0	1.07	24.1	133	166	239	67.7
MAX	511	558	395	181	141	148	32	262	451	369	1310	171
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	3250	7380	5240	2970	1510	802	63	1480	7940	10210	14680	4030

CAL YR 1987 TOTAL 17215.70 MEAN 47.2 MAX 558 MIN .00 AC-FT 34150
WTR YR 1988 TOTAL 30015.90 MEAN 82.0 MAX 1310 MIN .00 AC-FT 59540

e Estimated

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.53	4.29	4.55	4.51	4.50	4.35	4.47	4.40	4.22	4.08	4.33	4.54
2	4.50	4.43	4.34	4.62	4.56	4.18	4.46	4.52	4.34	4.10	4.29	4.26
3	4.48	4.42	4.57	4.11	4.59	4.34	4.45	4.45	4.54	4.38	4.37	4.52
4	4.40	4.11	4.36	4.50	4.61	4.43	4.44	4.48	4.37	4.40	4.24	4.41
5	4.33	4.27	4.54	4.59	4.64	4.48	4.40	4.49	4.42	4.53	4.48	4.35
6	4.27	4.13	4.54	4.31	4.42	4.53	4.36	4.44	4.45	4.22	4.17	4.35
7	4.31	3.97	4.29	4.55	4.42	4.54	4.34	4.39	4.27	4.32	4.39	4.42
8	4.38	4.45	4.46	4.17	4.58	4.54	4.28	4.37	4.33	4.33	4.04	4.39
9	4.41	4.17	4.19	4.42	4.33	4.58	4.22	4.35	4.23	4.32	4.09	4.49
10	4.49	4.36	4.31	4.48	4.31	4.40	4.20	4.35	4.21	4.42	4.27	4.28
11	4.29	4.34	4.35	4.21	4.19	4.39	4.23	4.34	4.17	4.15	4.24	4.44
12	4.39	4.51	4.39	4.54	4.39	4.45	4.22	4.32	4.33	4.57	4.22	4.32
13	4.29	4.23	4.22	4.33	4.47	4.52	4.21	4.30	4.01	4.22	4.32	4.49
14	4.14	4.03	4.52	4.43	4.51	4.19	4.16	4.29	4.33	4.44	3.87	4.05
15	4.07	3.86	4.36	4.47	4.56	4.17	4.15	4.25	4.06	4.43	3.05	3.87
16	4.43	3.94	4.34	4.41	4.34	4.29	4.14	4.19	4.38	4.32	2.62	4.20
17	4.51	4.29	4.19	4.59	4.39	4.32	4.12	4.21	4.37	4.25	3.70	4.41
18	4.51	4.49	4.33	4.35	4.35	4.35	4.10	4.41	4.31	4.31	4.40	4.54
19	4.50	4.38	4.56	4.49	4.12	4.49	4.10	4.43	4.28	4.36	4.23	4.27
20	4.44	4.39	4.34	4.60	4.32	4.54	4.14	4.41	4.30	4.28	4.04	4.32
21	4.34	4.55	4.54	4.36	4.49	4.55	4.13	4.38	4.29	4.48	4.24	4.55
22	4.14	4.64	4.32	4.47	4.56	4.54	4.13	4.35	3.98	4.37	4.25	4.19
23	4.03	4.23	4.47	4.58	4.56	4.51	4.18	4.31	3.90	4.46	4.38	4.47
24	3.96	4.36	4.59	4.55	4.13	4.51	4.23	4.27	4.23	4.20	4.20	4.57
25	3.92	4.30	4.25	4.16	4.43	4.51	4.25	4.24	4.39	4.11	4.26	4.64
26	3.94	4.26	4.57	4.44	4.50	4.51	4.28	4.21	4.48	4.23	3.79	4.45
27	3.88	4.51	4.25	4.53	4.56	4.52	4.31	4.24	4.45	4.07	3.56	4.46
28	3.79	4.20	4.43	4.58	4.59	4.49	4.31	4.54	4.36	4.28	4.42	4.63
29	3.83	4.52	4.61	4.23	4.62	4.49	4.30	4.39	4.56	4.41	4.30	4.51
30	4.01	4.13	4.38	4.19	---	4.52	4.30	4.27	4.55	4.25	4.50	4.17
31	4.16	---	4.29	4.39	---	4.49	---	4.36	---	4.40	4.23	---
MEAN	4.25	4.29	4.40	4.42	4.45	4.44	4.25	4.35	4.30	4.31	4.11	4.39
MAX	4.53	4.64	4.61	4.62	4.64	4.58	4.47	4.54	4.56	4.57	4.50	4.64
MIN	3.79	3.86	4.19	4.11	4.12	4.17	4.10	4.19	3.90	4.07	2.62	3.87

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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

LOCATION.--Lat 26°08'05", long 80°11'42", in SW $\frac{1}{4}$ 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.--Records 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.--25 years (water years 1963 - 86, 88), 20.0 ft³/s, 14,490 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, 748 ft³/s July 3, 4 (estimated); maximum gage height, 5.19 ft July 25; no flow for many days; minimum gage height, 1.03 ft Nov. 5.

DISCHARGE, IN 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	e32	e.00	e.00	e.00	e.00	6.0	.00	.00	e.00	e19	8.8	14
2	e26	e.00	e.00	e.00	e.00	2.4	.00	.00	e9.0	e76	.00	15
3	e22	e213	e.00	e.00	e.00	.00	.00	.00	e5.3	e748	.00	.00
4	e7.9	e313	e.00	e.00	e.00	.00	.00	.00	e.00	e748	.00	.00
5	e37	e127	e.00	e.00	e.00	.00	.00	.00	e.00	e419	.00	.00
6	e.00	e63	e.00	e.00	e.00	.00	.00	.00	e11	e59	.00	.00
7	e11	e21	e.00	e.00	e.00	.00	.00	.00	e41	e42	12	7.1
8	e.00	e11	e.00	e11	e.00	.00	.00	.00	e36	e49	40	.00
9	e9.0	e9.9	e28	e.00	e5.9	.00	.00	.00	e13	e32	19	.00
10	e12	e18	e19	e9.3	e.00	.00	.00	.00	e23	e19	41	.00
11	e9.9	e15	e16	e.00	e.00	.00	.00	.00	e24	e9.2	37	.00
12	e101	e13	e11	e.00	e.00	.00	.00	.00	e66	e13	43	.00
13	e25	e7.9	e8.2	e.00	e.00	.00	.00	.00	e61	e14	27	.00
14	e18	e.00	e8.3	e.00	e.00	.00	.00	.00	e59	e21	57	.00
15	e25	e.00	e.00	e5.8	e.00	.00	.00	.00	e56	e11	130	.00
16	e36	e.00	e5.6	e.00	e.00	.00	.00	.00	e54	e.00	72	.00
17	e18	e.00	e7.2	e.00	e.00	.00	.00	.00	e27	e.00	21	.00
18	e18	e.00	e11	e.00	e.00	.00	.00	.00	e30	e16	28	.00
19	e8.1	e9.2	e.00	e.00	e.00	.00	.00	.00	e31	e26	19	.00
20	e400	e12	e11	e.00	e.00	.00	.00	.00	e32	e12	24	.00
21	e400	e.00	e6.3	e.00	e.00	.00	.00	.00	e16	e.00	21	.00
22	e9.4	e.00	e.00	e9.8	e.00	.00	.00	.00	e22	e15	25	.00
23	e6.4	e.00	e.00	e.00	.00	.00	.00	.00	e3.1	.00	14	.00
24	e.00	e.00	e9.6	e.00	.00	.00	.00	e.00	e12	.00	.00	.00
25	e.00	e8.9	e.00	e.00	.00	.00	.00	e.00	e.00	.00	7.2	.00
26	e11	e16	e.00	e.00	10	.00	.00	e.00	e19	50	17	.00
27	e52	e12	e.00	e.00	13	.00	.00	e.00	e16	30	11	.00
28	e116	e11	e.00	e.00	12	.00	.00	e.00	e11	30	.00	.00
29	e52	e14	e.00	e.00	293	.00	.00	e.00	e.00	15	.00	.00
30	e.00	e14	e.00	e.00	---	.00	.00	e87	e8.9	7.6	.00	.00
31	e.00	e---	e12	e.00	---	.00	---	e215	---	.00	6.8	---
TOTAL	1462.70	908.90	154.20	35.90	333.90	8.40	.00	302.00	686.30	2480.80	680.80	36.10
MEAN	47.2	30.3	4.97	1.16	11.5	.27	.000	9.74	22.9	80.0	22.0	1.20
MAX	400	313	28	11	293	6.0	.00	215	66	748	130	15
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	2900	1800	306	71	662	17	.00	599	1360	4920	1350	72

WTR YR 1988 TOTAL 7090.00 MEAN 19.4 MAX 748 MIN .00 AC-FT 14060

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.48	3.23	3.52	3.42	3.29	2.99	2.80	3.31	3.49	3.49	3.49	3.51
2	3.43	3.38	3.51	3.44	3.28	3.01	2.78	3.46	3.57	3.24	3.46	3.52
3	3.44	3.39	3.50	3.47	3.26	3.10	2.73	3.47	3.51	2.53	3.45	3.55
4	3.51	2.25	3.48	3.51	3.26	3.18	2.71	3.45	3.49	2.13	3.42	3.52
5	3.38	2.17	3.42	3.51	3.28	3.15	2.68	3.41	3.47	2.68	3.41	3.51
6	3.59	3.33	3.37	3.48	3.25	3.17	2.65	3.35	3.45	3.31	3.37	3.49
7	3.46	3.45	3.31	3.46	3.21	3.19	2.63	3.20	3.47	3.27	3.41	3.44
8	3.50	3.51	3.31	3.42	3.31	3.17	2.60	3.05	3.45	3.36	3.43	3.45
9	3.41	3.48	3.42	3.48	3.29	3.13	2.54	2.95	3.53	3.48	3.44	3.44
10	3.49	3.39	3.41	3.53	3.34	3.18	2.53	2.87	3.54	3.51	3.41	3.40
11	3.51	3.49	3.47	3.56	3.40	3.15	2.65	2.81	e3.50	3.56	3.40	3.37
12	3.31	3.47	3.53	3.62	3.43	3.06	2.73	2.78	e3.29	3.52	3.39	3.33
13	3.48	3.44	3.53	3.63	3.36	3.05	2.77	2.77	e3.29	3.54	3.43	3.28
14	3.71	3.50	3.50	3.60	3.31	3.08	2.75	2.78	e3.23	3.49	3.40	3.23
15	3.39	3.50	3.60	3.56	3.28	3.03	2.77	2.76	3.40	3.40	3.29	3.19
16	3.39	3.48	3.52	3.59	3.30	2.91	2.87	2.71	3.38	3.48	3.35	3.20
17	3.43	3.48	3.56	3.60	3.26	2.81	2.96	2.66	3.44	3.51	3.45	3.15
18	3.45	3.53	3.54	3.60	3.22	2.81	3.01	2.66	3.45	3.50	3.43	3.09
19	3.50	3.51	3.62	3.57	3.28	2.95	3.04	2.75	3.51	3.45	3.47	3.07
20	3.24	3.43	3.49	3.54	3.22	3.06	3.11	2.83	3.50	3.51	3.43	3.02
21	3.05	3.61	3.60	3.53	3.38	3.08	3.13	2.85	3.56	3.54	3.45	3.00
22	3.40	3.59	3.57	3.46	3.46	3.06	3.13	2.82	3.54	3.44	3.22	2.97
23	3.38	3.55	3.63	3.47	3.51	2.98	3.12	2.76	3.60	3.44	3.47	2.98
24	3.45	3.50	3.54	3.45	3.56	2.91	3.11	2.64	3.54	3.75	3.58	2.96
25	3.47	3.44	3.61	3.50	3.55	2.89	3.11	2.53	3.62	4.77	3.50	2.93
26	3.34	3.50	3.62	3.50	3.41	2.86	3.11	2.50	3.51	3.82	3.52	2.91
27	3.40	3.49	3.61	3.45	3.08	2.85	3.10	2.52	3.47	3.41	3.50	2.91
28	3.10	3.55	3.60	3.39	2.97	2.83	3.11	2.70	3.49	3.44	3.61	2.95
29	3.01	3.51	3.59	3.37	2.95	2.82	3.10	3.00	3.52	3.45	3.59	2.93
30	3.16	3.46	3.54	3.32	---	2.85	3.08	3.39	3.45	3.47	3.56	2.98
31	3.19	---	3.42	3.30	---	2.81	---	3.22	---	3.58	3.53	---
MEAN	3.39	3.39	3.51	3.49	3.30	3.00	2.88	2.93	3.48	3.42	3.45	3.21
MAX	3.71	3.61	3.63	3.63	3.56	3.19	3.13	3.47	3.62	4.77	3.61	3.55
MIN	3.01	2.17	3.31	3.30	2.95	2.81	2.53	2.50	3.23	2.13	3.22	2.91

CAL YR 1987 MEAN 3.38 MAX 4.55 MIN 2.17
WTR YR 1988 MEAN 3.29 MAX 4.77 MIN 2.13

e Estimated

02283498 NORTH NEW RIVER CANAL AT S-2 AND HGS-4, NEAR SOUTH BAY, FL

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 hurricane gate structure 4, 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.--Record fair except those estimated which are poor.. 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 or by the operation of pump station No. 2 (negative figures indicate flow reversed). See records for North New River Canal below HGS-4, near South Bay (station 02283500) for table of daily 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.--21 years, 57.2 ft³/s, 41,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,440 ft³/s Mar. 15, 1985; 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, 1,470 ft³/s May 17, estimated; maximum gage height, 13.10 ft July 23; maximum daily reverse flow, 1830 ft³/s Nov. 4; no flow for many days; minimum gage height, 9.39 ft Oct. 11.

DISCHARGE, IN 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	.00	.00	.00	.00	.00	1250	1230	e63	455	607	.00	.00
2	.00	.00	.00	.00	.00	1240	1240	.00	573	609	.00	.00
3	.00	.00	.00	.00	.00	1220	1230	.00	588	596	.00	.00
4	.00	.00	.00	.00	.00	419	1240	.00	615	599	.00	.00
5	.00	.00	.00	.00	.00	.00	1230	343	605	395	.00	.00
6	.00	-752	.00	.00	.00	.00	1230	568	257	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	1280	555	.00	.00	.00	.00
8	159	.00	.00	.00	.00	669	1280	564	.00	.00	.00	.00
9	240	.00	.00	.00	.00	1210	1280	564	.00	.00	.00	.00
10	83	.00	.00	.00	.00	393	1270	796	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	889	1240	1190	.00	.00	.00	.00
12	-370	.00	.00	.00	.00	1240	1230	1290	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	1230	1260	681	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	1250	1250	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	1260	1250	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	1250	1260	e1130	621	.00	.00	.00
17	.00	.00	139	.00	.00	1230	1250	e1470	1190	.00	.00	.00
18	.00	.00	336	.00	.00	544	1220	e1140	1150	.00	.00	.00
19	.00	.00	329	.00	223	.00	1220	e797	390	.00	.00	245
20	.00	.00	329	.00	335	.00	1090	108	.00	.00	.00	893
21	.00	.00	184	.00	347	765	980	299	202	.00	.00	974
22	.00	.00	.00	.00	319	1290	1170	298	744	.00	.00	951
23	.00	.00	.00	.00	334	1260	1180	851	812	-62	.00	930
24	.00	.00	.00	.00	217	1260	1190	380	456	-965	.00	914
25	.00	.00	.00	.00	780	1270	1190	.00	597	.00	.00	901
26	183	.00	.00	362	1280	1060	1220	.00	592	.00	.00	892
27	286	.00	.00	230	1250	.00	1240	672	584	.00	.00	888
28	290	.00	.00	.00	1240	468	1210	1160	318	.00	.00	299
29	445	.00	.00	.00	1240	667	1320	842	391	.00	.00	122
30	369	.00	.00	.00	---	1020	1080	.00	612	.00	.00	318
31	.00	---	.00	.00	---	1210	---	.00	---	.00	.00	---
TOTAL	1685.00	-752.00	1317.00	592.00	7565.00	25564.00	36560	15761.00	11752.00	1779.00	.00	8327.00
MEAN	54.4	-25.1	42.5	19.1	261	825	1219	508	392	57.4	.000	278
MAX	445	.00	336	362	1280	1290	1320	1470	1190	609	.00	974
MIN	-370	-752	.00	.00	.00	.00	980	.00	.00	-965	.00	.00
AC-FT	3340	-1490	2610	1170	15010	50710	72520	31260	23310	3530	.00	16520

CAL YR 1987 TOTAL 78813.00 MEAN 216 MAX 1450 MIN -752 AC-FT 156300
WTR YR 1988 TOTAL 110150.00 MEAN 301 MAX 1470 MIN -965 AC-FT 218500

e Estimated

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.80	14.44	15.99	16.07	16.11	16.35	16.15	15.57	15.27	15.24	15.54	15.78
2	13.76	14.53	16.09	16.12	16.13	16.24	16.12	15.89	15.31	15.26	15.51	15.79
3	13.75	14.51	16.02	16.09	16.15	16.14	16.09	15.60	15.20	15.23	15.53	15.82
4	13.85	14.77	16.08	16.19	16.14	16.16	16.11	15.60	15.22	15.23	15.54	15.89
5	13.78	14.91	16.24	16.51	16.26	16.31	16.19	15.73	15.14	15.35	15.53	15.98
6	13.61	15.23	16.08	16.25	16.81	16.38	16.17	15.85	15.19	15.20	15.51	15.97
7	13.58	15.12	15.98	16.01	16.32	16.39	16.44	15.66	15.28	15.18	15.49	15.85
8	13.89	14.98	15.99	16.08	16.40	16.25	16.22	15.57	15.21	15.14	15.52	15.87
9	13.61	14.99	16.04	16.26	16.44	16.17	16.08	15.43	15.37	15.15	15.54	15.98
10	13.69	15.03	16.07	16.23	16.41	16.45	16.03	15.41	15.44	15.21	15.49	16.04
11	13.61	15.29	16.11	16.39	16.33	16.45	16.03	15.40	15.53	15.18	15.59	16.12
12	14.26	15.38	16.06	16.21	16.45	16.17	16.07	15.35	15.56	15.16	15.63	16.13
13	14.67	15.12	16.09	16.14	16.55	16.17	16.24	15.38	15.49	15.13	15.69	16.11
14	14.49	15.05	16.04	16.34	16.33	16.44	16.04	15.49	15.42	15.25	15.59	16.04
15	14.38	15.06	15.99	16.32	16.18	16.64	15.94	15.51	15.48	15.22	15.61	16.07
16	14.40	14.97	16.39	16.15	16.43	16.45	15.94	15.46	15.44	15.22	15.71	16.10
17	14.33	14.95	16.44	16.04	16.32	16.23	15.93	15.40	15.34	15.20	15.79	16.12
18	14.39	15.09	16.21	16.05	16.26	16.01	15.76	15.43	15.28	15.24	15.74	16.17
19	14.29	15.14	16.06	16.00	16.25	16.62	15.67	15.42	15.26	15.24	15.83	16.16
20	14.30	15.65	16.08	15.98	16.18	16.61	15.89	15.44	15.33	15.21	15.93	16.16
21	14.37	15.80	16.08	15.95	16.68	16.42	15.83	15.38	15.32	15.30	15.86	16.14
22	14.60	15.51	16.09	16.40	16.45	16.39	15.82	15.37	15.32	15.28	15.80	16.11
23	14.44	15.52	16.14	16.34	16.35	16.29	15.78	15.31	15.30	15.36	15.82	16.05
24	14.34	15.60	16.10	16.27	16.39	16.29	15.73	15.30	15.30	15.47	15.81	16.02
25	14.41	15.61	16.08	16.30	16.74	16.31	15.69	15.38	15.28	15.47	15.77	16.01
26	14.37	15.70	16.12	16.31	16.74	16.28	15.69	15.37	15.21	15.45	15.75	16.00
27	14.31	15.82	16.13	16.45	16.45	16.33	15.75	15.38	15.24	15.43	15.68	16.01
28	14.43	15.88	16.15	16.55	16.35	16.33	15.80	15.27	15.23	15.52	15.74	16.02
29	14.66	15.97	16.58	16.23	16.35	16.30	15.83	15.26	15.22	15.48	15.71	15.98
30	14.46	16.05	16.46	16.09	---	16.28	15.54	15.24	15.21	15.45	15.70	15.90
31	14.39	---	16.06	16.09	---	16.19	---	15.24	---	15.48	15.75	---
MEAN	14.17	15.26	16.13	16.21	16.38	16.32	15.95	15.45	15.31	15.29	15.67	16.01
MAX	14.67	16.05	16.58	16.55	16.81	16.64	16.44	15.89	15.56	15.52	15.93	16.17
MIN	13.58	14.44	15.98	15.95	16.11	16.01	15.54	15.24	15.14	15.13	15.49	15.78
CAL YR 1987	MEAN	14.81	MAX	16.58	MIN	13.42						
WTR YR 1988	MEAN	15.68	MAX	16.81	MIN	13.58						

02283500 NORTH NEW RIVER CANAL BELOW HGS-4, 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 hurricane gate structure 4 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.--Records poor. Flow regulated by hurricane 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 (negative figures indicate flow reversed). Discharge was the difference in flow between North New River Canal at S-2 and HGS-4 and Hillsboro Canal below HGS-4 February 1957 to June 9, 1987.

AVERAGE DISCHARGE.--31 years, 83.1 ft³/s, 60,200 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, 1,360 ft³/s Feb. 26; maximum gage height, 13.04 ft Nov. 4; maximum daily reverse flow, 810 ft³/s Nov. 4 (estimated); minimum gage height, 9.37 ft Oct. 11.

DISCHARGE, IN 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	-35	197	140	56	49	1030	924	11	474	195	28	115
2	-24	232	169	69	33	1070	967	-116	212	213	376	30
3	-64	e350	59	80	11	997	949	-118	265	166	262	-14
4	-115	e-810	100	82	51	171	941	-219	163	237	-115	-7.2
5	-74	e-710	78	112	35	177	971	94	190	106	.10	-85
6	-76	144	6.7	71	84	194	956	125	70	107	287	-92
7	-76	664	2.5	73	78	-17	1070	99	-159	160	199	-126
8	256	551	32	-23	311	540	1010	134	-229	393	-86	144
9	254	397	-5.6	56	-49	958	1020	179	-149	715	356	-43
10	142	171	-7.5	367	115	551	996	583	-131	558	158	50
11	78	367	32	394	53	666	974	1050	-85	171	15	-90
12	-7.7	540	29	103	105	971	1070	903	-173	84	-134	-123
13	482	175	35	167	74	965	1000	475	-141	89	-249	-260
14	120	194	59	64	49	1000	1010	-123	-35	93	-135	117
15	149	238	32	125	-28	1080	948	75	-148	120	365	166
16	43	225	130	105	29	978	935	838	359	78	145	171
17	44	142	199	65	-19	981	964	1150	358	117	142	69
18	38	150	347	155	37	473	939	901	108	84	361	-33
19	28	199	192	35	213	167	905	628	17	162	595	243
20	27	201	130	28	127	48	630	124	19	106	209	1070
21	-.80	31	52	-12	682	612	339	253	146	199	151	1060
22	26	1.4	-41	77	558	975	777	176	275	422	502	1130
23	43	11	8.4	78	528	972	761	695	335	629	232	1070
24	48	48	72	13	517	967	882	172	153	-293	478	939
25	34	15	91	294	1010	956	924	-119	177	38	251	947
26	76	248	29	467	1360	872	989	-138	208	-206	229	825
27	60	474	71	117	1160	-49	1000	476	186	-176	447	913
28	59	562	44	-70	1130	369	1110	677	105	-83	242	338
29	270	170	199	58	1200	362	1150	347	193	-99	43	175
30	352	98	60	19	---	633	925	-193	288	-245	148	366
31	70	---	94	76	---	992	---	-32	---	-1.4	60	---
TOTAL	2226.50	5275.4	2438.5	3301	9503	20661	28036	9107	3051	4138.6	5562.10	9064.8
MEAN	71.8	176	78.7	106	328	666	935	294	102	134	179	302
MAX	482	664	347	467	1360	1080	1150	1150	474	715	595	1130
MIN	-115	-810	-41	-70	-49	-49	339	-219	-229	-293	-249	-260
AC-FT	4420	10460	4840	6550	18850	40980	55610	18060	6050	8210	11030	17980

CAL YR 1987 TOTAL 86328.80 MEAN 237 MAX 1260 MIN -810 AC-FT 171200
WTR YR 1988 TOTAL 102364.90 MEAN 280 MAX 1360 MIN -810 AC-FT 203000

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02283500 NORTH NEW RIVER CANAL BELOW HGS-4, NEAR SOUTH BAY, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.89	11.17	10.62	11.04	10.99	11.91	11.85	12.24	11.35	11.03	12.09	10.08
2	10.44	11.33	10.51	11.12	10.97	11.85	11.75	10.82	11.55	11.03	11.03	10.58
3	11.29	11.97	10.74	11.37	10.91	11.88	11.75	10.61	11.24	11.17	10.64	10.69
4	11.40	12.26	11.05	11.38	10.88	11.50	11.72	10.88	10.89	11.14	11.60	10.96
5	11.46	11.78	10.96	11.06	11.02	11.44	11.84	11.04	10.95	11.10	11.74	11.13
6	11.42	11.35	10.92	10.98	10.73	11.32	11.81	11.47	11.33	10.59	11.30	11.27
7	11.18	12.32	10.88	10.73	10.59	11.11	11.76	11.43	10.88	11.03	10.78	10.57
8	10.86	11.19	10.89	10.68	11.10	11.31	11.53	11.28	10.36	11.02	11.46	10.72
9	10.95	10.82	11.09	10.77	11.15	11.96	11.39	11.16	10.14	11.13	11.17	10.85
10	11.23	10.57	11.27	11.39	11.03	11.69	11.44	10.99	10.43	10.61	10.79	10.44
11	9.95	10.70	11.21	11.91	11.23	11.23	11.61	11.32	10.17	11.32	12.13	10.78
12	11.30	10.40	11.18	10.76	11.05	11.77	11.75	11.53	10.32	11.18	11.40	11.17
13	12.45	10.86	11.05	11.21	10.83	11.84	11.68	11.51	10.73	11.36	10.70	11.14
14	11.54	10.87	11.01	11.17	10.66	12.00	11.53	10.76	10.89	11.64	12.05	11.08
15	10.36	10.86	11.08	11.13	10.67	12.10	11.48	10.08	10.52	11.77	12.21	10.90
16	11.08	10.84	11.01	11.03	11.10	11.94	11.42	10.29	10.48	10.47	11.99	10.56
17	10.66	11.02	10.90	10.83	11.09	11.87	11.44	11.62	11.31	11.59	10.96	10.17
18	10.87	10.88	11.02	10.78	10.87	11.57	11.47	11.76	11.50	11.55	10.86	9.88
19	11.22	10.77	11.10	10.63	10.84	11.11	11.38	11.59	11.20	11.63	10.89	10.12
20	11.25	10.75	11.12	10.56	11.06	10.77	11.86	11.29	10.34	10.60	10.57	10.86
21	11.11	10.33	11.10	10.56	11.40	10.93	11.90	11.09	10.43	11.51	10.61	11.33
22	11.00	10.77	10.82	10.94	11.67	11.65	11.87	10.81	11.23	12.29	11.62	11.51
23	10.94	10.82	10.66	11.02	11.20	11.78	11.77	10.96	11.72	12.36	11.02	11.65
24	10.76	10.82	10.95	11.08	11.51	11.73	11.69	11.51	11.38	12.01	10.54	11.77
25	10.56	11.03	10.84	11.28	11.51	11.68	11.61	10.89	11.20	12.41	10.97	11.88
26	10.47	11.60	10.69	10.41	12.08	11.85	11.44	10.50	11.20	12.79	10.95	11.96
27	10.55	11.28	10.58	11.33	11.97	11.62	11.37	10.53	11.33	12.44	10.28	12.00
28	10.54	10.25	10.54	11.01	11.92	12.01	11.67	11.45	11.29	12.09	11.00	12.15
29	10.55	10.95	10.67	11.33	11.96	11.94	11.86	11.75	10.84	11.95	11.90	11.43
30	10.68	10.69	10.98	11.23	---	11.88	11.84	11.01	10.93	11.31	10.51	11.29
31	10.74	---	10.99	11.05	---	12.03	---	10.74	---	11.11	11.31	---
MEAN	10.99	11.04	10.92	11.02	11.17	11.65	11.65	11.13	10.94	11.46	11.20	11.03
MAX	12.45	12.32	11.27	11.91	12.08	12.10	11.90	12.24	11.72	12.79	12.21	12.15
MIN	9.95	10.25	10.51	10.41	10.59	10.77	11.37	10.08	10.14	10.47	10.28	9.88
CAL YR 1987	MEAN	10.99	MAX	12.50	MIN	9.82						
WTR YR 1988	MEAN	11.18	MAX	12.79	MIN	9.88						

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.--No estimated daily discharge. 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.--48 years, 366 ft³/s, 265,200 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, 712 ft³/s June 8; maximum gage height, 5.16 ft Oct. 12; minimum daily discharge, 3.0 ft³/s (estimated leakage) for some days during the year; minimum gage height, 0.63 ft Aug. 11.

DISCHARGE, IN 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	205	3.0	249	26	19	22	6.2	150	231	135	143	235
2	265	3.0	81	28	20	17	5.8	149	231	179	139	187
3	250	13	8.9	32	20	15	5.4	129	130	149	143	145
4	241	441	29	35	19	17	6.7	122	118	141	132	141
5	266	105	37	33	20	17	7.2	109	116	78	75	138
6	326	13	40	30	21	18	7.0	102	183	42	73	131
7	382	3.0	43	28	16	21	7.5	94	372	143	90	128
8	294	3.0	47	34	23	15	5.8	88	712	193	116	121
9	112	3.0	651	33	29	14	3.5	38	611	387	152	120
10	11	35	634	46	28	17	4.0	12	219	329	374	112
11	56	54	495	53	28	15	13	3.0	157	210	632	110
12	567	63	458	46	27	12	14	3.0	233	165	611	108
13	574	30	438	54	23	14	13	52	446	101	627	104
14	179	64	183	57	20	15	13	69	478	93	648	97
15	13	76	16	58	21	25	16	62	498	154	347	98
16	18	71	51	37	22	55	16	21	403	169	3.0	65
17	16	86	39	35	19	39	17	3.0	208	143	141	62
18	18	83	38	35	18	12	17	68	149	140	276	58
19	14	142	37	30	20	15	15	86	157	161	417	44
20	4.2	180	41	31	20	16	19	76	241	172	467	34
21	3.0	174	38	33	33	14	23	70	201	159	385	14
22	3.1	156	39	35	38	12	23	66	178	155	362	3.5
23	3.0	141	38	29	38	8.5	22	64	68	156	356	4.2
24	3.0	136	41	26	35	8.4	22	21	141	177	331	4.1
25	3.0	137	37	30	39	9.3	21	55	172	219	152	4.3
26	3.2	164	37	28	37	9.0	24	82	178	197	199	4.6
27	3.0	179	36	26	28	10	24	37	183	192	275	4.0
28	3.0	175	36	24	24	9.7	24	25	168	185	284	5.8
29	3.0	175	35	21	23	9.7	22	42	117	170	256	5.4
30	3.0	170	30	18	---	9.3	21	128	73	160	160	4.9
31	3.0	---	28	18	---	7.1	---	213	---	150	170	---
TOTAL	3844.5	3078.0	4010.9	1049	728	498.0	438.1	2239.0	7372	5204	8536.0	2292.8
MEAN	124	103	129	33.8	25.1	16.1	14.6	72.2	246	168	275	76.4
MAX	574	441	651	58	39	55	24	213	712	387	648	235
MIN	3.0	3.0	8.9	18	16	7.1	3.5	3.0	68	42	3.0	3.5
AC-FT	7630	6110	7960	2080	1440	988	869	4440	14620	10320	16930	4550

CAL YR 1987 TOTAL 34485.5 MEAN 94.5 MAX 1270 MIN 3.0 AC-FT 68400
WTR YR 1988 TOTAL 39290.3 MEAN 107 MAX 712 MIN 3.0 AC-FT 77930

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.39	3.60	2.17	3.75	3.67	3.70	3.48	3.96	2.83	3.69	2.43	3.26
2	3.65	3.62	2.94	3.76	3.69	3.65	3.47	3.68	2.83	3.27	2.41	3.10
3	3.59	3.54	3.92	3.80	3.68	3.63	3.46	3.58	3.20	3.13	2.43	3.20
4	3.55	3.00	4.19	3.83	3.68	3.64	3.49	3.55	3.55	3.09	2.38	3.18
5	3.65	2.76	4.28	3.81	3.68	3.64	3.50	3.48	3.53	3.49	2.87	3.16
6	3.88	3.31	4.30	3.79	3.69	3.66	3.50	3.43	3.31	3.68	3.29	3.13
7	4.09	3.38	4.32	3.76	3.64	3.70	3.51	3.38	2.36	3.21	3.39	3.12
8	3.76	3.28	4.36	3.83	3.71	3.62	3.47	3.35	2.55	2.74	3.13	3.08
9	3.83	3.59	3.70	3.81	3.78	3.61	3.41	3.39	1.85	2.61	2.65	3.08
10	3.86	3.75	2.48	3.93	3.77	3.65	3.42	3.47	2.77	2.13	1.84	3.03
11	4.41	3.76	2.06	3.98	3.77	3.63	3.59	3.60	3.80	2.38	1.29	3.02
12	3.90	3.83	1.94	3.93	3.76	3.59	3.60	3.66	4.14	2.60	1.23	3.01
13	2.39	3.56	1.87	3.98	3.72	3.62	3.60	3.49	3.29	3.01	1.28	2.98
14	3.02	3.84	2.62	4.01	3.68	3.62	3.59	3.25	2.61	3.44	1.34	2.94
15	4.01	3.92	3.94	4.01	3.70	3.73	3.64	3.20	2.68	3.51	2.26	2.95
16	4.08	3.88	4.09	3.85	3.71	3.99	3.63	3.28	2.37	3.21	1.70	3.12
17	4.06	3.57	3.87	3.84	3.68	3.85	3.65	3.43	3.06	3.09	2.01	3.28
18	4.08	3.34	3.86	3.83	3.66	3.58	3.65	3.53	3.73	3.07	2.41	3.26
19	4.02	2.89	3.85	3.79	3.68	3.62	3.63	3.36	3.77	2.89	2.13	3.14
20	3.84	2.69	3.89	3.80	3.69	3.64	3.68	3.30	3.30	2.57	1.84	3.07
21	3.79	2.66	3.87	3.81	3.81	3.61	3.71	3.27	2.78	2.51	1.56	3.15
22	3.82	2.57	3.87	3.83	3.86	3.58	3.72	3.24	2.66	2.48	1.47	3.29
23	3.78	2.50	3.86	3.78	3.86	3.52	3.71	3.22	3.16	2.49	1.45	3.32
24	3.72	2.48	3.89	3.75	3.83	3.52	3.71	3.48	3.99	2.59	1.36	3.31
25	3.71	2.48	3.85	3.79	3.87	3.54	3.70	3.57	4.02	2.78	2.24	3.32
26	3.74	2.61	3.85	3.77	3.85	3.53	3.73	3.33	4.04	2.69	2.96	3.33
27	3.58	2.68	3.84	3.74	3.77	3.55	3.73	3.41	4.07	2.66	2.62	3.31
28	3.54	2.66	3.84	3.73	3.73	3.55	3.73	3.54	3.92	2.63	2.65	3.36
29	3.59	2.66	3.84	3.70	3.72	3.55	3.71	3.69	3.57	2.56	2.54	3.35
30	3.46	2.64	3.79	3.67	---	3.54	3.69	3.54	3.68	2.51	2.83	3.34
31	3.49	---	3.77	3.67	---	3.50	---	3.17	---	2.46	3.33	---
MEAN	3.72	3.17	3.58	3.82	3.74	3.62	3.60	3.45	3.25	2.88	2.24	3.17
MAX	4.41	3.92	4.36	4.01	3.87	3.99	3.73	3.96	4.14	3.69	3.39	3.36
MIN	2.39	2.48	1.87	3.67	3.64	3.50	3.41	3.17	1.85	2.13	1.23	2.94
CAL YR 1987	MEAN 3.45	MAX 4.47	MIN 1.14									
WTR YR 1988	MEAN 3.35	MAX 4.41	MIN 1.23									

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.--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, 3.17 ft Oct. 12; minimum -0.70 ft Mar. 20.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.00	2.44	2.15	1.49	---	---	1.22	1.77	1.95	2.07	1.78	1.67
2	2.13	2.56	2.21	1.56	---	---	1.25	1.85	1.98	2.34	1.82	1.51
3	2.00	2.67	1.98	1.80	---	---	1.33	1.86	1.95	2.22	1.74	1.36
4	2.13	2.89	1.87	1.65	---	---	1.38	1.63	1.91	2.11	1.67	1.27
5	2.08	2.51	1.88	1.56	---	---	1.34	1.47	1.80	2.00	1.59	1.34
6	2.16	2.35	1.76	1.76	---	---	1.40	1.46	1.74	2.05	1.39	1.27
7	2.02	2.16	1.69	2.03	---	---	1.44	1.30	1.94	2.16	1.56	1.45
8	1.88	2.19	1.78	1.77	---	---	1.50	1.33	2.39	1.98	1.50	1.62
9	1.99	2.28	2.26	1.80	---	1.10	1.55	1.29	2.02	1.96	1.74	1.92
10	2.03	2.08	2.15	1.57	---	1.18	1.57	1.28	1.73	1.76	1.85	1.93
11	1.93	1.90	2.08	1.61	1.70	1.09	1.71	1.24	1.72	1.65	1.80	2.28
12	3.17	1.77	1.78	---	1.62	1.08	1.67	1.23	2.18	1.70	1.87	2.38
13	2.89	1.76	1.72	---	1.39	.99	1.67	1.20	2.14	1.53	1.83	2.37
14	2.34	1.80	1.68	---	1.49	1.09	1.71	1.41	2.40	1.56	2.01	2.41
15	2.31	1.74	1.55	---	---	1.15	1.84	1.49	2.39	1.57	2.35	2.37
16	2.28	1.89	1.49	---	---	1.19	1.77	1.57	2.24	1.57	1.96	2.25
17	2.35	1.95	1.41	---	---	1.35	1.74	1.59	2.21	1.54	1.90	2.00
18	2.38	1.87	1.55	---	---	1.51	1.66	1.69	1.88	1.44	1.79	1.82
19	2.39	2.00	1.70	---	---	1.37	1.57	1.65	1.71	1.34	2.00	1.91
20	2.37	2.15	1.72	---	---	1.32	1.36	1.47	1.56	1.18	1.87	2.04
21	2.25	1.93	1.77	---	---	1.08	1.37	1.35	1.55	1.03	1.63	2.01
22	2.34	2.28	1.89	---	---	1.11	1.35	1.25	1.61	1.09	1.62	2.11
23	2.37	2.25	1.93	---	---	1.04	1.31	1.12	1.59	1.01	1.67	2.16
24	2.38	2.27	2.02	---	---	.89	1.14	1.16	1.54	1.33	1.73	2.15
25	2.15	2.07	1.79	---	---	.77	1.09	1.30	1.58	1.43	1.89	2.09
26	2.28	2.18	1.56	---	---	.77	1.33	1.52	1.75	1.61	2.08	2.11
27	2.21	2.15	1.54	---	---	.68	1.42	1.49	1.82	1.62	2.10	2.12
28	2.16	2.04	1.45	---	---	.75	1.39	1.37	1.86	1.61	2.01	2.01
29	2.09	2.02	1.46	---	---	.88	1.48	1.67	1.87	1.70	1.87	1.99
30	2.12	2.13	1.40	---	---	.94	1.79	1.86	1.98	1.69	1.83	2.01
31	2.35	---	1.54	---	---	1.16	---	1.97	---	1.79	1.88	---
MEAN	2.24	2.14	1.77	---	---	---	1.48	1.48	1.90	1.67	1.82	1.93
MAX	3.17	2.89	2.26	---	---	---	1.84	1.97	2.40	2.34	2.35	2.41
MIN	1.88	1.74	1.40	---	---	---	1.09	1.12	1.54	1.01	1.39	1.27

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02285001 NORTH NEW RIVER CANAL BELOW CONTROL NEAR FORT LAUDERDALE, FL
 GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
 TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	.82	.51	-.20	---	---	-.43	.04	.13	.22	-.01	.27
2	.67	.82	.50	-.15	---	---	-.43	.03	.09	.49	-.01	.08
3	.44	.81	.12	.10	---	---	-.40	-.13	.05	.44	-.02	-.11
4	.45	1.40	.10	-.02	---	---	-.46	-.27	.11	.40	-.07	-.04
5	.31	.93	.01	-.01	---	---	-.41	-.40	.05	.24	-.28	.00
6	.24	.62	-.02	.05	---	---	-.38	-.29	.08	.37	-.30	.01
7	.13	.56	-.10	.46	---	---	-.23	-.31	.57	.66	-.26	.04
8	-.07	.53	.06	.40	---	---	.01	-.38	1.27	.55	-.12	.21
9	.06	.57	.68	.40	---	-.40	-.08	-.35	.62	.89	.23	.27
10	.14	.57	1.13	.32	---	-.45	.13	-.39	-.07	.42	.37	.47
11	.38	.38	.99	.31	.27	-.41	.19	-.51	.02	.09	.34	.62
12	1.15	.32	.73	---	-.01	-.55	.02	-.57	.35	-.01	.44	.87
13	1.61	.32	.68	---	-.03	-.55	-.12	-.58	.93	-.18	.59	.88
14	1.15	.55	.30	---	-.20	-.60	-.23	-.58	.95	-.17	.45	.88
15	1.16	.51	.05	---	---	-.59	-.27	-.51	.97	-.06	1.39	.87
16	1.16	.46	-.02	---	---	-.64	-.25	-.49	.87	-.09	1.23	.73
17	1.02	.49	-.15	---	---	-.61	-.42	-.27	.46	-.10	.71	.51
18	.98	.37	-.25	---	---	-.50	-.37	-.15	.35	-.12	.64	.45
19	1.02	.21	-.22	---	---	-.59	-.57	-.23	.27	-.12	.76	.37
20	.93	.42	-.16	---	---	-.70	-.42	-.27	.37	.00	1.01	.47
21	.76	.24	-.23	---	---	-.68	-.18	-.18	.33	-.36	.53	.27
22	.67	.13	-.22	---	---	-.68	-.29	-.22	.27	-.30	.34	.33
23	.62	.34	-.02	---	---	-.61	-.17	-.20	.06	-.29	.33	.25
24	.57	.27	.24	---	---	-.66	-.28	-.25	-.06	-.33	.30	.21
25	.38	.32	.12	---	---	-.57	-.28	-.21	-.08	-.15	.04	.15
26	.38	.57	-.01	---	---	-.55	-.03	-.11	-.12	-.28	.41	.12
27	.53	.56	-.09	---	---	-.53	-.01	-.28	-.13	-.25	.40	.09
28	.53	.46	-.09	---	---	-.59	-.16	-.33	.06	-.23	.24	-.02
29	.45	.50	-.10	---	---	-.53	-.22	-.13	-.09	-.28	.17	.04
30	.54	.45	-.19	---	---	-.51	-.09	.05	-.17	-.26	.20	.18
31	.67	---	-.19	---	---	-.54	---	.30	---	-.14	.14	---
MEAN	.63	.52	.13	---	---	---	-.23	-.26	.28	.03	.33	.32
MAX	1.61	1.40	1.13	---	---	---	.19	.30	1.27	.89	1.39	.88
MIN	-.07	.13	-.25	---	---	---	-.57	-.58	-.17	-.36	-.30	-.11

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.--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.--30 years (water years 1958-86, 1988), 175 ft³/s, 126,800 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, 654 ft³/s Feb. 23; maximum gage height, 2.27 ft June 8; no flow for some days during the year; maximum daily reverse flow, 8.2 ft³/s, Nov. 24; minimum gage height, -0.13 ft Sept. 9.

DISCHARGE, IN 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	e349	233	52	216	230	205	75	156	153	125	53	541
2	e330	110	60	238	232	226	75	108	133	106	56	514
3	457	502	55	238	231	219	74	88	111	108	53	518
4	466	.00	51	249	168	202	75	68	106	99	47	506
5	e40	112	43	225	156	194	70	63	84	94	35	506
6	e50	133	45	220	137	188	.40	35	119	80	65	505
7	e65	134	47	201	128	188	.00	.00	236	168	156	506
8	e50	115	38	198	167	188	.00	.00	448	376	153	501
9	e60	341	622	238	217	179	.00	.00	267	257	415	422
10	e100	331	429	246	229	167	55	14	214	223	526	400
11	e100	456	500	355	232	196	79	.00	140	142	597	599
12	e475	246	152	590	247	183	40	.00	129	143	572	504
13	e560	444	151	536	234	186	53	.00	197	109	530	503
14	e312	.00	116	457	215	176	6.3	.00	452	83	521	491
15	e349	364	114	328	207	161	33	.00	322	125	640	487
16	465	.00	116	198	182	150	.00	.00	199	99	593	434
17	86	.00	119	232	138	141	.00	.00	168	109	598	417
18	107	.00	82	217	147	178	.00	39	144	78	587	484
19	97	.00	92	204	135	207	13	.00	142	100	550	387
20	95	.00	85	239	152	217	.00	33	135	136	547	470
21	105	.00	103	240	172	176	.00	30	130	60	559	396
22	83	.00	286	249	185	146	.00	.00	112	51	523	161
23	86	5.1	167	256	654	173	.00	33	87	114	472	119
24	88	-8.2	231	246	182	151	.00	.00	50	134	290	.00
25	90	2.5	269	249	452	153	.00	.00	96	138	341	.00
26	72	104	287	271	201	147	.00	35	59	129	456	.00
27	67	366	267	244	235	153	.00	43	81	119	284	.00
28	59	42	235	254	212	148	.00	74	193	78	85	.00
29	48	47	244	229	224	59	.00	50	71	76	444	7.5
30	56	66	228	225	---	93	1.9	149	101	64	443	155
31	47	---	233	228	---	79	---	198	---	47	546	---
TOTAL	5414	4145.40	5519	8316	6301	5229	650.60	1216.00	4879	3770	11737	10533.50
MEAN	175	138	178	268	217	169	21.7	39.2	163	122	379	351
MAX	560	502	622	590	654	226	79	198	452	376	640	599
MIN	40	-8.2	38	198	128	59	.00	.00	50	47	35	.00
AC-FT	10740	8220	10950	16490	12500	10370	1290	2410	9680	7480	23280	20890

WTR YR 1988 TOTAL 67710.50 MEAN 185 MAX 654 MIN -8.2 AC-FT 134300

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.62	1.57	1.56	1.49	1.64	1.60	1.53	1.52	1.59	1.57	.52
2	---	1.12	1.55	1.56	1.48	1.50	1.59	1.53	1.53	1.64	1.57	.30
3	---	1.58	1.55	1.57	1.46	1.51	1.60	1.53	1.51	1.65	1.57	.39
4	---	.73	1.55	1.54	1.47	1.50	1.60	1.56	1.52	1.63	1.56	.33
5	---	1.65	1.55	1.44	1.47	1.56	1.46	1.60	1.53	1.63	1.60	.41
6	---	1.63	1.55	1.58	1.53	1.59	1.45	1.56	1.53	1.67	1.68	.45
7	---	1.59	1.54	1.62	1.52	1.58	1.56	1.63	1.56	1.48	1.53	.43
8	---	1.56	1.57	1.53	1.56	1.48	1.57	1.69	1.23	1.30	1.52	.53
9	---	.95	1.14	1.59	1.56	1.48	1.55	1.69	.59	1.43	.99	.28
10	---	.42	.83	1.55	1.63	1.39	1.53	1.63	1.51	1.23	.81	.39
11	---	.91	1.13	1.40	1.64	1.51	1.49	1.64	1.53	1.56	.82	.29
12	---	.97	1.59	1.43	1.54	1.47	1.63	1.64	1.54	1.50	.55	.20
13	---	.91	1.54	1.39	1.48	1.43	1.57	1.63	1.50	1.55	.53	.18
14	---	1.51	1.31	1.38	1.54	1.43	1.67	1.66	1.45	1.54	.63	.22
15	---	1.00	1.32	1.46	1.60	1.42	1.52	1.68	.71	1.53	1.28	.20
16	1.34	1.22	1.39	1.70	1.51	1.54	1.67	1.67	1.56	1.50	1.02	.18
17	1.73	.93	1.50	1.61	1.52	1.61	1.69	1.67	1.61	1.54	.88	.47
18	1.70	.82	1.54	1.61	1.51	1.57	1.69	1.51	1.56	1.37	.93	.10
19	1.61	1.07	1.51	1.63	1.53	1.54	1.65	1.62	1.55	1.56	.81	.69
20	1.64	.71	1.53	1.61	1.53	1.54	1.63	1.62	1.55	1.08	.68	.42
21	1.54	1.41	1.50	1.56	1.52	1.59	1.63	1.60	1.31	1.53	.69	.31
22	1.57	1.13	1.46	1.51	1.47	1.65	1.61	1.63	1.59	1.56	.46	1.00
23	1.55	1.44	1.33	1.55	1.16	1.55	1.59	1.63	1.59	1.57	.33	1.52
24	1.52	1.01	1.51	1.57	1.51	1.59	1.56	1.60	1.61	1.52	.51	1.48
25	1.50	1.45	1.60	1.53	1.18	1.57	1.53	1.68	1.57	1.52	.91	1.51
26	1.53	1.53	1.55	1.27	1.53	1.57	1.52	1.56	1.60	1.50	.38	1.54
27	1.53	.96	1.53	1.55	1.58	1.56	1.55	1.60	1.60	1.48	.19	1.57
28	1.54	1.51	1.36	1.43	1.65	1.45	1.67	1.61	1.20	1.55	1.08	1.65
29	1.55	1.54	1.36	1.48	1.57	1.56	1.68	1.51	1.59	1.55	1.06	1.54
30	1.54	1.53	1.31	1.52	---	1.57	1.68	1.50	1.58	1.57	.40	1.49
31	1.57	---	1.35	1.52	---	1.59	---	1.38	---	1.57	.86	---
MEAN	---	1.21	1.44	1.52	1.51	1.53	1.59	1.60	1.46	1.51	.95	.69
MAX	---	1.65	1.60	1.70	1.65	1.65	1.69	1.69	1.61	1.67	1.68	1.65
MIN	---	.42	.83	1.27	1.16	1.39	1.45	1.38	.59	1.08	.19	.10

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.--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, 2.79 ft Nov. 4; minimum -0.99 ft Apr. 19.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.96	2.34	2.14	1.42	1.26	1.60	1.19	1.70	1.72	1.82	1.66	1.66
2	2.08	2.32	2.17	1.51	1.25	1.53	1.21	1.75	1.70	2.10	1.71	1.47
3	2.03	2.57	1.94	1.75	1.25	1.42	1.31	1.74	1.70	2.07	1.54	1.26
4	2.27	2.79	1.85	1.59	1.27	1.48	1.32	1.53	1.66	1.95	1.58	1.27
5	2.04	2.28	1.84	1.53	1.24	1.27	1.28	1.37	1.65	1.84	1.34	1.39
6	2.14	2.14	1.72	1.73	1.30	1.32	1.29	1.37	1.59	1.94	1.19	1.30
7	1.97	2.08	1.65	1.97	1.64	1.34	1.36	1.22	1.62	2.10	1.29	1.48
8	1.84	2.09	1.76	1.74	1.81	1.16	1.43	1.25	2.02	1.81	1.23	1.67
9	1.85	2.26	2.24	1.75	1.74	1.26	1.47	1.21	1.79	1.72	1.73	1.87
10	1.99	2.05	2.05	1.53	1.69	1.31	1.49	1.27	1.45	1.71	1.72	1.90
11	1.89	1.81	2.07	1.64	1.67	1.29	1.64	1.16	1.52	1.42	1.79	2.27
12	2.54	1.68	1.69	1.68	1.61	1.19	1.59	1.17	1.84	1.44	1.87	2.33
13	2.40	1.66	1.66	1.67	1.33	1.10	1.60	.97	1.85	1.40	1.77	2.35
14	2.32	1.64	1.42	1.59	1.44	1.19	1.62	1.21	2.20	1.31	1.78	2.36
15	2.28	1.70	1.52	1.69	1.77	1.24	1.75	1.27	2.19	1.33	1.82	2.34
16	2.24	1.59	1.45	1.93	1.62	1.29	1.68	1.24	1.92	1.37	1.72	2.23
17	2.14	1.65	1.34	1.89	1.66	1.40	1.59	1.33	1.94	1.27	1.62	2.05
18	2.18	1.83	1.29	1.93	1.88	1.56	1.55	1.51	1.72	1.29	1.62	1.86
19	2.16	1.82	1.66	2.04	1.87	1.41	1.47	1.46	1.54	1.31	1.71	1.75
20	2.34	2.10	1.66	1.91	1.80	1.39	1.26	1.17	1.44	1.12	1.62	1.92
21	2.10	1.89	1.71	1.92	1.68	1.11	1.27	1.11	1.38	.92	1.47	1.86
22	2.30	2.25	1.93	1.71	1.52	1.17	1.26	1.06	1.41	.91	1.47	1.86
23	2.30	2.14	1.88	1.57	1.75	1.09	1.20	.90	1.40	.94	1.51	1.94
24	2.29	2.32	1.93	1.60	1.51	.93	1.04	.92	1.28	1.13	1.35	1.92
25	2.05	1.93	1.73	1.57	1.36	.79	1.00	1.07	1.37	1.11	1.79	1.94
26	2.04	1.98	1.52	1.08	1.24	.78	1.20	1.18	1.51	1.33	1.92	1.93
27	2.12	2.06	1.47	.83	1.43	.70	1.26	1.21	1.56	1.40	1.90	2.02
28	2.14	1.93	1.41	.89	1.70	.71	1.28	1.20	1.52	1.45	1.72	1.92
29	2.06	1.99	1.42	1.12	1.50	.83	1.39	1.50	1.62	1.47	1.71	1.88
30	1.95	2.04	1.39	1.28	---	.92	1.69	1.70	1.75	1.50	1.75	1.92
31	2.16	---	1.39	1.29	---	1.11	---	1.75	---	1.62	1.84	---
MEAN	2.13	2.03	1.71	1.59	1.54	1.19	1.39	1.31	1.66	1.49	1.64	1.86
MAX	2.54	2.79	2.24	2.04	1.88	1.60	1.75	1.75	2.20	2.10	1.92	2.36
MIN	1.84	1.59	1.29	.83	1.24	.70	1.00	.90	1.28	.91	1.19	1.26

CAL YR 1987 MEAN .38 MAX 2.79 MIN -1.07
WTR YR 1988 MEAN 1.63 MAX 2.79 MIN .70

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	.72	.40	-.16	-.21	.30	-.42	-.12	-.32	-.95	-.46	.33
2	.63	.78	.42	-.06	-.21	.10	-.43	-.07	-.33	.26	-.83	-.08
3	.41	.73	.12	.22	-.24	-.08	-.41	-.23	-.30	.21	-.27	-.13
4	.40	.93	.08	.05	-.25	-.34	-.57	-.27	-.08	.20	-.33	.03
5	.33	.70	.00	.05	-.25	-.18	-.83	-.57	-.15	.10	-.63	.04
6	.36	.59	-.04	.15	-.14	-.20	-.53	-.37	-.10	.30	-.83	.18
7	.13	.60	-.13	.55	-.02	-.33	-.27	-.38	-.15	.07	-.65	.23
8	-.03	.56	.02	.45	.49	-.37	-.03	-.46	.61	.59	-.46	.17
9	.07	.56	.94	.49	.36	-.26	-.13	-.40	.29	.56	.03	.24
10	.13	.40	.89	.39	.43	-.27	.19	-.44	-.48	.22	.43	.38
11	.38	.21	.71	.31	.32	-.21	.17	-.56	-.35	-.28	.15	.75
12	1.14	.11	.58	.25	.07	-.32	-.02	-.81	-.11	-.29	.34	.97
13	1.42	.08	.51	.22	.04	-.30	-.13	-.94	.00	-.31	.24	.88
14	1.23	.26	.28	.27	-.10	-.37	-.26	-.90	.06	-.58	.22	.87
15	1.21	.46	-.03	.23	.01	-.38	-.31	-.74	.05	-.64	.86	.81
16	1.21	.41	-.17	.23	.01	-.52	-.31	-.89	.11	-.57	.61	.88
17	.90	.33	-.18	.31	-.50	-.57	-.45	-.42	.17	-.53	.43	.62
18	.84	.30	-.45	.18	-.17	-.34	-.42	-.59	.03	-.97	.45	.60
19	.86	.00	-.22	.18	-.01	-.94	-.99	-.70	.02	-.26	.38	.42
20	.90	.26	-.18	.14	-.06	-.63	-.58	-.63	.03	-.17	.50	.43
21	.60	.15	-.25	.13	-.95	-.65	-.34	-.38	.09	-.81	.23	.16
22	.69	-.14	-.23	-.03	-.22	-.70	-.40	-.44	-.13	-.46	.04	-.02
23	.63	.14	.02	-.05	.01	-.50	-.26	-.52	-.24	-.51	.01	-.04
24	.59	.21	.39	.00	-.17	-.69	-.39	-.62	-.38	-.77	-.37	-.15
25	.38	.26	.19	-.26	-.13	-.56	-.38	-.66	-.37	-.61	.01	-.16
26	.21	.54	.13	-.74	.10	-.45	-.14	-.50	-.41	-.78	.08	-.10
27	.51	.39	.00	-.51	.09	-.46	-.18	-.62	-.42	-.60	-.05	-.08
28	.52	.15	-.07	-.38	.22	-.95	-.32	-.50	-.22	-.72	-.44	-.17
29	.45	.23	-.08	-.25	.21	-.58	-.28	-.33	-.51	-.95	-.34	-.09
30	.53	.35	-.14	-.10	---	-.95	-.15	-.20	-.59	-.49	.00	.21
31	.47	---	-.16	-.18	---	-.51	---	-.13	---	-.66	.09	---
MEAN	.60	.38	.11	.07	-.04	-.43	-.32	-.50	-.14	-.34	-.02	.27
MAX	1.42	.93	.94	.55	.49	.30	.19	-.07	.61	.59	.86	.97
MIN	-.03	-.14	-.45	-.74	-.95	-.95	-.99	-.94	-.59	-.97	-.83	-.17

WTR YR 1988 MEAN -.03 MAX 1.42 MIN -.99

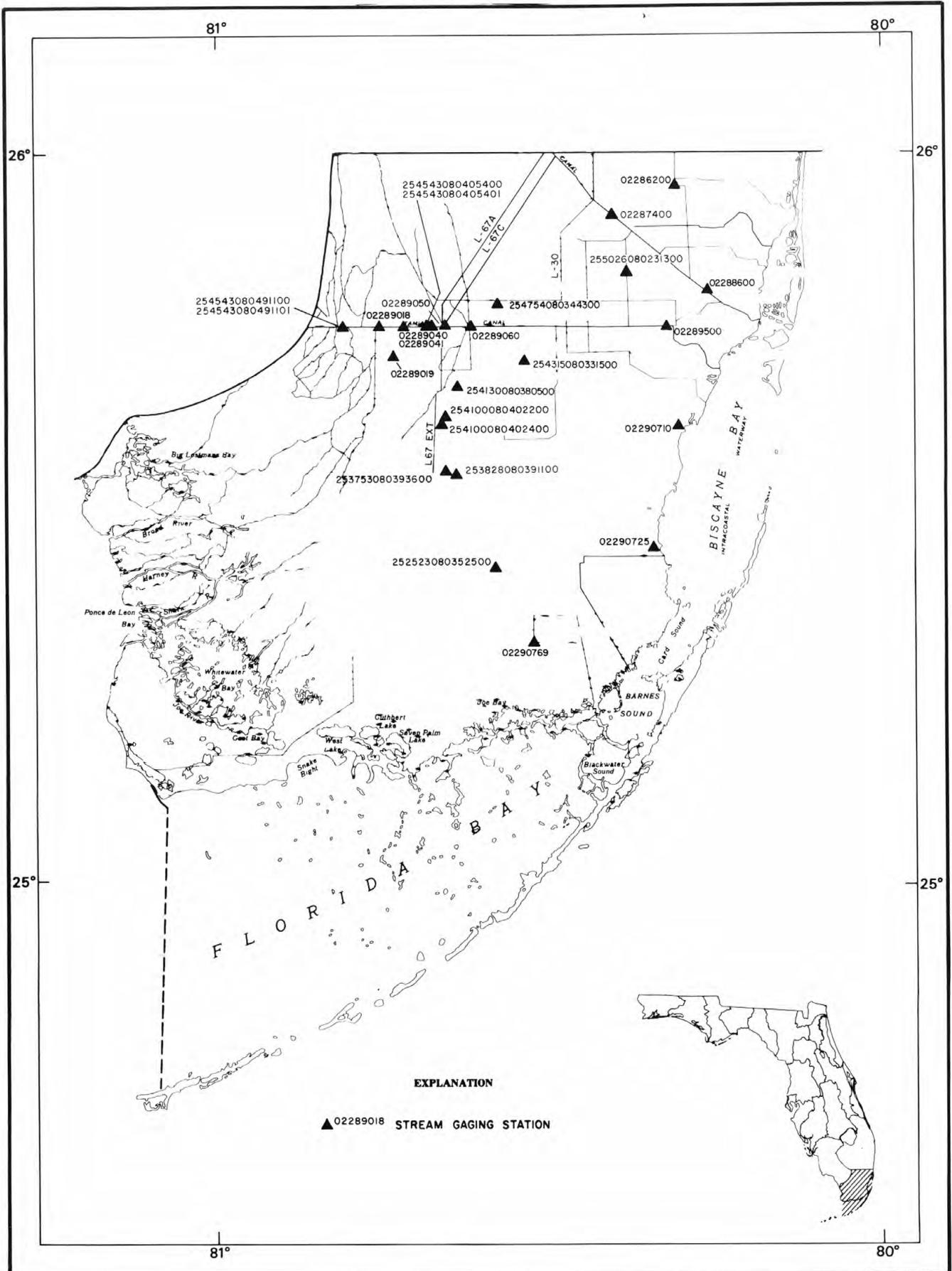


FIGURE 7. Location of gaging stations in the portion of the Everglades and southeastern coastal area south of latitude 26 degrees; Florida Bay and the Florida Keys

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.--Records fair, except for those estimated daily discharges, which are poor. Flow affected by regulation at salinity-control structure 29, structure in North Fork Snake Creek Canal, 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, 898 ft³/s Aug. 16; maximum gage height, 3.25 ft Dec. 9; minimum daily discharge, 15 ft³/s Oct. 31; minimum gage height, 1.62 ft Jan. 28.

DISCHARGE, IN 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	386	154	71	114	76	65	81	347	262	250	98	302
2	384	240	134	271	96	69	81	355	224	244	138	253
3	336	265	134	140	93	77	80	327	226	216	e100	222
4	170	416	178	251	89	81	96	321	198	205	e100	232
5	243	490	77	147	144	86	87	319	148	185	205	141
6	181	472	49	140	115	94	75	233	215	156	180	e100
7	194	425	44	138	64	88	e70	95	314	274	344	---
8	93	332	143	272	175	68	---	61	445	389	245	---
9	218	343	624	205	182	75	---	81	421	297	333	---
10	190	404	678	243	84	73	---	86	216	178	454	---
11	226	319	656	297	76	55	---	84	264	391	412	---
12	598	229	612	243	202	157	---	85	499	280	316	---
13	622	239	586	211	95	75	---	95	764	287	546	---
14	565	206	508	175	70	76	e70	106	826	439	632	---
15	459	185	523	220	73	64	76	106	778	886	884	---
16	465	62	500	90	229	68	56	111	688	730	898	---
17	410	153	491	217	119	62	80	124	509	658	747	---
18	411	139	375	103	79	66	99	136	218	627	729	---
19	352	193	284	77	69	211	83	137	474	612	769	e150
20	313	319	303	262	65	129	90	159	592	616	756	164
21	211	228	267	83	163	85	90	201	334	521	654	149
22	206	93	256	154	144	71	92	178	309	615	549	177
23	219	147	225	245	131	92	99	172	283	502	565	114
24	195	57	247	180	203	182	111	155	311	529	454	146
25	160	205	169	172	259	136	109	124	297	649	381	117
26	94	131	226	297	124	88	94	100	219	526	392	132
27	96	241	120	284	79	84	119	199	162	510	308	115
28	54	158	161	66	84	83	122	272	581	456	336	89
29	135	169	278	55	72	97	109	266	382	410	333	68
30	24	120	145	63	---	91	131	279	309	415	260	90
31	15	---	87	89	---	76	---	140	---	165	298	---
TOTAL	8225	7134	9151	5504	3454	2824	---	5454	11468	13218	13416	---
MEAN	265	238	295	178	119	91.1	---	176	382	426	433	---
MAX	622	490	678	297	259	211	---	355	826	886	898	---
MIN	15	57	44	55	64	55	---	61	148	156	98	---
AC-FT	16310	14150	18150	10920	6850	5600	---	10820	22750	26220	26610	---

e Estimated

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GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.26	2.25	2.27	2.32	2.17	2.24	2.04	2.28	2.16	2.24	2.27	2.46
2	2.32	2.28	2.20	2.05	2.20	2.24	2.03	2.18	2.22	2.22	2.23	2.40
3	2.26	2.30	2.18	2.27	2.21	2.23	2.01	2.11	2.17	2.21	2.17	2.35
4	2.17	2.52	2.09	2.14	2.23	2.23	2.01	1.99	2.20	2.19	2.30	2.30
5	2.18	2.39	2.14	2.17	2.12	2.25	2.06	1.88	2.20	2.18	2.20	2.33
6	2.23	2.29	2.23	2.27	2.08	2.26	2.04	1.82	2.24	2.20	2.23	2.33
7	2.19	2.24	2.27	2.26	2.16	2.29	1.99	1.99	2.18	2.20	1.95	2.28
8	2.23	2.24	2.26	2.13	2.19	2.30	1.95	2.03	2.29	2.29	2.25	2.24
9	2.20	2.27	2.91	2.23	2.09	2.29	1.93	2.03	2.23	2.31	2.33	2.20
10	2.15	2.26	2.90	2.11	2.25	2.29	1.94	2.01	2.26	2.32	2.48	2.23
11	2.18	2.21	2.67	2.13	2.29	2.30	2.02	2.00	2.35	2.29	2.43	2.22
12	2.70	2.22	2.61	2.21	2.11	2.11	1.98	1.98	2.29	2.31	2.42	2.24
13	2.72	2.19	2.47	2.10	2.15	2.15	1.97	1.97	2.38	2.23	2.53	2.31
14	2.66	2.17	2.42	2.19	2.22	2.20	1.95	1.99	2.47	2.26	2.57	2.26
15	2.50	2.17	2.34	2.15	2.24	2.18	1.95	2.01	2.50	2.48	2.72	2.22
16	2.42	2.34	2.30	2.25	1.97	2.13	1.95	2.00	2.40	2.43	2.43	2.22
17	2.34	2.22	2.18	2.18	2.07	2.11	1.94	2.01	2.28	2.33	2.47	2.26
18	2.26	2.26	2.19	2.24	2.12	2.12	1.93	2.09	2.27	2.32	2.88	2.21
19	2.23	2.19	2.25	2.20	2.18	2.07	1.90	2.09	2.33	2.41	2.71	2.17
20	2.20	2.11	2.25	2.19	2.19	2.05	1.90	2.10	2.34	2.32	2.49	2.30
21	2.23	2.14	2.24	2.17	2.23	2.17	1.89	2.22	2.31	2.26	2.52	2.30
22	2.20	2.23	2.23	2.22	2.26	2.18	1.87	2.22	2.29	2.09	2.65	2.20
23	2.15	2.18	2.21	2.06	2.22	2.16	1.86	2.19	2.21	1.93	2.56	2.30
24	2.17	2.28	2.17	2.25	2.09	2.01	1.85	2.17	2.17	1.98	2.44	2.20
25	2.18	2.15	2.24	2.18	2.00	1.90	1.84	2.16	2.17	2.45	2.32	2.23
26	2.24	2.29	2.14	1.95	2.07	2.02	1.83	2.20	2.10	2.44	2.23	2.21
27	2.22	2.15	2.27	1.78	2.16	2.08	1.84	2.22	2.29	2.50	2.31	2.19
28	2.25	2.22	2.23	1.66	2.20	2.10	1.94	2.19	2.30	2.45	2.31	2.30
29	2.13	2.18	2.07	1.93	2.22	2.10	1.93	2.09	2.31	2.43	2.32	2.32
30	2.22	2.19	2.08	2.08	---	2.09	1.93	2.13	2.20	2.28	2.30	2.23
31	2.27	---	2.27	2.13	---	2.07	---	2.26	---	2.27	2.35	---
MEAN	2.28	2.24	2.30	2.14	2.16	2.16	1.94	2.08	2.27	2.28	2.40	2.27
MAX	2.72	2.52	2.91	2.32	2.29	2.30	2.06	2.28	2.50	2.50	2.88	2.46
MIN	2.13	2.11	2.07	1.66	1.97	1.90	1.83	1.82	2.10	1.93	1.95	2.17

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.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 4.47 ft May 29, 1984; minimum, 1.13 ft Apr. 19, 29, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.34 ft Aug. 17; minimum, 1.13 ft Apr. 19, 29.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.78	3.29	2.98	2.57	2.37	2.10	1.50	2.13	1.75	3.01	3.70	4.11
2	3.74	4.08	2.94	2.55	2.35	2.08	1.47	2.05	1.80	3.21	3.61	4.08
3	3.64	4.10	2.89	2.54	2.36	2.04	1.45	1.90	1.75	3.43	3.50	4.02
4	3.53	4.24	2.84	2.52	2.35	2.04	1.46	1.83	1.73	3.36	3.43	3.96
5	3.43	4.20	2.80	2.50	2.34	2.04	1.51	1.78	1.77	3.47	3.36	3.90
6	3.34	4.15	2.75	2.47	2.34	2.06	1.49	1.72	1.80	3.41	3.30	3.85
7	3.25	4.09	2.71	2.46	2.31	2.07	1.47	1.66	1.98	3.52	3.33	3.88
8	3.17	4.03	2.75	2.49	2.37	2.03	1.42	1.62	2.85	3.55	3.39	3.82
9	3.08	e4.02	3.75	2.49	2.40	2.00	1.41	1.57	3.44	3.64	3.37	3.77
10	3.11	e3.97	3.77	2.51	2.36	2.01	1.40	1.53	3.25	3.55	3.57	3.71
11	3.16	e3.88	3.67	2.59	2.33	1.97	1.38	1.48	3.13	3.45	3.98	3.71
12	3.82	e3.75	3.54	2.54	2.31	1.94	1.34	1.45	3.19	3.36	3.97	3.81
13	4.06	e3.64	3.44	2.51	2.26	1.92	1.32	1.42	3.51	3.34	3.91	3.72
14	3.96	e3.53	3.36	2.50	2.25	1.91	1.28	1.46	3.74	3.53	3.89	3.67
15	3.88	e3.42	3.30	2.55	2.23	1.84	1.29	1.59	3.77	3.78	4.20	3.60
16	3.79	e3.35	3.30	2.51	2.22	1.78	1.27	1.50	3.66	3.65	4.21	3.53
17	3.70	e3.26	3.21	2.49	2.19	1.75	1.25	1.53	3.55	3.59	4.22	3.47
18	3.62	e3.20	3.14	2.48	2.18	1.74	1.22	1.53	3.44	3.64	4.26	3.41
19	3.54	e3.51	3.09	2.46	2.17	1.82	1.19	1.48	3.46	3.67	4.22	3.36
20	3.48	e3.47	3.04	2.44	2.16	1.82	1.45	1.45	3.52	3.62	4.30	3.31
21	3.41	e3.28	2.99	2.42	2.28	1.79	1.43	1.40	3.46	3.52	4.28	3.28
22	3.33	e3.18	2.95	2.43	2.31	1.76	1.36	1.36	3.38	3.46	4.24	3.25
23	3.26	e3.12	2.91	2.40	2.27	1.72	1.31	1.33	3.29	3.41	4.20	3.20
24	3.21	e3.08	2.88	2.39	2.28	1.68	1.28	1.35	3.22	3.51	4.15	3.33
25	3.14	e3.04	2.84	2.50	2.25	1.67	1.26	1.37	3.21	3.74	4.10	3.50
26	3.08	e3.04	2.81	2.55	2.20	1.65	1.28	1.38	3.14	3.71	4.06	3.36
27	3.03	e3.03	2.79	2.48	2.16	1.65	1.25	1.33	3.07	3.80	4.04	3.30
28	2.97	e3.01	2.75	2.44	2.15	1.64	1.22	1.37	3.04	3.83	4.25	3.34
29	2.89	e3.00	2.71	2.42	2.13	1.61	1.19	1.40	2.97	3.90	4.22	3.24
30	2.83	2.99	2.64	2.39	---	1.57	1.20	1.69	2.95	3.83	4.16	3.16
31	2.78	---	2.60	2.37	---	1.54	---	1.75	---	3.74	4.13	---
MEAN	3.39	3.53	3.04	2.48	2.27	1.85	1.35	1.56	2.96	3.56	3.92	3.59
MAX	4.06	4.24	3.77	2.59	2.40	2.10	1.51	2.13	3.77	3.90	4.30	4.11
MIN	2.78	2.99	2.60	2.37	2.13	1.54	1.19	1.33	1.73	3.01	3.30	3.16

CAL YR 1987 MEAN 2.51 MAX 4.24 MIN 1.27
WTR YR 1988 MEAN 2.79 MAX 4.30 MIN 1.19

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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02286399 MIAMI CANAL ABOVE HGS-3 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.--Water-level records are those for Lake Okeechobee at pump station 3. Stage is affected by S-3 pumping, HGS-3 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, 17.19 ft Dec. 30; minimum, 13.13 ft Oct. 1.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.76	14.44	15.90	16.01	16.04	16.26	16.10	15.50	15.25	15.15	15.40	15.88
2	13.74	14.54	16.01	16.04	16.06	16.17	16.07	15.89	15.26	15.19	15.37	15.89
3	13.70	14.50	15.93	16.00	16.07	16.08	16.03	15.58	15.11	15.17	15.38	15.86
4	13.84	14.68	15.92	16.11	16.05	16.06	16.03	15.53	15.13	15.18	15.39	15.80
5	13.76	14.83	16.14	16.45	16.19	16.24	16.11	15.58	15.06	15.30	15.39	15.71
6	13.55	15.21	16.01	16.18	16.74	16.30	16.07	15.67	15.11	15.18	15.36	15.72
7	13.51	15.11	15.93	15.94	16.29	16.32	16.24	15.58	15.20	15.18	15.34	15.84
8	13.86	14.95	15.94	16.00	16.32	16.20	16.10	15.54	15.12	15.08	15.37	15.83
9	13.62	14.93	15.97	16.19	16.37	16.09	16.00	15.37	15.27	15.06	15.39	15.91
10	13.68	14.94	15.98	16.16	16.33	16.27	15.95	15.33	15.35	15.13	15.37	15.98
11	13.55	15.17	16.00	16.30	16.25	16.37	15.89	15.32	15.47	15.11	15.46	16.07
12	14.21	15.33	15.97	16.14	16.30	16.11	15.84	15.28	15.57	15.10	15.51	16.10
13	14.56	15.06	16.01	16.05	16.44	16.08	15.80	15.30	15.46	15.03	15.56	16.07
14	14.45	14.99	15.98	16.28	16.26	16.29	15.80	15.41	15.40	15.14	15.44	16.00
15	14.32	15.00	15.91	16.24	16.09	16.49	15.86	15.44	15.45	15.15	15.46	16.00
16	14.34	14.94	16.27	16.12	16.32	16.37	15.86	15.39	15.39	15.14	15.56	16.04
17	14.26	14.90	16.37	15.97	16.25	16.17	15.85	15.34	15.27	15.12	15.61	16.07
18	14.32	15.02	16.13	15.98	16.20	15.95	15.69	15.36	15.21	15.15	15.64	16.10
19	14.22	15.07	16.00	15.92	16.16	16.44	15.54	15.34	15.19	15.19	15.64	16.10
20	14.23	15.53	16.00	15.90	16.08	16.50	15.80	15.36	15.26	15.14	15.60	16.09
21	14.32	15.75	15.99	15.85	16.60	16.34	15.74	15.31	15.26	15.22	15.66	16.07
22	14.59	15.48	16.00	16.29	16.40	16.32	15.73	15.29	15.25	15.20	15.76	16.03
23	14.44	15.47	16.07	16.26	16.27	16.26	15.67	15.22	15.23	15.28	15.78	15.97
24	14.31	15.56	16.03	16.20	16.31	16.23	15.63	15.22	15.22	15.38	15.75	15.94
25	14.34	15.57	16.01	16.13	16.67	16.25	15.60	15.27	15.22	15.39	15.81	15.94
26	14.30	15.64	16.04	16.20	16.68	16.20	15.57	15.30	15.13	15.36	15.83	15.93
27	14.22	15.75	16.05	16.37	16.35	16.25	15.64	15.30	15.13	15.35	15.91	15.95
28	14.36	15.80	16.05	16.49	16.25	16.28	15.70	15.19	15.14	15.40	15.86	15.97
29	14.63	15.86	16.45	16.16	16.26	16.26	15.76	15.22	15.13	15.44	15.92	15.91
30	14.44	15.93	16.39	16.05	---	16.24	15.49	15.21	15.12	15.42	15.93	15.86
31	14.37	---	16.01	16.03	---	16.15	---	15.23	---	15.38	15.89	---
MEAN	14.12	15.20	16.05	16.13	16.30	16.24	15.84	15.38	15.25	15.22	15.59	15.95
MAX	14.63	15.93	16.45	16.49	16.74	16.50	16.24	15.89	15.57	15.44	15.93	16.10
MIN	13.51	14.44	15.90	15.85	16.04	15.95	15.49	15.19	15.06	15.03	15.34	15.71

CAL YR 1987 MEAN 14.76 MAX 16.45 MIN 13.35
WTR YR 1988 MEAN 15.60 MAX 16.74 MIN 13.51

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02286400 MIAMI CANAL AT HGS-3, 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 hurricane gate structure 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.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by hurricane gates and pump station at Lake Okeechobee. Discharge is summation of HGS-3 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 HGS-3 gate-operation record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--31 years, (water years 1957-88), 48.9 ft³/s, 35,430 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, 1180 ft³/s Apr. 8; maximum gage height (Miami Canal), 13.15 ft Nov. 4; maximum daily reverse flow, 698 ft³/s Nov. 4; no flow for some days during the year; minimum gage height, 9.23 ft Oct. 11.

DISCHARGE, IN 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	.00	.00	.00	237	.00	946	1110	.00	603	.00	.00	.00
2	.00	.00	.00	237	.00	929	1100	.00	668	.00	.00	.00
3	.00	.00	.00	233	.00	918	1090	.00	571	.00	.00	.00
4	.00	-698	.00	81	157	319	1110	.00	595	.00	.00	.00
5	.00	-233	.00	138	164	.00	1150	321	598	.00	.00	.00
6	.00	.00	.00	237	.00	.00	1150	530	257	.00	.00	.00
7	.00	.00	.00	230	.00	.00	1170	515	.00	.00	.00	.00
8	.00	.00	.00	149	.00	525	1180	515	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	919	1170	506	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	294	1160	678	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	671	1140	797	.00	.00	.00	.00
12	-251	.00	.00	.00	.00	939	1020	786	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	918	958	391	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	954	967	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	961	950	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	952	942	644	327	.00	.00	.00
17	.00	.00	.00	.00	.00	944	941	891	604	.00	.00	.00
18	.00	.00	.00	.00	.00	413	919	895	582	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	1030	594	210	.00	.00	212
20	.00	.00	.00	.00	.00	.00	407	.00	.00	.00	.00	573
21	.00	.00	.00	.00	.00	690	523	.00	.00	.00	.00	560
22	.00	.00	.00	.00	.00	1170	789	.00	.00	.00	.00	559
23	.00	.00	227	.00	195	1120	790	720	.00	.00	.00	555
24	.00	.00	141	.00	213	1120	787	344	.00	.00	.00	541
25	.00	.00	.00	.00	587	1130	475	.00	.00	.00	.00	528
26	.00	.00	.00	291	962	1120	224	.00	.00	.00	.00	515
27	.00	.00	.00	197	930	1120	823	513	99	.00	.00	526
28	.00	.00	232	.00	926	1110	1100	859	95	.00	.00	198
29	101	.00	357	.00	930	1120	898	522	.00	.00	.00	237
30	197	.00	137	.00	---	1120	683	.00	.00	.00	.00	895
31	65	---	83	.00	---	1100	---	.00	---	.00	.00	---
TOTAL	112.00	-931.00	1177.00	2030.00	5064.00	23522.00	27756	11021.00	5209.00	.00	.00	5899.00
MEAN	3.61	-31.0	38.0	65.5	175	759	925	356	174	.000	.000	197
MAX	197	.00	357	291	962	1170	1180	895	668	.00	.00	895
MIN	-251	-698	.00	.00	.00	.00	224	.00	.00	.00	.00	.00
AC-FT	222	-1850	2330	4030	10040	46660	55050	21860	10330	.00	.00	11700

CAL YR 1987 TOTAL 49382.00 MEAN 135 MAX 995 MIN -698 AC-FT 97950
WTR YR 1988 TOTAL 80859.00 MEAN 221 MAX 1180 MIN -698 AC-FT 160400

EVERGLADES AND SOUTHEASTERN COASTAL AREA

79

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.97	11.02	11.39	10.91	10.86	12.07	12.26	11.24	10.87	10.57	10.85	9.84
2	10.03	11.04	11.27	10.93	10.86	12.13	12.27	9.83	11.79	10.38	11.83	9.76
3	11.06	11.73	10.99	11.06	10.73	12.13	12.31	10.86	11.68	10.43	10.36	10.96
4	11.53	12.37	10.81	11.12	10.68	11.75	12.17	10.92	11.40	10.54	11.49	11.71
5	11.51	12.07	11.10	10.88	10.81	11.29	12.02	10.97	11.28	10.44	11.52	11.95
6	11.75	11.82	11.54	11.10	10.59	10.83	11.98	11.48	11.61	10.58	10.72	11.31
7	11.50	11.18	11.25	11.15	10.47	10.73	11.95	11.64	11.81	10.86	11.03	10.71
8	11.07	10.51	10.93	11.26	10.77	11.06	11.76	11.59	10.79	10.13	11.12	10.47
9	10.84	10.28	11.14	10.91	10.67	12.13	11.72	11.56	10.40	11.33	10.02	10.59
10	10.70	10.00	11.45	10.94	10.82	11.49	11.74	11.40	10.61	11.27	10.73	10.53
11	9.59	9.92	11.52	10.88	11.05	11.12	11.85	11.59	10.65	11.30	12.52	11.07
12	11.16	9.70	11.50	10.07	11.15	11.97	11.77	11.66	10.65	11.16	12.53	11.47
13	11.66	10.84	11.48	11.05	10.97	12.12	11.50	11.67	10.89	10.99	11.62	10.96
14	10.67	10.69	11.44	11.09	10.74	12.02	11.42	10.99	11.34	11.31	11.10	10.83
15	10.26	10.69	11.49	10.98	10.76	12.16	11.64	10.46	10.94	11.35	11.10	10.93
16	11.40	10.74	11.42	10.87	11.18	12.13	11.70	10.49	10.73	11.31	11.67	10.59
17	11.16	10.69	11.26	10.80	11.28	11.99	11.70	11.61	11.42	11.39	11.10	10.17
18	10.67	10.59	11.19	10.86	11.01	11.72	11.72	11.60	11.64	11.51	10.65	10.04
19	11.31	10.68	11.05	10.76	10.92	11.04	11.70	11.39	11.36	11.77	10.39	10.49
20	11.67	11.75	11.07	10.60	10.99	10.70	11.67	11.33	10.76	10.41	10.53	11.20
21	11.65	11.13	10.93	10.50	11.01	10.85	11.72	11.06	11.34	11.65	10.57	11.39
22	11.44	10.58	10.81	10.94	11.23	12.05	12.08	10.70	11.67	11.41	11.11	11.37
23	11.33	10.62	10.65	10.97	11.27	12.33	12.01	10.90	11.73	10.78	10.61	11.38
24	11.28	10.70	10.93	10.91	11.81	12.34	12.00	11.80	11.43	10.99	10.01	11.58
25	11.17	10.50	10.69	10.79	11.81	12.27	11.65	11.51	11.43	10.99	9.88	11.78
26	11.02	11.67	10.57	10.91	12.34	12.31	10.99	11.14	11.18	11.28	9.83	11.98
27	10.97	10.77	10.30	11.51	12.29	12.37	11.19	10.83	11.34	10.83	9.96	11.83
28	10.87	9.97	10.48	11.00	12.24	12.42	11.92	11.73	11.39	10.85	10.62	11.55
29	10.80	11.28	11.08	11.07	12.21	12.36	12.05	12.01	10.91	10.82	10.85	10.72
30	10.93	11.14	11.31	11.14	---	12.37	11.86	11.19	10.68	11.15	9.96	11.32
31	11.04	---	10.81	11.09	---	12.35	---	10.61	---	11.47	9.97	---
MEAN	11.10	10.89	11.09	10.94	11.16	11.83	11.81	11.22	11.19	11.01	10.85	11.02
MAX	11.97	12.37	11.54	11.51	12.34	12.42	12.31	12.01	11.81	11.77	12.53	11.98
MIN	9.59	9.70	10.30	10.07	10.47	10.70	10.99	9.83	10.40	10.13	9.83	9.76

CAL YR 1987 MEAN 11.07 MAX 12.37 MIN 9.53
WTR YR 1988 MEAN 11.17 MAX 12.53 MIN 9.59

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.--8 years (water years 1977-79, 1983-87), 72.7 ft³/s, 52,900 acre ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 725 ft³/s Apr. 26, 1987; 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, 521 ft³/s Mar. 15; maximum gage height, 16.88 ft Jan. 9; maximum daily reverse flow, -960 ft³/s Nov. 4; minimum gage height, 13.24 ft Oct. 1.

DISCHARGE, IN 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	-44	362	457	445	440	e470				---	-112	10
2	114	147	461	460	e440	e480				---	-174	5.6
3	122	-257	322	448	e475	e474				---	-27	12
4	148	-960	419	438	e440	e469				---	5.8	17
5	145	-485	438	486	e466	e479				---	-36	21
6	187	-153	433	474	e495	e485				---	-16	40
7	256	-192	418	449	e480	e486				---	21	29
8	372	152	422	463	e470	444				---	-52	21
9	296	390	407	465	e472	430				---	-47	21
10	147	396	419	467	e470	454				---	-144	10
11	161	424	427	492	e479	483				---	-241	20
12	-69	450	461	471	e466	479				---	-136	14
13	78	450	450	462	e472	483				---	-55	6.9
14	233	442	435	483	e479	481				69	-18	13
15	150	424	423	475	e469	521				-40	-131	43
16	121	385	435	490	e479	516				23	-130	100
17	175	378	479	477	e485	500				-33	-12	94
18	209	399	469	481	e470	453				-88	-72	113
19	215	229	450	472	e466	448				-95	-4.5	87
20	250	-78	445	464	e469	410				-86	-113	91
21	266	277	438	442	e490	474				-147	-16	117
22	194	118	453	462	e475	483				-98	-424	135
23	199	315	440	466	e480	463				-330	-62	114
24	268	158	429	478	e470	471				-273	20	98
25	241	357	429	476	e510	482				-356	7.7	102
26	229	318	433	479	e498	484				-237	22	116
27	228	80	440	479	e485	480				-48	18	138
28	238	241	467	475	e470	e433				-55	32	137
29	344	423	464	457	e479	e475				-139	31	119
30	311	452	472	439	---	e472				-136	23	69
31	231	---	452	453	---	e468				-23	15	---
TOTAL	6015	5642	13587	14468	13739	14630				---	-1827.0	1913.5
MEAN	194	188	438	467	474	472				---	-58.9	63.8
MAX	372	452	479	492	510	521				---	32	138
MIN	-69	-960	322	438	440	410				---	-424	5.6
AC-FT	11930	11190	26950	28700	27250	29020				---	-3620	3800

CAL YR 1987 TOTAL 94437.90 MEAN 259 MAX 725 MIN -960 AC-FT 187300

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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264514080550700 INDUSTRIAL CANAL AT CLEWISTON, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.80	14.52	15.92	16.11	16.13	16.29	16.27	e15.58	e15.43	15.20	e15.46	16.02
2	13.83	14.66	16.03	16.12	16.13	16.26	16.23	e15.90	15.36	15.28	e15.45	16.05
3	13.73	14.66	15.97	16.08	16.14	16.21	16.17	e15.73	15.21	15.25	15.48	16.00
4	13.88	14.75	15.89	16.15	16.13	16.17	16.13	e15.64	15.20	15.27	15.49	15.93
5	13.78	14.89	16.10	16.38	16.24	16.31	16.19	e15.58	15.17	15.31	15.49	15.81
6	13.58	15.22	16.06	16.22	16.58	16.36	16.13	e15.58	15.21	e15.20	15.47	15.83
7	13.52	15.22	16.03	16.05	16.34	16.38	16.10	e15.55	15.31	e15.28	15.44	15.92
8	13.80	15.07	16.03	16.06	16.33	16.33	16.09	e15.60	15.25	e15.15	15.45	15.98
9	13.69	15.03	16.03	16.22	16.36	16.20	16.07	e15.47	15.34	e15.10	15.49	16.05
10	13.76	15.00	16.03	16.18	16.35	16.20	16.03	e15.42	15.43	e15.16	15.47	e16.10
11	13.59	15.09	16.04	16.23	16.30	16.38	15.92	e15.38	15.55	e15.20	15.56	e16.11
12	14.21	15.29	16.03	16.23	16.25	16.23	15.78	e15.36	15.75	e15.19	15.66	e16.13
13	14.31	15.11	16.08	16.08	16.36	16.16	15.98	e15.38	15.63	e15.12	15.66	e16.15
14	14.39	15.06	16.08	16.27	16.31	16.23	15.97	e15.46	15.55	15.20	15.56	e16.17
15	14.30	15.07	16.01	16.14	16.17	16.33	15.91	e15.50	15.57	15.22	15.56	e16.19
16	14.31	15.07	16.18	16.32	16.31	16.32	15.92	e15.48	15.47	15.23	15.64	e16.21
17	14.26	15.02	16.31	16.08	16.32	16.23	15.90	e15.43	15.37	15.22	15.69	16.20
18	14.33	15.10	16.17	16.05	16.29	16.10	15.79	e15.42	15.32	15.26	15.72	16.19
19	14.28	15.14	16.09	16.05	16.24	16.33	15.63	e15.41	15.28	15.28	15.76	16.20
20	14.29	15.43	16.08	16.03	16.17	16.44	15.85	e15.42	15.33	15.26	15.71	16.20
21	14.37	15.64	16.07	15.99	16.53	16.39	15.80	e15.40	15.35	15.30	15.74	16.16
22	14.59	15.55	16.06	16.07	16.45	16.39	15.79	e15.35	15.33	15.31	15.85	16.12
23	14.53	15.55	16.13	16.24	16.34	16.40	15.75	e15.30	15.31	15.40	15.87	16.08
24	14.39	15.63	16.12	16.22	16.37	16.35	15.70	e15.28	15.30	15.45	15.85	16.04
25	14.37	15.65	16.12	16.19	16.61	16.35	15.69	e15.30	15.32	15.46	15.88	16.03
26	14.32	15.71	16.13	16.19	16.60	16.30	15.63	e15.30	15.23	15.44	15.92	16.02
27	14.26	15.81	16.13	16.30	16.35	16.34	15.68	e15.34	15.19	15.45	16.02	16.05
28	14.35	15.85	16.12	16.41	16.29	16.39	15.71	e15.26	15.21	15.49	15.97	16.06
29	14.57	15.88	16.30	16.27	16.30	16.41	15.76	e15.30	15.21	15.55	16.02	15.99
30	14.45	15.91	16.36	16.15	---	16.38	15.63	e15.34	15.43	15.49	16.03	15.99
31	14.42	---	16.12	16.12	---	16.34	---	e15.36	---	15.48	16.01	---
MEAN	14.14	15.25	16.09	16.17	16.32	16.31	15.91	15.45	15.35	15.30	15.69	16.07
MAX	14.59	15.91	16.36	16.41	16.61	16.44	16.27	15.90	15.75	15.55	16.03	16.21
MIN	13.52	14.52	15.89	15.99	16.13	16.10	15.63	15.26	15.17	15.10	15.44	15.81

CAL YR 1987 MEAN 14.81 MAX 16.36 MIN 13.44
WTR YR 1988 MEAN 15.67 MAX 16.61 MIN 13.52

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02287400 MIAMI CANAL AT BROKEN DAM, NEAR MIAMI, FL

LOCATION.--Lat 25°56'00", long 80°25'50", in SW $\frac{1}{4}$ sec.10, T.52 S., R.39 E., 15 ft from left bank, 0.5 mi downstream from levee 30, 13.6 mi upstream from salinity-control structure, 19 mi northwest of Miami, Dade County and 19.3 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1959 to September 1967, October 1984 to current year.

GAGE.--Water-stage recorder and electromagnetic velocity meter recorder. Datum of gage is National Geodetic Vertical Datum of 1929. November 1959 to September 1967, dual water-stage and deflection vane recorder.

REMARKS.--Records poor. Flow affected by regulation at downstream salinity-control structure 26 and by upstream storage release at control structure 32.

COOPERATION.--Records of control structure 32 operation are provided by South Florida Water Management District.

AVERAGE DISCHARGE.--8 years (Water years 1960-67, 1987), 241 ft³/s, 174,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, indeterminate; maximum gage height, 6.21 ft July 30, 1966; minimum daily discharge, 27 ft³/s Feb. 21-23, Apr. 29, 1987; minimum gage height, 1.40 ft May 31, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 563 ft³/s Sept. 22; maximum gage height, 4.75 ft Aug. 15; minimum daily discharge, 40 ft³/s June 4; minimum gage height, 2.55 ft Apr. 13.

DISCHARGE, IN 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	100	112	123	93	106	95	54	191	102	---	145	---
2	110	115	125	82	103	95	53	138	73	---	148	---
3	103	115	116	82	105	96	55	e106	43	---	148	---
4	115	115	117	87	103	101	54	e102	40	---	160	---
5	143	122	122	63	99	114	53	e103	42	---	158	---
6	122	131	119	66	88	114	52	e99	42	e95	150	---
7	112	136	119	76	93	106	54	e100	47	97	142	---
8	112	139	124	79	115	92	52	e102	63	94	228	---
9	96	136	126	70	110	88	51	e104	49	97	148	---
10	83	133	135	85	104	94	59	e107	78	96	69	---
11	82	156	128	76	92	83	59	e108	73	97	48	---
12	86	148	122	87	70	82	62	e110	72	99	101	---
13	113	130	115	100	60	86	60	e112	e90	116	348	---
14	118	117	112	92	67	93	215	e112	e90	116	302	---
15	120	108	105	94	73	70	191	e110	e90	118	268	---
16	109	99	105	80	80	68	79	e112	108	119	228	---
17	99	102	102	79	73	74	80	e113	103	139	164	---
18	102	106	101	72	92	79	86	e115	100	134	150	---
19	107	102	105	78	105	82	91	e118	97	136	146	---
20	101	112	105	78	99	64	84	e120	78	137	---	---
21	101	124	107	88	97	54	88	e123	---	119	---	e562
22	104	119	104	112	100	57	90	e125	---	108	---	563
23	109	120	105	106	102	58	91	e125	---	116	---	562
24	117	120	106	114	110	56	92	e123	---	124	---	557
25	115	113	106	102	105	53	158	e108	---	141	---	546
26	118	112	103	84	88	48	214	e94	---	149	---	548
27	119	116	e100	86	86	44	219	e93	---	148	---	374
28	122	113	e100	103	95	50	215	e86	---	150	---	159
29	128	117	e100	99	102	61	206	e85	---	158	---	154
30	124	119	102	107	---	54	201	e88	---	157	---	155
31	120	---	98	104	---	55	---	e82	---	152	---	---
TOTAL	3410	3607	3457	2724	2722	2366	3118	3414	---	---	---	---
MEAN	110	120	112	87.9	93.9	76.3	104	110	---	---	---	---
MAX	143	156	135	114	115	114	219	191	---	---	---	---
MIN	82	99	98	63	60	44	51	82	---	---	---	---
AC-FT	6760	7150	6860	5400	5400	4690	6180	6770	---	---	---	---

CAL YR 1987 TOTAL 37128 MEAN 102 MAX 302 MIN 27 AC-FT 73640

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

83

02287400 MIAMI CANAL AT BROKEN DAM, NEAR MIAMI, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.48	3.18	3.03	2.88	2.95	2.91	2.77	4.06	2.93	2.87	2.96	---
2	3.45	3.36	2.97	2.88	2.93	2.92	2.76	3.76	2.88	2.94	2.90	---
3	3.38	3.39	2.97	2.93	2.92	2.93	2.75	3.33	2.79	2.96	2.84	---
4	3.28	3.52	2.99	2.90	2.92	2.94	2.79	3.19	2.84	2.91	2.80	---
5	3.20	3.44	2.96	2.87	2.91	2.94	2.81	3.11	2.90	2.92	2.75	---
6	3.14	3.36	2.89	2.86	2.91	2.95	2.77	3.02	2.98	2.86	2.77	---
7	3.09	3.29	2.89	2.91	2.91	2.96	2.71	2.97	3.01	2.95	2.89	---
8	3.06	3.23	2.95	2.99	2.99	2.97	2.67	2.94	3.16	2.98	3.45	---
9	3.03	3.31	3.58	3.01	2.98	2.95	2.66	2.91	3.22	3.04	4.26	---
10	3.08	3.26	3.57	3.05	2.95	2.95	2.67	2.88	3.08	2.98	4.13	---
11	3.11	3.18	3.48	3.05	2.89	2.93	2.66	2.84	3.03	2.95	3.60	---
12	3.52	3.16	3.38	3.07	2.92	2.93	2.64	2.82	3.10	2.91	4.04	---
13	3.64	3.11	3.30	2.98	2.90	2.91	2.60	2.83	3.41	2.92	4.54	---
14	3.54	3.10	3.28	2.97	2.92	2.90	3.54	2.85	3.50	3.02	4.60	---
15	3.45	3.04	3.21	2.95	2.93	2.86	3.70	2.86	3.41	3.24	4.74	---
16	3.39	3.07	3.18	3.01	2.91	2.84	2.76	2.86	3.26	3.15	4.71	---
17	3.31	3.04	3.15	3.02	2.87	2.83	2.67	2.90	3.14	3.12	4.24	---
18	3.25	2.95	3.13	3.01	2.88	2.84	2.64	2.93	3.04	3.14	3.71	---
19	3.19	3.04	3.14	3.02	2.89	2.92	2.60	2.91	3.12	3.16	3.64	---
20	3.14	3.11	3.12	3.00	2.90	2.92	2.62	2.90	3.14	3.14	---	e4.00
21	3.11	3.07	3.10	2.99	3.02	2.89	2.63	2.92	3.08	3.09	---	4.06
22	3.04	3.06	3.07	3.08	3.04	2.87	2.62	2.88	3.00	3.07	---	4.09
23	3.05	3.05	3.04	3.05	3.01	2.87	2.61	2.87	2.96	3.01	---	4.10
24	3.03	3.03	3.03	3.04	3.01	2.84	2.61	2.87	2.93	3.09	---	4.12
25	3.01	3.04	3.02	3.05	2.97	2.82	2.98	2.89	2.92	3.40	---	4.16
26	3.00	3.07	3.00	3.05	2.94	2.80	3.54	2.88	2.89	3.39	---	4.16
27	2.97	3.04	3.98	2.99	2.93	2.83	3.69	2.90	2.91	3.31	---	3.87
28	2.96	3.00	3.93	2.97	2.93	2.83	3.74	2.98	2.98	3.23	---	3.29
29	2.89	2.98	2.90	2.96	2.93	2.81	3.67	2.93	2.90	3.14	---	3.17
30	2.98	3.02	2.89	2.96	---	2.79	3.69	3.01	2.86	3.05	---	3.11
31	2.99	---	2.89	2.96	---	2.78	---	2.97	---	2.98	---	---
MEAN	3.19	3.15	3.16	2.98	2.94	2.88	2.92	3.00	3.05	3.06	---	---
MAX	3.64	3.52	3.98	3.08	3.04	2.97	3.74	4.06	3.50	3.40	---	---
MIN	2.89	2.95	2.89	2.86	2.87	2.78	2.60	2.82	2.79	2.86	---	---

CAL YR 1987 MEAN 3.12 MAX 4.48 MIN 2.61

e Estimated

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.--Records fair, except for those estimated daily discharges, which are poor. 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, 574 ft³/s Aug. 19; maximum gage height, 3.40 ft Nov. 4; no flow for many days during year; minimum gage height, 0.76 ft Aug. 26.

DISCHARGE, IN 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	281	162	25	30	.00	.00	.00	52	.00	e100	e200	344
2	190	237	105	20	.00	24	.00	37	.00	e150	e200	311
3	185	209	3.9	12	1.5	.00	.00	.00	.00	e150	e200	264
4	241	307	.00	22	.00	.00	.00	.00	e15	e130	e200	251
5	212	274	61	12	.00	.00	.00	.00	e5.0	e100	e200	216
6	147	250	85	26	.00	.00	.00	.00	.00	e100	209	242
7	132	249	61	19	.00	.00	e4.0	.00	32	e120	211	337
8	114	234	59	.00	.00	.00	7.0	.00	118	e150	200	345
9	110	260	318	.00	.90	.00	.00	.00	176	.151	119	353
10	78	251	286	4.4	22	3.8	.00	.00	85	127	530	349
11	107	182	231	4.0	16	.00	.00	.00	82	e170	547	345
12	364	136	173	.00	.00	.00	7.4	.00	151	e170	440	349
13	453	134	123	5.3	.00	.00	7.6	e.00	209	e170	554	329
14	380	111	141	.00	.00	.00	3.4	e.00	182	e170	461	327
15	321	121	178	5.5	.00	.00	.00	e.00	105	184	e500	318
16	272	119	136	.00	.00	.00	1.6	e5.0	89	132	e300	309
17	229	114	99	.00	18	.00	1.7	e.00	140	89	e300	303
18	191	155	82	.00	.00	.00	.00	e.00	69	123	e400	287
19	177	77	59	.00	.00	.00	.00	e.00	125	138	574	288
20	159	149	75	.00	.00	.00	.00	e.00	120	138	243	286
21	125	178	92	.00	.00	.00	.00	e.00	99	98	228	284
22	142	94	78	25	.90	.00	.00	e.00	86	144	334	246
23	92	77	83	.00	4.0	.00	.00	e.00	42	122	398	264
24	100	81	75	.00	.00	1.9	.00	e.00	e40	107	334	270
25	105	50	76	38	8.5	.00	.00	e.00	e40	144	320	300
26	68	63	76	26	.00	.00	.00	e.00	e40	124	270	272
27	70	79	78	26	.00	.00	.00	e10	e35	e160	261	264
28	79	76	72	.00	.00	.00	.00	e.00	e70	e160	382	177
29	72	74	81	.00	.00	.00	.00	e.00	e50	e160	345	119
30	3.8	23	72	.00	---	.00	.00	e.00	e50	e200	276	91
31	11	---	50	.00	---	.00	---	e10	---	e160	319	---
TOTAL	5210.8	4526	3133.90	275.20	71.80	29.70	32.70	114.00	2255.00	4341	10055	8440
MEAN	168	151	101	8.88	2.48	.96	1.09	3.68	75.2	140	324	281
MAX	453	307	318	38	22	24	7.6	52	209	200	574	353
MIN	3.8	23	.00	.00	.00	.00	.00	.00	.00	89	119	91
AC-FT	10340	8980	6220	546	142	59	65	226	4470	8610	19940	16740

CAL YR 1987 TOTAL 20168.40 MEAN 55.3 MAX 453 MIN .00 AC-FT 40000
WTR YR 1988 TOTAL 38485.10 MEAN 105 MAX 574 MIN .00 AC-FT 76340

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02288600 MIAMI CANAL AT NW 36TH ST, MIAMI, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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 WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L CACO3) (00419)	CAR- BONATE WATER WHOLE IT-FLD (MG/L) (00447)
DEC 15...	1105	23.0	763	80020	0.70	640	2.3	7.65	7.80	--	--	--
FEB 11...	1115	18.0	764	80020	0.50	690	8.1	8.18	8.20	232	233	0
JUN 22...	1115	24.0	763	80020	1.2	740	1.9	7.44	7.70	220	226	0
SEP 22...	1110	25.0	763	80020	1.5	785	0.6	7.80	7.70	253	262	0

DATE	BICAR- BONATE WATER WHOLE IT-FLD (MG/L) (00450)	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)
DEC 15...	--	0.330	0.300	0.030	1.4	<0.100	0.030	<0.010	0.030	79	10
FEB 11...	284	0.050	0.040	0.020	1.2	0.170	0.020	0.010	<0.010	77	13
JUN 22...	276	0.310	0.280	<0.010	1.4	<0.100	0.020	0.010	<0.010	76	12
SEP 22...	320	0.220	0.210	<0.010	1.5	<0.100	0.020	0.010	<0.010	77	15

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)
DEC 15...	44	2.6	65	21	0.30	8.0	1	26	<0.5	3	3
FEB 11...	53	2.8	81	15	0.30	7.4	<1	29	<0.5	2	<1
JUN 22...	52	2.6	79	14	0.40	8.0	1	29	<0.5	<1	2
SEP 22...	54	2.7	13	3.6	0.10	12	1	38	<0.5	<1	1

EVERGLADES AND SOUTHEASTERN COASTAL AREA

87

02288600 MIAMI CANAL AT NW 36TH ST, MIAMI, FL--Continued

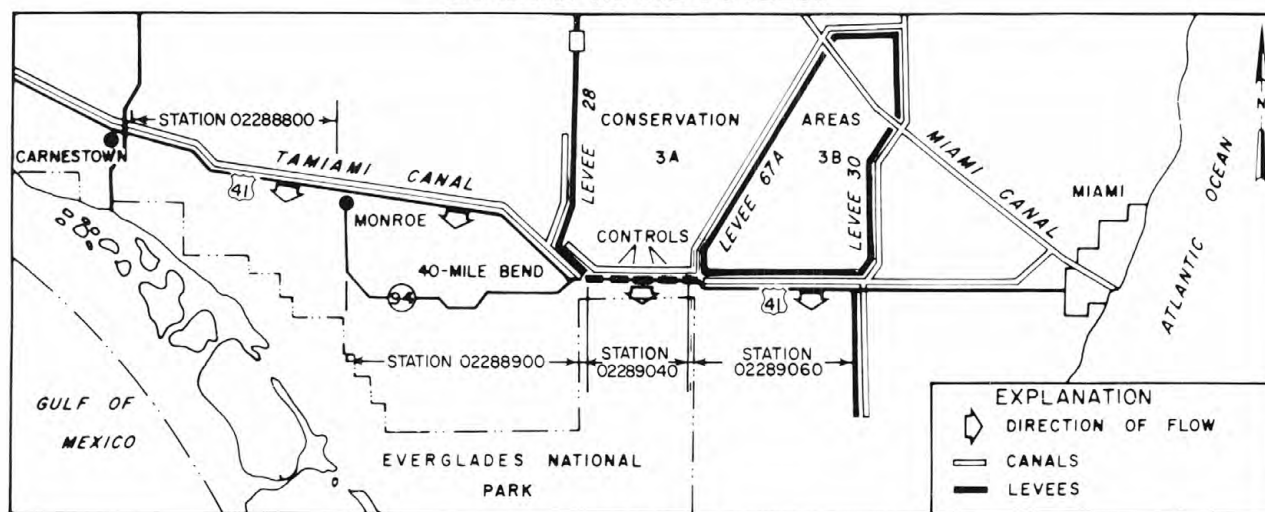
WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

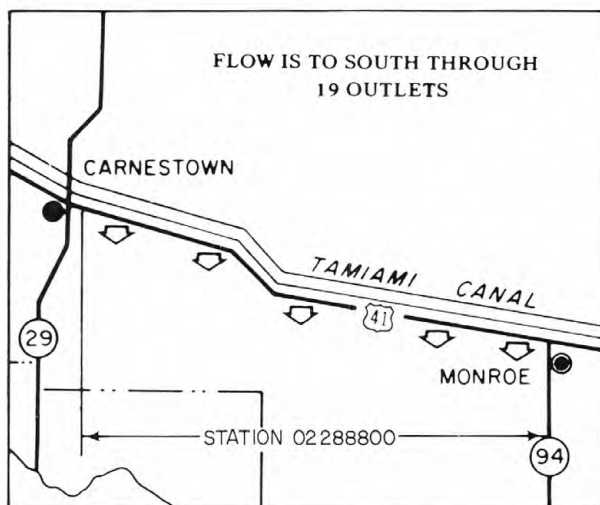
DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, 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)
DEC 15...	<3	12	190	<5	11	<10	1	1	760	<6	6
FEB 11...	<3	4	110	<5	1	<10	<1	<1	860	<6	9
JUN 22...	<3	2	91	<5	41	<10	4	<1	840	<6	4
SEP 22...	<3	2	180	<5	16	<10	3	<1	1000	<6	17

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	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)	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- LINITY LAB AS CACO3) (90410)
DEC 15...	10	<4	<1	<10	<10	381	40	<0.1	10	653	228
FEB 11...	<10	9	<1	--	--	417	85	0.4	48	692	238
JUN 22...	<10	8	<1	300	200	419	29	<0.1	7	685	228
SEP 22...	<10	7	<1	340	K160	451	40	0.4	5	725	243

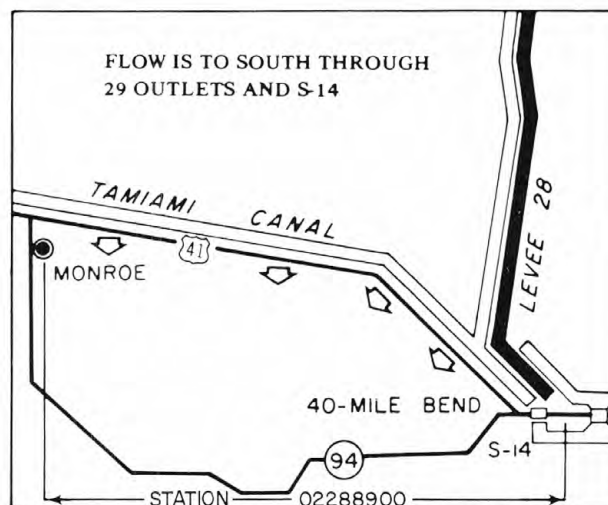
TAMIAMI CANAL OUTLETS



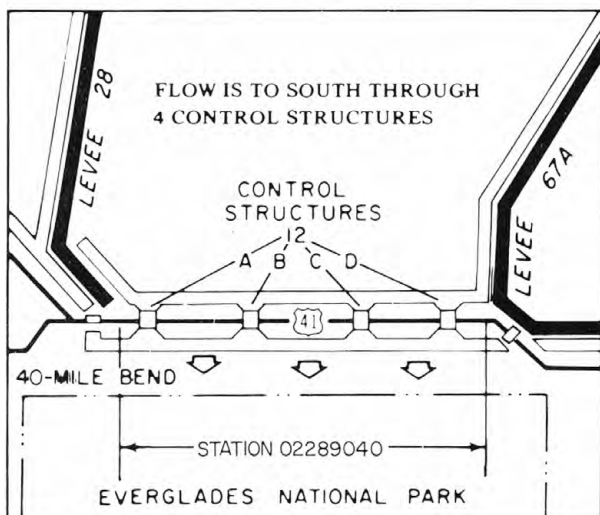
LOCATION



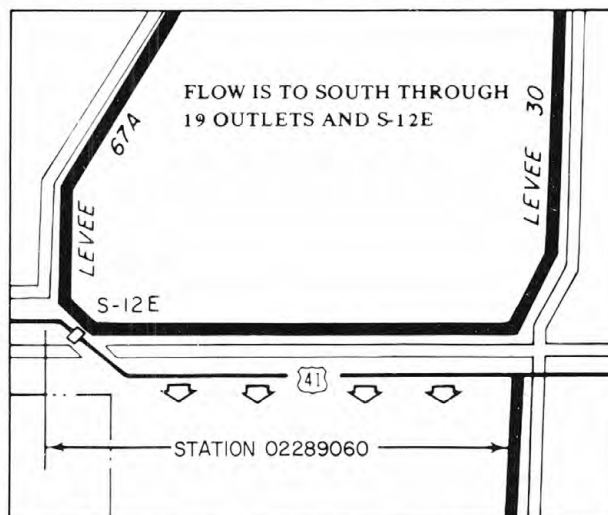
STATION 02288800 MONROE TO CARNESTOWN



STATION 02288900 40-MILE BEND TO MONROE



STATION 02289040 LEVEE 67-A TO 40-MILE BEND



STATION 02289060 LEVEE 30 TO LEVEE 67-A

FIGURE 8 • Tamiami Canal Outlets.

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

89

02288800 TAMIA MI 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.--Records fair, except those for estimated daily discharges, which are poor. 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.--28 years, 384 ft³/s, 278,200 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, 1,940 ft³/s July 26; maximum gage height, 4.61 ft July 25; no flow for many days; minimum gage height, 0.60 ft May 17.

DISCHARGE, IN 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	1780	199	246	70	12	4.1	.00	.00	.00	287	1420	1520
2	1670	246	236	68	11	3.5	.00	.00	.00	264	1320	1520
3	1550	504	223	68	10	3.0	.00	.00	.00	241	1210	1480
4	1430	620	211	67	9.8	2.6	.00	.00	.00	218	1150	1460
5	1320	605	202	66	9.2	5.3	.00	.00	.00	201	1190	1490
6	1200	696	192	64	8.7	10	.03	.00	.00	191	1090	1550
7	1100	827	182	63	8.1	13	.01	.00	.00	219	1010	1560
8	1000	810	172	62	22	12	.00	.00	3.3	245	995	1540
9	914	765	173	62	36	10	.00	.00	18	307	1030	1490
10	854	725	174	73	34	9.3	.00	.00	18	350	1080	1500
11	826	677	169	102	32	8.8	.00	.00	19	327	1380	1440
12	869	627	162	101	31	7.2	.00	.00	23	303	1560	1420
13	891	580	155	98	29	6.0	.00	.00	20	332	1610	1390
14	843	541	148	94	26	8.7	.00	.00	26	360	1790	1380
15	782	507	142	88	25	7.4	.00	.00	26	396	1890	1390
16	725	477	137	80	25	5.8	.00	.00	18	398	1900	1320
17	676	452	131	73	23	4.7	.00	.00	13	412	1870	1250
18	629	427	125	66	22	3.9	.00	.00	24	428	1810	1190
19	582	409	120	60	20	5.4	.00	.08	20	441	1720	1140
20	540	354	116	53	19	6.1	.00	.00	17	847	1840	1110
21	498	337	110	48	14	4.9	.00	.00	57	949	1870	1080
22	455	320	106	45	9.9	3.7	.00	.00	150	1170	1770	1040
23	415	307	104	40	9.3	2.7	.00	.00	143	1300	1640	1000
24	377	297	100	36	8.7	1.9	.00	.00	134	1480	1520	926
25	342	290	96	32	8.2	1.4	.00	.00	125	1660	1460	784
26	311	284	92	30	7.1	1.8	.00	.00	170	1940	1430	746
27	283	279	88	26	6.2	2.6	.00	.00	276	1840	1580	718
28	259	273	85	22	5.5	2.3	.00	.00	324	1720	1660	699
29	235	264	81	20	4.9	1.7	.00	.00	320	1650	1580	640
30	213	254	76	17	---	1.1	.00	.00	308	1620	1600	608
31	195	---	73	14	---	.45	---	.00	---	1520	1520	---
TOTAL	23764	13953	4427	1808	486.6	161.35	.04	.08	2252.30	23616	46495	36381
MEAN	767	465	143	58.3	16.8	5.20	.001	.003	75.1	762	1500	1213
MAX	1780	827	246	102	36	13	.03	.08	324	1940	1900	1560
MIN	195	199	73	14	4.9	.45	.00	.00	.00	191	995	608
AC-FT	47140	27680	8780	3590	965	320	.08	.2	4470	46840	92220	72160

CAL YR 1987 TOTAL 134747.00 MEAN 369 MAX 1780 MIN 7.7 AC-FT 267300
WTR YR 1988 TOTAL 153344.37 MEAN 419 MAX 1940 MIN .00 AC-FT 304200

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02288800 TAMIA MIAMI CANAL OUTLETS, MONROE TO CARNESTOWN, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.39	3.64	3.80	3.45	3.28	3.19	2.87	1.53	1.79	3.81	4.27	4.13
2	4.35	3.79	3.77	3.44	3.27	3.16	2.81	1.69	1.74	3.76	4.21	4.13
3	4.31	4.18	3.75	3.45	3.26	3.13	2.75	1.62	1.60	3.71	4.12	4.10
4	4.27	4.27	3.73	3.46	3.25	3.11	2.70	1.51	1.42	3.65	4.08	4.09
5	4.22	4.25	3.71	3.45	3.23	3.15	2.65	1.40	1.26	3.60	4.12	4.11
6	4.17	4.34	3.69	3.43	3.22	3.21	2.60	1.31	1.15	3.57	4.04	4.16
7	4.12	4.44	3.68	3.43	3.20	3.24	2.53	1.20	1.08	3.62	3.97	4.21
8	4.07	4.43	3.66	3.42	3.28	3.22	2.45	1.10	1.70	3.65	3.96	4.25
9	4.03	4.38	3.67	3.42	3.35	3.17	2.39	1.02	2.84	3.73	3.99	4.26
10	4.01	4.34	3.68	3.44	3.33	3.15	2.33	.94	2.84	3.79	4.03	4.32
11	4.01	4.28	3.68	3.50	3.31	3.14	2.27	.87	2.87	3.74	4.26	4.35
12	4.09	4.22	3.66	3.50	3.30	3.09	2.22	.80	2.97	3.69	4.40	4.36
13	4.14	4.16	3.65	3.48	3.28	3.05	2.19	.74	2.93	3.72	4.43	4.34
14	4.13	4.11	3.64	3.47	3.25	3.08	2.14	.73	3.04	3.75	4.53	4.34
15	4.09	4.06	3.62	3.46	3.23	3.03	2.10	.69	3.05	3.79	4.59	4.34
16	4.06	4.02	3.62	3.45	3.23	2.97	2.07	.65	2.94	3.79	4.60	4.29
17	4.03	3.98	3.60	3.44	3.20	2.93	2.03	.80	2.84	3.82	4.58	4.24
18	4.01	3.94	3.59	3.43	3.18	2.89	1.85	1.60	2.98	3.84	4.55	4.20
19	3.98	3.94	3.57	3.41	3.16	3.04	1.53	1.67	2.92	3.86	4.49	4.16
20	3.95	4.00	3.57	3.40	3.15	3.13	1.35	1.60	2.86	4.16	4.50	4.14
21	3.92	3.99	3.55	3.39	3.31	3.09	1.23	1.50	3.08	4.20	4.49	4.11
22	3.88	3.96	3.55	3.39	3.39	3.03	1.13	1.39	3.54	4.30	4.43	4.08
23	3.85	3.93	3.54	3.38	3.37	2.97	1.07	1.28	3.52	4.35	4.35	4.04
24	3.81	3.91	3.53	3.36	3.36	2.91	1.03	1.19	3.48	4.44	4.28	4.03
25	3.78	3.90	3.53	3.36	3.34	2.87	.99	1.29	3.45	4.50	4.24	4.06
26	3.74	3.89	3.51	3.36	3.31	2.90	.94	1.32	3.57	4.58	4.22	4.02
27	3.71	3.87	3.50	3.35	3.28	3.13	.89	1.24	3.80	4.53	4.26	3.99
28	3.69	3.86	3.49	3.33	3.25	3.12	.85	1.17	3.89	4.46	4.26	3.98
29	3.66	3.84	3.48	3.32	3.23	3.08	.79	1.19	3.88	4.42	4.21	3.99
30	3.63	3.82	3.46	3.30	---	3.02	.77	1.49	3.86	4.40	4.18	3.95
31	3.61	---	3.45	3.29	---	2.94	---	1.74	---	4.34	4.13	---
MEAN	3.99	4.06	3.61	3.41	3.27	3.07	1.85	1.23	2.76	3.99	4.28	4.16
MAX	4.39	4.44	3.80	3.50	3.39	3.24	2.87	1.74	3.89	4.58	4.60	4.36
MIN	3.61	3.64	3.45	3.29	3.15	2.87	.77	.65	1.08	3.57	3.96	3.95

WTR YR 1988 TOTAL 1210.87 MEAN 3.31 MAX 4.60 MIN .65

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02288900 TAMAMI 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.--48 years, 275 ft³/s, 199,200 acre-ft/yr.

REMARKS.--Records fair except those below 20 ft³/s. 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, 1,680 ft³/s Aug. 22; maximum gage height, 8.55 ft Aug. 20-22; no flow, May 19-24; minimum gage height, 4.97 ft May 24.

DISCHARGE, IN 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	888	435	254	170	92	51	13	7.0	20	156	919	1470
2	905	513	242	163	89	48	12	8.3	17	147	903	1420
3	905	594	232	163	86	45	11	5.7	14	133	852	1370
4	911	634	224	155	82	43	11	3.8	9.9	120	835	1350
5	896	638	216	150	79	47	10	2.3	7.5	107	844	1300
6	874	739	207	147	77	53	9.5	1.4	14	96	787	1250
7	845	726	201	144	74	56	8.6	.95	13	100	775	1230
8	814	677	195	145	82	52	7.4	.83	130	117	821	1190
9	781	645	216	144	90	49	6.3	.72	e268	145	817	1160
10	770	616	220	149	89	50	5.7	.61	e250	146	978	1140
11	784	588	218	148	85	48	5.1	.51	e250	141	1290	1110
12	891	556	213	143	81	43	4.6	.40	e250	130	1260	1090
13	971	529	208	141	77	39	4.3	.31	e250	123	1200	1070
14	954	506	203	139	73	37	3.7	.30	e240	137	1200	1060
15	920	486	370	139	70	31	2.8	.24	e226	335	1430	1030
16	878	467	581	138	67	27	2.1	.14	220	356	1570	996
17	839	447	539	136	63	24	1.6	.06	211	536	1580	955
18	797	427	497	134	60	22	1.1	.01	200	657	1570	919
19	760	413	461	132	58	42	.94	.00	196	618	1540	887
20	725	417	428	129	56	49	.89	.00	200	573	1640	855
21	685	395	398	128	68	42	.82	.00	243	577	1660	827
22	651	368	370	112	76	36	.72	.00	304	606	1680	798
23	618	353	343	110	73	31	.63	.00	288	611	1630	767
24	580	336	321	107	73	27	.55	.00	263	627	1550	735
25	551	325	297	107	71	24	.47	.33	240	627	1530	705
26	522	316	275	107	66	24	.39	2.5	220	633	1460	681
27	491	304	257	106	61	31	.31	3.1	202	653	1440	661
28	466	291	237	104	58	26	.23	20	185	647	1610	644
29	440	277	219	100	54	22	.15	30	177	720	1660	621
30	414	266	200	97	---	18	.16	26	171	1010	1580	597
31	397	---	184	94	---	15	---	23	---	961	1510	---
TOTAL	22923	14284	9026	4081	2130	1152	126.06	138.51	5279.4	12545	40121	29888
MEAN	739	476	291	132	73.4	37.2	4.20	4.47	176	405	1294	996
MAX	971	739	581	170	92	56	13	30	304	1010	1680	1470
MIN	397	266	184	94	54	15	.15	.00	7.5	96	775	597
AC-FT	45470	28330	17900	8090	4220	2280	250	275	10470	24880	79580	59280

CAL YR 1987 TOTAL 101308.20 MEAN 278 MAX 1100 MIN 1.3 AC-FT 200900
WTR YR 1988 TOTAL 141693.97 MEAN 387 MAX 1680 MIN .00 AC-FT 281000

e Estimated

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02288900 TAMIAMI CANAL OUTLETS, 40-MILE BEND TO MONROE, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.41	8.17	8.07	7.82	7.89	7.67	7.09	6.57	6.15	8.02	8.25	8.46
2	8.42	8.26	8.05	7.83	7.87	7.65	7.03	6.75	6.10	8.00	8.24	8.44
3	8.42	8.34	8.03	7.85	7.86	7.64	6.97	6.65	6.02	7.96	8.21	8.43
4	8.42	8.39	8.02	7.85	7.85	7.62	6.92	6.54	5.90	7.92	8.20	8.42
5	8.41	8.39	8.00	7.84	7.84	7.64	6.87	6.43	5.83	7.88	8.20	8.40
6	8.39	8.48	7.98	7.83	7.83	7.65	6.82	6.33	6.16	7.84	8.17	8.38
7	8.38	8.48	7.97	7.82	7.81	7.66	6.75	6.22	6.17	7.85	8.16	8.37
8	8.36	8.45	7.96	7.83	7.84	7.64	6.66	6.11	7.03	7.89	8.19	8.35
9	8.34	8.42	8.00	7.82	7.88	7.61	6.58	6.01	e7.97	7.95	8.18	8.34
10	8.33	8.40	8.01	7.84	7.87	7.61	6.52	5.91	---	7.95	8.26	8.33
11	8.33	8.38	8.01	7.89	7.86	7.58	6.45	5.82	---	7.93	8.41	8.31
12	8.39	8.35	8.00	7.89	7.84	7.55	6.38	5.73	---	7.90	8.40	8.31
13	8.44	8.33	7.99	7.89	7.82	7.52	6.33	5.65	---	7.88	8.38	8.30
14	8.43	8.31	7.98	7.88	7.80	7.50	6.26	5.65	---	7.91	8.37	8.31
15	8.42	8.29	7.97	7.88	7.79	7.45	6.18	5.60	e7.90	8.16	8.47	8.33
16	8.40	8.27	7.97	7.88	7.77	7.40	6.12	5.52	7.89	8.17	8.52	8.31
17	8.38	8.25	7.95	7.87	7.75	7.35	6.04	5.44	7.87	8.25	8.52	8.29
18	8.36	8.23	7.94	7.87	7.74	7.31	5.97	5.40	7.85	8.27	8.52	8.27
19	8.35	8.22	7.93	7.86	7.73	7.50	5.89	5.34	7.84	8.23	8.50	8.25
20	8.33	8.23	7.92	7.85	7.72	7.58	5.84	5.28	7.85	8.20	8.53	8.23
21	8.31	8.21	7.91	7.85	7.78	7.52	5.77	5.20	8.04	8.19	8.54	8.21
22	8.29	8.19	7.90	7.90	7.82	7.47	5.67	5.13	8.29	8.17	8.55	8.20
23	8.27	8.17	7.89	7.89	7.81	7.42	5.58	5.05	8.27	8.18	8.53	8.18
24	8.25	8.15	7.89	7.90	7.80	7.37	5.50	5.01	8.23	8.19	8.50	8.16
25	8.23	8.14	7.88	7.94	7.78	7.32	5.42	5.45	8.20	8.19	8.49	8.14
26	8.21	8.13	7.87	7.94	7.76	7.33	5.34	6.02	8.16	8.19	8.47	8.12
27	8.20	8.12	7.87	7.94	7.74	7.42	5.26	6.02	8.12	8.21	8.46	8.11
28	8.18	8.11	7.86	7.93	7.72	7.36	5.18	6.26	8.09	8.21	8.51	8.09
29	8.16	8.09	7.85	7.92	7.70	7.29	5.10	6.31	8.07	8.22	8.53	8.07
30	8.14	8.08	7.83	7.91	---	7.22	5.11	6.25	8.06	8.30	8.50	8.06
31	8.13	---	7.82	7.90	---	7.16	---	6.21	---	8.27	8.48	---
MEAN	8.33	8.27	7.95	7.87	7.80	7.48	6.12	5.87	7.52	8.08	8.39	8.27
MAX	8.44	8.48	8.07	7.94	7.89	7.67	7.09	6.75	8.29	8.30	8.55	8.46
MIN	8.13	8.08	7.82	7.82	7.70	7.16	5.10	5.01	5.83	7.84	8.16	8.06

CAL YR 1987 MEAN 7.81 MAX 8.48 MIN 5.73
WTR YR 1988 MEAN 7.66 MAX 8.55 MIN 5.01

e Estimated

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

93

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

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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 ARD (STAND- UNITS) (00403)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L CACO3) (00419)	CAR- BONATE WATER WHOLE IT-FLD (MG/L) (00447)
DEC 15...	0930	21.5	763	80020	0.50	410	2.7	7.48	7.80	--	--	--
FEB 11...	0910	16.5	764	80020	0.80	430	2.0	7.32	7.90	170	177	0
JUN 22...	0935	23.0	763	80020	1.1	215	4.0	7.59	7.60	95	98	0
SEP 22...	0920	25.5	763	80020	1.5	430	3.2	7.80	7.90	143	148	0

DATE	BICAR- BONATE WATER WHOLE IT-FLD (MG/L) (00450)	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)
DEC 15...	--	--	0.030	--	1.0	--	0.020	--	--	67	2.4
FEB 11...	216	0.730	0.040	0.030	0.80	0.100	0.150	0.040	<0.010	72	3.3
JUN 22...	120	0.030	0.030	<0.010	0.60	<0.100	0.050	0.020	<0.010	38	6.5
SEP 22...	180	0.070	0.060	<0.010	0.90	<0.100	0.010	0.010	<0.010	59	2.8

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)
DEC 15...	13	0.60	23	7.6	0.10	0.9	1	14	<0.5	2	<1
FEB 11...	17	0.90	25	4.9	0.20	1.6	<1	15	<0.5	<1	<1
JUN 22...	63	2.5	9.7	7.8	0.30	3.5	1	10	<0.5	1	1
SEP 22...	12	0.40	59	15	0.30	5.0	1	14	<0.5	1	1

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	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)	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)
DEC 15...	<3	11	16	<5	4	<10	6	<1	220	<6	7
FEB 11...	<3	2	38	<5	5	<10	1	<1	300	<6	4
JUN 22...	<3	5	53	7	8	<10	7	<1	160	<6	11
SEP 22...	<3	<1	84	<5	8	<10	4	<1	210	<6	11

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	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)	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- LITY LAB (MG/L AS CACO3) (90410)
DEC 15...	<10	<4	<1	K50	K90	223	25	<0.1	12	386	165
FEB 11...	<10	8	<1	--	--	261	87	<0.1	23	430	183
JUN 22...	<10	4	<1	K160	740	145	25	<0.1	4	217	95
SEP 22...	10	<4	<1	K100	K40	203	50	0.7	4	322	145

EVERGLADES AND SOUTHEASTERN COASTAL AREA

95

254754080344300 SHARK RIVER SLOUGH NO. 1 IN CONSERVATION AREA 3B NEAR COOPERTOWN, FL

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.

DRAINAGE AREA.--Indeterminate.

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."

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.38 ft Sept. 29, 1978; minimum, 4.62 ft June 22, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.31 ft Aug. 28, 29; minimum, 6.87 ft May 23.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.62	7.43	7.62	7.68	7.67	7.44	7.23	7.14	7.04	7.38	7.72	8.26
2	7.58	7.67	7.62	7.67	7.66	7.43	7.22	7.13	7.03	7.38	7.70	8.24
3	7.55	7.73	7.60	7.67	7.65	7.42	7.22	7.11	7.01	7.38	7.68	8.23
4	7.52	7.91	7.60	7.67	7.64	7.41	7.22	7.10	7.02	7.36	7.66	8.20
5	7.48	7.92	7.59	7.67	7.63	7.41	7.23	7.08	7.01	7.34	7.65	8.18
6	7.45	7.90	7.57	7.66	7.62	7.40	7.22	7.06	7.07	7.34	7.64	8.16
7	7.43	7.88	7.57	7.66	7.60	7.40	7.21	7.04	7.20	7.33	7.64	8.14
8	7.40	7.86	7.56	7.66	7.61	7.39	7.19	7.02	7.37	7.34	7.65	8.13
9	7.38	7.86	7.68	7.66	7.61	7.38	7.17	7.00	7.66	7.40	7.71	8.11
10	7.38	7.84	7.72	7.68	7.60	7.38	7.17	6.98	7.63	7.46	7.75	8.10
11	7.39	7.82	7.71	7.71	7.59	7.37	7.16	6.97	7.60	7.45	7.79	8.10
12	7.47	7.79	7.71	7.71	7.58	7.36	7.15	6.96	7.58	7.43	7.80	8.12
13	7.59	7.77	7.70	7.70	7.56	7.35	7.13	6.94	7.58	7.40	7.80	8.10
14	7.58	7.75	7.70	7.69	7.55	7.35	7.12	6.95	7.61	7.52	7.83	8.09
15	7.57	7.74	7.69	7.70	7.54	7.33	7.10	6.93	7.64	7.73	7.93	8.07
16	7.55	7.72	7.73	7.69	7.54	7.32	7.10	6.92	7.60	7.79	7.97	8.04
17	7.54	7.71	7.72	7.68	7.52	7.31	7.09	6.92	7.56	7.74	7.97	8.02
18	7.52	7.69	7.71	7.68	7.51	7.30	7.08	6.92	7.53	7.72	7.98	8.00
19	7.51	7.70	7.70	7.67	7.51	7.31	7.07	6.94	7.51	7.72	7.99	7.98
20	7.49	7.71	7.70	7.66	7.50	7.32	7.07	6.93	7.60	7.72	8.11	7.96
21	7.48	7.70	7.70	7.66	7.53	7.31	7.07	6.91	7.57	7.71	8.15	7.95
22	7.46	7.68	7.70	7.68	7.53	7.30	7.06	6.89	7.56	7.70	8.15	7.93
23	7.45	7.67	7.70	7.67	7.52	7.30	7.05	6.90	7.53	7.70	8.14	7.91
24	7.43	7.66	7.70	7.67	7.52	7.29	7.04	6.95	7.50	7.74	8.14	7.92
25	7.42	7.65	7.70	7.73	7.51	7.28	7.03	6.94	7.48	7.75	8.13	7.92
26	7.41	7.66	7.70	7.74	7.49	7.27	7.02	6.94	7.45	7.73	8.12	7.90
27	7.39	7.67	7.70	7.73	7.47	7.27	7.01	6.93	7.42	7.71	8.13	7.92
28	7.38	7.66	7.70	7.71	7.46	7.27	6.99	6.93	7.41	7.72	8.29	7.97
29	7.36	7.64	7.70	7.70	7.45	7.26	6.97	6.94	7.41	7.73	8.30	7.95
30	7.35	7.63	7.68	7.69	---	7.25	6.96	7.04	7.40	7.73	8.28	7.94
31	7.34	---	7.68	7.68	---	7.24	---	7.05	---	7.70	8.26	---
MEAN	7.47	7.73	7.67	7.68	7.56	7.34	7.11	6.98	7.42	7.58	7.94	8.05
MAX	7.62	7.92	7.73	7.74	7.67	7.44	7.23	7.14	7.66	7.79	8.30	8.26
MIN	7.34	7.43	7.56	7.66	7.45	7.24	6.96	6.89	7.01	7.33	7.64	7.90

CAL YR 1987 MEAN 7.25 MAX 7.92 MIN 6.56
WTR YR 1988 MEAN 7.54 MAX 8.30 MIN 6.89

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 northeast 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. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--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, 5.60 ft June 9, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.21 ft Jan. 11; minimum, 8.38 ft May 17.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.03	9.39	9.95	10.08	10.06	9.72	9.32	8.68	8.66	9.07	9.44	9.57
2	9.07	9.50	9.97	10.09	10.04	9.70	9.31	8.71	8.65	9.09	9.46	9.58
3	9.09	9.57	9.96	10.08	10.03	9.68	9.29	8.72	8.62	9.15	9.39	9.58
4	9.11	9.67	9.94	10.08	10.01	9.65	9.27	8.69	8.59	9.15	9.36	9.59
5	9.12	9.68	9.96	10.13	9.99	9.63	9.26	8.66	8.58	9.19	9.39	9.59
6	9.11	9.75	9.97	10.14	10.06	9.62	9.23	8.63	8.61	9.18	9.36	9.58
7	9.09	9.78	9.97	10.09	10.07	9.63	9.21	8.62	8.65	9.20	9.33	9.59
8	9.08	9.78	9.99	10.08	10.02	9.62	9.18	8.62	8.97	9.23	9.35	9.59
9	9.07	9.83	10.08	10.10	10.03	9.59	9.17	8.61	9.20	9.27	9.38	9.60
10	9.10	9.87	10.09	10.14	10.02	9.55	9.14	8.58	9.16	9.25	9.37	9.61
11	9.14	9.86	10.07	10.18	9.97	9.56	9.11	8.53	9.14	9.24	9.39	9.62
12	9.31	9.89	10.06	10.18	9.94	9.54	9.06	8.48	9.14	9.23	9.38	9.69
13	9.43	9.89	10.06	10.14	9.94	9.51	9.04	8.44	9.16	9.28	9.38	9.69
14	9.45	9.88	10.06	10.16	9.92	9.48	9.02	8.43	9.20	9.36	9.40	9.70
15	9.46	9.89	10.04	10.15	9.87	9.48	9.00	8.41	9.21	9.36	9.51	9.70
16	9.46	9.89	10.07	10.17	9.87	9.47	8.97	8.39	9.19	9.37	9.52	9.70
17	9.45	9.87	10.09	10.12	9.87	9.45	8.94	8.40	9.17	9.37	9.53	9.68
18	9.44	9.85	10.08	10.10	9.85	9.41	8.91	8.43	9.15	9.39	9.53	9.66
19	9.44	9.87	10.06	10.08	9.83	9.41	8.87	8.52	9.15	9.42	9.54	9.66
20	9.43	9.91	10.05	10.05	9.79	9.43	8.86	8.57	9.18	9.40	9.58	9.64
21	9.42	9.94	10.04	10.01	9.83	9.42	8.83	8.53	9.18	9.39	9.60	9.63
22	9.42	9.94	10.04	10.11	9.87	9.41	8.80	8.49	9.17	9.40	9.55	9.61
23	9.42	9.94	10.07	10.12	9.83	9.40	8.77	8.51	9.16	9.52	9.50	9.59
24	9.41	9.94	10.08	10.11	9.84	9.38	8.73	8.60	9.16	9.53	9.48	9.56
25	9.40	9.94	10.08	10.12	9.87	9.37	8.70	8.58	9.14	9.53	9.47	9.53
26	9.38	9.94	10.08	10.13	9.87	9.37	8.66	8.55	9.13	9.52	9.46	9.52
27	9.37	9.95	10.08	10.14	9.82	9.41	8.64	8.55	9.11	9.52	9.48	9.50
28	9.34	9.95	10.08	10.17	9.77	9.39	8.62	8.61	9.11	9.51	9.51	9.51
29	9.33	9.95	10.09	10.15	9.74	9.39	8.60	8.65	9.10	9.49	9.53	9.51
30	9.32	9.94	10.12	10.11	---	9.37	8.57	8.67	9.08	9.47	9.54	9.50
31	9.32	---	10.09	10.08	---	9.35	---	8.66	---	9.44	9.55	---
MEAN	9.29	9.84	10.04	10.12	9.92	9.50	8.97	8.57	9.02	9.34	9.46	9.60
MAX	9.46	9.95	10.12	10.18	10.07	9.72	9.32	8.72	9.21	9.53	9.60	9.70
MIN	9.03	9.39	9.94	10.01	9.74	9.35	8.57	8.39	8.58	9.07	9.33	9.50

CAL YR 1987 MEAN 9.18 MAX 10.12 MIN 7.28
WTR YR 1988 MEAN 9.47 MAX 10.18 MIN 8.39

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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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 northeast 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. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. 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.--15 years (water years 1964-65, 1971, 1976, 1978-88), 89.6 ft³/s, 64,920 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, 5.58 ft June 9, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 633 ft³/s Aug. 23; maximum gage height, 9.67 ft Sept. 14; no flow for some days; minimum gage height, 7.60 ft (estimated) May 15, estimated.

DISCHARGE, IN 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	28	132	189	124	71	37	14	.00	.00	36	107	299
2	29	141	177	124	71	37	14	.00	.00	37	229	301
3	29	136	176	124	71	37	14	.00	.00	38	349	303
4	30	137	175	124	70	36	14	.00	.00	38	269	303
5	30	138	176	128	70	36	5.2	.00	.00	39	226	299
6	67	141	177	130	72	36	.00	.00	.00	31	223	298
7	91	144	176	129	72	36	.00	.00	.00	27	216	300
8	89	144	165	128	70	36	.00	.00	.00	27	216	303
9	88	146	161	129	60	35	.00	.00	.00	27	240	306
10	89	142	162	130	54	35	.00	.00	.00	27	247	310
11	92	136	161	132	53	35	.00	.00	.00	27	270	315
12	100	138	161	103	53	35	.00	.00	.00	21	287	332
13	108	138	160	73	53	34	.00	.00	.00	15	284	334
14	109	138	160	73	52	34	.00	.00	.00	15	279	337
15	109	138	170	73	51	24	.00	.00	8.7	15	336	337
16	109	139	183	74	51	14	.00	.00	15	15	384	335
17	109	143	185	73	51	14	.00	.00	15	15	386	332
18	107	146	184	72	51	14	.00	.00	14	15	383	330
19	107	147	182	72	51	14	.00	.00	14	36	360	331
20	116	149	181	82	50	14	.00	.00	15	55	328	326
21	122	151	181	86	51	14	.00	.00	28	55	333	320
22	122	150	176	88	51	14	.00	.00	39	55	450	312
23	122	150	174	89	45	14	.00	.00	e38	58	633	304
24	121	177	175	88	38	14	.00	.00	e38	59	587	297
25	119	202	175	89	39	14	.00	.00	e37	59	542	292
26	118	202	175	78	39	14	.00	.00	e37	82	500	286
27	128	202	175	73	38	14	.00	.00	e36	114	470	285
28	131	202	175	73	38	14	.00	.00	e36	113	441	287
29	130	202	141	73	37	14	.00	.00	e36	112	405	285
30	128	202	125	72	---	14	.00	.00	e36	110	363	282
31	128	---	124	72	---	14	---	.00	---	108	325	---
TOTAL	3005	4653	5257	2978	1573	747	61.20	.00	442.70	1481	10668	9281
MEAN	96.9	155	170	96.1	54.2	24.1	2.04	.000	14.8	47.8	344	309
MAX	131	202	189	132	72	37	14	.00	39	114	633	337
MIN	28	132	124	72	37	14	.00	.00	.00	15	107	282
AC-FT	5960	9230	10430	5910	3120	1480	121	.00	878	2940	21160	18410

CAL YR 1987 TOTAL 19035.80 MEAN 52.2 MAX 202 MIN .00 AC-FT 37760
WTR YR 1988 TOTAL 40146.90 MEAN 110 MAX 633 MIN .00 AC-FT 79630

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.31	8.82	8.98	8.80	8.61	8.42	8.16	7.96	7.95	8.40	8.79	9.53
2	8.30	8.85	8.95	8.81	8.61	8.41	8.16	e7.93	7.93	8.41	9.00	9.55
3	8.29	8.82	8.94	8.81	8.60	8.41	8.16	e7.91	7.91	8.42	9.20	9.56
4	8.29	8.81	8.94	8.80	8.60	8.40	8.16	e7.88	7.88	8.43	9.06	9.56
5	8.29	8.81	8.95	8.77	8.59	8.40	8.14	e7.88	7.87	8.44	8.98	9.54
6	8.42	8.84	8.95	8.72	8.60	8.40	8.05	e7.83	7.94	8.41	8.97	9.54
7	8.54	8.84	8.95	8.71	8.60	8.40	8.01	e7.80	7.97	8.39	8.96	9.55
8	8.55	8.84	8.92	8.71	8.60	8.40	8.00	e7.78	8.26	8.41	8.98	9.56
9	8.55	8.85	8.89	8.72	8.58	8.40	7.99	e7.75	8.28	8.40	9.03	9.57
10	8.57	8.84	8.89	8.72	8.55	8.39	7.99	e7.69	8.18	8.39	9.06	9.58
11	8.58	8.82	8.89	8.73	8.55	8.40	7.98	e7.66	8.14	8.39	9.10	9.60
12	8.64	8.82	8.88	8.69	8.54	8.39	7.97	e7.67	8.12	8.34	9.14	9.65
13	8.66	8.82	8.89	8.64	8.54	8.39	7.97	e7.66	8.13	8.30	9.15	9.65
14	8.66	8.81	8.89	8.63	8.54	8.39	7.96	e7.63	8.14	8.31	9.18	9.66
15	8.67	8.81	8.91	8.63	8.53	8.36	7.96	e7.60	8.17	8.30	9.29	9.66
16	8.67	8.81	8.97	8.63	8.53	8.30	7.95	e7.69	8.19	8.30	9.33	9.66
17	8.67	8.82	8.97	8.62	8.53	8.29	7.95	e7.61	8.19	8.29	9.33	9.65
18	8.68	8.84	8.97	8.61	8.53	8.29	7.94	e7.69	8.19	8.30	9.34	9.64
19	8.68	8.85	8.97	8.61	8.52	8.28	7.93	7.91	8.21	8.41	9.37	9.64
20	8.71	8.85	8.97	8.64	8.52	8.25	7.95	8.01	8.21	8.52	9.44	9.62
21	8.74	8.86	8.97	8.66	8.53	8.25	7.93	7.93	8.29	8.52	9.45	9.60
22	8.74	8.86	8.95	8.68	8.53	8.24	7.90	7.88	8.38	8.53	9.46	9.57
23	8.75	8.86	8.93	8.68	8.51	8.23	7.87	7.88	e8.41	8.55	9.46	9.55
24	8.75	8.92	8.93	8.68	8.46	8.22	7.84	8.01	e8.41	8.55	9.45	9.53
25	8.75	8.99	8.92	8.68	8.46	8.21	7.82	7.96	e8.43	8.55	9.43	9.51
26	8.75	8.99	8.92	8.65	8.46	8.25	7.80	7.93	e8.43	8.65	9.42	9.49
27	8.77	9.00	8.92	8.63	8.46	8.24	7.77	7.90	e8.45	8.78	9.45	9.48
28	8.78	9.00	8.92	8.63	8.44	8.21	7.74	7.95	e8.46	8.79	9.48	9.48
29	8.78	9.00	8.86	8.63	8.43	8.21	7.72	e8.08	e8.44	8.79	9.51	9.48
30	8.78	9.00	8.81	8.62	---	8.19	7.71	e8.12	e8.43	8.79	9.52	9.47
31	8.79	---	8.80	8.62	---	8.18	---	e8.06	---	8.78	9.52	---
MEAN	8.62	8.87	8.92	8.68	8.54	8.32	7.95	7.85	8.20	8.48	9.25	9.57
MAX	8.79	9.00	8.98	8.81	8.61	8.42	8.16	8.12	8.46	8.79	9.52	9.66
MIN	8.29	8.81	8.80	8.61	8.43	8.18	7.71	7.60	7.87	8.29	8.79	9.47

CAL YR 1987 MEAN 8.33 MAX 9.00 MIN 7.45
WTR YR 1988 MEAN 8.60 MAX 9.66 MIN 7.60

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

99

02289018 TAMIAMI CANAL ABOVE S-12-B, NEAR MIAMI, FL

LOCATION.--Lat 25°45'42", long 80°46'05", in N½ 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, and 35 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1963 to current year (gage heights only).

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

REMARKS.--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.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 10.55 ft Oct. 26, 1968; minimum, 5.31 ft May 21, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.16 ft Jan. 11; minimum, 8.39 ft May 17.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e9.00	9.33	9.91	10.04	9.99	9.68	9.26	8.62	8.63	9.08	9.49	9.59
2	9.05	9.45	9.92	10.04	9.98	9.65	9.24	8.65	8.62	9.10	9.49	9.60
3	9.07	9.54	9.92	10.03	9.98	9.62	9.22	8.64	8.59	9.14	9.37	9.60
4	9.08	9.65	9.91	10.04	9.96	9.59	9.20	8.62	8.57	9.14	9.35	9.60
5	9.08	9.66	9.93	10.09	9.95	9.58	9.19	8.60	8.56	9.17	9.37	9.58
6	9.08	9.72	9.93	10.09	10.02	9.56	9.17	8.58	8.59	9.15	9.34	9.58
7	9.05	9.74	9.93	10.04	10.01	9.58	9.15	8.57	8.65	9.17	9.32	9.58
8	9.04	9.74	9.94	10.03	9.97	9.56	9.12	8.56	8.97	9.19	9.36	9.59
9	9.04	9.77	10.05	10.06	9.98	9.52	9.10	8.55	9.16	9.26	9.39	9.60
10	9.07	9.83	10.07	10.10	9.97	9.50	9.08	8.50	9.11	9.25	9.38	9.60
11	9.11	9.83	10.06	10.14	9.92	9.50	9.05	8.49	9.09	9.24	9.40	9.61
12	9.24	9.84	10.04	10.13	9.90	9.47	9.01	8.46	9.10	9.22	9.41	9.66
13	9.41	9.84	10.03	10.09	9.90	9.44	8.99	8.42	9.13	9.27	9.42	9.66
14	9.42	9.84	10.02	10.11	9.87	9.43	8.96	8.42	9.16	9.34	9.44	9.66
15	9.43	9.84	10.00	10.11	9.82	9.43	8.94	8.41	9.19	9.37	9.52	9.67
16	9.42	9.84	10.06	10.12	9.83	9.41	8.91	8.40	9.16	9.39	9.51	9.70
17	9.41	9.83	10.08	10.07	9.83	9.39	8.88	8.40	9.14	9.38	9.52	9.67
18	9.40	9.81	10.06	10.05	9.81	9.35	8.84	8.42	9.13	9.42	9.54	9.66
19	9.40	9.81	10.03	10.02	9.78	9.37	8.80	8.49	9.14	9.43	9.55	9.65
20	9.39	9.85	10.01	10.00	9.75	9.39	8.80	8.53	9.18	9.40	9.58	9.64
21	9.37	9.89	10.01	9.96	9.79	9.37	8.77	8.49	9.18	9.38	9.59	9.63
22	9.37	9.90	10.00	10.08	9.82	9.35	8.73	8.46	9.16	9.40	9.55	9.61
23	9.36	9.90	10.02	10.08	9.79	9.33	8.69	8.49	9.15	9.52	9.50	9.59
24	9.35	9.90	10.03	10.07	9.80	9.32	8.65	8.56	9.15	9.54	9.48	9.57
25	9.34	9.90	10.02	10.08	9.84	9.30	8.62	8.54	9.13	9.55	9.47	9.56
26	9.33	9.90	10.03	10.09	9.83	9.31	8.59	8.52	9.12	9.54	9.48	9.54
27	9.31	9.90	10.03	10.10	9.77	9.35	8.57	8.51	9.11	9.53	9.51	9.52
28	9.29	9.90	10.03	10.12	9.73	9.34	8.55	8.57	9.11	9.53	9.55	9.53
29	9.27	9.91	10.06	10.10	9.70	9.32	8.52	8.62	9.10	9.51	9.57	9.52
30	9.26	9.91	10.08	10.05	---	9.31	8.49	8.64	9.08	9.50	9.57	9.51
31	9.26	---	10.05	10.01	---	9.28	---	8.64	---	9.48	9.57	---
MEAN	9.25	9.79	10.01	10.07	9.87	9.44	8.90	8.53	9.01	9.34	9.47	9.60
MAX	9.43	9.91	10.08	10.14	10.02	9.68	9.26	8.65	9.19	9.55	9.59	9.70
MIN	9.00	9.33	9.91	9.96	9.70	9.28	8.49	8.40	8.56	9.08	9.32	9.51

CAL YR 1987 MEAN 9.15 MAX 10.08 MIN 7.25
WTR YR 1988 MEAN 9.44 MAX 10.14 MIN 8.40

e Estimated

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. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for estimated daily discharges, which are fair. 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.--15 years (water years 1964-65, 1976-88), 94.0 ft³/s, 68,100 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, 5.35 ft May 21, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 638 ft³/s Aug. 23; maximum gage height, 9.66 ft Sept. 13-16; no flow for some days; minimum gage height, 7.25 ft May 16-17.

DISCHARGE, IN 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	e34	125	193	130	86	30	14	.00	.00	41	110	227
2	35	137	194	130	64	30	14	.00	.00	41	240	229
3	36	131	193	129	50	29	14	.00	.00	42	294	235
4	36	133	192	130	50	29	13	.00	.00	41	214	239
5	36	136	194	134	50	29	5.0	.00	.00	42	189	240
6	70	140	194	138	51	29	.00	.00	.00	33	184	244
7	89	142	192	136	51	29	.00	.00	.00	27	177	251
8	88	142	183	136	50	29	.00	.00	.00	27	178	258
9	88	144	180	137	51	29	.00	.00	.00	28	201	263
10	89	142	183	138	51	29	.00	.00	.00	28	211	270
11	90	136	182	140	50	29	.00	.00	.00	28	226	279
12	96	136	181	105	50	29	.00	.00	.00	23	244	296
13	106	136	180	69	50	28	.00	.00	.00	18	243	302
14	107	137	180	70	49	28	.00	.00	.00	19	239	307
15	107	137	179	70	49	28	.00	.00	e11	19	287	310
16	106	137	182	70	49	28	.00	.00	18	19	316	302
17	106	142	184	69	49	28	.00	.00	18	19	293	290
18	105	143	183	69	48	27	.00	.00	18	19	301	279
19	104	142	180	68	48	28	.00	.00	13	39	294	271
20	113	145	179	80	48	28	.00	.00	18	57	264	260
21	120	147	179	85	48	28	.00	.00	32	56	265	248
22	120	148	167	88	49	28	.00	.00	43	56	437	233
23	119	148	155	88	41	28	.00	.00	43	59	638	219
24	118	169	155	88	31	28	.00	.00	43	59	538	206
25	117	192	155	88	31	28	.00	.00	42	60	494	196
26	116	192	156	88	31	27	.00	.00	42	87	448	185
27	124	192	156	89	31	28	.00	.00	41	120	412	176
28	127	192	156	89	30	28	.00	.00	41	119	380	171
29	124	193	138	89	30	21	.00	.00	41	117	341	162
30	122	193	131	88	---	14	.00	.00	41	117	297	153
31	122	---	130	87	---	14	---	.00	---	115	259	---
TOTAL	2970	4529	5386	3115	1366	845	60.00	.00	510.00	1575	9214	7301
MEAN	95.8	151	174	100	47.1	27.3	2.00	.000	17.0	50.8	297	243
MAX	127	193	194	140	86	30	14	.00	43	120	638	310
MIN	34	125	130	68	30	14	.00	.00	.00	18	110	153
AC-FT	5890	8980	10680	6180	2710	1680	119	.00	1010	3120	18280	14480

CAL YR 1987 TOTAL 19978.60 MEAN 54.7 MAX 194 MIN .00 AC-FT 39630
WTR YR 1988 TOTAL 36871.00 MEAN 101 MAX 638 MIN .00 AC-FT 73130

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

101

02289019 TAMiami CANAL BELOW S-12-B, NEAR MIAMI, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.21	8.81	8.99	8.74	8.51	8.26	7.94	7.68	7.70	8.34	8.77	9.55
2	8.20	8.84	8.99	8.74	8.45	8.25	7.92	7.68	7.66	8.36	8.96	9.56
3	8.20	8.85	9.00	8.74	8.38	8.25	7.91	7.63	7.62	8.36	9.18	9.57
4	8.20	8.84	9.00	8.74	8.37	8.24	7.91	7.84	7.57	8.37	9.10	9.57
5	8.19	8.82	9.00	8.70	8.37	8.23	7.91	7.67	7.53	8.38	9.04	9.56
6	8.35	8.82	9.00	8.63	8.37	8.24	7.93	7.59	7.58	8.35	9.03	9.55
7	8.51	8.82	9.01	8.61	8.37	8.24	7.93	7.53	e7.73	8.32	9.02	9.56
8	8.51	8.82	8.99	8.61	8.38	8.23	7.93	7.49	e8.01	8.33	9.06	9.57
9	8.52	8.83	8.98	8.62	8.37	8.20	7.93	7.44	e8.04	8.35	9.09	9.58
10	8.54	8.82	8.97	8.63	8.36	8.20	7.93	7.41	e7.94	8.33	9.11	9.59
11	8.55	8.79	8.97	8.63	8.36	8.19	7.93	7.37	e7.88	8.32	9.14	9.60
12	8.61	8.80	8.97	8.58	8.35	8.19	7.93	7.34	e7.86	8.28	9.19	9.65
13	8.65	8.79	8.97	8.49	8.35	8.18	7.92	7.31	e7.85	8.23	9.20	9.65
14	8.65	8.79	8.96	8.48	8.35	8.18	7.91	7.32	e7.87	8.23	9.22	9.66
15	8.65	8.79	8.95	8.48	8.34	8.18	7.91	7.29	e8.00	8.22	9.31	9.65
16	8.65	8.78	8.97	8.47	8.34	8.17	7.90	7.27	8.08	8.21	9.33	9.65
17	8.65	8.80	8.97	8.46	8.34	8.16	7.90	7.29	8.09	8.20	9.31	9.64
18	8.65	8.84	8.97	8.46	8.34	8.16	7.89	7.37	8.09	8.24	9.34	9.63
19	8.66	8.85	8.96	8.46	8.33	8.17	7.86	7.47	8.11	8.34	9.39	9.63
20	8.69	8.86	8.96	8.49	8.33	8.16	7.82	7.57	8.13	8.47	9.44	9.61
21	8.71	8.86	8.95	8.52	8.34	8.15	7.75	7.53	8.22	8.48	9.45	9.60
22	8.71	8.86	8.94	8.55	8.34	8.14	7.70	7.47	8.33	8.50	9.45	9.58
23	8.71	8.86	8.93	8.54	8.32	8.11	7.65	7.50	8.33	8.52	9.46	9.56
24	8.72	8.91	8.93	8.54	8.28	8.10	7.61	7.66	8.33	8.53	9.45	9.54
25	8.72	8.99	8.92	8.54	8.28	8.10	7.57	7.63	8.34	8.53	9.44	9.53
26	8.71	8.99	8.92	8.54	8.28	8.13	7.54	7.60	8.34	8.59	9.45	9.51
27	8.73	8.99	8.92	8.54	8.28	8.14	7.49	7.58	8.36	8.73	9.48	9.50
28	8.76	8.99	8.92	8.54	8.26	8.12	7.46	7.67	8.37	8.75	9.52	9.51
29	8.77	8.99	8.83	8.54	8.26	8.06	7.42	7.76	8.35	8.75	9.54	9.50
30	8.77	8.99	8.75	8.53	---	7.97	7.39	7.80	8.34	8.75	9.54	9.49
31	8.77	---	8.74	8.52	---	7.95	---	7.74	---	8.75	9.54	---
MEAN	8.58	8.86	8.95	8.57	8.34	8.16	7.79	7.53	8.02	8.42	9.28	9.58
MAX	8.77	8.99	9.01	8.74	8.51	8.26	7.94	7.84	8.37	8.75	9.54	9.66
MIN	8.19	8.78	8.74	8.46	8.26	7.95	7.39	7.27	7.53	8.20	8.77	9.49

CAL YR 1987 MEAN 8.22 MAX 9.01 MIN 7.30
WTR YR 1988 MEAN 8.51 MAX 9.66 MIN 7.27

e Estimated

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.

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.--Records poor. Flow at this location includes the flow of Deerfence Canal. Discharge computed using fall as a factor.

AVERAGE DISCHARGE.--18 years, 151 ft³/s, 109,400 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, 1,250 ft³/s Nov. 7, 8; maximum gage height, 15.34 ft Nov. 7; no flow for many days; minimum gage height, 11.04 ft July 5, 6.

DISCHARGE, IN 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	---	47	642	e.00	e17	12	66	.00	.00	.00	473	485
2	---	272	550	e.00	e7.4	30	68	1.9	.00	.00	404	403
3	---	767	417	.00	e17	44	63	.00	.00	.00	362	340
4	---	1090	269	e.00	e24	38	58	.00	.00	.00	287	315
5	---	1110	231	e28	e25	17	34	.00	.00	.00	199	294
6	---	1170	209	e.00	e30	3.1	43	1.0	.00	.00	87	281
7	---	1250	147	.00	e14	.00	.00	.10	.00	.00	56	290
8	---	1250	125	e.00	e.00	7.5	7.7	.00	.00	.00	84	312
9	---	1210	108	e23	e5.1	35	22	.00	.00	.00	94	303
10	---	1160	116	e23	e12	9.5	22	.00	.00	.00	196	267
11	---	1110	149	e36	e32	9.0	15	.00	.00	.00	609	232
12	---	922	198	e84	e35	32	9.6	.00	.00	.00	756	222
13	---	852	160	e53	e26	35	2.7	.00	.00	.00	693	209
14	481	778	133	e27	e17	.00	3.2	6.4	.00	.00	636	170
15	317	673	114	e47	e12	.00	.00	5.2	.00	.00	593	91
16	292	598	102	e57	e21	.00	.00	.00	.00	.00	555	61
17	338	469	73	e22	e23	.00	.00	.00	.00	.00	622	81
18	343	169	37	e53	e22	32	.00	.00	.00	54	605	51
19	323	368	1.1	e71	e10	.00	.00	.00	.00	76	588	65
20	68	1040	.00	e49	e15	.00	.00	.00	.00	40	545	24
21	47	947	.00	e19	e.00	6.5	.00	.00	.00	17	527	.00
22	.00	778	.00	e21	e9.4	26	.00	.00	.00	11	508	.00
23	.00	685	12	e34	6.7	39	.00	.00	61	.00	450	.00
24	14	513	17	e18	e.00	40	.00	.00	66	.00	350	.00
25	18	225	26	e7.2	e21	32	.00	.00	59	135	210	.00
26	16	501	10	e44	e20	35	.00	.00	30	363	201	.00
27	20	1050	.00	e20	3.0	30	.00	.00	11	354	428	.00
28	9.8	958	e39	e28	5.0	32	2.5	.00	2.5	355	719	.00
29	2.5	830	e19	e26	12	63	2.0	.00	.70	437	709	.00
30	.00	727	e19	e12	---	72	.00	.00	.00	518	609	9.6
31	.00	---	e.00	e30	---	75	---	.00	---	474	528	---
TOTAL	---	23519	3923.10	832.20	441.60	754.60	418.70	14.60	230.20	2834.00	13683	4505.60
MEAN	---	784	127	26.8	15.2	24.3	14.0	.47	7.67	91.4	441	150
MAX	---	1250	642	84	35	75	68	6.4	66	518	756	485
MIN	---	47	.00	.00	.00	.00	.00	.00	.00	.00	56	.00
AC-FT	---	46650	7780	1650	876	1500	830	29	457	5620	27140	8940

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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02289030 LEVEE 3 CANAL NEAR CLEWISTON, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.14	14.22	e12.71	e12.72	12.64	12.91	11.49	11.27	11.42	13.88	13.97
2	---	13.34	14.03	e12.72	e12.67	12.60	12.87	11.73	11.32	11.20	13.82	13.83
3	---	14.58	13.81	12.81	e12.65	12.58	12.81	11.83	11.35	11.07	13.59	13.77
4	---	15.10	13.21	e12.94	e12.62	12.53	12.77	11.87	11.35	11.10	13.50	13.74
5	---	15.07	13.01	e12.96	e12.64	12.52	12.71	11.87	11.35	11.09	13.20	13.71
6	---	15.18	13.23	e12.93	e12.64	12.51	12.64	11.85	11.43	11.09	12.62	13.76
7	---	15.29	12.95	12.89	e12.55	12.49	12.55	11.85	11.54	11.31	12.36	13.85
8	---	15.30	12.62	e12.89	e12.61	12.43	12.46	11.83	11.56	11.20	12.58	13.91
9	---	15.21	12.48	e12.92	e12.72	12.42	12.37	11.81	11.61	11.80	12.50	13.91
10	---	15.09	12.61	e13.00	e12.81	12.49	12.28	11.73	11.67	11.82	12.93	13.84
11	---	15.00	12.70	e13.32	e12.81	12.53	12.15	11.55	11.71	11.83	14.18	13.78
12	---	14.68	13.15	e13.18	e12.79	12.54	12.09	11.54	11.71	11.82	14.59	13.76
13	---	14.43	12.96	e13.13	e12.78	12.55	12.03	11.54	11.71	11.62	14.45	13.71
14	---	14.03	12.74	e13.07	e12.74	12.59	11.97	11.47	11.75	11.80	14.33	13.59
15	---	13.85	12.61	e13.02	e12.70	12.56	11.89	11.35	11.76	11.81	14.20	13.41
16	---	13.78	12.59	e12.98	e12.80	12.54	11.69	11.25	11.72	11.76	13.94	13.34
17	13.27	13.43	12.43	e12.93	e12.70	12.52	11.69	11.28	11.68	11.87	14.06	13.31
18	13.33	12.49	12.22	e12.95	e12.58	12.46	11.62	11.33	11.68	12.27	14.14	13.27
19	13.25	13.04	11.90	e12.95	e12.44	12.49	11.56	11.36	11.68	12.76	14.20	13.26
20	13.37	14.82	11.79	e12.89	e12.35	12.56	11.73	11.37	11.63	12.28	14.14	13.21
21	13.21	14.61	11.69	e12.83	e12.39	12.56	11.65	11.34	11.65	12.37	14.12	13.14
22	13.00	14.23	11.75	e12.93	e12.43	12.56	11.55	11.25	11.79	12.11	14.04	13.08
23	12.81	13.87	12.21	e12.97	12.42	12.56	11.50	11.14	12.40	11.71	13.89	13.03
24	12.63	13.41	12.43	e12.97	e12.55	12.56	11.47	11.22	12.95	11.67	13.65	12.96
25	12.50	12.79	12.60	e12.98	e12.68	12.57	11.44	11.27	12.66	12.26	13.20	12.90
26	12.36	13.72	12.72	e12.98	e12.70	12.62	11.30	11.24	12.33	13.40	13.09	12.92
27	12.21	14.88	12.79	e12.94	12.66	12.86	11.20	11.20	12.11	13.48	13.65	12.98
28	12.07	14.74	e12.83	e12.91	12.66	13.02	11.24	11.23	11.96	13.60	14.41	12.98
29	11.94	14.57	e12.83	e12.82	12.66	13.06	11.27	11.32	11.88	13.71	14.43	12.89
30	11.86	14.38	e12.82	e12.76	---	13.04	11.30	11.36	11.75	13.98	14.22	12.82
31	11.84	---	e12.76	e12.74	---	12.98	---	11.32	---	13.99	14.05	---
MEAN	---	14.24	12.73	12.94	12.64	12.61	11.96	11.48	11.77	12.10	13.74	13.42
MAX	---	15.30	14.22	13.32	12.81	13.06	12.91	11.87	12.95	13.99	14.59	13.97
MIN	---	12.14	11.69	12.71	12.35	12.42	11.20	11.14	11.27	11.07	12.36	12.82

e Estimated

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 N½ 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.

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

REMARKS.--Records good, except those for estimated daily discharges, which are fair. 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.--48 years, 442 ft³/s, 320,200 acre-ft/yr.

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, 5.34 ft May 21, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2520 ft³/s Aug. 23; maximum gage height, 10.17 ft Jan. 11; no flow for many days; minimum gage height, 8.30 ft May 13, 15-17.

DISCHARGE, IN 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	e133	575	798	529	324	147	55	.00	.00	143	432	2060
2	137	615	789	530	265	e147	55	.00	.00	144	865	2060
3	138	561	787	528	229	e136	55	.00	.00	146	1220	2060
4	139	547	783	530	228	e125	54	.00	.00	145	967	e2140
5	139	553	788	544	228	e125	61	.00	.00	148	844	e2120
6	279	565	788	554	233	e125	66	.00	.00	117	830	e2110
7	370	572	784	546	233	e125	65	.00	.00	98	813	e2150
8	365	572	754	545	228	e125	64	.00	.00	99	820	e2160
9	364	578	750	549	221	e124	64	.00	.00	101	913	e2160
10	368	570	759	553	214	e124	63	.00	.00	101	963	e2130
11	374	550	757	560	211	e124	62	.00	.00	101	1070	e2250
12	399	555	756	433	211	e124	45	.00	.00	82	1210	e2330
13	444	554	752	292	211	e120	36	.00	.00	63	1210	e2320
14	461	553	750	294	208	e120	36	.00	.00	64	1200	e2310
15	461	553	768	294	205	e110	36	.00	e39	65	1550	2100
16	460	553	802	295	206	e100	35	.00	70	65	1850	2050
17	459	587	810	292	190	e100	34	.00	70	65	1820	1960
18	455	611	805	290	182	99	34	.00	69	65	e1770	1930
19	454	614	795	288	181	100	29	.00	69	134	e1530	1920
20	480	624	791	322	179	100	26	.00	70	204	1340	1880
21	499	630	790	337	181	100	26	.00	114	202	1330	1850
22	499	629	741	347	183	92	26	.00	151	202	1970	1800
23	496	628	692	348	168	82	26	.00	e149	211	2520	1740
24	492	716	692	346	152	82	26	.00	e149	212	2290	1700
25	488	807	692	348	153	81	26	.00	e147	216	2200	1660
26	485	806	693	338	153	80	8.4	.00	e147	318	2170	1620
27	542	809	694	334	151	81	.00	.00	e144	451	2170	1590
28	574	809	695	334	149	82	.00	.00	e145	449	2270	1600
29	568	811	588	333	147	68	.00	.00	e143	445	2220	1580
30	562	811	534	329	---	55	.00	.00	e143	443	2140	1540
31	560	---	529	326	---	55	---	.00	---	437	2080	---
TOTAL	12644	18918	22906	12488	5824	3258	1113.40	.00	1819.00	5736	46577	58880
MEAN	408	631	739	403	201	105	37.1	.000	60.6	185	1502	1963
MAX	574	811	810	560	324	147	66	.00	151	451	2520	2330
MIN	133	547	529	288	147	55	.00	.00	.00	63	432	1540
AC-FT	25080	37520	45430	24770	11550	6460	2210	.00	3610	11380	92390	116800

CAL YR 1987 TOTAL 83649.10 MEAN 229 MAX 811 MIN -.30 AC-FT 165900
WTR YR 1988 TOTAL 190163.40 MEAN 520 MAX 2520 MIN .00 AC-FT 377200

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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02289040 TAMiami CANAL OUTLETS, LEVEE 67A TO 40-MILE BEND, NEAR MIAMI, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.05	9.38	9.94	10.06	10.00	9.69	9.26	8.58	8.58	9.07	9.54	9.81
2	9.09	9.50	9.95	10.07	9.99	e9.66	9.24	8.65	8.57	9.08	9.56	9.82
3	9.10	9.57	9.95	10.07	9.99	e9.63	9.22	8.64	8.53	9.10	9.47	9.83
4	9.12	9.70	9.94	10.07	9.97	e9.60	9.20	8.62	8.52	9.10	9.42	9.82
5	9.13	9.70	9.96	10.11	9.96	e9.59	9.21	8.61	8.51	9.12	9.42	9.81
6	9.11	9.75	9.96	10.11	10.02	e9.58	9.19	8.60	8.53	9.10	9.40	9.81
7	9.08	9.77	9.95	10.06	10.02	e9.59	9.17	8.59	8.63	9.11	9.39	9.82
8	9.07	9.76	9.96	10.06	9.97	e9.57	9.13	8.59	8.91	9.14	9.44	9.83
9	9.07	9.79	10.08	10.08	10.01	e9.53	9.11	8.57	9.08	9.23	9.48	9.83
10	9.11	9.86	10.10	10.12	9.99	e9.51	9.08	8.50	9.02	9.22	9.50	9.83
11	9.14	9.87	10.10	10.15	9.94	e9.51	9.04	8.42	9.01	9.22	9.53	9.85
12	9.29	9.89	10.09	10.14	9.93	e9.49	8.98	8.37	9.02	9.21	9.57	9.90
13	9.45	9.88	10.09	10.12	9.93	e9.45	8.97	8.32	9.06	9.24	9.59	9.90
14	9.44	9.87	10.07	10.13	9.90	e9.44	8.94	8.33	9.11	9.30	9.61	9.89
15	9.45	9.87	10.05	10.13	9.84	e9.44	8.91	8.32	9.14	9.35	9.67	9.88
16	9.44	9.85	10.10	10.13	9.86	e9.42	8.88	8.32	9.13	9.36	9.65	9.86
17	9.44	9.83	10.12	10.09	9.85	e9.40	8.85	8.33	9.11	9.36	9.66	9.83
18	9.44	9.83	10.10	10.07	9.83	9.36	8.80	8.39	9.10	9.39	9.70	9.81
19	9.43	9.85	10.07	10.05	9.80	9.37	8.74	8.41	9.13	9.41	9.71	9.81
20	9.42	9.90	10.06	10.03	9.77	9.41	8.75	8.42	9.18	9.39	9.74	9.79
21	9.41	9.92	10.05	9.99	9.81	9.38	8.72	8.41	9.18	9.37	9.74	9.78
22	9.41	9.91	10.04	10.10	9.84	9.36	8.67	8.39	9.16	9.39	9.72	9.75
23	9.40	9.91	10.06	10.10	9.81	9.34	8.63	8.42	9.14	9.49	9.69	9.73
24	9.39	9.91	10.06	10.10	9.83	9.32	8.58	8.46	9.14	9.52	9.68	9.71
25	9.39	9.91	10.05	10.11	9.85	9.30	8.55	8.46	9.12	9.58	9.67	9.70
26	9.38	9.91	10.06	10.12	9.84	9.30	8.51	8.43	9.11	9.55	9.70	9.68
27	9.35	9.92	10.07	10.12	9.78	9.33	8.53	8.43	9.11	9.54	9.73	9.67
28	9.33	9.93	10.07	10.13	9.73	9.33	8.52	8.46	9.11	9.54	9.77	9.68
29	9.32	9.94	10.09	10.11	9.71	9.32	8.48	8.52	9.10	9.54	9.79	9.67
30	9.31	9.94	10.11	10.06	---	9.31	8.43	8.56	9.08	9.54	9.79	9.65
31	9.30	---	10.07	10.01	---	9.29	---	8.58	---	9.52	9.79	---
MEAN	9.29	9.82	10.04	10.09	9.89	9.45	8.88	8.47	8.97	9.33	9.62	9.79
MAX	9.45	9.94	10.12	10.15	10.02	9.69	9.26	8.65	9.18	9.58	9.79	9.90
MIN	9.05	9.38	9.94	9.99	9.71	9.29	8.43	8.32	8.51	9.07	9.39	9.65

CAL YR 1987 MEAN 9.17 MAX 10.12 MIN 7.24
WTR YR 1988 MEAN 9.47 MAX 10.15 MIN 8.32

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289041 TAMIAHI 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. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for estimated daily discharges, which are fair. 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.

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

AVERAGE DISCHARGE.--14 years (water years 1964-65, 1977-88), 243 ft³/s, 176,100 acre-ft/yr. The figure published in the 1986 report was in error; the correct figure is 13 years (water years 1964-65, 1977-86), 268 ft³/s, 194,200 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, 13 ft³/s Feb. 27, 1985; minimum gage height, 5.37 ft May 21, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 813 ft³/s Sept. 11-12 estimated; maximum gage height, 9.88 ft Sept. 12-13 estimated; no flow for a few days; minimum gage height, 7.22 ft May 16, 17.

DISCHARGE, IN 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	36	160	201	140	89	48	14	.00	.00	38	112	696
2	37	170	202	140	65	e48	14	.00	.00	38	203	691
3	37	142	202	140	51	e38	14	.00	.00	38	293	685
4	37	129	201	140	51	e29	14	.00	.00	38	239	e759
5	37	130	202	144	51	e29	22	.00	.00	38	209	e759
6	71	133	202	146	52	e29	27	.00	.00	34	206	e765
7	94	134	201	144	52	e29	26	.00	.00	32	204	e771
8	93	134	202	144	51	e29	26	.00	.00	32	207	e771
9	93	135	209	145	52	e29	26	.00	.00	33	232	e771
10	94	138	212	146	52	e29	25	.00	.00	33	250	e723
11	95	139	212	147	51	e29	25	.00	.00	33	276	e813
12	101	140	212	112	51	e29	24	.00	.00	25	316	e813
13	115	140	211	70	51	e28	24	.00	.00	17	318	e807
14	123	139	210	71	51	e28	24	.00	.00	17	321	e801
15	123	139	209	71	50	e28	24	.00	9.3	18	433	606
16	123	139	211	71	50	e28	23	.00	17	18	502	599
17	122	146	213	70	50	e28	23	.00	17	18	501	577
18	122	151	212	70	50	28	23	.00	17	18	e520	570
19	122	153	209	69	49	28	18	.00	17	33	e418	567
20	121	155	209	82	49	28	15	.00	17	51	414	558
21	120	156	208	88	49	28	15	.00	29	50	409	552
22	120	156	194	91	50	28	15	.00	40	50	520	541
23	119	155	180	91	49	28	15	.00	39	52	596	529
24	118	177	180	91	50	28	15	.00	39	52	547	519
25	117	200	180	91	50	27	15	.00	39	54	551	510
26	117	200	180	92	50	27	4.9	.00	39	79	577	499
27	143	201	180	92	49	27	.00	.00	38	113	607	495
28	159	201	181	92	49	28	.00	.00	39	113	641	501
29	158	201	155	91	48	21	.00	.00	38	113	656	495
30	157	201	141	90	---	14	.00	.00	38	113	666	489
31	156	---	140	89	---	14	---	.00	---	112	679	---
TOTAL	3280	4694	6061	3260	1512	889	510.90	.00	472.30	1503	12623	19232
MEAN	106	156	196	105	52.1	28.7	17.0	.000	15.7	48.5	407	641
MAX	159	201	213	147	89	48	27	.00	40	113	679	813
MIN	36	129	140	69	48	14	.00	.00	.00	17	112	489
AC-FT	6510	9310	12020	6470	3000	1760	1010	.00	937	2980	25040	38150

CAL YR 1987 TOTAL 22104.20 MEAN 60.6 MAX 213 MIN .00 AC-FT 43840
WTR YR 1988 TOTAL 54037.20 MEAN 148 MAX 813 MIN .00 AC-FT 107200

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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02289041 TAMIAMI CANAL BELOW S-12-C, NEAR MIAMI, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.06	8.57	8.69	8.52	8.34	8.16	7.87	7.65	7.62	8.06	8.41	9.78
2	8.06	8.58	8.69	8.53	8.30	8.16	7.86	7.65	7.58	8.07	8.60	9.78
3	8.06	8.55	8.69	8.53	8.25	8.15	7.85	7.59	7.53	8.07	8.81	9.79
4	8.06	8.54	8.70	8.51	8.24	8.15	7.85	7.64	7.48	8.08	8.73	e9.79
5	8.07	8.52	8.70	8.48	8.24	8.15	7.90	7.66	7.44	8.08	8.66	e9.79
6	8.13	8.52	8.70	8.43	8.24	8.15	7.96	7.56	7.48	8.04	8.66	e9.80
7	8.28	8.52	8.70	8.43	8.24	8.15	7.97	7.49	7.65	8.01	8.67	e9.81
8	8.29	8.52	8.70	8.42	8.25	8.13	7.97	7.44	7.94	8.01	8.70	e9.81
9	8.29	8.52	8.73	8.43	8.24	8.08	7.97	7.40	7.96	8.02	8.75	e9.81
10	8.31	8.53	8.72	8.44	8.24	8.08	7.97	7.36	7.86	8.01	8.80	e9.83
11	8.32	8.52	8.72	8.44	8.23	8.07	7.97	7.33	7.80	8.01	8.86	e9.83
12	8.36	8.53	8.71	8.40	8.23	8.07	7.96	7.29	7.78	7.99	8.96	e9.88
13	8.39	8.53	8.71	8.33	8.22	8.06	7.96	7.27	7.77	7.98	8.97	e9.88
14	8.40	8.52	8.71	8.32	8.22	8.06	7.94	7.28	7.80	7.97	8.98	e9.87
15	8.40	8.53	8.70	8.31	8.22	8.05	7.93	7.26	7.82	7.97	9.13	9.84
16	8.40	8.51	8.72	8.31	8.22	8.05	7.93	7.23	7.86	7.96	9.33	9.83
17	8.40	8.53	8.72	8.30	8.22	8.04	7.92	7.24	7.87	7.94	9.33	9.79
18	8.40	8.57	8.72	8.30	8.21	8.04	7.91	7.31	7.87	7.98	e9.35	9.78
19	8.41	8.57	8.72	8.30	8.21	8.05	7.87	7.36	7.91	8.03	e9.49	9.78
20	8.41	8.58	8.71	8.32	8.20	8.04	7.81	7.47	7.92	8.12	9.52	9.76
21	8.42	8.58	8.71	8.35	8.21	8.03	7.74	7.44	7.97	8.13	9.53	9.75
22	8.42	8.58	8.68	8.36	8.21	8.03	7.68	7.39	8.04	8.15	9.57	9.73
23	8.43	8.58	8.63	8.35	8.20	8.00	7.63	7.40	8.04	8.17	9.66	9.71
24	8.43	8.62	8.62	8.36	8.19	8.00	7.59	7.56	8.04	8.16	9.65	9.69
25	8.43	8.68	8.62	8.37	8.19	8.00	7.55	7.55	8.04	8.16	9.64	9.67
26	8.43	8.68	8.62	8.36	8.18	8.01	7.51	7.54	8.04	8.23	9.67	9.65
27	8.47	8.68	8.62	8.36	8.18	8.02	7.47	7.50	8.07	8.38	9.71	9.65
28	8.52	8.69	8.62	8.36	8.18	8.00	7.43	7.57	8.06	8.38	9.75	9.66
29	8.52	8.69	8.58	8.35	8.17	7.97	7.39	7.65	8.05	8.38	9.76	9.65
30	8.52	8.69	8.53	8.35	---	7.92	7.37	7.72	8.05	8.38	9.76	9.64
31	8.52	---	8.52	8.35	---	7.89	---	7.67	---	8.38	9.76	---
MEAN	8.34	8.57	8.67	8.39	8.22	8.06	7.79	7.47	7.84	8.11	9.20	9.77
MAX	8.52	8.69	8.73	8.53	8.34	8.16	7.97	7.72	8.07	8.38	9.76	9.88
MIN	8.06	8.51	8.52	8.30	8.17	7.89	7.37	7.23	7.44	7.94	8.41	9.64

CAL YR 1987 MEAN 8.06 MAX 8.73 MIN 7.24
WTR YR 1988 MEAN 8.37 MAX 9.88 MIN 7.23

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254543080405400 TAMiami CANAL ABOVE S-12-D, NEAR MIAMI, FL

LOCATION.--Lat 25°45'43", long 80°40'54", in sec.14, T.54 S., R.36 E., Dade County, Hydrologic Unit 03090202, on north bank of Levee 29, 200 ft northeast of structure S-12-D, 30 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1981 to current year (gage heights only). Records prior to October 1981 are fragmentary or missing from files of the Geological Survey.

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

REMARKS.--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-D.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 10.38 ft Feb. 16, 17, 1983; minimum, 5.60 ft June 9, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.13 ft Jan. 11; minimum, 8.21 ft May 16.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.03	9.35	9.92	10.02	9.95	9.66	9.21	8.53	8.54	9.05	9.54	9.92
2	9.07	9.48	9.94	10.03	9.95	9.62	9.19	8.61	8.53	9.06	9.56	9.93
3	9.09	9.55	9.93	10.03	9.95	9.59	9.17	8.60	8.49	9.07	9.47	9.93
4	9.10	9.71	9.93	10.03	9.94	9.56	9.15	8.59	8.49	9.08	9.40	9.93
5	9.10	9.70	9.94	10.08	9.93	9.55	9.16	8.58	8.47	9.10	9.40	9.91
6	9.08	9.74	9.94	10.08	9.98	9.54	9.15	8.57	8.49	9.07	9.37	9.91
7	9.05	9.75	9.93	10.01	9.96	9.56	9.13	8.56	8.60	9.09	9.37	9.93
8	9.04	9.74	9.94	10.01	9.94	9.53	9.10	8.55	e8.84	9.11	9.41	9.93
9	9.04	9.77	10.05	10.04	9.97	9.48	9.07	8.53	e8.99	9.19	9.49	9.93
10	9.08	9.82	10.09	10.08	9.95	9.47	9.05	8.46	e8.95	9.19	9.53	9.94
11	9.11	9.85	10.09	10.12	9.91	9.48	8.99	8.38	e8.95	9.19	9.59	9.96
12	9.27	9.88	10.08	10.11	9.90	9.45	8.93	8.32	e8.96	9.18	9.63	10.01
13	9.44	9.86	10.07	10.09	9.90	9.41	8.93	8.28	e9.02	9.20	9.65	10.00
14	9.42	9.84	10.05	10.10	9.86	9.40	8.90	8.30	e9.07	9.26	9.68	9.99
15	9.42	9.85	10.02	10.10	9.81	9.42	8.86	8.29	e9.10	9.32	9.73	9.98
16	9.42	9.81	10.08	10.10	9.83	9.40	8.84	8.29	9.08	9.34	9.71	9.94
17	9.41	9.79	10.11	10.05	9.82	9.37	8.80	8.29	9.07	9.33	9.73	9.88
18	9.41	9.79	10.08	10.03	9.79	9.32	8.75	8.36	9.06	9.36	9.78	9.87
19	9.41	9.82	10.04	10.01	9.77	9.33	8.70	8.37	9.10	9.39	9.80	9.87
20	9.39	9.87	10.03	9.99	9.74	9.37	8.71	8.39	9.14	9.36	9.83	9.85
21	9.38	9.90	10.02	9.95	9.79	9.35	8.67	8.37	9.14	9.35	9.83	9.84
22	9.39	9.88	10.01	10.07	9.81	9.33	8.62	8.35	9.12	9.36	9.80	9.82
23	9.37	9.88	10.03	10.07	9.78	9.29	8.57	8.39	9.11	9.46	9.78	9.80
24	9.36	9.88	10.02	10.06	9.79	9.27	8.52	8.42	9.10	9.50	9.77	9.78
25	9.35	9.88	10.01	10.08	9.82	9.25	8.49	8.42	9.09	9.58	9.77	9.76
26	9.34	9.88	10.02	10.09	9.80	9.25	8.46	8.39	9.07	9.55	9.81	9.74
27	9.32	9.90	10.03	10.09	9.74	9.27	8.49	8.39	9.07	9.53	9.84	9.74
28	9.29	9.91	10.03	10.10	9.70	9.28	8.49	8.43	9.08	9.53	9.88	9.73
29	9.28	9.92	10.06	10.06	9.67	9.27	8.44	8.47	9.06	9.54	9.89	9.72
30	9.27	9.92	10.08	10.01	---	9.26	8.39	8.51	9.05	9.54	9.89	9.70
31	9.26	---	10.03	9.97	---	9.23	---	8.53	---	9.52	9.90	---
MEAN	9.26	9.80	10.02	10.05	9.85	9.41	8.83	8.44	8.93	9.30	9.67	9.87
MAX	9.44	9.92	10.11	10.12	9.98	9.66	9.21	8.61	9.14	9.58	9.90	10.01
MIN	9.03	9.35	9.92	9.95	9.67	9.23	8.39	8.28	8.47	9.05	9.37	9.70

CAL YR 1987 MEAN 9.15 MAX 10.11 MIN 7.21
WTR YR 1988 MEAN 9.45 MAX 10.12 MIN 8.28

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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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 west bank 75 ft downstream 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.

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

REMARKS.--No estimated daily discharges. 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.-- 13 years (water years 1964-65, 1976-77, 1979-88), 147 ft³/s, 106,500 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, 5.50 ft June 9, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 885 ft³/s Sept. 12; maximum gage height, 10.00 ft Sept. 12; no flow for many days; minimum gage height, 7.10 ft June 5, 6.

DISCHARGE, IN 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	35	158	215	135	78	32	13	.00	.00	28	103	834
2	36	167	216	136	65	32	13	.00	.00	28	193	840
3	36	152	216	135	57	32	13	.00	.00	28	283	836
4	36	148	215	136	57	31	13	.00	.00	28	245	836
5	36	149	216	138	57	31	29	.00	.00	29	220	821
6	71	151	215	140	58	31	39	.00	.00	19	217	807
7	96	152	215	137	58	31	39	.00	.00	12	216	825
8	95	152	204	137	57	31	38	.00	.00	13	219	829
9	95	153	200	138	58	31	38	.00	.00	13	240	823
10	96	148	202	139	57	31	38	.00	.00	13	255	829
11	97	139	202	141	57	31	37	.00	.00	13	303	842
12	102	141	202	113	57	31	21	.00	.00	13	361	885
13	115	140	201	80	57	30	12	.00	.00	13	363	878
14	122	139	200	80	56	30	12	.00	.00	13	365	860
15	122	139	210	80	55	30	12	.00	e10	13	493	846
16	122	138	226	80	56	30	12	.00	20	13	648	809
17	122	156	228	80	40	30	11	.00	20	13	642	763
18	121	171	226	79	33	30	11	.00	20	13	562	749
19	121	172	224	79	33	30	11	.00	20	26	454	746
20	130	175	222	78	32	30	11	.00	20	41	330	740
21	137	176	222	78	33	30	11	.00	25	41	327	729
22	137	175	204	80	33	22	11	.00	29	41	567	711
23	136	175	183	80	33	12	11	.00	29	42	656	692
24	135	193	182	79	33	12	11	.00	29	42	613	676
25	135	213	182	80	33	12	11	.00	29	43	613	662
26	134	212	182	80	33	12	3.5	.00	29	70	640	645
27	147	214	183	80	33	12	.00	.00	29	104	684	637
28	157	214	183	80	32	12	.00	.00	29	104	808	643
29	156	215	154	80	32	12	.00	.00	28	103	815	633
30	155	215	137	79	---	13	.00	.00	28	103	813	619
31	154	---	135	78	---	13	---	.00	---	102	820	---
TOTAL	3389	5042	6202	3135	1373	777	481.50	.00	394.00	1177	14068	23045
MEAN	109	168	200	101	47.3	25.1	16.1	.000	13.1	38.0	454	768
MAX	157	215	228	141	78	32	39	.00	29	104	820	885
MIN	35	138	135	78	32	12	.00	.00	.00	12	103	619
AC-FT	6720	10000	12300	6220	2720	1540	955	.00	781	2330	27900	45710

CAL YR 1987 TOTAL 22527.80 MEAN 61.7 MAX 228 MIN -1.8 AC-FT 44680
WTR YR 1988 TOTAL 59083.50 MEAN 161 MAX 885 MIN .00 AC-FT 117200

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

254543080405401 TAMIAMI CANAL BELOW S-12-D, NEAR MIAMI, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.78	8.32	8.45	8.29	8.09	7.82	7.39	7.32	7.18	7.62	8.09	9.90
2	7.77	8.34	8.45	8.29	8.06	7.81	7.38	7.28	7.17	7.64	8.26	9.91
3	7.77	8.32	8.45	8.29	8.01	7.81	7.37	7.26	7.15	7.64	8.47	9.92
4	7.77	8.33	8.46	8.29	8.00	7.81	7.37	7.25	7.13	7.63	8.44	9.92
5	7.78	8.30	8.46	8.27	8.00	7.81	7.47	7.25	7.11	7.65	8.41	9.90
6	7.88	8.30	8.46	8.23	8.00	7.80	7.62	7.23	7.16	7.55	8.41	9.90
7	8.02	8.30	8.46	8.23	8.00	7.80	7.63	7.21	7.23	7.38	8.41	9.91
8	8.03	8.30	8.45	8.22	8.01	7.80	7.63	7.19	7.55	7.36	8.43	9.92
9	8.03	8.30	8.46	8.23	8.00	7.79	7.63	7.18	7.59	7.41	8.47	9.92
10	8.06	8.28	8.46	8.23	8.00	7.79	7.63	7.17	7.50	7.37	8.51	9.93
11	8.07	8.26	8.45	8.24	8.00	7.78	7.62	7.15	7.47	7.35	8.59	9.95
12	8.12	8.26	8.45	8.20	8.00	7.78	7.53	7.14	7.49	7.34	8.73	9.99
13	8.15	8.26	8.45	8.12	8.00	7.78	7.39	7.13	7.44	7.37	8.74	9.99
14	8.17	8.26	8.44	8.11	7.99	7.77	7.37	7.12	7.43	7.42	8.75	9.98
15	8.17	8.26	8.46	8.10	7.99	7.77	7.36	7.12	7.43	7.42	8.98	9.97
16	8.17	8.25	8.50	8.10	7.99	7.77	7.35	7.11	7.46	7.40	9.26	9.93
17	8.17	8.29	8.51	8.09	7.94	7.76	7.35	7.11	7.45	7.38	9.29	9.88
18	8.17	8.35	8.50	8.09	7.89	7.76	7.34	7.11	7.44	7.44	9.20	9.86
19	8.18	8.35	8.50	8.09	7.88	7.77	7.33	7.11	7.48	7.54	9.27	9.86
20	8.19	8.36	8.50	8.09	7.88	7.76	7.35	7.15	7.50	7.68	9.56	9.85
21	8.21	8.36	8.50	8.09	7.89	7.76	7.32	7.14	7.53	7.68	9.56	9.84
22	8.21	8.36	8.46	8.10	7.87	7.73	7.30	7.13	7.62	7.68	9.67	9.81
23	8.21	8.36	8.38	8.09	7.87	7.64	7.28	7.14	7.62	7.70	9.76	9.79
24	8.21	8.39	8.38	8.11	7.86	7.62	7.26	7.20	7.62	7.72	9.76	9.77
25	8.21	8.43	8.38	8.12	7.86	7.62	7.24	7.19	7.62	7.71	9.76	9.75
26	8.22	8.44	8.38	8.11	7.86	7.62	7.22	7.18	7.61	7.81	9.79	9.73
27	8.25	8.44	8.37	8.11	7.86	7.62	7.21	7.16	7.62	8.04	9.82	9.72
28	8.28	8.45	8.38	8.11	7.84	7.60	7.19	7.17	7.62	8.06	9.88	9.73
29	8.28	8.45	8.34	8.11	7.82	7.58	7.17	7.18	7.62	8.07	9.88	9.71
30	8.28	8.45	8.30	8.10	---	7.45	7.17	7.21	7.62	8.08	9.88	9.70
31	8.29	---	8.29	8.10	---	7.41	---	7.20	---	8.08	9.89	---
MEAN	8.10	8.34	8.43	8.16	7.95	7.72	7.38	7.18	7.45	7.62	9.09	9.86
MAX	8.29	8.45	8.51	8.29	8.09	7.82	7.63	7.32	7.62	8.08	9.89	9.99
MIN	7.77	8.25	8.29	8.09	7.82	7.41	7.17	7.11	7.11	7.34	8.09	9.70
CAL YR 1987	MEAN	7.83	MAX	8.51	MIN	7.24						
WTR YR 1988	MEAN	8.11	MAX	9.99	MIN	7.11						

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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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.--No estimated daily discharges. Records 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.--7 years, 252 ft³/s, 182,600 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, 5.60 ft June 8, 9, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 782 ft³/s Oct. 28; maximum gage height, 10.17 ft Dec. 17, Jan. 11-12; no flow for many days; minimum gage height, 8.27 ft May 13.

DISCHARGE, IN 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	123	772	694	653	453	222	106	.00	.00	199	353	.00
2	125	360	696	655	378	220	106	.00	.00	200	354	.00
3	126	.00	696	655	341	219	106	.00	.00	200	589	.00
4	127	.00	698	656	341	218	106	.00	.00	200	736	.00
5	127	.00	698	661	342	218	91	.00	.00	208	734	.00
6	289	.00	697	663	345	218	80	.00	.00	175	727	.00
7	394	.00	695	656	343	218	80	.00	.00	151	722	.00
8	392	.00	694	657	342	191	79	.00	.00	152	726	.00
9	392	.00	635	659	307	163	78	.00	.00	152	480	.00
10	394	.00	572	663	286	164	78	.00	.00	152	330	.00
11	398	.00	574	665	285	164	328	.00	.00	153	114	.00
12	187	.00	573	576	285	163	488	.00	.00	126	.00	.00
13	245	149	573	463	285	162	441	.00	.00	90	.00	.00
14	518	279	571	465	283	162	438	.00	.00	91	.00	.00
15	517	279	570	465	281	150	435	.00	.00	90	.00	.00
16	517	440	575	464	282	136	432	.00	.00	91	.00	311
17	517	616	578	462	264	135	428	.00	.00	91	.00	499
18	517	682	577	461	253	134	423	.00	.00	91	.00	497
19	517	683	573	459	252	135	373	32	.00	157	.00	495
20	608	689	572	457	251	135	364	.00	.00	242	.00	494
21	617	693	621	455	253	135	374	.00	110	242	.00	492
22	627	690	653	464	253	134	372	.00	199	317	.00	490
23	676	690	655	464	243	133	368	.00	199	383	.00	488
24	674	691	653	463	226	132	366	.00	199	383	.00	486
25	676	690	652	462	228	132	364	.00	199	391	.00	484
26	675	690	653	461	227	132	134	.00	199	374	.00	482
27	749	692	654	463	225	133	.00	.00	199	355	.00	477
28	782	694	655	464	224	133	.00	.00	199	355	.00	475
29	778	695	658	461	223	120	.00	.00	199	355	.00	476
30	775	695	659	456	---	107	.00	.00	199	355	.00	474
31	773	---	653	454	---	107	---	.00	---	354	.00	---
TOTAL	14832	11869.00	19677	16582	8301	4925	7038.00	32.00	1901.00	6875	5865.00	7120.00
MEAN	478	396	635	535	286	159	235	1.03	63.4	222	189	237
MAX	782	772	698	665	453	222	488	32	199	391	736	499
MIN	123	.00	570	454	223	107	.00	.00	.00	90	.00	.00
AC-FT	29420	23540	39030	32890	16470	9770	13960	63	3770	13640	11630	14120

CAL YR 1987 TOTAL 109990.50 MEAN 301 MAX 785 MIN .00 AC-FT 218200
WTR YR 1988 TOTAL 105017.00 MEAN 287 MAX 782 MIN .00 AC-FT 208300

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289050 TAMiami CANAL ABOVE S-333 NEAR MIAMI, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.07	9.39	9.96	10.06	9.99	9.68	9.23	8.55	8.55	9.07	9.57	10.00
2	9.12	9.54	9.98	10.07	9.99	9.65	9.21	8.63	8.54	9.08	9.59	10.01
3	9.13	9.60	9.98	10.07	9.98	9.61	9.19	8.62	8.50	9.09	9.49	10.01
4	9.15	9.75	9.98	10.08	9.97	9.58	9.17	8.60	8.50	9.09	9.43	10.01
5	9.15	9.74	9.99	10.12	9.97	9.57	9.18	8.60	8.48	9.11	9.43	9.99
6	9.12	9.78	9.99	10.11	10.01	9.57	9.16	8.58	8.51	9.09	9.40	9.98
7	9.09	9.79	9.98	10.05	9.99	9.58	9.14	8.57	8.62	9.10	9.40	10.00
8	9.08	9.78	9.98	10.06	9.97	9.54	9.12	8.57	8.86	9.13	9.44	10.01
9	9.09	9.81	10.11	10.08	10.00	9.50	9.09	8.55	9.01	9.22	9.52	10.01
10	9.12	9.87	10.14	10.12	9.98	9.50	9.06	8.48	8.97	9.21	9.57	10.02
11	9.17	9.89	10.14	10.16	9.95	9.51	9.01	8.39	8.97	9.20	9.64	10.04
12	9.32	9.92	10.13	10.15	9.94	9.47	8.96	8.33	8.98	9.19	9.68	10.09
13	9.49	9.91	10.12	10.13	9.94	9.44	8.95	8.29	9.04	9.22	9.70	10.08
14	9.47	9.89	10.10	10.14	9.90	9.43	8.93	8.31	9.09	9.29	9.72	10.07
15	9.47	9.89	10.08	10.14	9.84	9.44	8.89	8.30	9.12	9.35	9.78	10.05
16	9.46	9.86	10.13	10.13	9.86	9.43	8.86	8.30	9.11	9.36	9.76	10.01
17	9.46	9.82	10.15	10.09	9.85	9.39	8.82	8.31	9.10	9.36	9.78	9.95
18	9.45	9.83	10.13	10.07	9.83	9.35	8.77	8.37	9.08	9.39	9.83	9.94
19	9.45	9.86	10.09	10.05	9.80	9.37	8.71	8.39	9.11	9.41	9.85	9.93
20	9.43	9.91	10.08	10.02	9.77	9.40	8.72	8.41	9.16	9.39	9.89	9.92
21	9.42	9.94	10.07	9.99	9.82	9.38	8.68	8.38	9.16	9.37	9.89	9.90
22	9.42	9.93	10.06	10.10	9.84	9.36	8.63	8.36	9.14	9.38	9.87	9.88
23	9.41	9.92	10.08	10.10	9.81	9.32	8.58	8.39	9.13	9.49	9.84	9.85
24	9.40	9.93	10.07	10.10	9.82	9.30	8.54	8.43	9.13	9.53	9.83	9.83
25	9.39	9.93	10.06	10.12	9.84	9.28	8.50	8.44	9.12	9.61	9.84	9.81
26	9.39	9.93	10.07	10.13	9.82	9.27	8.47	8.41	9.09	9.57	9.87	9.79
27	9.36	9.94	10.07	10.13	9.77	9.30	8.50	8.40	9.09	9.55	9.91	9.79
28	9.33	9.96	10.07	10.14	9.72	9.30	8.49	8.45	9.10	9.56	9.97	9.80
29	9.32	9.97	10.10	10.10	9.70	9.29	8.45	8.49	9.08	9.57	9.98	9.78
30	9.31	9.97	10.12	10.04	---	9.27	8.40	8.53	9.07	9.56	9.98	9.77
31	9.31	---	10.07	10.00	---	9.25	---	8.55	---	9.55	9.98	---
MEAN	9.30	9.84	10.07	10.09	9.89	9.43	8.85	8.45	8.95	9.33	9.72	9.94
MAX	9.49	9.97	10.15	10.16	10.01	9.68	9.23	8.63	9.16	9.61	9.98	10.09
MIN	9.07	9.39	9.96	9.99	9.70	9.25	8.40	8.29	8.48	9.07	9.40	9.77
CAL YR 1987	MEAN	9.16	MAX	10.15	MIN	7.28						
WTR YR 1988	MEAN	9.49	MAX	10.16	MIN	8.29						

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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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.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.19 ft Sept. 27, 1988, minimum, 4.55 ft May 10, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.19 ft Sept. 27; minimum, 5.98 ft Apr. 30.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.98	7.06	7.19	7.24	7.11	6.76	6.41	6.34	6.27	6.67	e6.95	8.06
2	6.95	7.25	7.19	7.23	7.10	6.74	6.38	6.36	6.27	6.65	e7.05	8.06
3	6.92	7.27	7.19	7.23	7.08	6.72	6.37	6.32	6.25	6.65	e7.01	8.05
4	6.90	7.42	7.19	7.23	7.06	6.71	6.39	6.29	6.22	6.64	e7.00	8.06
5	6.87	7.45	7.20	7.23	7.05	6.69	6.45	6.27	6.20	6.67	e6.98	8.05
6	6.85	7.46	7.20	7.22	7.03	6.69	6.42	6.24	6.24	6.69	e6.97	8.05
7	6.87	7.46	7.20	7.21	7.01	6.68	6.40	6.21	6.32	6.69	e6.96	8.06
8	6.89	7.43	7.20	7.22	6.99	6.67	6.38	6.19	6.76	6.71	e7.07	8.08
9	6.89	7.41	7.27	7.21	7.00	6.65	6.37	6.17	7.06	6.84	7.28	8.08
10	7.01	7.41	7.32	7.20	7.00	6.64	6.36	6.14	7.06	6.83	7.29	8.09
11	7.14	7.39	7.35	7.23	6.99	6.64	6.35	6.11	7.06	6.80	7.35	8.10
12	7.16	7.36	7.35	7.23	6.97	6.63	6.33	6.08	7.07	6.76	7.41	8.13
13	7.15	7.33	7.34	7.23	6.95	6.62	6.31	6.05	7.10	6.78	7.42	8.11
14	7.14	7.31	7.34	7.22	6.94	6.61	6.30	6.06	7.13	6.84	7.46	8.11
15	7.13	7.28	7.34	7.22	6.93	6.58	6.29	6.05	7.12	6.89	7.60	8.12
16	7.12	7.26	7.34	7.21	6.91	6.56	6.27	6.04	7.08	e6.91	7.65	8.12
17	7.11	7.23	7.34	7.19	6.90	6.55	6.25	6.06	7.02	e6.87	7.69	8.12
18	7.10	7.22	7.32	7.17	6.89	6.55	6.23	6.07	6.97	e6.89	7.73	8.11
19	7.09	7.22	7.30	7.16	6.88	6.56	6.20	6.13	6.94	e6.97	7.77	8.11
20	7.06	7.22	7.30	7.14	6.87	6.56	6.22	6.16	6.92	e6.96	7.87	8.11
21	7.05	7.21	7.30	7.13	6.87	6.55	6.21	6.12	6.91	e6.93	7.90	8.11
22	7.03	7.20	7.30	7.13	6.88	6.54	6.19	6.08	6.89	e6.90	7.90	8.10
23	7.02	7.19	7.30	7.12	6.87	6.53	6.17	6.06	6.86	e6.89	7.89	8.10
24	7.01	7.18	7.30	7.11	6.87	6.52	6.16	6.13	6.83	e6.89	7.88	8.10
25	7.01	7.18	7.29	7.16	6.84	6.52	6.14	6.11	6.80	e6.90	7.89	8.10
26	7.00	7.18	7.29	7.18	6.82	6.51	6.12	6.11	6.76	e6.89	7.90	8.09
27	6.99	7.18	7.28	7.18	6.80	6.49	6.09	6.15	6.73	e6.90	7.94	8.12
28	6.97	7.18	7.28	7.16	6.79	6.48	6.05	6.29	6.70	e6.94	8.11	8.15
29	6.96	7.18	7.26	7.15	6.78	6.46	6.02	6.26	6.69	e6.96	8.08	8.13
30	6.94	7.18	7.25	7.14	---	6.44	6.00	6.26	6.68	e6.93	8.06	8.10
31	6.92	---	7.24	7.12	---	6.42	---	6.27	---	e6.91	8.06	---
MEAN	7.01	7.28	7.28	7.19	6.94	6.59	6.26	6.17	6.76	6.83	7.55	8.10
MAX	7.16	7.46	7.35	7.24	7.11	6.76	6.45	6.36	7.13	6.97	8.11	8.15
MIN	6.85	7.06	7.19	7.11	6.78	6.42	6.00	6.04	6.20	6.64	6.95	8.05

CAL YR 1987 MEAN 6.73 MAX 7.46 MIN 6.24

WTR YR 1988 MEAN 6.99 MAX 8.15 MIN 6.00

e Estimated

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.

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, 7.67 ft Aug. 20, 21; minimum, 5.95 ft Apr. 30.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.98	7.11	7.04	7.02	7.07	6.79	6.43	6.55	6.53	6.83	7.11	7.54
2	6.94	7.26	7.04	7.02	7.06	6.78	6.41	6.58	6.54	6.81	7.16	7.51
3	6.91	7.27	7.04	7.03	7.05	6.77	6.39	6.49	6.47	6.80	7.12	7.48
4	6.88	7.35	7.03	7.04	7.04	6.76	6.42	6.41	6.40	6.80	7.10	7.45
5	6.85	7.35	7.02	7.03	7.03	6.75	6.57	6.35	6.34	6.86	7.08	7.41
6	6.83	7.35	7.02	7.02	7.01	6.75	6.55	6.30	6.37	6.86	7.07	7.38
7	6.81	7.33	7.02	7.02	7.00	6.75	6.51	6.26	6.57	6.86	7.06	7.36
8	6.79	7.30	7.02	7.02	7.01	6.74	6.46	6.22	7.09	6.88	7.05	7.34
9	6.77	7.27	7.15	7.03	6.99	6.72	6.42	6.19	7.06	7.02	7.07	7.32
10	6.82	7.26	7.16	7.04	6.96	6.72	6.39	6.15	7.01	6.99	7.09	7.30
11	6.86	7.23	7.16	7.09	6.95	6.71	6.37	6.12	7.01	6.95	7.18	7.30
12	7.07	7.19	7.15	7.07	6.94	6.70	6.34	6.09	7.03	6.91	7.28	7.31
13	7.12	7.16	7.15	7.07	6.92	6.68	6.31	6.08	7.11	6.94	7.29	7.30
14	7.07	7.14	7.14	7.07	6.91	6.67	6.29	6.10	7.14	7.05	7.30	7.30
15	7.05	7.11	7.13	7.09	6.90	6.64	6.28	6.08	7.14	7.15	7.42	7.30
16	7.03	7.10	7.12	7.07	6.89	6.62	6.26	6.06	7.11	7.09	7.47	7.29
17	7.01	7.08	7.11	7.06	6.88	6.60	6.24	6.13	7.08	7.05	7.51	7.28
18	6.99	7.07	7.10	7.05	6.87	6.59	6.22	6.14	7.05	7.07	7.51	7.29
19	6.98	7.07	7.10	7.05	6.87	6.62	6.20	6.13	7.03	7.15	7.53	7.29
20	6.97	7.07	7.09	7.04	6.86	6.63	6.19	6.13	7.03	7.14	7.64	7.28
21	6.96	7.06	7.09	7.03	6.91	6.61	6.17	6.09	7.01	7.11	7.65	7.27
22	6.95	7.05	7.08	7.06	6.91	6.59	6.14	6.05	6.99	7.08	7.62	7.27
23	6.94	7.04	7.07	7.04	6.88	6.58	6.12	6.02	6.96	7.07	7.58	7.27
24	6.93	7.04	7.07	7.05	6.87	6.56	6.10	6.02	6.94	7.07	7.54	7.27
25	6.92	7.04	7.06	7.14	6.85	6.55	6.09	6.03	6.91	7.08	7.50	7.26
26	6.91	7.04	7.06	7.15	6.84	6.54	6.07	6.04	6.88	7.07	7.50	7.26
27	6.91	7.04	7.05	7.13	6.82	6.53	6.04	6.13	6.85	7.08	7.51	7.28
28	6.90	7.04	7.05	7.10	6.81	6.51	6.02	6.43	6.83	7.12	7.65	7.30
29	6.89	7.04	7.04	7.09	6.80	6.50	5.99	6.42	6.82	7.14	7.62	7.28
30	6.88	7.04	7.03	7.09	---	6.47	5.99	6.38	6.84	7.11	7.58	7.27
31	6.88	---	7.02	7.08	---	6.45	---	6.43	---	7.09	7.55	---
MEAN	6.93	7.15	7.08	7.06	6.93	6.64	6.27	6.21	6.87	7.01	7.37	7.33
MAX	7.12	7.35	7.16	7.15	7.07	6.79	6.57	6.58	7.14	7.15	7.65	7.54
MIN	6.77	7.04	7.02	7.02	6.80	6.45	5.99	6.02	6.34	6.80	7.05	7.26

CAL YR 1987 MEAN 6.68 MAX 7.35 MIN 6.21
WTR YR 1988 MEAN 6.90 MAX 7.65 MIN 5.99

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 discharges. 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.--48 years, 219 ft³/s, 158,700 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, 807 ft³/s Nov. 20; maximum gage height, 7.71 ft Aug. 8; minimum daily discharge, 9.1 ft³/s June 5; minimum gage height, 6.42 ft May 23.

DISCHARGE, IN 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	177	468	710	578	543	243	107	37	9.9	206	392	84
2	154	135	695	595	458	243	101	34	9.8	198	414	82
3	141	46	695	605	391	238	99	31	9.5	192	488	81
4	130	149	712	607	372	234	106	30	9.6	188	538	81
5	124	117	694	560	359	237	104	29	9.1	191	561	80
6	189	95	693	512	334	234	92	27	11	178	615	80
7	270	84	684	506	320	231	89	25	13	164	675	80
8	269	77	695	534	334	226	89	24	30	176	673	82
9	269	75	759	543	304	207	90	22	42	215	373	82
10	292	70	616	567	263	206	89	21	36	200	142	81
11	312	64	577	610	254	195	128	20	34	175	98	82
12	289	57	539	571	244	193	140	18	33	154	67	85
13	318	69	515	510	229	191	107	18	36	143	62	86
14	526	89	499	479	219	187	99	18	44	161	60	91
15	547	88	484	477	221	173	98	16	42	183	62	93
16	553	194	510	444	217	155	101	15	39	173	62	190
17	558	478	471	441	286	151	98	16	36	160	62	325
18	556	739	460	441	273	147	96	17	33	167	64	357
19	556	785	450	433	272	154	79	20	31	221	64	366
20	660	807	441	423	267	151	63	18	31	274	104	382
21	581	761	520	427	294	149	62	17	153	262	111	381
22	419	745	599	446	291	144	58	14	273	248	96	383
23	424	747	607	422	280	145	56	14	264	292	87	368
24	430	724	594	445	268	143	54	15	249	339	81	380
25	439	752	581	573	257	147	52	14	231	302	76	388
26	443	768	582	553	240	146	47	13	219	324	73	391
27	441	766	585	507	243	146	35	12	222	381	83	435
28	439	767	589	469	238	144	30	12	218	397	133	454
29	433	737	575	452	234	136	25	11	206	394	115	435
30	434	729	561	437	---	116	22	11	203	375	95	418
31	438	---	579	437	---	111	---	10	---	374	88	---
TOTAL	11811	12182	18271	15604	8505	5523	2416	599	2776.9	7407	6614	6903
MEAN	381	406	589	503	293	178	80.5	19.3	92.6	239	213	230
MAX	660	807	759	610	543	243	140	37	273	397	675	454
MIN	124	46	441	422	217	111	22	10	9.1	143	60	80
AC-FT	23430	24160	36240	30950	16870	10950	4790	1190	5510	14690	13120	13690

CAL YR 1987 TOTAL 87986.3 MEAN 241 MAX 807 MIN 3.3 AC-FT 174500
WTR YR 1988 TOTAL 98611.9 MEAN 269 MAX 807 MIN 9.1 AC-FT 195600

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.06	7.59	7.53	7.50	7.38	7.10	6.87	6.68	6.55	7.05	7.35	7.49
2	7.02	7.52	7.53	7.51	7.35	7.10	6.86	6.65	6.54	7.04	7.37	7.46
3	7.00	7.35	7.53	7.51	7.31	7.09	6.86	6.62	6.54	7.04	7.46	7.43
4	6.98	7.48	7.54	7.51	7.30	7.09	6.87	6.61	6.55	7.03	7.58	7.40
5	6.97	7.43	7.53	7.49	7.30	7.09	6.87	6.60	6.54	7.05	7.59	7.37
6	7.06	7.38	7.53	7.47	7.28	7.09	6.84	6.59	6.58	7.03	7.61	7.34
7	7.16	7.33	7.53	7.47	7.27	7.09	6.82	6.57	6.62	7.01	7.63	7.32
8	7.16	7.29	7.53	7.48	7.28	7.07	6.82	6.55	6.89	7.03	7.65	7.30
9	7.16	7.28	7.58	7.48	7.26	7.03	6.83	6.53	7.06	7.10	7.59	7.28
10	7.18	7.25	7.53	7.49	7.23	7.03	6.82	6.52	7.01	7.10	7.48	7.25
11	7.19	7.21	7.52	7.51	7.23	7.02	6.89	6.51	6.99	7.06	7.40	7.23
12	7.17	7.17	7.50	7.48	7.22	7.02	6.90	6.49	6.98	7.03	7.32	7.22
13	7.20	7.19	7.49	7.42	7.21	7.01	6.83	6.48	7.01	7.03	7.29	7.20
14	7.33	7.25	7.49	7.41	7.20	7.01	6.82	6.48	7.11	7.08	7.29	7.20
15	7.34	7.25	7.48	7.41	7.20	6.99	6.81	6.46	7.12	7.15	7.43	7.19
16	7.34	7.32	7.49	7.39	7.19	6.97	6.82	6.45	7.10	7.14	7.45	7.32
17	7.34	7.42	7.47	7.39	7.18	6.96	6.81	6.46	7.07	7.12	7.45	7.49
18	7.34	7.48	7.47	7.39	7.17	6.95	6.81	6.47	7.04	7.14	7.46	7.51
19	7.34	7.51	7.46	7.39	7.16	6.96	6.75	6.52	7.02	7.21	7.46	7.51
20	7.39	7.51	7.46	7.38	7.16	6.96	6.71	6.50	7.02	7.25	7.61	7.52
21	7.41	7.51	7.49	7.38	7.17	6.96	6.71	6.48	7.06	7.24	7.63	7.52
22	7.40	7.51	7.52	7.39	7.16	6.95	6.69	6.45	7.11	7.23	7.60	7.52
23	7.43	7.51	7.52	7.38	7.16	6.95	6.67	6.47	7.10	7.27	7.56	7.51
24	7.43	7.51	7.51	7.39	7.14	6.95	6.65	6.55	7.09	7.31	7.53	7.52
25	7.44	7.52	7.51	7.45	7.13	6.94	6.64	6.54	7.08	7.28	7.50	7.52
26	7.44	7.53	7.51	7.44	7.12	6.94	6.62	6.53	7.07	7.29	7.48	7.52
27	7.48	7.53	7.51	7.42	7.11	6.94	6.57	6.52	7.07	7.33	7.49	7.55
28	7.51	7.53	7.51	7.40	7.10	6.94	6.54	6.53	7.07	7.34	7.62	7.57
29	7.51	7.53	7.51	7.40	7.10	6.93	6.52	6.54	7.05	7.34	7.59	7.56
30	7.51	7.53	7.50	7.39	---	6.89	6.52	6.56	7.05	7.33	7.55	7.55
31	7.51	---	7.50	7.39	---	6.88	---	6.55	---	7.33	7.52	---
MEAN	7.28	7.41	7.51	7.44	7.21	7.00	6.76	6.53	6.94	7.16	7.50	7.41
MAX	7.51	7.59	7.58	7.51	7.38	7.10	6.90	6.68	7.12	7.34	7.65	7.57
MIN	6.97	7.17	7.46	7.38	7.10	6.88	6.52	6.45	6.54	7.01	7.29	7.19

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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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.--Records poor. 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.--28 years (water years 1960-83, 1985-88), 139 ft³/s 100,700 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 May 25, 26, 1985; 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, 473 ft³/s June 14 (estimated); maximum gage height, 3.77 ft June 9; minimum daily discharge, 29 ft³/s Dec. 24; minimum gage height, 2.14 ft Apr. 16.

DISCHARGE, IN 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	155	e55	73	66	76	78	e116	e103	e107	e206	e296	229
2	206	62	87	67	76	76	e129	e113	e111	e227	e254	164
3	176	45	68	67	71	81	e135	e104	e103	e257	106	121
4	150	61	76	69	75	83	e144	e98	e97	e209	111	135
5	188	47	40	70	70	83	e155	e94	e92	e220	115	122
6	157	62	38	70	74	85	e159	e87	e98	e215	138	148
7	135	72	44	73	85	85	e163	e76	e145	e215	130	144
8	147	e96	68	68	77	80	e162	e75	e297	e210	145	210
9	98	e110	173	68	53	78	e161	e72	e357	e215	140	257
10	90	e90	183	77	80	80	e161	e68	e330	e210	156	288
11	140	e90	182	86	104	82	e162	e64	e295	e205	226	270
12	203	e173	176	67	115	79	e166	e60	e317	e205	194	e206
13	263	167	112	62	115	77	e174	e56	e454	e205	176	e194
14	178	148	94	68	98	75	e178	e57	e473	e200	162	e192
15	e162	e99	94	101	93	77	e174	e58	e425	e200	371	e189
16	e166	e84	110	92	98	78	e154	e60	e373	e200	358	e182
17	e162	e88	88	67	95	75	e146	e61	e356	e195	302	e173
18	e112	e89	99	66	87	73	e141	e56	e335	e195	285	e163
19	e93	e94	86	64	88	74	e128	e70	e337	e190	269	e154
20	e85	e107	85	71	85	76	e139	e77	e348	e190	355	e149
21	e77	e87	79	71	83	75	e119	e72	e277	e180	262	e134
22	e70	e89	59	76	85	73	e105	e71	e268	e239	229	e127
23	e70	e94	35	78	78	73	e100	e72	e247	e233	291	213
24	e70	e96	29	69	83	76	e94	e77	e230	e227	282	123
25	e70	e105	41	72	85	74	e91	e85	e219	e203	281	182
26	e65	96	e40	75	83	71	e89	e86	e223	e195	299	124
27	e65	103	e70	79	84	68	e74	e78	e216	e219	242	94
28	e65	106	e65	81	81	74	e66	e76	e210	e197	267	87
29	e60	105	e60	79	80	83	e60	e81	e207	e209	237	91
30	e60	95	e60	82	---	93	e56	e93	e207	e191	252	88
31	e60	---	66	79	---	90	---	e105	---	e256	243	---
TOTAL	3798	2815	2580	2280	2457	2425	3901	2405	7754	6518	7174	4953
MEAN	123	93.8	83.2	73.5	84.7	78.2	130	77.6	258	210	231	165
MAX	263	173	183	101	115	93	178	113	473	257	371	288
MIN	60	45	29	62	53	68	56	56	92	180	106	87
AC-FT	7530	5580	5120	4520	4870	4810	7740	4770	15380	12930	14230	9820

CAL YR 1987 TOTAL 29908.5 MEAN 81.9 MAX 263 MIN 8.5 AC-FT 59320
WTR YR 1988 TOTAL 49060.0 MEAN 134 MAX 473 MIN 29 AC-FT 97310

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA
02289500 TAMIAAMI CANAL NEAR CORAL GABLES, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.34	3.03	2.83	2.77	2.81	2.74	2.37	2.80	2.83	2.91	2.80	3.16
2	3.25	3.41	2.79	2.76	2.81	2.72	2.36	2.89	2.82	3.01	2.62	3.12
3	3.19	3.46	2.82	2.77	2.81	2.71	2.35	2.86	2.82	3.13	2.88	3.12
4	3.13	3.52	2.77	2.78	2.82	2.70	2.35	2.83	2.84	3.19	2.92	3.12
5	3.08	3.29	2.84	2.77	2.84	2.70	2.36	2.77	2.84	3.49	2.92	3.09
6	3.03	3.11	2.84	2.76	2.85	2.70	2.37	2.75	2.84	3.29	2.92	3.08
7	3.00	3.00	2.83	2.76	2.84	2.70	2.36	2.75	2.80	3.19	2.92	3.08
8	2.95	e3.01	2.82	2.78	2.82	2.68	2.35	2.72	3.02	3.16	2.97	3.10
9	2.96	e3.02	3.16	2.80	2.82	2.67	2.34	2.68	3.53	3.35	2.97	3.05
10	3.02	e2.95	3.10	2.78	2.82	2.67	2.34	2.65	3.18	3.19	3.09	2.91
11	3.01	e2.88	2.82	2.70	2.77	2.66	2.33	2.62	2.96	3.05	3.16	2.89
12	3.48	e2.82	2.62	2.80	2.76	2.64	2.32	2.58	2.96	3.04	3.04	2.96
13	3.62	2.76	2.77	2.82	2.75	2.62	2.28	2.55	3.27	2.99	2.92	2.98
14	3.45	2.70	2.87	2.82	2.76	2.61	2.25	2.52	3.60	3.07	2.90	2.96
15	3.38	e2.62	2.77	2.66	2.77	2.59	2.27	2.51	3.46	3.06	3.45	2.89
16	3.31	e2.67	2.80	2.65	2.78	2.56	2.27	2.50	3.24	2.98	3.40	2.81
17	3.21	e2.66	2.74	2.74	2.77	2.55	2.25	2.51	3.08	2.93	3.17	2.76
18	e3.16	e2.69	2.73	2.78	2.76	2.53	2.24	2.51	2.94	2.96	3.04	2.74
19	e3.12	e2.72	2.74	2.80	2.75	2.55	2.24	2.49	2.85	2.93	3.17	2.74
20	e3.09	e2.76	2.76	2.75	2.74	2.55	2.47	2.48	2.87	2.95	3.03	2.73
21	e3.06	e2.74	2.78	2.74	2.77	2.53	2.53	2.46	3.08	2.85	3.06	2.80
22	e3.02	e2.73	2.81	2.77	2.79	2.52	2.51	2.43	2.97	2.91	3.18	2.97
23	e3.00	e2.72	2.83	2.75	2.79	2.50	2.48	2.39	2.92	2.96	3.14	2.86
24	e2.98	e2.74	2.83	2.74	2.79	2.47	2.45	2.36	2.88	2.96	3.13	2.92
25	e2.95	e2.75	2.79	2.77	2.79	2.46	2.44	2.35	2.90	3.06	3.11	2.90
26	e2.93	2.79	2.84	2.81	2.77	2.45	2.47	2.36	2.90	3.10	3.02	2.91
27	e2.91	2.83	2.81	2.80	2.75	2.48	2.49	2.39	2.92	3.06	3.05	2.97
28	e2.89	2.79	2.66	2.81	2.75	2.46	2.49	2.47	2.92	3.05	3.26	2.99
29	e2.88	2.77	2.77	2.82	2.75	2.43	2.48	2.46	2.90	3.01	3.20	2.98
30	e2.87	2.80	2.78	2.81	---	2.41	2.46	2.66	2.89	3.00	3.13	2.98
31	2.87	---	2.77	2.81	---	2.40	---	2.76	---	2.96	3.11	---
MEAN	3.10	2.89	2.81	2.77	2.79	2.58	2.38	2.58	3.00	3.06	3.05	2.95
MAX	3.62	3.52	3.16	2.82	2.85	2.74	2.53	2.89	3.60	3.49	3.45	3.16
MIN	2.87	2.62	2.62	2.65	2.74	2.40	2.24	2.35	2.80	2.85	2.62	2.73

CAL YR 1987 MEAN 2.78 MAX 3.62 MIN 2.20
WTR YR 1988 MEAN 2.83 MAX 3.62 MIN 2.24

e Estimated

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.

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, 7.55 ft Aug. 20; minimum, 5.68 ft May 23.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.75	6.94	e6.94	e6.90	e6.94	e6.66	6.36	6.21	6.02	6.65	6.95	7.34
2	6.74	7.14	e6.93	e6.90	e6.93	e6.64	6.35	6.21	6.02	6.64	6.95	7.31
3	6.73	7.16	e6.93	e6.91	e6.92	e6.63	6.33	6.19	6.00	6.63	6.93	7.27
4	6.71	7.29	e6.92	e6.91	e6.91	e6.62	6.33	6.18	5.98	6.61	6.91	7.24
5	6.69	7.30	e6.92	e6.91	e6.90	e6.62	6.34	6.16	6.05	6.62	6.92	7.21
6	6.67	7.27	e6.91	e6.90	e6.88	e6.61	6.33	6.13	6.26	6.61	6.94	7.17
7	6.65	7.22	e6.91	e6.90	e6.87	e6.60	6.31	6.11	6.36	6.67	7.01	7.15
8	6.64	e7.21	e6.92	e6.91	e6.87	e6.59	6.29	6.09	6.68	6.70	7.06	7.12
9	6.63	e7.20	e6.99	e6.91	e6.87	e6.58	6.27	6.06	6.88	6.74	7.12	7.10
10	6.66	e7.19	e7.02	e6.91	e6.86	e6.58	6.26	6.03	6.85	6.74	7.13	7.07
11	6.70	e7.16	e7.03	e6.95	e6.85	e6.56	6.25	6.00	6.84	6.72	7.14	7.05
12	6.82	e7.09	e7.02	e6.95	e6.84	e6.55	6.23	5.96	6.85	6.70	7.14	7.05
13	6.91	e7.06	e7.01	e6.94	e6.82	e6.54	6.21	5.93	6.93	6.70	7.11	7.03
14	6.90	e7.04	e7.02	e6.94	e6.81	e6.54	6.20	5.92	7.00	6.75	7.13	7.01
15	6.90	e7.01	e7.03	e6.95	e6.80	6.53	6.18	5.91	7.03	6.86	7.33	6.98
16	6.90	e7.00	e7.02	e6.94	e6.80	6.52	6.17	5.88	7.00	6.87	7.37	6.95
17	6.89	e6.98	e7.01	e6.93	e6.78	6.51	6.15	5.90	6.96	6.85	7.37	6.93
18	6.89	e6.96	e7.00	e6.92	e6.76	6.50	6.14	5.87	6.93	6.87	7.36	6.91
19	6.88	e6.97	e6.99	e6.92	e6.76	6.50	6.12	5.85	6.91	6.93	7.36	6.92
20	6.87	e6.97	e6.98	e6.91	e6.75	6.50	6.16	5.83	6.91	6.92	7.51	6.93
21	6.86	e6.96	e6.98	e6.90	e6.78	6.48	6.15	5.79	6.88	6.90	7.53	6.93
22	6.85	e6.95	e6.96	e6.92	e6.76	6.47	6.13	5.75	6.85	6.88	7.50	6.93
23	6.84	e6.94	e6.96	e6.91	e6.75	6.46	6.11	5.78	6.83	6.89	7.45	6.92
24	6.84	e6.94	e6.95	e6.91	e6.75	6.45	6.09	5.94	6.81	6.96	7.41	6.92
25	6.83	e6.94	e6.95	e6.98	e6.74	6.44	6.08	5.91	6.78	6.94	7.39	6.93
26	6.82	e6.95	e6.94	e6.99	e6.71	6.43	6.07	5.89	6.76	6.93	7.37	6.92
27	6.82	e6.95	e6.94	e6.97	e6.69	6.42	6.05	5.88	6.74	6.92	7.34	6.93
28	6.81	e6.95	e6.93	e6.96	e6.67	6.41	6.03	5.93	6.72	6.93	7.44	6.96
29	6.81	e6.94	e6.93	e6.96	e6.67	6.40	6.00	5.91	6.69	6.94	7.43	6.97
30	6.81	e6.94	e6.91	e6.95	---	6.39	5.99	5.93	6.66	6.93	7.40	6.97
31	6.81	---	e6.91	e6.95	---	6.37	---	5.98	---	6.92	7.36	---
MEAN	6.79	7.05	6.96	6.93	6.81	6.52	6.19	5.97	6.67	6.80	7.24	7.04
MAX	6.91	7.30	7.03	6.99	6.94	6.66	6.36	6.21	7.03	6.96	7.53	7.34
MIN	6.63	6.94	6.91	6.90	6.67	6.37	5.99	5.75	5.98	6.61	6.91	6.91

CAL YR 1987 MEAN 6.45 MAX 7.30 MIN 5.62
WTR YR 1988 MEAN 6.75 MAX 7.53 MIN 5.75

e Estimated

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.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.66 ft Aug. 20, 1988; minimum, 4.54 ft estimated Apr. 23, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.66 ft Aug. 20; minimum, 6.07 ft Apr. 30.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.86	6.99	7.00	6.97	7.01	e6.74	6.43	6.28	6.30	6.80	7.02	7.47
2	6.85	7.23	6.99	6.97	7.00	e6.72	6.42	6.31	6.30	6.78	7.04	7.43
3	6.84	7.25	6.99	6.98	6.99	e6.71	6.40	6.29	6.28	6.77	7.03	7.40
4	6.82	7.34	6.98	6.98	6.98	e6.70	6.40	6.26	6.26	6.75	7.02	7.37
5	6.80	7.34	6.98	6.98	6.97	e6.70	6.45	6.24	6.25	6.74	7.02	7.33
6	6.78	7.32	6.97	6.97	6.95	e6.69	6.43	6.22	6.30	6.74	7.01	7.31
7	6.77	7.29	6.97	6.97	6.94	e6.68	6.41	6.20	6.40	6.76	7.00	7.30
8	6.75	7.27	6.98	6.98	6.94	e6.67	6.39	6.18	6.75	6.82	7.01	7.27
9	6.74	7.26	7.05	6.98	6.94	e6.66	6.38	6.16	6.99	6.94	7.03	7.23
10	6.77	7.25	7.08	6.98	6.93	e6.66	6.36	6.14	6.96	6.90	7.06	7.20
11	6.80	7.22	7.09	7.02	6.92	e6.64	6.35	6.12	6.97	6.87	7.17	7.19
12	6.93	7.15	7.08	7.02	6.91	e6.63	6.33	6.10	6.98	6.85	7.23	7.20
13	7.03	7.12	7.07	7.01	6.89	e6.62	6.31	6.09	7.03	6.86	7.22	7.18
14	7.02	7.10	7.08	7.01	6.88	e6.62	6.30	6.10	7.05	6.92	7.23	7.17
15	7.01	7.07	7.09	7.02	e6.87	e6.60	6.29	6.09	7.06	7.02	7.36	7.15
16	6.99	7.06	7.08	7.01	e6.87	6.59	6.27	6.09	7.04	7.01	7.41	7.13
17	6.98	7.04	7.07	7.00	e6.85	6.58	6.26	6.15	7.03	6.98	7.43	7.11
18	6.96	7.02	7.06	6.99	e6.83	6.57	6.25	6.18	7.01	7.01	7.44	7.09
19	6.95	7.03	7.05	6.99	e6.83	6.58	6.23	6.19	6.99	7.06	7.47	7.08
20	6.94	7.03	7.04	6.98	e6.82	6.58	6.24	6.19	6.99	7.04	7.61	7.07
21	6.93	7.02	7.04	6.97	e6.85	6.57	6.22	6.17	6.97	7.03	7.60	7.07
22	6.92	7.01	7.03	6.99	e6.84	6.55	6.21	6.14	6.95	7.02	7.56	7.05
23	6.91	7.00	7.03	6.98	e6.83	6.54	6.19	6.15	6.93	7.01	7.52	7.05
24	6.90	7.00	7.02	6.98	e6.83	6.53	6.18	6.25	6.90	7.03	7.48	7.04
25	6.89	7.00	7.02	7.05	e6.82	6.52	6.16	6.23	6.87	7.02	7.45	7.05
26	6.89	7.01	7.01	7.06	e6.79	6.51	6.15	6.22	6.85	7.02	7.45	7.05
27	6.88	7.01	7.01	7.04	e6.77	6.50	6.13	6.22	6.83	7.02	7.45	7.10
28	6.87	7.01	7.00	7.03	e6.76	6.48	6.11	6.29	6.81	7.04	7.60	7.18
29	6.86	7.00	7.00	7.03	e6.75	6.47	6.09	6.27	6.79	7.04	7.55	7.17
30	6.85	7.00	6.98	7.02	---	6.46	6.08	6.26	6.82	7.03	7.51	7.15
31	6.85	---	6.98	7.02	---	6.45	---	6.29	---	7.02	7.49	---
MEAN	6.88	7.11	7.03	7.00	6.88	6.60	6.28	6.20	6.79	6.93	7.31	7.19
MAX	7.03	7.34	7.09	7.06	7.01	6.74	6.45	6.31	7.06	7.06	7.61	7.47
MIN	6.74	6.99	6.97	6.97	6.75	6.45	6.08	6.09	6.25	6.74	7.00	7.04

CAL YR 1987 MEAN 6.60 MAX 7.34 MIN 6.20
WTR YR 1988 MEAN 6.85 MAX 7.61 MIN 6.08

e Estimated

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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.

PERIOD OF RECORD.--July 1985 to current year (gage heights).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.45 ft Aug. 20, 1988; minimum, 5.49 ft Apr. 30, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.45 ft Aug. 20; minimum, 5.49 ft Apr. 30.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.65	6.70	6.68	6.65	6.69	6.44	6.10	5.86	5.96	6.61	6.77	7.25
2	6.64	6.90	6.67	6.66	6.68	6.43	6.09	5.87	5.95	6.58	6.82	7.22
3	6.63	6.92	6.66	6.67	6.67	6.42	6.07	5.85	5.93	6.56	6.78	7.19
4	6.61	7.00	6.66	6.67	6.66	6.41	6.10	5.83	5.91	6.53	6.75	7.15
5	6.59	7.03	6.65	6.65	6.65	6.40	6.17	5.80	5.92	6.54	6.73	7.12
6	6.57	7.03	6.64	6.65	6.64	6.39	6.15	5.77	6.00	6.54	6.73	7.08
7	6.55	7.02	6.64	6.64	6.63	6.38	6.13	5.74	6.11	6.54	6.73	7.06
8	6.53	6.99	6.64	6.65	6.63	6.38	6.10	5.71	6.42	6.57	6.73	7.04
9	6.51	6.98	6.77	6.64	6.63	6.37	6.08	5.68	6.64	6.67	6.73	7.02
10	6.59	6.97	6.82	6.65	6.62	6.36	6.06	5.65	6.69	6.65	6.78	6.99
11	6.61	6.94	6.81	6.68	6.61	6.35	6.04	5.62	6.74	6.63	6.89	6.99
12	6.75	6.91	6.80	6.67	6.60	6.34	6.02	5.59	6.77	6.60	7.00	7.01
13	6.83	6.89	6.79	6.67	6.58	6.33	6.00	5.56	6.87	6.58	7.00	6.99
14	6.80	6.87	6.78	6.67	6.57	6.32	5.97	5.62	6.90	6.60	7.02	6.98
15	6.78	6.85	6.78	6.68	6.56	6.30	5.95	5.63	6.90	6.69	7.18	6.97
16	6.76	6.83	6.77	6.68	6.55	6.28	5.93	5.58	6.87	6.68	7.22	6.95
17	6.74	6.81	6.75	6.67	6.54	6.27	5.91	5.57	6.84	6.68	7.23	6.93
18	6.72	6.79	6.74	6.67	6.53	6.26	5.89	5.55	6.80	6.68	7.23	6.91
19	6.71	6.78	6.74	6.66	6.52	6.27	5.87	5.70	6.78	6.72	7.25	6.90
20	6.69	6.78	6.73	6.65	6.51	6.26	5.91	5.82	6.78	6.75	7.40	6.89
21	6.68	6.76	6.73	6.65	6.53	6.25	5.89	5.78	6.76	6.76	7.39	6.88
22	6.66	6.74	6.72	6.66	6.53	6.24	5.85	5.75	6.73	6.77	7.34	6.87
23	6.64	6.73	6.71	6.65	6.52	6.22	5.82	5.75	6.70	6.77	7.29	6.86
24	6.64	6.72	6.71	6.65	6.52	6.21	5.79	5.79	6.68	6.78	7.24	6.86
25	6.62	6.71	6.70	6.72	6.51	6.20	5.75	5.78	6.65	6.78	7.24	6.88
26	6.61	6.71	6.70	6.74	6.49	6.19	5.72	5.77	6.61	6.76	7.24	6.86
27	6.60	6.70	6.69	6.73	6.47	6.18	5.67	5.86	6.59	6.75	7.24	6.88
28	6.58	6.70	6.68	6.72	6.46	6.16	5.62	6.00	6.57	6.77	7.36	6.93
29	6.57	6.69	6.68	6.71	6.45	6.15	5.57	5.97	6.60	6.80	7.31	6.92
30	6.55	6.68	6.66	6.71	---	6.14	5.54	5.98	6.65	6.77	7.27	6.91
31	6.55	---	6.66	6.70	---	6.12	---	5.97	---	6.75	7.24	---
MEAN	6.64	6.84	6.71	6.67	6.57	6.29	5.93	5.75	6.54	6.67	7.07	6.98
MAX	6.83	7.03	6.82	6.74	6.69	6.44	6.17	6.00	6.90	6.80	7.40	7.25
MIN	6.51	6.68	6.64	6.64	6.45	6.12	5.54	5.55	5.91	6.53	6.73	6.86

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 (gauge heights).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.47 ft Aug. 27, 1988; minimum, 5.72 ft Apr. 29-30, May 12-14, 16-19, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.47 ft Aug. 27; minimum, 5.72 ft Apr. 29-30, May 12-14, 16-19.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.72	6.70	6.69	6.66	6.67	6.40	6.07	5.90	5.98	6.61	6.75	7.26
2	6.70	6.89	6.67	6.66	6.66	6.39	6.05	5.96	5.96	6.59	6.81	7.24
3	6.68	6.92	6.66	6.68	6.65	6.37	6.04	5.93	5.94	6.56	6.77	7.21
4	6.65	6.97	6.66	6.67	6.64	6.37	6.08	5.90	5.92	6.53	6.75	7.18
5	6.63	7.00	6.65	6.66	6.63	6.36	6.16	5.86	5.91	6.55	6.73	7.15
6	6.61	7.02	6.64	6.65	6.62	6.35	6.14	5.83	5.99	6.55	6.73	7.12
7	6.59	7.01	6.64	6.65	6.61	6.34	6.11	5.79	6.09	6.53	6.74	7.10
8	6.57	6.99	6.64	6.65	6.61	6.34	6.09	5.76	6.37	6.55	6.74	7.08
9	6.55	6.98	6.77	6.64	6.61	6.33	6.07	5.74	6.59	6.66	6.74	7.07
10	6.63	6.98	6.82	6.65	6.60	6.32	6.05	5.73	6.65	6.64	6.77	7.04
11	6.65	6.96	6.81	6.68	6.59	6.31	6.03	5.73	6.72	6.62	6.90	7.03
12	6.79	6.93	6.80	6.67	6.58	6.30	6.01	5.72	6.75	6.59	7.01	7.06
13	6.86	6.91	6.79	6.66	6.56	6.29	5.99	5.72	6.85	6.56	7.01	7.05
14	6.83	6.89	6.78	6.65	6.55	6.28	5.97	5.72	6.89	6.57	7.03	7.04
15	6.81	6.87	6.78	6.66	6.54	6.26	5.95	5.73	6.90	6.64	7.19	7.03
16	6.79	6.85	6.77	6.66	6.53	6.24	5.93	5.72	6.87	6.66	7.22	7.02
17	6.77	6.83	6.75	6.65	6.52	6.23	5.91	5.72	6.83	6.65	7.23	7.00
18	6.75	6.81	6.74	6.65	6.51	6.22	5.89	5.72	6.79	6.65	7.24	6.98
19	6.74	6.80	6.74	6.65	6.50	6.22	5.86	5.81	6.76	6.68	7.24	6.97
20	6.72	6.80	6.73	6.64	6.49	6.22	5.91	5.87	6.77	6.70	7.39	6.96
21	6.70	6.77	6.73	6.63	6.50	6.21	5.90	5.85	6.75	6.72	7.39	6.95
22	6.68	6.76	6.73	6.64	6.51	6.20	5.87	5.81	6.72	6.75	7.34	6.94
23	6.66	6.74	6.72	6.63	6.50	6.18	5.85	5.81	6.69	6.78	7.29	6.94
24	6.66	6.73	6.71	6.63	6.48	6.17	5.82	5.85	6.66	6.77	7.25	6.95
25	6.64	6.73	6.71	6.69	6.47	6.16	5.79	5.84	6.63	6.77	7.24	6.97
26	6.62	6.72	6.70	6.72	6.46	6.15	5.77	5.83	6.60	6.75	7.25	6.95
27	6.61	6.72	6.70	6.71	6.44	6.14	5.74	5.92	6.57	6.74	7.26	6.96
28	6.60	6.71	6.69	6.70	6.43	6.12	5.73	6.05	6.57	6.76	7.38	7.00
29	6.58	6.70	6.68	6.69	6.41	6.11	5.72	6.00	6.58	6.78	7.32	7.00
30	6.56	6.69	6.66	6.69	---	6.10	5.73	5.99	6.64	6.75	7.27	6.98
31	6.55	---	6.66	6.68	---	6.08	---	5.99	---	6.73	7.25	---
MEAN	6.67	6.85	6.72	6.66	6.55	6.25	5.94	5.83	6.53	6.66	7.07	7.04
MAX	6.86	7.02	6.82	6.72	6.67	6.40	6.16	6.05	6.90	6.78	7.39	7.26
MIN	6.55	6.69	6.64	6.63	6.41	6.08	5.72	5.72	5.91	6.53	6.73	6.94

CAL YR 1987 MEAN 6.29 MAX 7.02 MIN 5.81
WTR YR 1988 MEAN 6.56 MAX 7.39 MIN 5.72

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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02290710 BLACK CREEK CANAL AT S-21, NEAR GOULDS, FL

LOCATION.--Lat 25°32'34", long 80°19'52", in NE¼ sec.21, T.56 S., R.40 E., Dade County, Hydrologic Unit 03090202, in control house of salinity-control structure S-21, 0.5 mi upstream from mouth, and 3.5 mi east of Goulds.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1957 to October 1969 (gage heights), November 1969 to September 1977, October 1978 to current year. Records of gage heights prior to October 1962 are available in files of the Geological Survey.

GAGE.--Digital upstream, downstream recorders and gate-opening recorders. Datum of gages is National Geodetic Vertical Datum of 1929 (Dade County bench mark). Prior to Aug. 9, 1960, water-stage recorder at site 270 ft upstream in north lateral borrow canal, and Apr. 9, 1960 to July 8, 1968, at site 810 ft upstream in north lateral borrow canal all at same datum.

REMARKS.--Records fair, except those for estimated daily discharges, which are poor. Flow is affected by tide and is occasionally reversed. Flow is regulated by the operation of salinity-control structure S-21 and by some upstream pumpage for irrigation. Discharge computed from relation between head, discharges and gate-openings at structure S-21.

COOPERATION.--Supplementary gate-opening record and gage-height record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--17 years (water years 1971-77, 1979-88), 144 ft³/s, 104,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,340 ft³/s Aug. 18, 1981; maximum gage height, 6.41 ft Sept. 10, 1960; no flow for many days each year; maximum daily reverse flow, 384 ft³/s Jan. 23, 1983; minimum gage height, -0.57 ft Apr. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,130 ft³/s Aug. 18; maximum gage height, 2.78 ft June 14; no flow for many days; minimum gage height, -0.11 ft Aug. 21, 22.

DISCHARGE, IN 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	348	93	.00	.00	62	.00	.00	72	232	140	139	e87
2	254	176	12	.00	.00	.00	.00	91	276	147	204	e88
3	218	86	.00	.00	.00	.00	.00	95	204	190	244	e92
4	150	145	.00	.00	.00	.00	.00	.00	140	198	238	e90
5	148	169	.00	.00	.00	.00	.00	48	163	229	157	e92
6	134	134	.00	.00	69	.00	.00	.00	291	137	.00	e95
7	143	134	.00	.00	.00	.00	.00	.00	175	108	.00	e93
8	160	106	32	71	.00	.00	.00	.00	821	178	.00	e86
9	108	108	190	35	.00	.00	.00	.00	1050	109	50	e77
10	286	78	125	76	50	.00	.00	.00	977	131	78	74
11	346	124	85	71	62	52	.00	.00	797	41	163	65
12	452	54	157	70	.00	.00	.00	.00	739	139	457	80
13	768	43	.00	70	.00	.00	.00	.00	943	164	333	63
14	629	60	121	70	.00	.00	.00	75	969	167	296	49
15	449	48	40	70	.00	.00	.00	63	1010	165	939	71
16	171	42	42	59	18	.00	.00	97	912	159	980	72
17	161	71	.00	64	.00	.00	.00	134	850	159	1100	.00
18	154	56	67	67	.00	.00	.00	77	771	80	1130	83
19	144	75	31	118	.00	.00	.00	123	802	473	1080	116
20	125	41	35	162	.00	.00	.00	110	854	619	1070	113
21	140	49	67	169	38	.00	.00	111	814	229	1110	113
22	120	.00	.00	94	.00	58	.00	108	601	121	1090	92
23	96	59	.00	.00	.00	.00	.00	57	318	103	e1120	.00
24	133	.00	.00	.00	38	.00	.00	55	263	76	e569	.00
25	83	33	30	.00	.00	.00	.00	46	214	104	e.00	56
26	85	.00	.00	41	.00	.00	.00	66	214	116	e260	.00
27	25	39	105	.00	.00	.00	.00	129	206	178	e372	61
28	90	.00	114	.00	.00	.00	.00	114	21	125	e367	.00
29	109	43	117	.00	.00	.00	.00	118	84	87	e210	.00
30	47	.00	103	.00	---	.00	.00	184	144	148	e8.6	57
31	68	---	35	.00	---	.00	---	195	---	138	e68	---
TOTAL	6344	2066.00	1508.00	1307.00	337.00	110.00	.00	2168.00	15855	5158	13832.60	1965.00
MEAN	205	68.9	48.6	42.2	11.6	3.55	.000	69.9	529	166	446	65.5
MAX	768	176	190	169	69	58	.00	195	1050	619	1130	116
MIN	25	.00	.00	.00	.00	.00	.00	.00	21	41	.00	.00
AC-FT	12580	4100	2990	2590	668	218	.00	4300	31450	10230	27440	3900

CAL YR 1987 TOTAL 22925.20 MEAN 62.8 MAX 768 MIN .00 AC-FT 45470
WTR YR 1988 TOTAL 50650.60 MEAN 138 MAX 1130 MIN .00 AC-FT 100500

e Estimated

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.00	2.16	2.39	2.17	2.19	2.38	2.22	2.22	2.19	2.28	2.30	2.37
2	2.06	1.99	2.36	2.26	2.32	2.37	2.21	2.20	1.96	2.31	2.10	2.45
3	2.09	2.12	2.37	2.31	2.37	2.37	2.20	2.19	2.18	2.25	1.62	2.45
4	2.15	2.18	2.41	2.35	2.40	2.37	2.20	2.34	2.12	2.25	1.40	2.44
5	2.20	2.14	2.41	2.37	2.41	2.37	2.20	2.23	2.10	2.20	1.32	2.42
6	2.20	2.17	2.41	2.39	2.17	2.37	2.20	2.35	2.16	2.31	1.97	2.39
7	2.15	2.16	2.41	2.41	2.26	2.38	2.21	2.41	2.04	2.21	2.26	2.38
8	2.14	2.20	2.39	2.23	2.36	2.37	2.18	2.42	2.05	2.19	2.41	2.38
9	2.23	2.21	2.07	2.36	2.42	2.36	2.16	2.42	2.13	2.12	2.40	2.39
10	2.15	2.29	2.13	2.35	2.23	2.39	2.15	2.42	1.95	2.24	2.27	2.40
11	1.99	2.14	2.22	2.27	2.14	2.22	2.15	2.41	1.95	2.29	2.10	2.41
12	1.99	2.15	2.06	2.32	2.26	2.22	2.15	2.40	1.98	2.22	2.00	2.28
13	1.88	2.24	2.24	2.31	2.34	2.28	2.13	2.39	2.15	2.19	2.12	2.29
14	1.98	2.25	1.93	2.32	2.36	2.31	2.10	2.31	2.13	2.14	2.15	2.35
15	2.11	2.24	2.19	2.40	2.37	2.30	2.08	2.15	2.04	2.08	.86	2.25
16	2.08	2.24	2.31	2.40	2.35	2.30	2.08	2.25	2.00	2.04	.73	2.31
17	2.13	2.14	2.33	2.40	2.36	2.29	2.07	2.19	1.98	2.00	.62	2.42
18	2.13	2.24	2.25	2.38	2.38	2.29	2.06	2.26	1.98	2.07	.70	2.33
19	2.11	2.20	2.41	2.22	2.39	2.35	2.06	2.19	1.93	2.14	.93	2.24
20	2.13	2.25	2.25	1.89	2.40	2.37	2.11	2.37	2.17	1.89	.74	2.22
21	2.11	2.29	2.29	1.68	2.27	2.37	2.14	2.37	1.90	2.16	.57	2.18
22	2.17	2.31	2.22	1.73	2.38	2.16	2.12	2.31	2.05	2.27	.57	2.17
23	2.20	2.22	2.38	2.11	2.43	2.19	2.10	2.28	1.88	2.28	.67	2.38
24	2.16	2.33	2.43	2.24	2.24	2.24	2.08	2.26	1.79	2.35	1.45	2.48
25	2.23	2.29	2.29	2.35	2.34	2.26	2.11	2.25	1.84	2.23	2.32	2.29
26	2.20	2.39	2.41	2.25	2.37	2.27	2.23	2.26	1.79	2.27	1.89	2.44
27	2.28	2.24	2.18	2.33	2.37	2.27	2.25	2.21	1.72	2.19	2.00	2.27
28	2.20	2.38	2.02	2.39	2.37	2.27	2.24	2.18	2.21	2.12	1.95	2.42
29	2.17	2.28	1.95	2.41	2.38	2.26	2.22	2.21	2.35	2.28	1.99	2.49
30	2.27	2.32	1.89	2.43	---	2.25	2.21	2.17	2.25	2.25	2.39	2.29
31	2.23	---	1.98	2.44	---	2.23	---	2.27	---	2.30	2.25	---
MEAN	2.13	2.23	2.24	2.27	2.33	2.30	2.15	2.29	2.03	2.20	1.65	2.35
MAX	2.28	2.39	2.43	2.44	2.43	2.39	2.25	2.42	2.35	2.35	2.41	2.49
MIN	1.88	1.99	1.89	1.68	2.14	2.16	2.06	2.15	1.72	1.89	.57	2.17
CAL YR 1987	MEAN	2.16	MAX 2.50	MIN 1.59								
WTR YR 1988	MEAN	2.18	MAX 2.49	MIN .57								

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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02290725 MOWRY CANAL NEAR HOMESTEAD, FL

LOCATION.--Lat 25°28'13", long 80°20'47", in NE¼ sec.17, T.57 S., R.40 E., Dade County, Hydrologic Unit 03090202, in control house of salinity-control structure S-20F, 0.5 mi upstream from mouth, and 8 mi east of Homestead.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1954 to March 1970 (gage heights), April 1970 to current year. Records of gage heights prior to October 1962 are available in files of the Geological Survey.

GAGE.--Digital upstream and downstream water-stage recorders, digital gate-opening recorders. Datum of gage heights prior to October 1962 are available in files of the Geological Survey.

REMARKS.--Records poor. Flow is affected by tide and is occasionally reversed. Flow is regulated by operation of salinity-control structure S-20F and by some upstream pumpage for irrigation. Discharge computed from relation between head, discharges, and gate openings at structure S-20F.

COOPERATION.--Supplementary gage-height and gate-opening records provided by South Florida Water Management District.

AVERAGE DISCHARGE.--16 years (1971-82, 85-88), 208 ft³/s, 150,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,660 ft³/s Sept. 27, 1981; maximum gage height, 9.25 ft Sept. 8, 1965; no flow for many days each year; minimum gage height, -1.03 ft May 10, 12, June 26, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,840 ft³/s Aug. 15; maximum gage height, 2.87 ft Oct. 15; no flow for some days; minimum gage height, -0.11 ft Aug. 17.

DISCHARGE, IN 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	1470	179	223	125	107	37	.00	229	e286	e588	e292	425
2	735	599	257	151	110	.00	.00	199	e310	e475	e233	358
3	533	472	217	177	109	36	.00	120	e343	e771	e206	279
4	380	528	261	172	107	26	.00	73	e313	e664	e226	270
5	382	561	233	159	74	42	.00	68	e261	e573	179	252
6	354	507	230	122	119	96	.00	.00	e47	e549	173	224
7	380	283	160	133	79	378	.00	.00	e168	e372	230	218
8	319	362	126	165	164	678	.00	.00	e1650	e431	221	215
9	284	456	483	173	191	1110	.00	.00	e2130	e640	212	179
10	479	509	421	203	150	920	.00	.00	e1600	e519	217	152
11	758	460	344	313	143	44	.00	.00	e1300	e431	405	151
12	1440	410	301	256	134	38	.00	2.1	e1200	e375	677	248
13	958	380	281	212	77	35	.00	5.2	e1240	e319	591	150
14	564	365	267	196	81	35	.00	109	e1340	e270	865	150
15	732	269	349	209	92	.00	.00	137	e1470	e225	2840	125
16	813	182	282	138	53	.00	.00	83	e1160	e191	2550	113
17	604	341	261	188	39	.00	.00	236	e469	e211	2060	109
18	554	326	193	126	80	.00	.00	141	e194	e297	1120	116
19	503	321	203	133	82	112	.00	337	e336	e610	1210	121
20	510	311	182	166	91	86	.00	354	e846	e737	1600	180
21	454	292	176	141	238	33	.00	236	e667	e470	1420	115
22	374	256	208	346	154	.00	.00	125	e515	e401	565	155
23	270	245	191	207	130	.20	.00	104	e382	e303	382	116
24	339	226	160	196	142	.00	.00	38	e293	e356	375	110
25	460	255	162	222	38	.00	86	e406	e273	e434	329	138
26	409	284	171	204	39	.00	464	e456	e221	e398	822	158
27	385	274	166	152	52	.00	180	e493	e251	e457	628	157
28	377	254	126	140	37	.00	144	e478	e224	e352	407	138
29	293	225	158	121	38	.00	48	e382	e220	e352	282	139
30	151	249	107	89	---	2.3	.00	e439	e464	e297	245	108
31	75	---	119	80	---	.00	---	e464	---	e294	416	---
TOTAL	16339	10381	7018	5415	2950	3708.50	922.00	5714.30	20173	13362	21978	5369
MEAN	527	346	226	175	102	120	30.7	184	672	431	709	179
MAX	1470	599	483	346	238	1110	464	493	2130	771	2840	425
MIN	75	179	107	80	37	.00	.00	.00	47	191	173	108
AC-FT	32410	20590	13920	10740	5850	7360	1830	11330	40010	26500	43590	10650

CAL YR 1987 TOTAL 70770.70 MEAN 194 MAX 1470 MIN .00 AC-FT 140400
WTR YR 1988 TOTAL 113329.80 MEAN 310 MAX 2840 MIN .00 AC-FT 224800

e Estimated

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02290725 MOWRY CANAL NEAR HOMESTEAD, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.02	2.06	1.47	1.59	1.60	1.62	1.48	2.00	2.05	2.06	2.09	2.06
2	2.06	1.94	1.39	1.58	1.60	1.65	1.46	2.06	2.06	2.12	2.11	2.07
3	2.02	1.89	1.38	1.58	1.60	1.62	1.46	2.09	2.01	2.11	2.11	2.09
4	2.12	1.70	1.34	1.57	1.59	1.64	1.48	2.10	2.01	2.10	2.01	2.10
5	2.09	1.62	1.34	1.57	1.62	1.61	1.50	2.09	2.03	2.08	2.13	2.09
6	2.10	1.64	1.35	1.60	1.59	1.62	1.49	2.11	2.03	1.81	2.12	2.10
7	2.04	1.91	1.45	1.63	1.62	1.63	1.46	2.09	2.04	2.12	2.10	2.10
8	2.04	1.78	1.60	1.60	1.61	1.66	1.42	2.06	1.93	2.07	2.09	2.11
9	2.08	1.62	1.53	1.59	1.60	1.67	1.39	2.04	1.44	2.03	2.11	2.12
10	2.06	1.47	1.58	1.55	1.59	1.61	1.39	2.01	1.35	2.06	2.10	2.12
11	2.00	1.43	1.56	1.56	1.56	1.62	1.40	1.98	1.40	2.08	2.06	2.12
12	1.81	1.40	1.58	1.55	1.59	1.61	1.37	1.96	1.58	2.08	2.07	2.03
13	1.89	1.42	1.60	1.57	1.60	1.61	1.34	1.96	1.65	2.11	2.07	2.04
14	2.12	1.41	1.60	1.58	1.60	1.61	1.31	2.07	1.64	2.11	2.02	2.14
15	2.15	1.49	1.50	1.58	1.62	1.61	1.31	2.09	1.61	2.12	.96	2.14
16	2.04	1.65	1.46	1.65	1.60	1.60	1.31	2.09	1.62	2.14	.74	2.15
17	1.92	1.47	1.50	1.58	1.64	1.59	1.30	2.05	1.94	2.12	.99	2.15
18	1.85	1.39	1.57	1.60	1.61	1.61	1.29	2.08	2.11	2.11	1.81	2.14
19	1.85	1.40	1.57	1.60	1.62	1.58	1.29	2.03	2.08	2.05	1.83	2.15
20	1.80	1.40	1.57	1.58	1.60	1.59	1.35	2.02	2.06	2.05	1.31	2.11
21	1.67	1.41	1.57	1.59	1.55	1.61	1.39	2.05	2.05	2.08	1.26	2.14
22	1.70	1.47	1.56	1.55	1.59	1.64	1.35	2.09	2.06	2.08	1.76	2.14
23	1.87	1.49	1.57	1.55	1.60	1.61	1.34	2.10	2.07	2.10	2.06	2.15
24	1.83	1.53	1.60	1.60	1.58	1.59	1.32	2.13	2.08	2.09	2.07	2.15
25	1.54	1.48	1.60	1.55	1.62	1.59	1.37	2.05	2.09	2.07	2.07	2.14
26	1.51	1.46	1.58	1.56	1.63	1.59	1.30	2.00	2.10	2.09	1.56	2.13
27	1.52	1.42	1.59	1.58	1.61	1.59	1.45	1.99	2.10	2.07	1.65	2.13
28	1.50	1.44	1.58	1.57	1.62	1.59	1.59	2.00	2.10	2.09	2.06	2.13
29	1.54	1.46	1.56	1.60	1.62	1.55	1.60	2.01	2.11	2.09	2.08	2.14
30	1.70	1.45	1.60	1.61	---	1.53	1.70	2.00	2.08	2.09	2.11	2.14
31	1.96	---	1.58	1.61	---	1.50	---	1.99	---	2.08	2.07	---
MEAN	1.88	1.56	1.53	1.58	1.60	1.60	1.41	2.04	1.92	2.08	1.86	2.12
MAX	2.15	2.06	1.60	1.65	1.64	1.67	1.70	2.13	2.11	2.14	2.13	2.15
MIN	1.50	1.39	1.34	1.55	1.55	1.50	1.29	1.96	1.35	1.81	.74	2.03
CAL YR 1987	MEAN 1.79		MAX 2.20	MIN 1.25								
WTR YR 1988	MEAN 1.77		MAX 2.15	MIN .74								

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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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.--Records poor. 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.--20 years, 151 ft³/s, 109,400 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, 2,940 ft³/s Aug. 16; maximum gage height, 3.58 ft Aug. 15; no flow for many days; maximum daily reverse flow, 194 ft³/s Jan. 2; minimum gage height, 1.62 ft Apr. 19.

DISCHARGE, IN 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	1550	800	210	-147	.00	36	.00	e75	200	617	345	1030
2	1400	1180	161	-194	.00	.00	.00	e87	200	642	436	888
3	1310	1090	3.2	-167	.00	.00	.00	99	254	616	837	587
4	1240	1100	17	56	.00	.00	.00	e.00	30	619	919	463
5	1040	1120	79	196	.00	.00	.00	.00	.00	601	807	455
6	889	1080	18	203	.00	.00	.00	e.00	500	712	699	491
7	731	843	87	203	.00	.00	e.00	e.00	700	850	768	e633
8	831	829	168	215	.00	.00	e.00	e.00	110	794	787	e775
9	858	834	499	222	.00	.00	e.00	.00	1400	757	786	e917
10	1020	831	747	226	.00	.00	e.00	.00	1510	738	904	1060
11	1230	815	755	257	.00	.00	.00	.00	1500	675	1340	1170
12	1530	787	743	332	.00	.00	.00	.00	1390	574	1470	896
13	1500	784	757	274	97	.00	.00	.00	1440	465	1250	726
14	1330	766	735	178	61	.00	.00	.00	1300	420	1400	613
15	1210	764	628	187	.00	.00	.00	.00	1620	383	2340	457
16	1130	698	623	94	.00	.00	.00	.00	1720	326	2940	554
17	1120	739	611	55	.00	.00	e.00	.00	1590	412	2840	509
18	1080	645	613	.00	.00	.00	e.00	.00	1310	326	2770	448
19	962	625	543	.00	.00	.00	e.00	.00	1320	393	2410	401
20	891	666	590	.00	.00	.00	e.00	.00	1430	412	2170	393
21	851	671	477	.00	.00	.00	e.00	.00	1370	361	2180	341
22	787	667	178	116	.00	.00	e.00	.00	1120	354	2560	309
23	722	635	34	271	.00	.00	e.00	.00	987	309	2140	545
24	726	637	-63	121	.00	.00	e.00	.00	904	343	2370	489
25	758	639	-71	312	.00	.00	e.00	.00	899	449	1610	532
26	620	619	-28	363	267	.00	e.00	.00	925	505	1370	487
27	621	640	100	545	289	.00	e.00	200	809	424	1060	587
28	581	615	124	623	67	31	e.00	200	786	357	999	438
29	381	542	23	91	59	46	e.00	200	700	350	1190	421
30	450	463	-148	.00	---	45	e.00	200	668	363	1100	384
31	335	---	-70	.00	---	43	---	200	---	251	1000	---
TOTAL	29684	23124	9143.2	4632.00	840.00	201.00	.00	1261.00	28692.00	15398	45797	17999
MEAN	958	771	295	149	29.0	6.48	.000	40.7	956	497	1477	600
MAX	1550	1180	757	623	289	46	.00	200	1720	850	2940	1170
MIN	335	463	-148	-194	.00	.00	.00	.00	.00	251	345	309
AC-FT	58880	45870	18140	9190	1670	399	.00	2500	56910	30540	90840	35700

CAL YR 1987 TOTAL 96721.90 MEAN 265 MAX 1550 MIN -148 AC-FT 191800
WTR YR 1988 TOTAL 176771.20 MEAN 483 MAX 2940 MIN -194 AC-FT 350600

e Estimated

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

CAL	YR	1987	MEAN	2.28	MAX	2.97	MIN	1.42
WTR	YR	1988	MEAN	2.39	MAX	3.44	MIN	1.65

EVERGLADES AND SOUTHEASTERN COASTAL AREA

129

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 recorders. 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. 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.--5 years, 45.9 ft³/s, 33,250 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; maximum gage height, 5.78 ft Aug. 16, 1988; no flow for many days each year; minimum gage height, 1.65 ft May 9, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 127 ft³/s, Oct. 3; maximum gage height, 5.78 ft Aug. 16; no flow Sept. 17; minimum gage height, 2.70 ft Apr. 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	127	37	14	12	7.0	4.6	4.6	9.1	120	120	50
2	116	90	14	14	9.1	4.6	4.6	4.6	69	120	82	74
3	127	64	14	14	9.1	4.6	4.6	7.0	120	120	50	95
4	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
5	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
6	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
7	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
8	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
9	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
10	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
11	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
12	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
13	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
14	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
15	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
16	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	43
17	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	.00
18	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	36
19	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
20	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
21	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
22	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
23	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
24	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
25	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
26	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
27	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
28	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
29	127	64	14	14	9.1	4.6	4.6	9.1	120	120	50	95
30	127	64	14	14	---	4.6	4.6	9.1	120	120	50	95
31	127	---	14	14	---	4.6	---	9.1	---	120	50	---
TOTAL	3894	2009	457	434	266.8	145.0	138.0	271.0	3438.1	3720	1652	2578.00
MEAN	126	67.0	14.7	14.0	9.20	4.68	4.60	8.74	115	120	53.3	85.9
MAX	127	127	37	14	12	7.0	4.6	9.1	120	120	120	95
MIN	95	64	14	14	9.1	4.6	4.6	4.6	9.1	120	50	.00
AC-FT	7720	3980	906	861	529	288	274	538	6820	7380	3280	5110

CAL YR 1987 TOTAL 18917.40 MEAN 51.8 MAX 127 MIN .00 AC-FT 37520
WTR YR 1988 TOTAL 19002.90 MEAN 51.9 MAX 127 MIN .00 AC-FT 37690

EVERGLADES AND SOUTHEASTERN COASTAL AREA

252523080352500 LEVEE 31 W CANAL AT S-332, NEAR FLORIDA CITY, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.61	3.93	3.57	3.30	3.44	3.20	2.97	3.62	3.85	4.65	4.46	e4.58
2	4.28	3.85	3.60	3.33	3.37	3.19	2.94	3.36	4.30	4.61	4.44	e4.61
3	4.32	3.66	3.57	3.39	3.31	3.19	2.93	3.38	4.14	4.58	4.35	e4.57
4	4.43	3.49	3.54	3.37	3.26	3.24	2.91	3.55	4.18	4.58	4.30	e4.57
5	4.45	3.44	3.52	3.32	3.21	3.28	2.94	3.52	4.18	4.51	4.33	e4.58
6	4.56	3.45	3.50	3.28	3.18	3.32	2.96	3.45	4.15	4.68	4.29	e4.55
7	4.48	3.50	3.49	3.25	3.14	3.35	2.93	3.36	3.92	4.44	4.42	e4.55
8	4.42	3.54	3.46	3.25	3.21	3.35	2.87	3.28	4.54	4.21	4.68	4.43
9	4.45	3.48	3.60	3.24	3.27	3.29	2.84	3.24	4.81	4.46	4.61	4.35
10	4.61	3.40	3.38	3.26	3.24	3.30	2.82	3.31	4.64	4.43	4.73	4.29
11	4.33	3.42	3.35	3.55	3.19	3.33	2.79	3.32	4.44	4.29	4.86	4.37
12	4.68	3.43	3.36	3.53	3.13	3.31	2.74	3.31	4.43	4.15	4.81	4.44
13	4.64	3.51	3.31	3.46	3.08	3.28	2.94	3.28	4.54	4.15	4.56	4.28
14	4.42	3.49	3.39	3.44	3.05	3.27	3.21	3.24	4.65	4.32	4.54	e4.28
15	4.34	3.47	3.47	3.44	3.02	3.21	3.22	3.17	4.74	4.32	5.56	e4.28
16	4.26	3.51	3.46	3.40	3.00	3.17	3.23	3.26	4.62	4.37	5.73	e4.32
17	4.17	3.52	3.41	3.41	2.95	3.14	3.23	3.84	4.46	4.39	5.58	e4.27
18	4.13	3.53	3.42	3.41	2.92	3.12	3.20	3.88	4.40	4.38	5.34	e4.19
19	3.99	3.54	3.45	3.38	2.90	3.15	3.25	3.83	4.39	4.42	e5.16	e4.16
20	3.74	3.51	3.46	3.30	2.86	3.18	3.30	3.81	4.42	4.45	e5.22	e4.34
21	3.54	3.48	3.46	3.25	2.94	3.16	3.17	3.77	4.37	4.39	e5.10	e4.59
22	3.47	3.43	3.46	3.49	3.02	3.12	3.18	3.72	4.46	4.39	e4.97	e4.76
23	3.48	3.52	3.44	3.44	3.00	3.10	3.19	3.64	4.57	4.42	e4.86	e4.77
24	3.50	3.60	3.47	3.45	2.97	3.08	3.22	3.58	4.55	4.50	e4.74	e4.78
25	3.44	3.51	3.47	3.48	2.93	3.05	3.42	3.80	4.56	4.50	e4.70	e4.82
26	3.36	3.43	3.45	3.34	2.93	3.02	3.26	3.94	4.50	4.42	e4.63	e4.84
27	3.48	3.43	3.42	3.51	3.08	3.05	3.24	4.66	4.48	4.40	e4.41	e4.79
28	3.54	3.45	3.42	3.50	3.15	3.17	3.28	4.44	4.62	4.47	e4.51	e4.77
29	3.46	3.42	3.44	3.48	3.19	3.14	3.18	4.35	4.62	4.50	e4.54	e4.70
30	3.54	3.44	3.42	3.47	---	3.09	3.20	4.37	4.70	4.43	e4.47	e4.62
31	3.54	---	3.38	3.46	---	3.03	---	4.08	---	4.38	e4.46	---
MEAN	4.05	3.51	3.46	3.39	3.10	3.19	3.09	3.66	4.44	4.43	4.75	4.52
MAX	4.68	3.93	3.60	3.55	3.44	3.35	3.42	4.66	4.81	4.68	5.73	4.84
MIN	3.36	3.40	3.31	3.24	2.86	3.02	2.74	3.17	3.85	4.15	4.29	4.16

CAL YR 1987 MEAN 3.53 MAX 4.88 MIN 2.68
WTR YR 1988 MEAN 3.80 MAX 5.73 MIN 2.74

e Estimated

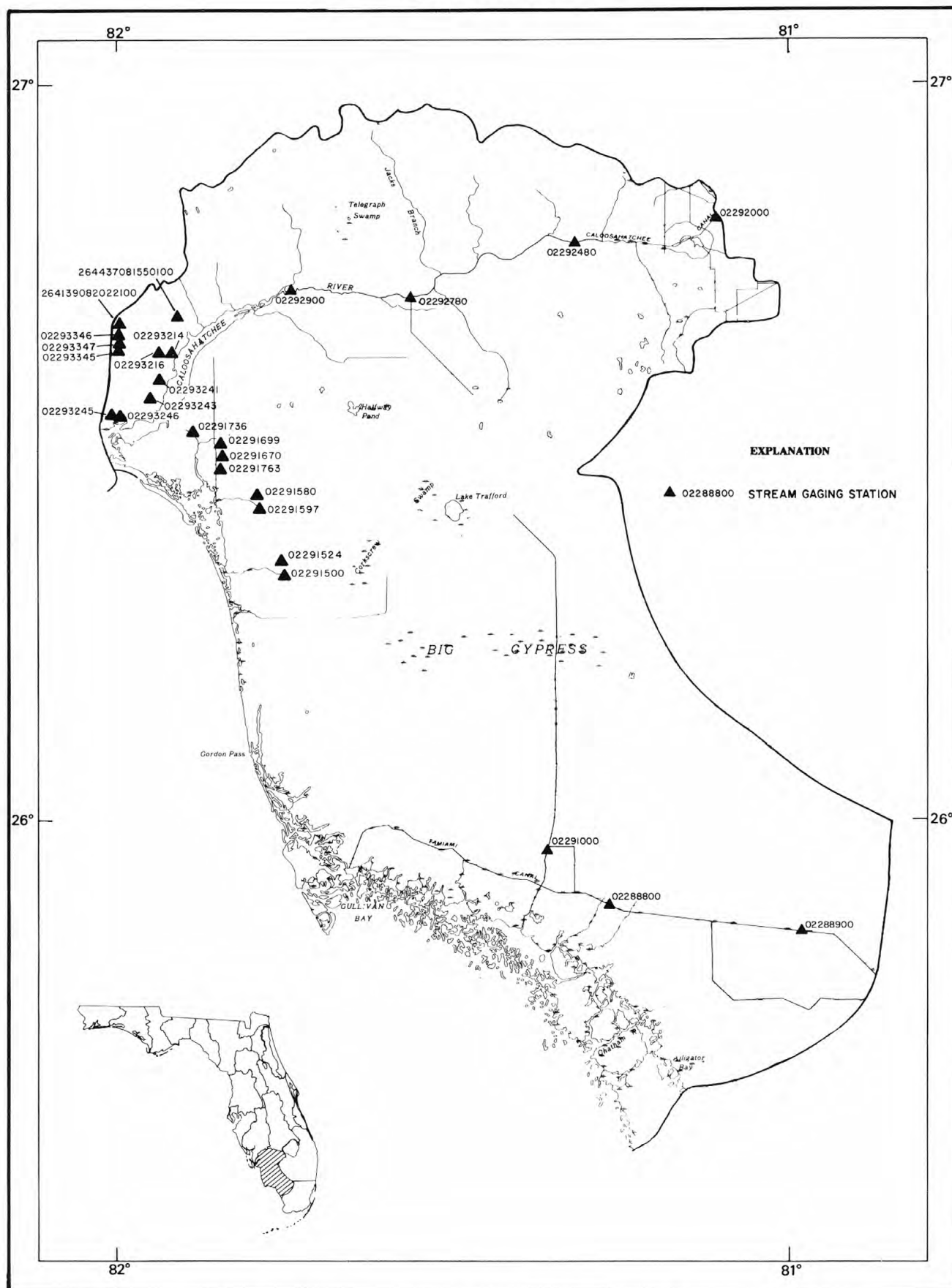


FIGURE 9. Location of gaging stations in the Big Cypress Swamp and southwestern coastal area; the Caloosahatchee River; and Charlotte Harbor and the coastal area

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 discharges. Records poor. 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.--35 years (water years 1952-87), 102 ft³/s, 73,900 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; 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, 209 ft³/s Nov. 7, gage height, 5.81 ft; maximum gage height, 5.81 ft Nov. 7; no flow for many days; minimum gage height, 1.93 ft May 28.

DISCHARGE, IN 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	151	119	179	153	123	44	7.1	1.0	.00	---	140	195
2	152	152	176	152	120	38	8.1	2.1	.00	---	140	195
3	151	167	174	153	118	35	7.7	1.7	.00	---	140	194
4	149	175	173	153	115	32	6.9	1.2	.00	---	139	192
5	147	181	172	152	113	33	6.0	.76	.00	---	142	191
6	145	197	171	150	109	35	5.2	.46	.00	---	141	190
7	142	208	170	150	105	34	4.7	.16	.00	68	141	189
8	138	207	170	151	125	32	3.9	.00	---	76	146	189
9	135	206	170	151	130	30	3.3	.00	---	98	148	189
10	134	205	170	154	125	30	2.8	.00	---	85	149	191
11	134	203	169	155	122	28	2.5	.00	---	75	152	190
12	139	203	168	155	118	27	2.3	.00	---	67	160	191
13	141	202	167	154	112	25	2.1	.00	---	68	164	189
14	138	200	167	154	107	25	1.8	.00	---	108	169	188
15	133	199	167	153	106	23	1.6	.00	---	127	173	189
16	131	198	166	152	108	21	1.4	.00	---	121	177	187
17	129	195	165	152	104	19	1.1	.00	---	123	179	183
18	128	194	163	152	102	18	.88	.00	---	123	180	181
19	127	193	163	151	103	22	.72	.00	---	122	179	180
20	127	194	162	151	103	24	.60	.00	---	137	178	178
21	126	192	161	150	127	20	.41	.00	---	138	177	176
22	125	189	160	150	128	18	.27	.00	---	138	176	173
23	123	187	159	148	121	15	.18	.00	---	136	174	170
24	122	186	159	147	117	14	.04	.00	---	134	171	168
25	121	184	158	147	112	13	.00	.00	---	134	169	171
26	120	184	157	146	104	12	.00	.00	---	138	173	169
27	119	183	156	144	99	11	.00	.00	---	138	181	166
28	117	182	156	143	96	10	.00	.00	---	137	187	164
29	114	181	155	138	71	9.1	.00	.00	---	138	191	159
30	110	180	154	129	---	8.0	.00	.00	---	139	194	153
31	108	---	153	126	---	7.1	---	.00	---	139	195	---
TOTAL	4076	5646	5110	4616	3243	712.2	71.60	7.38	---	---	5125	5440
MEAN	131	188	165	149	112	23.0	2.39	.24	---	---	165	181
MAX	152	208	179	155	130	44	8.1	2.1	---	---	195	195
MIN	108	119	153	126	71	7.1	.00	.00	---	---	139	153
AC-FT	8080	11200	10140	9160	6430	1410	142	15	---	---	10170	10790

CAL YR 1987 TOTAL 40985.85 MEAN 112 MAX 208 MIN .24 AC-FT 81300

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

133

02291000 BARRON RIVER CANAL NEAR EVERGLADES, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.77	5.01	5.50	5.18	4.53	3.74	2.89	2.66	2.44	---	4.55	5.78
2	5.78	5.24	5.46	5.18	4.48	3.59	2.95	2.77	2.44	---	4.55	5.77
3	5.76	5.51	5.42	5.21	4.44	3.50	2.95	2.74	2.39	---	4.53	5.74
4	5.72	5.59	5.41	5.20	4.39	3.44	2.93	2.70	2.34	---	4.52	5.71
5	5.67	5.61	5.40	5.19	4.34	3.46	2.90	2.64	2.30	---	4.59	5.69
6	5.62	5.77	5.38	5.16	4.27	3.52	2.87	2.59	2.27	---	4.56	5.67
7	5.55	5.79	5.37	5.15	4.19	3.49	2.85	2.54	2.29	2.68	4.56	5.65
8	5.48	5.76	5.37	5.17	4.57	3.42	2.82	2.48	---	2.89	4.67	5.64
9	5.43	5.75	5.38	5.17	4.66	3.38	2.79	2.42	---	3.37	4.71	5.63
10	5.41	5.72	5.38	5.24	4.58	3.38	2.76	2.37	---	3.11	4.75	5.68
11	5.41	5.68	5.37	5.28	4.51	3.33	2.74	2.33	---	2.91	4.82	5.67
12	5.51	5.68	5.37	5.26	4.44	3.29	2.73	2.30	---	2.72	4.98	5.68
13	5.55	5.68	5.36	5.25	4.33	3.25	2.72	2.27	---	2.76	5.08	5.65
14	5.48	5.66	5.35	5.24	4.24	3.23	2.69	2.26	---	3.69	5.18	5.62
15	5.39	5.65	5.35	5.22	4.21	3.19	2.68	2.23	---	4.11	5.29	5.65
16	5.35	5.63	5.35	5.21	4.25	3.15	2.67	2.20	---	4.01	5.37	5.60
17	5.32	5.61	5.32	5.20	4.17	3.11	2.65	2.18	---	4.19	5.41	5.51
18	5.30	5.59	5.31	5.20	4.14	3.07	2.62	2.16	---	4.19	5.43	5.46
19	5.28	5.59	5.30	5.19	4.14	3.22	2.59	2.14	---	4.18	5.41	5.43
20	5.27	5.63	5.29	5.17	4.16	3.27	2.58	2.11	---	4.47	5.40	5.39
21	5.25	5.60	5.28	5.16	4.60	3.19	2.55	2.09	---	4.48	5.38	5.34
22	5.24	5.56	5.26	5.16	4.62	3.12	2.53	2.06	---	4.49	5.34	5.28
23	5.21	5.54	5.25	5.11	4.49	3.06	2.51	2.03	---	4.45	5.30	5.22
24	5.18	5.53	5.24	5.08	4.43	3.03	2.49	2.00	---	4.42	5.24	5.17
25	5.17	5.51	5.24	5.09	4.33	3.00	2.47	1.99	---	4.41	5.19	5.24
26	5.15	5.51	5.23	5.06	4.19	2.99	2.45	1.97	---	4.50	5.28	5.19
27	5.13	5.52	5.22	5.01	4.08	2.97	2.43	1.95	---	4.49	5.45	5.13
28	5.09	5.51	5.22	4.96	4.01	2.97	2.41	1.97	---	4.48	5.61	5.08
29	5.03	5.51	5.22	4.82	3.96	2.93	2.38	2.20	---	4.50	5.68	4.97
30	4.97	5.51	5.19	4.64	---	2.90	2.36	2.47	---	4.52	5.75	4.84
31	4.92	---	5.18	4.58	---	2.88	---	2.46	---	4.52	5.78	---
MEAN	5.37	5.58	5.32	5.12	4.34	3.23	2.67	2.30	---	---	5.11	5.47
MAX	5.78	5.79	5.50	5.28	4.66	3.74	2.95	2.77	---	---	5.78	5.78
MIN	4.92	5.01	5.18	4.58	3.96	2.88	2.36	1.95	---	---	4.52	4.84

CAL YR 1987 MEAN 5.09 MAX 5.79 MIN 3.47

EVERGLADES AND SOUTHEASTERN COASTAL AREA

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02291200 LAKE TRAFFORD NEAR IMMOKALEE, FL

LOCATION.--Lat 26°26'08", long 81°29'25", in NW¼ sec.35, T.46 S., R.28 E., Collier County, Hydrologic Unit 03090204, at county boat ramp dock, on north side of lake and 4.2 mi west of Immokalee (revised).

SURFACE AREA.--1,485 acres. Revised.

DRAINAGE AREA.--27 mi², approximately. Revised.

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.--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, 21.55 ft Nov. 6; minimum, 18.99 ft July 6.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.92	20.84	21.39	20.78	20.51	20.32	20.16	19.67	19.53	19.12	19.66	20.64
2	20.93	20.96	21.35	20.76	20.50	20.32	20.15	19.68	19.51	19.11	19.68	20.63
3	20.92	21.19	21.33	20.78	20.49	20.31	20.14	19.66	19.51	19.11	19.68	20.62
4	20.90	21.47	21.31	20.77	20.48	20.30	20.13	19.64	19.48	19.08	19.68	20.61
5	20.87	21.50	21.28	20.75	20.47	20.31	20.11	19.63	19.47	19.05	19.67	20.61
6	20.86	21.54	21.25	20.74	20.43	20.35	20.10	19.60	19.49	19.03	19.66	20.63
7	20.85	21.53	21.22	20.74	20.41	20.38	20.07	19.56	19.48	19.05	19.67	20.66
8	20.82	21.51	21.20	20.73	20.45	20.38	20.03	19.53	19.47	19.09	19.79	20.67
9	20.79	21.50	21.18	20.71	20.47	20.38	20.01	19.51	19.46	19.24	19.94	20.66
10	20.77	21.48	21.17	20.72	20.46	20.40	19.99	19.50	19.43	19.31	19.98	20.65
11	20.78	21.45	21.16	20.73	20.46	20.40	19.98	19.47	19.42	19.32	20.00	20.63
12	21.00	21.41	21.14	20.72	20.44	20.39	19.97	19.45	19.44	19.31	20.02	20.62
13	21.17	21.39	21.13	20.72	20.42	20.38	19.92	19.44	19.42	19.33	20.03	20.60
14	21.17	21.36	21.11	20.69	20.41	20.35	19.90	19.42	19.41	19.35	20.04	20.59
15	21.16	21.33	21.10	20.67	20.43	20.31	19.88	19.40	19.38	19.35	20.05	20.60
16	21.15	21.31	21.06	20.63	20.43	20.29	19.87	19.39	19.36	19.34	20.10	20.58
17	21.14	21.29	21.03	20.63	20.42	20.28	19.85	19.37	19.34	19.34	20.18	20.55
18	21.13	21.34	21.01	20.63	20.41	20.29	19.83	19.36	19.32	19.37	20.22	20.54
19	21.12	21.35	20.99	20.62	20.41	20.33	19.82	19.34	19.30	19.39	20.30	20.52
20	21.10	21.35	20.97	20.61	20.43	20.32	19.79	19.32	19.29	19.40	20.31	20.50
21	21.07	21.32	20.96	20.61	20.42	20.32	19.77	19.29	19.28	19.44	20.31	20.48
22	21.03	21.30	20.95	20.60	20.42	20.31	19.75	19.27	19.28	19.48	20.29	20.45
23	21.00	21.27	20.93	20.58	20.42	20.31	19.74	19.25	19.29	19.53	20.27	20.43
24	20.98	21.24	20.92	20.58	20.42	20.29	19.72	19.29	19.27	19.54	20.25	20.41
25	20.96	21.22	20.91	20.57	20.39	20.28	19.70	19.39	19.24	19.54	20.29	20.38
26	20.94	21.24	20.89	20.57	20.36	20.27	19.69	19.37	19.23	19.54	20.36	20.36
27	20.92	21.43	20.87	20.56	20.36	20.26	19.67	19.35	19.21	19.55	20.39	20.33
28	20.90	21.44	20.85	20.53	20.34	20.26	19.63	19.37	19.18	19.59	20.53	20.31
29	20.87	21.43	20.83	20.52	20.34	20.24	19.60	19.54	19.15	19.63	20.56	20.29
30	20.84	21.41	20.79	20.52	---	20.23	19.59	19.53	19.13	19.65	20.56	20.26
31	20.82	---	20.79	20.52	---	20.20	---	19.53	---	19.65	20.58	---
MEAN	20.96	21.35	21.07	20.65	20.43	20.31	19.89	19.46	19.36	19.35	20.10	20.53
MAX	21.17	21.54	21.39	20.78	20.51	20.40	20.16	19.68	19.53	19.65	20.58	20.67
MIN	20.77	20.84	20.79	20.52	20.34	20.20	19.59	19.25	19.13	19.03	19.66	20.26

CAL YR 1987 MEAN 20.45 MAX 21.54 MIN 19.70
WTR YR 1988 MEAN 20.29 MAX 21.54 MIN 19.03

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 discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 528 ft³/s Oct. 16, 1987, gage height 10.21; minimum discharge, 4.7 ft³/s June 10, 1988, gage height 3.20 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 528 ft³/s Oct. 16, gage height 10.21 ft; minimum discharge, 4.7 ft³/s June 10, gage height 3.20 ft.

DISCHARGE, IN 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					---	39	186		---	176	46	90
2					---	53	181			24	182	44
3					37	70	171		28	183	40	114
4					36	70	156		31	174	38	167
5					46	67	139		32	165	49	169
6					61	65	120		32	154	62	175
7					64	85	105		30	160	76	175
8					70	98	94		28	170	86	164
9					67	99	82		27	167	88	148
10					60	102	72		28	158	89	133
11					56	97	62		49	141	126	119
12					52	92	56		110	127	186	115
13					49	82	52		155	114	262	106
14					45	72	48		166	105	292	99
15					43	64	49		161	100	295	102
16					44	58	56		150	93	284	92
17					46	54	61		145	90	266	84
18					45	50	62		162	97	253	79
19					44	47	59		159	86	233	74
20					41	44	55		194	83	216	67
21					47	40	49		199	85	243	61
22					50	37	44		197	80	209	56
23					46	34	39		187	72	181	53
24					43	39	36		172	68	162	51
25					43	58	32		165	75	159	53
26					46	59	29		156	67	138	50
27					43	102	---		151	62	123	50
28					39	129	---		146	60	109	82
29					---	139	---		152	56	98	97
30					---	149	---		168	52	92	136
31					---	179	---		---	48	97	---
TOTAL					---	2373	---		---	3450	4642	3055
MEAN					---	76.5	---		---	111	150	102
MAX					---	179	---		---	183	295	175
MIN					---	34	---		---	48	38	50
AC-FT					---	4710	---		---	6840	9210	6060

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291500 IMPERIAL RIVER NEAR BONITA SPRINGS, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	4.27	6.84		---	6.82	4.52	5.61
2					---	4.69	6.78		3.81	6.91	4.44	5.67
3					4.23	5.09	6.64		3.94	6.92	4.36	5.99
4					4.19	5.10	6.45		4.02	6.80	4.30	6.75
5					4.47	5.03	6.19		4.06	6.68	4.59	6.80
6					4.91	5.00	5.92		4.05	6.54	4.93	6.88
7					4.98	5.34	5.69		4.01	6.61	5.20	6.88
8					5.09	5.58	5.51		3.95	6.75	5.37	6.74
9					5.03	5.59	5.30		3.90	6.71	5.41	6.53
10					4.87	5.63	5.12		3.94	6.58	5.42	6.31
11					4.76	5.56	4.94		4.56	6.35	6.02	6.11
12					4.66	5.48	4.78		5.80	6.14	6.87	6.05
13					4.56	5.30	4.65		6.48	5.94	7.82	5.92
14					4.46	5.13	4.54		6.65	5.80	8.18	5.82
15					4.41	4.97	4.57		6.59	5.72	8.22	5.86
16					4.42	4.83	4.77		6.43	5.62	8.11	5.69
17					4.47	4.71	4.91		6.37	5.55	7.91	5.56
18					4.45	4.59	4.94		6.61	5.63	7.76	5.47
19					4.44	4.50	4.86		6.58	5.46	7.53	5.38
20					4.34	4.42	4.73		7.05	5.40	7.32	5.25
21					4.51	4.32	4.57		7.13	5.44	7.68	5.12
22					4.58	4.21	4.41		7.09	5.35	7.27	4.99
23					4.48	4.14	4.29		6.97	5.21	6.92	4.89
24					4.39	4.27	4.18		6.78	5.14	6.66	4.84
25					4.40	4.81	4.07		6.68	5.22	6.64	4.90
26					4.47	4.84	3.98		6.56	5.07	6.34	4.80
27					4.40	5.63	---		6.48	4.98	6.12	4.82
28					4.29	6.05	---		6.41	4.92	5.91	5.46
29					---	6.20	---		6.50	4.80	5.74	5.71
30					---	6.34	---		6.72	4.68	5.63	6.29
31					---	6.75	---		---	4.58	5.71	---
MEAN					---	5.11	---		---	5.82	6.29	5.77
MAX					---	6.75	---		---	6.92	8.22	6.88
MIN					---	4.14	---		---	4.58	4.30	4.80

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291500 IMPERIAL RIVER NEAR BONITA SPRINGS, FL

DISCHARGE, IN 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	263	209	391	105	55	29	21	12	6.9	8.1	141	505
2	282	259	371	101	53	28	19	14	6.5	8.3	155	490
3	295	323	350	102	51	26	17	13	6.7	8.2	138	472
4	289	423	335	101	49	25	16	11	6.4	7.8	121	452
5	274	433	319	95	46	30	15	11	6.0	7.3	106	429
6	256	435	303	91	44	51	14	10	6.2	7.1	96	436
7	237	424	289	88	41	66	13	9.7	6.4	7.3	79	441
8	217	407	271	92	47	67	13	9.7	6.2	8.0	69	474
9	199	408	263	87	53	65	12	9.7	5.7	8.1	61	458
10	187	457	253	92	50	66	11	9.4	5.3	8.1	56	444
11	180	452	244	124	47	67	11	9.2	6.7	7.9	73	417
12	310	436	235	118	45	60	11	9.3	7.6	8.1	161	390
13	432	417	227	116	44	55	11	9.3	7.4	8.3	192	375
14	488	399	218	113	42	53	11	9.2	7.3	8.8	210	365
15	512	382	211	108	42	46	10	9.0	7.2	9.1	210	362
16	526	364	207	100	48	40	9.8	9.0	7.1	10	209	350
17	525	346	196	93	44	36	9.6	9.2	6.9	12	244	330
18	518	351	189	89	40	34	9.6	9.1	6.9	14	267	313
19	505	349	183	84	39	45	9.4	8.6	9.0	17	300	292
20	485	369	179	79	39	56	9.4	8.5	9.3	20	305	271
21	460	351	172	76	42	53	9.4	8.4	9.3	22	306	247
22	431	338	166	90	44	48	9.1	8.3	9.2	30	295	222
23	397	327	160	82	40	44	8.9	8.2	9.2	37	265	193
24	365	318	155	74	41	41	9.3	7.8	9.3	40	245	169
25	334	310	149	74	40	38	9.6	7.8	9.0	41	221	150
26	308	322	143	69	36	35	9.3	7.8	8.9	43	217	140
27	284	406	137	64	33	34	9.6	7.5	8.8	47	238	133
28	262	421	131	62	32	30	9.6	7.2	8.5	51	336	149
29	241	422	125	61	31	26	9.6	7.0	8.5	68	411	134
30	222	409	116	58	---	24	10	7.1	8.2	105	391	121
31	207	---	109	56	---	22	---	7.0	---	123	425	---
TOTAL	10491	11267	6797	2744	1258	1340	347.2	284.0	226.6	800.5	6543	9724
MEAN	338	376	219	88.5	43.4	43.2	11.6	9.16	7.55	25.8	211	324
MAX	526	457	391	124	55	67	21	14	9.3	123	425	505
MIN	180	209	109	56	31	22	8.9	7.0	5.3	7.1	56	121
AC-FT	20810	22350	13480	5440	2500	2660	689	563	449	1590	12980	19290

WTR YR 1988 TOTAL 51822.3 MEAN 142 MAX 526 MIN 5.3 AC-FT 102800

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291500 IMPERIAL RIVER NEAR BONITA SPRINGS, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.72	6.94	8.90	5.48	4.64	3.83	3.81	3.56	3.29	3.31	6.37	10.13
2	7.93	7.54	8.70	5.42	4.58	3.78	3.76	3.60	3.28	3.32	6.57	10.00
3	8.09	8.22	8.49	5.43	4.52	3.75	3.71	3.56	3.28	3.32	6.33	9.84
4	8.03	9.23	8.33	5.42	4.46	3.72	3.67	3.51	3.27	3.30	6.09	9.65
5	7.86	9.32	8.16	5.32	4.40	3.87	3.64	3.48	3.25	3.29	5.86	9.43
6	7.66	9.34	7.99	5.25	4.34	4.51	3.61	3.48	3.26	3.28	5.69	9.50
7	7.44	9.23	7.84	5.21	4.25	4.96	3.59	3.46	3.26	3.29	5.41	9.56
8	7.20	9.07	7.64	5.26	4.37	4.97	3.56	3.45	3.25	3.31	5.23	9.87
9	6.97	9.08	7.55	5.20	4.50	4.94	3.54	3.45	3.23	3.31	5.05	9.74
10	6.83	9.54	7.43	5.33	4.42	4.97	3.52	3.44	3.22	3.31	4.93	9.61
11	6.74	9.50	7.34	5.90	4.32	5.01	3.52	3.43	3.27	3.31	5.24	9.34
12	8.19	9.35	7.23	5.83	4.28	4.83	3.53	3.43	3.30	3.31	6.63	9.08
13	9.47	9.17	7.13	5.80	4.24	4.71	3.52	3.43	3.29	3.32	7.00	8.93
14	9.88	8.99	7.02	5.75	4.19	4.64	3.51	3.42	3.29	3.34	7.21	8.83
15	10.06	8.82	6.94	5.67	4.20	4.44	3.50	3.41	3.28	3.35	7.21	8.80
16	10.19	8.64	6.89	5.55	4.35	4.29	3.49	3.40	3.28	3.40	7.19	8.68
17	10.18	8.46	6.75	5.44	4.24	4.17	3.47	3.41	3.27	3.47	7.59	8.47
18	10.12	8.51	6.66	5.37	4.14	4.10	3.47	3.41	3.27	3.55	7.85	8.29
19	10.01	8.49	6.59	5.28	4.11	4.44	3.46	3.38	3.34	3.65	8.21	8.07
20	9.82	8.69	6.53	5.20	4.13	4.79	3.46	3.38	3.35	3.75	8.27	7.83
21	9.59	8.51	6.44	5.15	4.20	4.70	3.46	3.37	3.36	3.82	8.27	7.55
22	9.32	8.37	6.36	5.36	4.26	4.56	3.45	3.37	3.35	4.08	8.15	7.26
23	8.99	8.26	6.28	5.21	4.13	4.46	3.44	3.36	3.35	4.27	7.81	6.90
24	8.67	8.16	6.21	5.07	4.15	4.37	3.46	3.34	3.36	4.39	7.59	6.60
25	8.36	8.08	6.13	5.07	4.13	4.28	3.47	3.34	3.34	4.43	7.30	6.33
26	8.08	8.20	6.04	4.98	4.01	4.21	3.46	3.34	3.34	4.47	7.24	6.19
27	7.81	9.06	5.96	4.89	3.94	4.18	3.47	3.32	3.34	4.60	7.47	6.09
28	7.57	9.19	5.87	4.84	3.91	4.06	3.47	3.31	3.33	4.72	8.53	6.35
29	7.33	9.20	5.78	4.79	3.89	3.95	3.47	3.31	3.33	5.17	9.28	6.14
30	7.10	9.08	5.65	4.72	---	3.91	3.47	3.30	3.32	5.81	9.08	5.95
31	6.92	---	5.53	4.67	---	3.84	---	3.30	---	6.11	9.40	---
MEAN	8.39	8.74	6.98	5.29	4.25	4.36	3.53	3.41	3.30	3.85	7.10	8.30
MAX	10.19	9.54	8.90	5.90	4.64	5.01	3.81	3.60	3.36	6.11	9.40	10.13
MIN	6.74	6.94	5.53	4.67	3.89	3.72	3.44	3.30	3.22	3.28	4.93	5.95

WTR YR 1988 TOTAL 2060.21 MEAN 5.63 MAX 10.19 MIN 3.22

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 Estro.

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 discharges. Records good.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 52 ft³/s Sept. 1; maximum gage height, 8.20 ft; minimum daily discharge, 0.13 ft³/s June 18, 19; minimum gage height, 6.40 ft.

DISCHARGE, IN 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		---	15	3.5	2.1	1.6	2.1	1.0	.32	.59	1.7	49
2		---	14	3.3	1.9	1.5	2.0	.90	.28	.61	1.9	38
3		---	14	3.3	1.9	1.5	1.9	.90	.23	.72	1.9	31
4		38	13	3.4	1.9	1.4	1.8	.83	.19	.72	2.0	30
5		34	12	3.3	1.8	1.3	1.7	.89	.19	.80	2.0	26
6		28	12	3.2	1.8	1.7	1.6	1.2	.23	.78	2.1	24
7		26	12	2.9	1.7	1.9	1.5	1.1	.23	.72	2.0	26
8		23	11	2.9	2.0	2.2	1.4	1.1	.23	.72	2.2	37
9		21	11	2.9	2.3	2.6	1.3	1.0	.19	.72	2.2	35
10		21	11	3.2	2.5	2.7	1.3	.88	.15	.72	2.2	35
11		20	10	4.2	2.5	2.7	1.2	.67	.27	.67	2.9	27
12		19	9.9	4.9	2.5	2.8	1.1	.87	.56	.51	7.3	24
13		17	9.6	4.9	2.4	2.7	1.1	.95	.45	.38	8.8	22
14		16	9.2	4.5	2.3	2.6	1.0	.83	.36	.32	13	21
15		15	9.0	4.3	2.2	2.5	.95	.93	.27	.42	13	22
16		14	9.1	4.0	2.1	2.4	.90	.92	.20	.49	11	21
17		14	9.0	3.6	2.0	2.4	.86	.93	.16	.47	11	19
18		15	8.1	3.4	1.9	2.4	.89	1.1	.15	.73	11	19
19		15	7.4	3.2	1.9	3.1	.83	.95	.25	1.1	12	19
20		16	7.0	3.0	1.9	3.7	.78	.88	.36	1.1	11	17
21		15	6.6	3.0	1.9	3.9	.72	.79	.39	1.2	9.8	16
22		14	6.3	3.3	1.9	3.8	.67	.72	.54	1.2	8.9	15
23		13	6.0	3.5	1.8	3.6	.61	.72	.67	1.2	8.2	14
24		12	5.8	3.4	1.9	3.5	.61	.66	.89	1.5	7.4	15
25		12	5.6	3.3	1.9	3.3	.56	.61	1.0	1.5	7.2	13
26		15	5.0	3.1	1.8	3.2	.51	.61	.95	1.3	7.5	12
27		24	4.5	2.7	1.7	3.0	.46	.56	.95	1.3	10	12
28		21	4.4	2.6	1.6	2.7	.36	.51	.90	1.2	25	13
29		18	4.2	2.4	1.6	2.5	.32	.46	.79	1.2	34	12
30		16	3.9	2.4	---	2.4	.56	.41	.67	1.5	27	11
31		---	3.7	2.3	---	2.3	---	.37	---	1.6	32	---
TOTAL		---	269.3	103.9	57.7	79.9	31.59	25.25	13.02	27.99	298.2	675
MEAN		---	8.69	3.35	1.99	2.58	1.05	.81	.43	.90	9.62	22.5
MAX		---	15	4.9	2.5	3.9	2.1	1.2	1.0	1.6	34	49
MIN		---	3.7	2.3	1.6	1.3	.32	.37	.15	.32	1.7	11
AC-FT		---	534	206	114	158	63	50	26	56	591	1340

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291524 SPRING CREEK HEADWATER NEAR BONITA SPRINGS, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	7.18	6.71	6.62	6.57	6.61	6.52	6.44	6.49	6.57	8.23
2		---	7.16	6.70	6.61	6.57	6.60	6.51	6.44	6.49	6.58	7.92
3		---	7.13	6.70	6.61	6.57	6.60	6.51	6.43	6.50	6.58	7.71
4		7.91	7.11	6.71	6.61	6.57	6.59	6.50	6.43	6.50	6.59	7.68
5		7.80	7.08	6.70	6.60	6.56	6.59	6.51	6.42	6.51	6.59	7.56
6		7.63	7.06	6.69	6.60	6.58	6.58	6.53	6.42	6.51	6.59	7.49
7		7.54	7.05	6.68	6.60	6.60	6.57	6.52	6.42	6.51	6.59	7.57
8		7.46	7.04	6.68	6.62	6.62	6.56	6.52	6.42	6.51	6.60	7.97
9		7.40	7.03	6.68	6.64	6.65	6.56	6.52	6.41	6.51	6.60	7.92
10		7.38	7.02	6.70	6.65	6.65	6.55	6.50	6.41	6.51	6.60	7.94
11		7.35	7.01	6.76	6.65	6.65	6.55	6.49	6.42	6.51	6.64	7.72
12		7.31	7.00	6.80	6.65	6.66	6.54	6.50	6.46	6.50	6.87	7.60
13		7.26	6.98	6.79	6.64	6.65	6.54	6.51	6.44	6.49	6.93	7.54
14		7.22	6.96	6.78	6.63	6.64	6.53	6.50	6.43	6.48	7.11	7.52
15		7.19	6.96	6.76	6.63	6.64	6.53	6.51	6.42	6.49	7.11	7.54
16		7.16	6.97	6.74	6.63	6.63	6.53	6.50	6.42	6.50	7.04	7.52
17		7.14	6.96	6.73	6.62	6.63	6.52	6.50	6.41	6.50	7.04	7.44
18		7.17	6.92	6.71	6.61	6.63	6.52	6.51	6.41	6.51	7.02	7.44
19		7.17	6.90	6.70	6.61	6.67	6.51	6.50	6.42	6.54	7.07	7.44
20		7.21	6.87	6.69	6.61	6.71	6.51	6.49	6.44	6.54	7.04	7.38
21		7.17	6.86	6.69	6.61	6.72	6.50	6.49	6.45	6.55	6.99	7.34
22		7.13	6.84	6.71	6.61	6.72	6.50	6.48	6.46	6.55	6.95	7.31
23		7.11	6.83	6.72	6.60	6.71	6.49	6.48	6.48	6.55	6.92	7.27
24		7.08	6.82	6.71	6.60	6.70	6.49	6.47	6.50	6.56	6.89	7.28
25		7.06	6.81	6.71	6.60	6.69	6.49	6.47	6.51	6.56	6.87	7.23
26		7.18	6.78	6.69	6.59	6.68	6.48	6.47	6.51	6.55	6.89	7.20
27		7.48	6.77	6.67	6.59	6.67	6.47	6.46	6.51	6.55	6.99	7.20
28		7.38	6.76	6.65	6.58	6.65	6.46	6.46	6.51	6.54	7.52	7.22
29		7.28	6.75	6.64	6.58	6.64	6.46	6.45	6.50	6.54	7.81	7.17
30		7.21	6.73	6.64	---	6.63	6.47	6.45	6.49	6.55	7.59	7.15
31		---	6.72	6.63	---	6.62	---	6.45	---	6.56	7.73	---
MEAN		---	6.94	6.71	6.61	6.64	6.53	6.49	6.45	6.52	6.93	7.52
MAX		---	7.18	6.80	6.65	6.72	6.61	6.53	6.51	6.56	7.81	8.23
MIN		---	6.72	6.63	6.58	6.56	6.46	6.45	6.41	6.48	6.57	7.15

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 discharges. 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, 264 ft³/s Oct. 12, gage height, 13.32 ft; no flow for many days.

DISCHARGE, IN 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					---	.36	6.4	.66	.00	.00	.66	1.6
2					---	1.1	5.0	.18	.00	.00	.66	1.4
3					---	1.6	3.8	.02	.00	.00	.66	1.8
4					.47	1.3	3.2	.01	.00	.00	.66	16
5					1.6	1.1	2.3	.01	.00	.01	.66	21
6					3.2	.99	1.7	.12	.00	.03	.66	18
7					3.3	2.5	1.4	.03	.00	.05	.66	15
8					3.2	2.5	1.3	.01	.00	.13	.66	12
9					2.5	2.3	.94	.01	.00	1.0	.66	9.9
10					1.8	2.4	1.3	.01	.03	.49	3.0	9.2
11					1.2	1.7	1.7	.05	.01	.66	7.5	11
12					.86	1.5	.73	.15	.00	.66	8.4	11
13					.16	1.1	.95	.12	.00	.66	7.7	10
14					.19	.67	1.4	.08	.00	.66	7.0	10
15					.24	.66	1.2	.85	.00	.66	5.7	17
16					.94	.58	1.1	.40	.00	.66	4.0	13
17					.90	1.1	.92	.10	.00	.66	2.8	10
18					.68	.96	1.1	.11	.00	.66	2.0	8.4
19					.46	.42	.66	1.8	.00	.66	1.7	7.1
20					.57	.33	.16	1.8	.00	.66	2.2	5.7
21					.84	.24	.59	.13	.00	.66	2.8	3.8
22					.75	.16	.61	.64	.00	.66	1.6	2.8
23					.52	.21	.37	.01	.00	.66	1.3	2.1
24					.61	.92	.73	.00	.00	.66	3.0	2.4
25					.75	1.8	.28	.00	.00	.66	7.3	2.7
26					.61	2.0	.17	.01	.00	.66	5.8	2.2
27					.44	5.3	.67	.30	.00	.66	5.4	2.5
28					.36	5.6	.72	.04	.00	.66	3.7	3.3
29					---	4.8	.72	.00	.00	.66	2.8	2.9
30					---	4.6	.69	.00	.00	.66	2.3	13
31					---	6.9	---	.00	---	.66	2.1	---
TOTAL					---	57.70	42.81	7.65	.04	15.57	96.04	246.8
MEAN					---	1.86	1.43	.25	.001	.50	3.10	8.23
MAX					---	6.9	6.4	1.8	.03	1.0	8.4	21
MIN					---	.16	.16	.00	.00	.00	.66	1.4
AC-FT					---	114	85	15	.08	31	190	490

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291580 NORTH BRANCH ESTERO RIVER AT ESTERO, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	7.45	8.33	7.68	7.14	7.11	7.58	7.76
2					---	7.72	8.22	7.37	7.13	7.10	7.58	7.73
3					---	7.81	8.14	7.18	7.13	7.12	7.58	7.78
4					7.51	7.76	8.08	7.16	7.13	7.12	7.58	8.94
5					7.74	7.72	7.98	7.16	7.14	7.14	7.58	9.22
6					8.01	7.69	7.89	7.30	7.14	7.17	7.58	9.04
7					8.02	7.93	7.84	7.19	7.14	7.18	7.58	8.86
8					8.01	7.94	7.81	7.16	7.12	7.22	7.58	8.70
9					7.93	7.92	7.74	7.16	7.13	7.66	7.58	8.52
10					7.84	7.92	7.82	7.16	7.17	7.51	7.89	8.45
11					7.70	7.83	7.88	7.21	7.17	7.58	8.37	8.57
12					7.58	7.77	7.68	7.38	7.16	7.58	8.45	8.58
13					7.29	7.70	7.75	7.33	7.15	7.58	8.39	8.55
14					7.32	7.59	7.84	7.28	7.14	7.58	8.32	8.55
15					7.36	7.59	7.80	7.74	7.13	7.58	8.20	9.08
16					7.57	7.56	7.79	7.55	7.13	7.58	8.08	8.89
17					7.66	7.71	7.74	7.32	7.13	7.58	7.97	8.67
18					7.60	7.68	7.78	7.33	7.12	7.58	7.87	8.52
19					7.47	7.48	7.64	7.96	7.13	7.58	7.82	8.40
20					7.48	7.43	7.35	7.96	7.13	7.58	7.90	8.27
21					7.65	7.37	7.59	7.37	7.13	7.58	7.97	8.14
22					7.62	7.29	7.65	7.59	7.13	7.58	7.82	8.04
23					7.51	7.33	7.54	7.20	7.12	7.58	7.75	7.95
24					7.57	7.57	7.70	7.16	7.11	7.58	7.90	7.99
25					7.62	7.88	7.46	7.15	7.11	7.58	8.33	8.03
26					7.57	7.89	7.37	7.17	7.11	7.58	8.17	7.98
27					7.50	8.22	7.68	7.58	7.11	7.58	8.13	8.01
28					7.45	8.25	7.70	7.25	7.11	7.58	8.02	8.09
29					---	8.20	7.70	7.14	7.11	7.58	7.93	8.06
30					---	8.19	7.69	7.14	7.12	7.58	7.87	8.97
31					---	8.37	---	7.13	---	7.58	7.85	---
MEAN					---	7.77	7.77	7.34	7.13	7.47	7.91	8.41
MAX					---	8.37	8.33	7.96	7.17	7.66	8.45	9.22
MIN					---	7.29	7.35	7.13	7.11	7.10	7.58	7.73

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291580 NORTH BRANCH ESTERO RIVER AT ESTERO, FL

DISCHARGE, IN 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	30	8.4	14	.03	.01	.00	.00	.00	.00	.00	.14	7.4
2	19	21	13	.02	.00	.00	.00	.00	.00	.07	.15	7.9
3	13	77	11	.02	.00	.00	.00	.00	.00	.12	.16	9.0
4	10	199	10	.02	.00	.00	.00	.00	.00	.12	.20	11
5	7.9	123	9.1	.01	.00	.00	.00	.00	.00	.12	.15	9.6
6	6.6	72	8.1	.01	.00	.00	.00	.00	.00	.12	.15	9.6
7	5.1	49	7.4	.02	.00	.00	.00	.00	.00	.12	.17	13
8	2.8	38	6.8	.02	.05	.00	.00	.00	.00	.12	.33	25
9	1.4	35	6.4	.07	.04	.00	.00	.00	.00	.12	.38	24
10	.88	51	6.1	.09	.03	.00	.00	.00	.28	.12	.40	27
11	.88	44	5.5	.41	.02	.00	.00	.00	.04	.11	2.1	22
12	140	34	4.6	.40	.00	.00	.00	.00	.01	.10	4.0	18
13	203	27	4.2	.34	.00	.00	.00	.00	.00	.10	3.5	16
14	115	24	3.4	.25	.00	.00	.03	.00	.53	.09	3.8	15
15	68	22	3.1	.18	.00	.00	.15	.00	1.5	.11	3.4	15
16	51	20	3.2	.14	.00	.00	.04	.00	1.5	.11	4.3	14
17	42	18	2.4	.13	.00	.00	.00	.00	.24	.11	5.4	12
18	37	20	1.9	.11	.00	.00	.00	.00	.11	.10	4.8	11
19	33	24	1.6	.04	.00	.00	.00	.00	.11	.10	4.0	9.4
20	29	37	1.5	.01	.00	.00	.00	.00	.10	.10	2.9	9.6
21	25	29	1.3	.02	.00	.00	.00	.00	.29	.10	1.8	9.2
22	25	23	1.1	.21	.00	.00	.00	.00	.19	.09	1.3	7.1
23	22	21	.96	.17	.00	.00	.00	.00	.11	.06	.96	8.6
24	19	18	.81	.12	.00	.00	.00	.00	.11	.05	.78	6.9
25	17	17	.72	.12	.00	.00	.00	.00	.10	.06	1.1	8.5
26	15	16	.62	.11	.00	.00	.00	.00	.07	.02	1.2	12
27	13	22	.53	.03	.00	.00	.00	.00	.04	.00	1.1	15
28	11	21	.46	.01	.00	.00	.00	.00	.01	.04	1.6	23
29	9.3	18	.38	.01	.00	.00	.00	.00	.02	.13	3.1	19
30	8.0	16	.26	.01	---	.00	.00	.00	.03	.14	5.1	15
31	7.0	---	.16	.01	---	.00	---	.00	---	.14	6.4	---
TOTAL	986.86	1144.4	130.60	3.14	.15	.00	.22	.00	5.39	2.89	64.87	409.8
MEAN	31.8	38.1	4.21	.10	.005	.000	.007	.000	.18	.093	2.09	13.7
MAX	203	199	14	.41	.05	.00	.15	.00	1.5	.14	6.4	27
MIN	.88	8.4	.16	.01	.00	.00	.00	.00	.00	.00	.14	6.9
AC-FT	1960	2270	259	6.2	.3	.00	.4	.00	11	5.7	129	813

WTR YR 1988 TOTAL 2748.32 MEAN 7.51 MAX 203 MIN .00 AC-FT 5450

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291580 NORTH BRANCH ESTERO RIVER AT ESTERO, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.05	8.53	8.93	7.24	7.26	6.95	6.18	6.19	6.03	7.04	7.25	8.33
2	9.56	9.28	8.81	7.23	7.25	6.91	6.12	6.23	6.00	7.12	7.26	8.38
3	9.25	10.80	8.72	7.24	7.25	6.86	6.08	6.23	5.97	7.24	7.26	8.45
4	9.03	12.65	8.64	7.24	7.24	6.80	6.06	6.22	5.94	7.23	7.29	8.64
5	8.82	11.71	8.55	7.24	7.25	6.75	6.02	6.21	5.92	7.23	7.25	8.52
6	8.69	10.86	8.47	7.23	7.25	6.78	5.96	6.19	5.94	7.22	7.25	8.52
7	8.57	10.32	8.41	7.25	7.25	6.80	5.91	6.17	6.06	7.23	7.27	8.73
8	8.33	10.01	8.35	7.25	7.32	6.76	5.85	6.15	6.12	7.23	7.39	9.39
9	8.18	9.87	8.31	7.33	7.31	6.71	5.80	6.13	6.15	7.23	7.42	9.32
10	8.07	10.36	8.28	7.37	7.30	6.68	5.79	6.12	6.58	7.23	7.44	9.45
11	8.07	10.17	8.24	7.66	7.28	6.64	5.80	6.12	7.16	7.22	7.74	9.22
12	11.22	9.84	8.20	7.67	7.25	6.59	5.77	6.12	7.09	7.20	8.01	9.02
13	12.73	9.60	8.16	7.63	7.25	6.54	5.73	6.12	6.93	7.19	7.97	8.95
14	11.65	9.46	8.11	7.57	7.24	6.50	6.39	6.17	7.12	7.19	8.01	8.88
15	10.81	9.35	8.08	7.50	7.24	6.46	7.39	6.18	7.71	7.21	7.97	8.85
16	10.41	9.25	8.10	7.45	7.24	6.43	7.18	6.18	7.71	7.22	8.04	8.78
17	10.17	9.17	8.02	7.44	7.24	6.40	6.85	6.18	7.32	7.21	8.11	8.66
18	10.02	9.23	7.95	7.41	7.23	6.37	6.61	6.19	7.24	7.20	8.07	8.63
19	9.87	9.40	7.91	7.31	7.23	6.63	6.43	6.17	7.23	7.20	8.01	8.47
20	9.73	9.94	7.88	7.25	7.23	6.75	6.31	6.15	7.21	7.20	7.91	8.49
21	9.57	9.64	7.85	7.27	7.23	6.81	6.23	6.13	7.36	7.20	7.76	8.45
22	9.53	9.40	7.82	7.52	7.23	6.83	6.16	6.10	7.31	7.18	7.68	8.26
23	9.41	9.27	7.79	7.50	7.23	6.83	6.10	6.09	7.23	7.14	7.61	8.39
24	9.28	9.15	7.76	7.44	7.23	6.81	6.07	6.08	7.22	7.13	7.56	8.22
25	9.15	9.07	7.73	7.43	7.22	6.76	6.05	6.08	7.20	7.14	7.65	8.36
26	9.02	9.05	7.70	7.41	7.19	6.70	6.04	6.09	7.17	7.08	7.68	8.67
27	8.89	9.33	7.67	7.29	7.12	6.63	6.03	6.06	7.13	7.04	7.66	8.79
28	8.77	9.27	7.63	7.26	7.06	6.55	6.00	6.04	7.07	7.09	7.74	9.23
29	8.63	9.15	7.60	7.26	7.00	6.44	5.99	6.03	7.05	7.25	7.96	9.02
30	8.52	9.04	7.52	7.26	---	6.33	6.03	6.02	7.11	7.25	8.12	8.84
31	8.42	---	7.40	7.26	---	6.25	---	6.02	---	7.25	8.23	---
MEAN	9.43	9.74	8.08	7.37	7.23	6.65	6.16	6.13	6.84	7.19	7.70	8.73
MAX	12.73	12.65	8.93	7.67	7.32	6.95	7.39	6.23	7.71	7.25	8.23	9.45
MIN	8.07	8.53	7.40	7.23	7.00	6.25	5.73	6.02	5.92	7.04	7.25	8.22

WTR YR 1988 MEAN 7.60 MAX 12.73 MIN 5.73

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.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 284 ft³/s Oct. 14, 1987, gage height, 8.90 ft; minimum discharge, .01 ft³/s May 12, 1988; minimum gage height, 3.34 ft June 4, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 284 ft³/s Oct. 14, gage height, 8.90 ft; minimum discharge, .01 ft³/s, May 12; minimum gage height, 3.34 ft June 4.

DISCHARGE, IN 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					---	2.1	44	1.9	2.4	2.3	3.9	4.5
2					---	4.2	39	1.8	2.9	2.2	4.0	4.3
3					2.1	6.1	36	1.8	2.7	2.4	3.7	6.1
4					2.1	4.6	30	1.7	2.5	2.9	3.5	19
5					3.2	3.5	19	1.7	2.3	4.2	3.6	31
6					5.7	3.6	14	1.6	2.2	8.4	3.2	24
7					5.7	8.9	11	1.6	2.3	7.8	3.3	18
8					4.9	8.3	9.5	1.5	2.4	5.1	3.9	16
9					3.7	7.7	7.7	1.6	2.3	6.1	3.4	11
10					2.9	7.7	5.7	2.1	3.6	15	3.7	9.8
11					2.6	5.7	4.1	3.1	5.8	8.2	5.6	15
12					2.3	5.9	3.3	5.1	4.4	5.2	9.4	15
13					2.2	7.0	2.8	3.9	4.0	4.9	11	12
14					2.1	5.9	2.5	4.1	3.6	5.8	10	10
15					2.1	5.1	2.5	6.0	3.3	4.9	8.6	19
16					2.1	4.7	2.4	7.0	3.2	4.5	7.3	19
17					2.1	4.5	2.2	10	3.0	3.7	6.2	15
18					2.1	4.4	2.0	14	2.8	3.5	5.3	12
19					2.1	4.4	1.9	21	2.9	3.0	4.7	11
20					2.1	4.3	1.8	13	3.2	2.9	4.9	9.1
21					2.8	4.2	1.8	7.6	4.5	3.3	8.7	7.4
22					2.8	4.1	1.8	5.3	4.6	3.0	7.4	5.7
23					2.4	4.2	1.8	4.3	3.7	2.7	6.1	4.6
24					2.2	5.0	1.8	3.9	2.8	3.1	13	4.2
25					2.4	6.3	1.8	3.5	2.7	3.7	25	5.7
26					2.2	12	1.7	3.3	2.7	3.8	21	5.0
27					2.1	45	1.7	3.0	2.7	6.0	13	4.2
28					2.0	41	1.7	2.8	2.6	4.6	9.6	10
29					---	39	2.2	2.7	2.4	3.7	7.9	17
30					---	40	2.2	2.5	2.4	3.2	6.3	39
31					---	49	---	2.4	---	3.3	5.3	---
TOTAL					---	358.4	259.9	145.8	92.9	143.4	232.5	383.6
MEAN					---	11.6	8.66	4.70	3.10	4.63	7.50	12.8
MAX					---	49	44	21	5.8	15	25	39
MIN					---	2.1	1.7	1.5	2.2	2.2	3.2	4.2
AC-FT					---	711	516	289	184	284	461	761

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291597 SOUTH BRANCH ESTERO RIVER AT ESTERO, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	3.92	5.38	3.91	3.89	3.92	4.30	4.37
2					---	4.21	5.23	3.89	3.96	3.91	4.30	4.34
3					3.92	4.42	5.12	3.87	3.94	3.94	4.27	4.50
4					3.92	4.28	5.03	3.86	3.90	4.02	4.25	4.94
5					4.10	4.15	4.90	3.85	3.87	4.15	4.25	5.13
6					4.38	4.16	4.81	3.84	3.85	4.57	4.21	5.05
7					4.38	4.61	4.74	3.84	3.87	4.57	4.22	4.96
8					4.31	4.57	4.67	3.82	3.89	4.37	4.29	4.91
9					4.17	4.54	4.55	3.82	3.86	4.40	4.23	4.81
10					4.07	4.54	4.40	3.91	3.99	4.86	4.26	4.75
11					4.02	4.39	4.25	4.03	4.29	4.64	4.46	4.90
12					3.97	4.25	4.16	4.26	4.17	4.42	4.71	4.91
13					3.94	4.14	4.10	4.15	4.13	4.39	4.79	4.83
14					3.93	4.05	4.05	4.16	4.08	4.48	4.75	4.78
15					3.92	3.99	4.05	4.32	4.04	4.39	4.67	4.98
16					3.93	3.95	4.03	4.39	4.02	4.35	4.59	4.97
17					3.92	3.93	3.99	4.58	4.00	4.28	4.51	4.91
18					3.92	3.92	3.96	4.63	3.98	4.25	4.43	4.85
19					3.92	3.92	3.93	4.77	3.99	4.18	4.38	4.82
20					3.93	3.91	3.92	4.60	4.04	4.17	4.39	4.72
21					4.04	3.90	3.92	4.39	4.20	4.22	4.67	4.61
22					4.05	3.89	3.91	4.22	4.22	4.18	4.60	4.49
23					3.99	3.90	3.91	4.13	4.12	4.14	4.51	4.38
24					3.95	4.00	3.91	4.08	4.01	4.19	4.70	4.34
25					3.98	4.15	3.91	4.04	3.99	4.28	5.05	4.49
26					3.95	4.35	3.90	4.01	4.00	4.28	4.99	4.43
27					3.92	5.24	3.90	3.97	3.99	4.49	4.84	4.35
28					3.91	5.20	3.90	3.94	3.97	4.37	4.74	4.73
29					---	5.13	3.96	3.92	3.94	4.27	4.63	4.91
30					---	5.15	3.97	3.90	3.95	4.21	4.52	5.38
31					---	5.49	---	3.89	---	4.22	4.44	---
MEAN					---	4.33	4.28	4.10	4.01	4.29	4.51	4.75
MAX					---	5.49	5.38	4.77	4.29	4.86	5.05	5.38
MIN					---	3.89	3.90	3.82	3.85	3.91	4.21	4.34

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291597 SOUTH BRANCH ESTERO RIVER AT ESTERO, FL

DISCHARGE, IN 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	---	4.1	11	1.6	.95	.71	.34	.19	.22	.09	13	86
2	---	18	9.9	1.6	.91	.68	.33	.17	.23	.14	7.8	96
3	---	91	9.4	1.7	.88	.63	.32	.15	.22	.13	5.0	98
4	---	237	8.6	1.8	.86	.62	.32	.14	.21	.12	5.6	116
5	---	201	7.4	1.7	.83	.63	.31	.13	.21	.12	6.2	97
6	---	135	6.3	1.6	.82	.73	.30	.12	.20	.13	5.4	86
7	---	96	5.8	1.6	.76	.76	.29	.11	.22	.15	4.7	86
8	---	76	5.6	1.5	.88	.70	.28	.10	.21	.16	8.9	112
9	281	64	5.6	1.6	1.0	.64	.28	.09	.20	.18	8.1	112
10	271	76	5.3	1.6	.99	.62	.28	.08	.18	.19	7.7	116
11	268	67	4.9	2.0	.97	.60	.30	.08	.20	.19	19	98
12	---	56	4.5	1.9	.94	.57	.31	.06	.23	.20	38	75
13	---	45	4.1	1.9	.90	.55	.31	.06	.19	.21	38	71
14	264	42	3.8	1.8	.87	.54	.32	.06	.19	.24	43	60
15	192	37	3.4	1.7	.86	.49	.31	.07	.15	.31	43	55
16	145	28	3.4	1.7	1.1	.46	.31	.07	.14	.33	43	51
17	124	19	2.9	1.6	1.1	.44	.29	.08	.14	.34	43	45
18	109	21	2.3	1.6	1.0	.44	.27	.08	.13	.34	44	43
19	95	23	2.2	1.5	1.0	.88	.27	.09	.13	.37	44	40
20	82	38	2.3	1.4	.99	.86	.27	.09	.13	.43	44	32
21	67	32	2.2	1.4	1.0	.79	.26	.10	.16	.53	44	16
22	61	19	2.1	1.6	1.0	.73	.25	.11	.16	.60	43	11
23	51	14	2.0	1.6	.99	.66	.24	.12	.14	.63	41	8.7
24	42	11	1.9	1.5	1.0	.59	.23	.14	.13	.66	34	7.0
25	31	9.8	1.9	1.5	.98	.55	.22	.16	.12	.68	27	6.2
26	18	11	1.8	1.4	.92	.52	.21	.16	.11	.75	38	20
27	12	26	1.8	1.3	.86	.48	.20	.16	.11	.90	40	18
28	8.1	26	1.8	1.1	.81	.44	.19	.18	.10	1.5	44	36
29	5.9	19	1.7	1.1	.75	.41	.18	.19	.12	5.3	50	25
30	4.2	14	1.6	1.0	---	.38	.19	.20	.11	11	58	14
31	3.2	---	1.6	.98	---	.36	---	.21	---	9.5	64	---
TOTAL	---	1555.9	129.1	47.88	26.92	18.46	8.18	3.75	4.99	36.42	954.4	1736.9
MEAN	---	51.9	4.16	1.54	.93	.60	.27	.12	.17	1.17	30.8	57.9
MAX	---	237	11	2.0	1.1	.88	.34	.21	.23	11	64	116
MIN	---	4.1	1.6	.98	.75	.36	.18	.06	.10	.09	4.7	6.2
AC-FT	---	3090	256	95	53	37	16	7.4	9.9	72	1890	3450

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291597 SOUTH BRANCH ESTERO RIVER AT ESTERO, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	4.37	4.72	3.87	3.71	3.59	3.44	3.48	3.40	3.44	4.60	6.87
2	---	4.98	4.67	3.87	3.70	3.57	3.43	3.46	3.39	3.52	4.38	7.06
3	---	6.42	4.64	3.90	3.68	3.55	3.42	3.45	3.37	3.53	4.21	7.07
4	---	8.50	4.59	3.91	3.67	3.54	3.42	3.45	3.37	3.52	4.26	7.34
5	---	8.09	4.52	3.90	3.67	3.54	3.41	3.45	3.38	3.52	4.30	6.99
6	---	7.25	4.43	3.87	3.66	3.59	3.41	3.44	3.38	3.52	4.24	6.77
7	---	6.61	4.39	3.86	3.63	3.60	3.40	3.44	3.41	3.54	4.18	6.73
8	---	6.23	4.38	3.86	3.67	3.57	3.39	3.42	3.41	3.54	4.47	7.16
9	---	5.97	4.38	3.86	3.73	3.55	3.39	3.42	3.40	3.55	4.42	7.14
10	---	6.20	4.36	3.88	3.72	3.54	3.33	3.42	3.39	3.54	4.40	7.18
11	---	5.98	4.33	3.96	3.71	3.53	3.40	3.42	3.41	3.53	4.72	6.84
12	---	5.67	4.29	3.95	3.70	3.51	3.41	3.40	3.46	3.52	5.18	6.35
13	---	5.38	4.25	3.93	3.68	3.50	3.41	3.40	3.43	3.53	5.23	6.24
14	8.71	5.27	4.21	3.92	3.67	3.49	3.42	3.40	3.43	3.54	---	5.97
15	8.01	5.12	4.17	3.91	3.67	3.46	3.42	3.40	3.39	3.58	---	5.81
16	7.48	4.99	4.17	3.89	3.73	3.44	3.41	3.39	3.38	3.58	---	5.68
17	7.17	4.87	4.09	3.88	3.73	3.44	3.41	3.40	3.39	3.57	---	5.49
18	6.92	4.89	4.00	3.87	3.72	3.43	3.41	3.39	3.39	3.57	---	5.39
19	6.68	4.92	3.98	3.85	3.71	3.70	3.42	3.39	3.39	3.57	---	5.28
20	6.42	5.16	4.00	3.84	3.71	3.71	3.43	3.38	3.41	3.58	---	5.11
21	6.11	5.05	3.99	3.84	3.72	3.68	3.43	3.38	3.46	3.63	---	4.85
22	5.98	4.88	3.97	3.89	3.72	3.65	3.43	3.39	3.46	3.65	5.38	4.73
23	5.72	4.78	3.95	3.87	3.70	3.62	3.44	3.39	3.44	3.65	5.36	4.62
24	5.45	4.70	3.93	3.85	3.71	3.59	3.44	3.40	3.44	3.65	5.24	4.52
25	5.22	4.66	3.92	3.85	3.69	3.57	3.44	3.42	3.44	3.64	5.19	4.45
26	5.03	4.69	3.92	3.84	3.67	3.55	3.44	3.40	3.43	3.66	5.41	4.79
27	4.91	4.98	3.91	3.80	3.65	3.53	3.44	3.40	3.43	3.70	5.54	4.69
28	4.73	4.97	3.91	3.77	3.63	3.51	3.44	3.40	3.42	3.82	5.71	4.90
29	4.58	4.87	3.90	3.75	3.60	3.49	3.44	3.40	3.46	4.26	5.94	4.74
30	4.41	4.78	3.88	3.74	---	3.47	3.46	3.39	3.46	4.65	6.17	4.57
31	4.31	---	3.87	3.72	---	3.45	---	3.40	---	4.57	6.38	---
MEAN	---	5.51	4.18	3.86	3.69	3.55	3.42	3.41	3.41	3.67	---	5.84
MAX	---	8.50	4.72	3.96	3.73	3.71	3.46	3.48	3.46	4.65	---	7.34
MIN	---	4.37	3.87	3.72	3.60	3.43	3.39	3.38	3.37	3.44	---	4.45

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 poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,830 ft³/s Aug. 11, gage height, 7.95 ft; no flow many days.DISCHARGE, IN 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			---	.01	.01	.00	.00	e.00	.00	.00	.13	321
2			---	.01	.00	.00	.00	e.00	.00	.00	1.1	238
3			---	.02	.00	.00	.00	e.00	.00	.00	3.5	173
4			---	.02	.00	.00	.00	e.00	.00	.00	5.2	133
5			---	.01	.00	.00	.00	e.00	.00	.00	11	94
6			---	.01	.00	.01	.00	e.00	.00	.00	18	82
7			---	.01	.00	.00	.00	e.00	.00	.00	27	78
8			---	.01	.06	.00	.00	e.00	.00	.00	31	87
9			---	.01	.30	.00	.00	e.00	.00	.00	24	99
10			---	.04	.30	.00	.00	e.00	.00	.00	25	95
11			---	.12	.21	.00	.00	e.00	.00	.00	569	80
12			---	.13	.14	.00	.00	e.00	.00	.00	697	68
13			---	.10	.08	.00	.00	.00	.00	.00	250	50
14			---	.03	.04	.00	.00	.00	.00	.00	82	8.4
15			.74	.01	.06	.00	.00	.00	.00	.00	40	6.1
16			1.2	.01	.08	.00	e.00	.00	.00	.00	27	9.1
17			.93	.00	.06	.00	e.00	.00	.00	.00	35	7.1
18			.66	.00	.04	.00	e.00	.00	.00	.00	35	5.6
19			.54	.00	.03	.06	e.00	.00	.00	.00	33	4.3
20			.41	.00	.03	.10	e.00	.00	.00	.00	36	4.6
21			.32	.13	.02	.10	e.00	.00	.00	.00	28	3.8
22			.25	.35	.01	.06	e.00	.00	.00	.00	20	2.6
23			.20	.59	.01	.03	e.00	.00	.00	.00	15	1.2
24			.13	.51	.01	.01	e.00	.00	.00	.16	11	.80
25			.10	.39	.00	.01	e.00	.00	.00	.40	11	2.4
26			.08	.21	.00	.00	e.00	.00	.00	.20	26	20
27			.06	.12	.00	.00	e.00	.00	.00	.16	309	16
28			.05	.04	.00	.00	e.00	.00	.00	.21	500	17
29			.02	.02	.00	.00	e.00	.00	.00	.49	568	25
30			.01	.01	---	.00	e.00	.00	.00	.57	478	35
31			.01	.01	---	.00	---	.00	---	.25	370	---
TOTAL			---	2.93	1.49	.38	.00	.00	.00	2.44	4285.93	1767.00
MEAN			---	.095	.051	.012	.000	.000	.000	.079	138	58.9
MAX			---	.59	.30	.10	.00	.00	.00	.57	697	321
MIN			---	.00	.00	.00	.00	.00	.00	.00	.13	.80
AC-FT			---	5.8	3.0	.8	.00	.00	.00	4.8	8500	3500

e Estimated

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291669 SIXMILE CYPRESS CREEK NORTH NEAR FORT MYERS, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	5.51	5.52	5.47	5.45	---	4.53	5.43	5.54	6.76
2			---	5.51	5.51	5.47	5.45	---	4.53	5.44	5.60	6.63
3			---	5.52	5.50	5.47	5.44	---	4.53	5.44	5.69	6.50
4			---	5.51	5.50	5.47	5.44	---	4.53	5.41	5.73	6.40
5			---	5.50	5.50	5.48	5.43	---	4.52	5.40	5.79	6.29
6			---	5.50	5.48	5.49	5.42	---	4.52	5.39	5.86	6.25
7			---	5.51	5.48	5.49	5.40	---	4.53	5.44	5.90	6.24
8			---	5.51	5.54	5.49	5.38	---	4.53	5.46	5.95	6.27
9			---	5.50	5.58	5.49	5.37	---	4.53	5.46	5.91	6.30
10			---	5.51	5.58	5.49	5.35	---	4.52	5.46	5.91	6.29
11			---	5.55	5.57	5.49	5.33	---	4.61	5.46	6.84	6.24
12			---	5.57	5.56	5.48	5.31	---	4.55	5.46	7.16	6.20
13			---	5.57	5.54	5.49	5.33	5.07	4.56	5.45	6.59	6.10
14			---	5.55	5.53	5.47	5.31	4.82	4.55	5.46	6.21	5.82
15			5.60	5.54	5.54	5.46	5.31	4.74	4.55	5.47	6.03	5.79
16			5.62	5.53	5.55	5.45	---	4.69	4.54	5.46	5.96	5.84
17			5.61	5.52	5.54	5.45	---	4.68	4.54	5.46	6.01	5.81
18			5.59	5.52	5.53	5.50	---	4.66	4.54	5.47	6.00	5.78
19			5.59	5.51	5.53	5.53	---	4.63	4.65	5.47	5.99	5.76
20			5.58	5.51	5.53	5.54	---	4.60	4.57	5.46	6.01	5.77
21			5.57	5.53	5.52	5.54	---	4.57	4.66	5.47	5.96	5.75
22			5.56	5.59	5.51	5.53	---	4.54	4.97	5.47	5.90	5.72
23			5.55	5.61	5.51	5.52	---	4.53	5.15	5.47	5.86	5.67
24			5.55	5.60	5.50	5.51	---	4.52	5.29	5.51	5.81	5.65
25			5.54	5.59	5.49	5.50	---	4.59	5.37	5.57	5.82	5.68
26			5.53	5.58	5.48	5.49	---	4.52	5.42	5.56	5.94	5.93
27			5.53	5.56	5.48	5.48	---	4.51	5.45	5.55	6.61	5.88
28			5.53	5.54	5.48	5.48	---	4.50	5.45	5.55	6.95	5.89
29			5.51	5.53	5.48	5.47	---	4.50	5.44	5.58	7.06	5.95
30			5.50	5.53	---	5.46	---	4.50	5.44	5.59	6.96	6.00
31			5.51	5.52	---	5.46	---	4.52	---	5.56	6.83	---
MEAN			---	5.54	5.52	5.49	---	---	4.79	5.48	6.14	6.04
MAX			---	5.61	5.58	5.54	---	---	5.45	5.59	7.16	6.76
MIN			---	5.50	5.48	5.45	---	---	4.52	5.39	5.54	5.65

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.--No estimated daily discharges. Records poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.9 ft³/s Aug. 28, gage height, 6.93 ft; no flow for many days.

DISCHARGE, IN 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		---	.53	.12	.13	.06	.04	.00	.00	.03	.09	1.6
2		---	.51	.12	.13	.06	.03	.00	.00	.03	.13	1.4
3		---	.49	.13	.12	.06	.03	.00	.00	.04	.20	1.2
4		---	.42	.12	.12	.06	.02	.00	.00	.01	.21	1.1
5		---	.39	.11	.11	.06	.02	.00	.00	.00	.21	.94
6		---	.42	.12	.10	.08	.01	.00	.00	.00	.24	.88
7		---	.34	.12	.09	.07	.00	.00	.00	.03	.28	.84
8		---	.29	.13	.16	.07	.00	.00	.00	.05	.37	.82
9		---	.37	.11	.21	.07	.00	.00	.00	.05	.34	.87
10		---	.35	.13	.22	.08	.00	.00	.00	.05	.39	.85
11		---	.33	.18	.20	.07	.00	.00	.00	.04	1.1	.76
12		---	.32	.21	.19	.07	.00	.00	.00	.04	1.7	.71
13		---	.30	.20	.17	.07	.00	.00	.00	.03	1.2	.51
14		---	.27	.17	.16	.06	.00	.00	.00	.03	.78	.00
15		---	.27	.16	.16	.04	.00	.00	.00	.04	.60	.12
16		---	.27	.15	.17	.04	.00	.00	.00	.03	.52	.37
17		---	.25	.14	.16	.03	.00	.00	.00	.03	.59	.36
18		.01	.23	.13	.14	.04	.00	.00	.00	.05	.60	.35
19		.15	.21	.13	.12	.11	.00	.00	.00	.03	.59	.35
20		.10	.19	.13	.12	.13	.00	.00	.00	.02	.61	.38
21		.02	.18	.16	.11	.13	.00	.00	.00	.02	.55	.38
22		.00	.18	.24	.10	.12	.00	.00	.00	.03	.46	.28
23		.00	.17	.25	.10	.11	.00	.00	.00	.03	.40	.17
24		.00	.16	.24	.09	.10	.00	.00	.00	.07	.36	.16
25		.00	.16	.23	.08	.09	.00	.00	.00	.16	.39	.19
26		.91	.15	.20	.07	.08	.00	.00	.02	.13	.48	.41
27		.67	.14	.19	.07	.07	.00	.00	.06	.13	1.3	.35
28		.67	.13	.17	.07	.06	.00	.00	.06	.13	1.9	.37
29		.63	.12	.15	.06	.06	.00	.00	.05	.16	1.8	.41
30		.58	.11	.15	---	.05	.00	.00	.04	.16	1.8	.44
31		---	.12	.14	---	.04	---	.00	---	.12	1.6	---
TOTAL		---	8.37	4.93	3.73	2.24	.15	.00	.23	1.77	21.79	17.57
MEAN		---	.27	.16	.13	.072	.005	.000	.008	.057	.70	.59
MAX		---	.53	.25	.22	.13	.04	.00	.06	.16	1.9	1.6
MIN		---	.11	.11	.06	.03	.00	.00	.00	.00	.09	.00
AC-FT		---	17	9.8	7.4	4.4	.3	.00	.5	3.5	43	35

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291670 SIX MILE CYPRESS CREEK SOUTH NEAR FT. MYERS, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	5.75	5.50	5.51	5.46	5.44	5.09	4.64	5.44	5.48	6.31
2		---	5.74	5.50	5.51	5.46	5.44	5.07	4.62	5.44	5.51	6.21
3		---	5.73	5.51	5.50	5.46	5.44	5.04	4.60	5.44	5.55	6.12
4		---	5.69	5.50	5.50	5.46	5.43	5.01	4.58	5.42	5.56	6.06
5		---	5.67	5.50	5.50	5.46	5.43	4.99	4.55	5.41	5.56	5.98
6		---	5.69	5.50	5.49	5.47	5.42	4.97	4.44	5.39	5.58	5.95
7		---	5.64	5.50	5.48	5.47	5.40	4.94	4.03	5.43	5.60	5.92
8		---	5.61	5.51	5.52	5.47	5.39	4.92	3.91	5.45	5.66	5.91
9		---	5.60	5.50	5.56	5.47	5.38	4.89	3.89	5.45	5.64	5.94
10		---	5.59	5.51	5.57	5.48	5.37	4.87	3.89	5.45	5.67	5.93
11		---	5.58	5.54	5.56	5.47	5.35	4.86	4.10	5.45	6.07	5.88
12		---	5.58	5.56	5.55	5.47	5.33	4.85	4.09	5.44	6.38	5.85
13		---	5.58	5.55	5.53	5.47	5.32	4.85	3.93	5.44	6.10	5.72
14		---	5.57	5.54	5.53	5.46	5.30	4.89	3.92	5.44	5.89	5.15
15		---	5.57	5.53	5.53	5.45	5.28	4.88	3.90	5.44	5.79	5.31
16		---	5.58	5.52	5.54	5.45	5.26	4.86	3.89	5.44	5.74	5.66
17		---	5.57	5.52	5.53	5.44	5.24	4.85	3.89	5.44	5.79	5.65
18		5.42	5.56	5.51	5.51	5.44	5.22	4.84	3.88	5.45	5.79	5.65
19		5.51	5.55	5.51	5.50	5.49	5.21	4.83	4.11	5.44	5.78	5.64
20		5.49	5.55	5.51	5.50	5.51	5.22	4.81	4.52	5.43	5.80	5.67
21		5.43	5.54	5.53	5.50	5.51	5.21	4.79	4.75	5.43	5.76	5.67
22		5.36	5.54	5.58	5.49	5.50	5.20	4.76	4.97	5.44	5.71	5.65
23		5.29	5.53	5.58	5.49	5.49	5.18	4.75	5.16	5.44	5.68	5.61
24		5.17	5.53	5.58	5.48	5.49	5.17	4.73	5.29	5.47	5.65	5.61
25		5.05	5.53	5.57	5.47	5.48	5.15	4.74	5.38	5.53	5.67	5.62
26		5.96	5.52	5.56	5.47	5.48	5.14	4.74	5.42	5.51	5.72	5.76
27		5.83	5.52	5.55	5.47	5.47	5.11	4.72	5.46	5.51	6.15	5.72
28		5.83	5.51	5.53	5.47	5.46	5.08	4.70	5.46	5.51	6.44	5.73
29		5.81	5.50	5.52	5.46	5.46	5.05	4.69	5.45	5.53	6.44	5.75
30		5.78	5.49	5.52	---	5.45	5.05	4.68	5.45	5.53	6.42	5.77
31		---	5.50	5.52	---	5.45	---	4.66	---	5.50	6.34	---
MEAN		---	5.58	5.53	5.51	5.47	5.27	4.85	4.54	5.46	5.84	5.78
MAX		---	5.75	5.58	5.57	5.51	5.44	5.09	5.46	5.53	6.44	6.31
MIN		---	5.49	5.50	5.46	5.44	5.05	4.66	3.88	5.39	5.48	5.15

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.--No estimated daily discharges. Records poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 502 ft³/s, Aug. 11, gage height 6.15 ft; many days of no flow; minimum gage height, 3.04 ft June 8.

DISCHARGE, IN 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			---	5.6	8.4	3.9	1.8	.00	.00	.52	8.8	218
2			---	5.6	7.2	3.6	1.5	.00	.00	.94	15	201
3			---	7.1	7.2	2.9	1.0	.00	.00	.75	24	200
4			---	7.2	6.4	2.0	1.1	.00	.00	.28	27	179
5			---	7.2	7.2	2.8	1.2	.00	.00	.23	31	146
6			---	7.2	6.4	4.0	.86	.00	---	.21	37	125
7			---	7.2	5.6	3.6	.51	.00	---	1.0	44	117
8			---	8.4	5.6	3.2	.26	.00	---	1.6	59	79
9			18	9.0	6.5	1.9	.22	.00	---	1.3	57	87
10			10	9.0	7.2	3.1	.19	.00	---	1.3	65	88
11			4.3	9.0	7.2	2.9	.16	.00	---	1.0	236	72
12			4.3	9.0	7.2	2.7	.11	.00	---	.85	301	64
13			5.5	9.9	6.8	2.3	.05	.00	---	.52	212	---
14			5.6	11	5.6	2.5	.01	.00	---	.70	139	---
15			5.6	11	4.9	1.7	.00	.00	---	1.1	102	1.8
16			5.6	11	4.3	1.3	.00	.00	---	.49	91	13
17			5.6	11	4.9	1.0	.00	.00	---	.74	112	12
18			6.7	11	8.4	.93	.00	.00	---	1.3	116	12
19			7.2	12	11	6.3	.00	.00	---	1.0	113	12
20			7.2	11	10	7.5	.00	.00	.00	.78	107	16
21			6.6	8.8	12	7.2	.00	.00	.00	1.2	89	17
22			5.6	11	8.4	6.4	.00	.00	.00	1.0	66	13
23			6.3	11	8.1	5.5	.00	.00	.00	1.1	53	4.9
24			7.2	11	7.3	5.3	.00	.00	.02	7.0	46	6.5
25			7.2	12	7.0	4.8	.00	.00	.19	15	54	9.7
26			7.2	11	6.6	4.2	.00	.00	1.1	12	76	49
27			7.2	9.0	4.8	3.7	.00	.00	2.3	11	205	38
28			6.7	9.0	4.2	3.1	.00	.00	1.7	12	302	43
29			6.7	9.0	4.1	2.7	.00	.00	1.3	17	311	50
30			5.6	9.0	---	2.3	.00	.00	1.0	16	291	54
31			5.6	9.0	---	2.0	---	.00	---	11	249	---
TOTAL			---	289.2	200.5	107.33	8.97	.00	---	120.91	3638.8	---
MEAN			---	9.33	6.91	3.46	.30	.00	---	3.90	117	---
MAX			---	12	12	7.5	1.8	.00	---	17	311	---
MIN			---	5.6	4.1	.93	.00	.00	---	.21	8.8	---

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

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02291673 TENMILE CANAL AT CONTROL NEAR ESTERO, FL

GAGE HEIGHT (FEET ABOVE DATUM) WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	5.56	5.54	5.52	5.51	5.16	4.71	5.50	5.57	5.98
2			---	5.56	5.53	5.51	5.50	5.15	4.69	5.50	5.59	5.96
3			---	5.56	5.53	5.51	5.50	5.12	4.67	5.50	5.63	5.96
4			---	5.56	5.52	5.51	5.49	5.09	4.65	5.48	5.64	5.94
5			---	5.56	5.52	5.52	5.49	5.06	4.62	5.46	5.65	5.91
6			---	5.56	5.51	5.53	5.48	5.04	3.80	5.45	5.67	5.89
7			---	5.56	5.51	5.52	5.47	5.01	3.17	5.50	5.68	5.87
8			---	5.56	5.51	5.52	5.45	4.99	3.05	5.51	5.72	5.82
9			5.61	5.56	5.52	5.52	5.44	4.97	3.25	5.51	5.72	5.83
10			5.60	5.56	5.52	5.53	5.42	4.95	3.44	5.51	5.73	5.84
11			5.59	5.56	5.52	5.53	5.41	4.93	3.60	5.51	5.93	5.82
12			5.59	5.56	5.52	5.53	5.40	4.92	3.81	5.50	6.01	5.80
13			5.59	5.56	5.52	5.52	5.39	4.92	3.88	5.50	5.93	5.29
14			5.59	5.56	5.51	5.52	5.37	4.97	3.94	5.50	5.85	3.21
15			5.59	5.56	5.50	5.51	5.35	4.95	3.95	5.51	5.81	5.11
16			5.59	5.56	5.50	5.51	5.33	4.93	3.98	5.49	5.79	5.68
17			5.59	5.56	5.50	5.51	5.31	4.92	4.03	5.50	5.83	5.68
18			5.59	5.56	5.53	5.50	5.28	4.92	4.06	5.51	5.84	5.67
19			5.59	5.56	5.54	5.55	5.27	4.90	4.21	5.50	5.83	5.67
20			5.59	5.55	5.54	5.55	5.29	4.88	4.58	5.50	5.82	5.70
21			5.59	5.54	5.54	5.55	5.27	4.86	4.82	5.51	5.80	5.71
22			5.58	5.55	5.54	5.55	5.26	4.84	5.04	5.51	5.76	5.69
23			5.58	5.55	5.53	5.54	5.24	4.82	5.23	5.51	5.74	5.64
24			5.58	5.55	5.53	5.54	5.23	4.81	5.36	5.54	5.73	5.65
25			5.58	5.55	5.53	5.53	5.22	4.82	5.44	5.60	5.74	5.65
26			5.58	5.55	5.53	5.53	5.20	4.82	5.49	5.58	5.78	5.78
27			5.58	5.54	5.52	5.53	5.18	4.80	5.52	5.58	5.95	5.75
28			5.58	5.54	5.52	5.52	5.16	4.77	5.52	5.58	6.05	5.76
29			5.57	5.54	5.52	5.52	5.13	4.76	5.51	5.60	6.05	5.78
30			5.56	5.54	---	5.51	5.12	4.75	5.50	5.60	6.04	5.77
31			5.56	5.54	---	5.51	---	4.73	---	5.58	6.00	---
MEAN			---	5.55	5.52	5.52	5.34	4.92	4.45	5.52	5.80	5.66
MAX			---	5.56	5.54	5.55	5.51	5.16	5.52	5.60	6.05	5.98
MIN			---	5.54	5.50	5.50	5.12	4.73	3.05	5.45	5.57	3.21

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291736 MAIN LAKE OUTLET NEAR FORT MYERS, FL

LOCATION.--Lat 26°31'38", long 81°52'59", in SW¼ sec.26, T.45 S., R.24 E., Lee County, Hydrologic Unit 03090204, at lake outlet weir structure, 0.7 mi west of U.S. Highway 41 and 5.0 mi south of 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.--No estimated daily stages.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.54 ft Nov. 3 and 4; minimum, 0.20 ft June 5 and 13.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	1.20	.52	.47	.42	.46	.79	.42	.35	.43	1.58
2		---	1.04	.60	.49	.44	.45	.37	.43	.34	.51	1.60
3		2.26	.94	.60	.48	.53	.47	.40	.48	.35	.48	1.50
4		2.53	.98	.62	.49	.58	.51	.46	.42	.68	.41	1.45
5		2.51	.92	.48	.48	.46	.47	.39	.31	.37	.60	1.56
6		2.40	.81	.46	.41	.44	.45	.33	.37	.36	.62	1.61
7		2.04	.80	.53	.41	.42	.36	.32	.42	.34	.60	1.48
8		1.77	.84	.55	.44	.42	.39	.29	.52	.62	1.33	1.63
9		1.57	.80	.48	.46	.53	.36	.30	.59	.80	2.34	1.56
10		1.43	.76	.46	.49	.47	.41	.32	.50	.66	2.09	1.41
11		1.28	.71	.46	.52	.41	.56	.34	.34	.62	2.26	1.29
12		.98	.72	.48	.45	.43	.68	.38	.26	.58	2.48	1.23
13		.76	.70	.48	.44	.45	.41	.35	.28	.81	2.37	1.18
14		.77	.68	.45	.48	.39	.40	.39	.34	.67	2.18	1.19
15		.84	.71	.43	.62	.36	.45	.43	.33	.51	1.82	1.28
16		.91	1.12	.48	.62	.36	.51	.46	.38	.49	1.98	1.16
17		.96	.98	.56	.54	.37	.44	.47	.39	.47	2.13	1.06
18		1.32	.77	.65	.53	.55	.70	.46	.34	.38	2.08	1.05
19		1.41	.75	.78	.72	.54	.70	.44	.36	.35	1.95	1.04
20		1.62	.80	.81	.76	.39	.45	.37	.36	.31	1.81	1.02
21		1.33	.80	.93	.51	.39	.43	.34	.35	.28	1.69	.96
22		1.04	.79	.67	.44	.39	.34	.29	.40	.30	1.57	.99
23		1.05	.75	.60	.51	.43	.37	.28	.39	.32	1.71	1.05
24		.95	.72	.54	.41	.40	.33	.27	.43	.30	1.37	1.04
25		1.05	.69	.61	.40	.37	.30	.26	.40	.37	1.36	1.06
26		1.40	.64	.63	.39	.37	.39	.40	.45	.57	1.38	1.13
27		1.94	.62	.56	.39	.37	.37	.29	.58	.78	1.37	1.10
28		1.78	.64	.47	.44	.37	.33	.31	.60	.81	1.44	1.05
29		1.62	.62	.44	.44	.37	.27	.33	.55	.75	1.55	1.02
30		1.37	.52	.43	---	.38	.49	.34	.56	.62	1.76	.99
31		---	.51	.42	---	.40	---	.36	---	.51	1.62	---
MEAN		---	.78	.55	.49	.43	.44	.37	.42	.51	1.53	1.24
MAX		---	1.20	.93	.76	.58	.70	.79	.60	.81	2.48	1.63
MIN		---	.51	.42	.39	.36	.27	.26	.26	.28	.41	.96

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 discharges. 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.--50 years, 888 ft³/s, 643,000 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, 4,540 ft³/s Apr. 1; maximum gage height, 12.13 ft Nov. 6; lock closed and flow consists of leakage and lockage estimated as 5.0 ft³/s for many days; minimum gage height, 9.81 ft June 23.

DISCHARGE, IN 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	5.0	5.0	5.0	5.0	5.0	1620	4540	5.0	5.0	5.0	5.0	5.0
2	5.0	5.0	5.0	5.0	5.0	1110	4230	5.0	109	5.0	5.0	5.0
3	5.0	5.0	5.0	5.0	5.0	600	3590	5.0	392	5.0	5.0	5.0
4	5.0	5.0	5.0	5.0	5.0	479	2780	5.0	428	5.0	5.0	5.0
5	5.0	5.0	5.0	5.0	43	237	1970	189	779	5.0	5.0	5.0
6	5.0	5.0	5.0	5.0	199	5.0	1150	415	5.0	5.0	5.0	5.0
7	5.0	5.0	5.0	5.0	5.0	5.0	661	669	5.0	5.0	5.0	5.0
8	5.0	5.0	5.0	5.0	5.0	5.0	575	550	5.0	5.0	5.0	5.0
9	5.0	5.0	5.0	5.0	5.0	1140	245	543	5.0	5.0	5.0	5.0
10	5.0	5.0	5.0	5.0	5.0	3060	448	537	5.0	5.0	5.0	5.0
11	5.0	5.0	5.0	5.0	5.0	3490	303	532	5.0	5.0	5.0	5.0
12	5.0	5.0	5.0	5.0	5.0	2660	225	469	5.0	5.0	5.0	5.0
13	5.0	5.0	5.0	5.0	5.0	2370	226	367	5.0	5.0	5.0	5.0
14	5.0	5.0	5.0	5.0	5.0	1650	230	5.0	5.0	5.0	5.0	5.0
15	5.0	5.0	5.0	5.0	5.0	1410	469	5.0	387	5.0	5.0	5.0
16	5.0	5.0	5.0	5.0	5.0	968	1200	5.0	586	5.0	5.0	364
17	5.0	5.0	5.0	5.0	5.0	567	370	5.0	734	5.0	5.0	291
18	5.0	5.0	5.0	5.0	5.0	513	5.0	5.0	619	5.0	5.0	5.0
19	5.0	5.0	5.0	5.0	5.0	5.0	168	116	514	5.0	5.0	5.0
20	5.0	5.0	5.0	5.0	5.0	5.0	54	306	486	5.0	5.0	155
21	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	75	5.0	5.0	589
22	5.0	5.0	5.0	5.0	5.0	526	5.0	5.0	5.0	5.0	5.0	141
23	5.0	5.0	5.0	5.0	5.0	2640	5.0	235	5.0	5.0	5.0	5.0
24	5.0	5.0	5.0	5.0	776	3860	5.0	584	5.0	5.0	5.0	150
25	5.0	5.0	5.0	5.0	2540	3270	5.0	508	5.0	5.0	5.0	286
26	5.0	5.0	5.0	5.0	3350	2570	395	169	69	5.0	5.0	62
27	5.0	5.0	5.0	81	2840	1960	551	56	321	5.0	5.0	446
28	5.0	5.0	5.0	603	2260	1560	551	314	86	5.0	5.0	578
29	5.0	5.0	5.0	195	1890	1110	550	316	5.0	5.0	5.0	493
30	5.0	5.0	5.0	5.0	---	1640	455	89	5.0	5.0	5.0	344
31	5.0	---	5.0	5.0	---	3760	---	5.0	---	5.0	5.0	---
TOTAL	155.0	150.0	155.0	1019.0	14003.0	44800.0	25966.0	7024.0	5665.0	155.0	155.0	3989.0
MEAN	5.0	5.0	5.0	32.9	483	1445	866	227	189	5.0	5.0	133
MAX	5.0	5.0	5.0	603	3350	3860	4540	669	779	5.0	5.0	589
MIN	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
AC-FT	307	298	307	2020	27770	88860	51500	13930	11240	307	307	7910

CAL YR 1987	TOTAL	54319.0	MEAN 149	MAX 4090	MIN 5.0	AC-FT 107700
WTR YR 1988	TOTAL	103236.0	MEAN 282	MAX 4540	MIN 5.0	AC-FT 204800

CALOOSAHATCHEE RIVER

02292000 CALOOSAHATCHEE CANAL AT MOORE HAVEN, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.27	11.31	11.30	11.16	11.30	11.05	11.45	11.19	11.09	11.28	11.24	11.03
2	11.07	11.01	11.33	11.20	11.20	10.99	11.39	11.01	10.84	11.25	11.19	10.92
3	11.09	11.21	11.14	11.26	11.03	10.97	11.22	11.12	10.92	11.11	11.05	10.91
4	11.14	11.16	10.96	11.33	10.90	10.97	11.04	11.22	10.97	11.25	11.08	10.94
5	11.27	11.00	11.09	11.29	10.87	11.29	11.19	11.13	10.99	11.12	11.27	11.09
6	11.36	11.68	11.19	11.23	11.14	11.34	11.17	11.07	11.08	11.14	10.93	10.95
7	11.22	11.53	11.20	11.15	11.21	11.14	11.06	11.14	10.99	11.13	11.01	11.07
8	11.15	11.44	11.18	11.15	11.36	11.05	11.05	11.01	11.18	11.19	11.08	11.12
9	11.08	11.11	11.17	11.26	11.43	11.18	11.08	11.10	11.18	11.37	11.12	11.06
10	11.15	11.15	11.23	11.48	11.31	11.46	11.04	11.09	11.09	11.40	11.28	11.06
11	11.38	11.11	11.19	11.52	11.10	11.35	11.10	11.14	10.97	11.25	11.17	10.95
12	11.49	11.22	11.15	11.40	11.15	11.13	11.09	11.18	11.05	11.12	10.94	10.85
13	11.39	10.89	11.21	11.15	11.34	11.24	11.13	11.19	10.93	10.96	10.93	10.92
14	11.21	10.97	11.20	11.12	11.41	11.18	11.12	11.15	10.82	11.03	10.87	10.65
15	11.11	11.26	11.20	11.08	11.42	10.98	11.07	11.04	10.86	11.09	11.08	10.63
16	10.94	11.38	11.17	11.00	11.08	11.04	11.05	11.04	10.98	11.01	11.23	10.73
17	10.99	11.23	11.30	11.07	11.00	11.07	11.26	11.07	10.95	11.05	11.07	11.10
18	10.90	11.25	11.41	11.14	11.16	11.13	11.16	11.11	11.11	11.05	11.11	11.15
19	10.91	11.26	11.48	11.06	11.24	11.32	11.03	11.03	11.09	11.07	11.27	11.10
20	11.27	11.38	11.47	11.11	11.34	11.04	11.23	11.21	11.23	11.01	11.06	10.92
21	11.39	11.03	11.48	11.26	11.42	11.08	11.32	11.17	11.33	11.12	10.83	11.01
22	11.11	11.14	11.46	11.29	11.35	11.20	11.28	11.19	11.37	10.99	11.12	11.20
23	11.24	10.85	11.32	11.26	11.13	11.34	11.19	11.02	11.16	11.21	11.16	11.16
24	11.36	11.04	11.21	11.18	11.09	11.30	11.09	11.05	11.06	11.09	11.00	10.93
25	11.19	11.23	11.25	11.13	11.21	11.27	11.00	11.19	11.12	11.13	11.16	10.97
26	11.20	11.33	11.37	11.10	11.13	10.98	10.94	11.24	11.00	10.93	11.06	10.95
27	11.14	11.37	11.42	10.93	11.00	11.14	11.19	11.28	11.02	10.95	11.23	10.96
28	11.38	11.17	11.47	10.95	11.12	11.11	11.11	11.16	11.25	10.94	10.97	11.01
29	11.45	11.25	11.39	11.38	11.15	10.93	11.01	11.15	11.25	11.29	11.14	11.16
30	11.35	11.08	11.22	11.47	---	10.95	11.10	11.39	11.08	10.91	11.05	11.16
31	11.24	---	11.09	11.38	---	11.33	---	11.46	---	10.99	11.08	---
MEAN	11.21	11.20	11.27	11.21	11.19	11.15	11.14	11.15	11.07	11.11	11.09	10.99
MAX	11.49	11.68	11.48	11.52	11.43	11.46	11.45	11.46	11.37	11.40	11.28	11.20
MIN	10.90	10.85	10.96	10.93	10.87	10.93	10.94	11.01	10.82	10.91	10.83	10.63

CAL YR 1987 MEAN 11.14 MAX 11.68 MIN 10.72
WTR YR 1988 MEAN 11.15 MAX 11.68 MIN 10.63

CALOOSAHATCHEE RIVER

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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.--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.--17 years, 796 ft³/s, 576,700 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, 4,890 ft³/s Oct. 13; maximum gage height, 12.13 ft Nov. 6; minimum daily discharge, 0.10 ft³/s Oct. 8; minimum gage height, 10.19 ft July 20, Sept. 4.

DISCHARGE, IN 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	1210	729	795	18	407	1500	4190	303	331	51	430	1160
2	1230	1180	837	24	405	1210	4030	406	6.1	357	579	917
3	374	2370	928	14	375	671	3470	370	12	342	549	752
4	172	3500	608	43	61	248	2520	378	99	232	405	383
5	7.2	2250	402	192	47	192	1620	375	335	148	573	301
6	12	3090	409	195	195	488	1010	310	485	64	541	671
7	13	2920	406	146	196	555	470	338	625	185	300	514
8	.10	2920	405	8.0	410	410	156	408	451	245	482	886
9	13	2530	405	15	790	1070	164	196	587	650	723	1090
10	15	2210	408	79	793	2840	358	205	560	1700	849	797
11	410	1850	401	626	632	3590	196	193	269	1970	2320	795
12	3600	1510	250	796	287	2800	167	198	284	1650	2330	542
13	4890	1220	192	625	200	2220	15	195	355	704	1850	398
14	3630	249	189	401	192	2030	10	196	61	397	1190	375
15	3410	228	195	401	402	1420	375	181	56	401	659	9.4
16	2220	471	143	245	663	828	596	15	195	410	976	6.0
17	1520	524	7.2	191	275	409	186	17	197	408	1090	16
18	1240	527	9.9	196	200	382	20	99	256	565	859	13
19	953	988	46	171	199	957	14	193	412	502	1220	e8.9
20	400	3000	198	12	202	732	20	199	259	795	1510	e6.8
21	662	2410	188	83	258	411	23	75	55	1100	974	e7.8
22	664	1640	186	403	493	605	24	24	269	1360	553	e7.2
23	14	1310	191	404	594	2550	25	131	386	1960	789	e87
24	285	769	168	410	971	3490	18	192	152	2140	271	e192
25	325	768	3.7	317	2410	3500	19	286	23	1920	310	e152
26	191	1200	19	193	3520	2010	19	131	18	1930	662	e8.6
27	95	2290	23	82	2990	1520	184	267	17	1510	1380	e131
28	18	2040	58	194	2130	1520	386	232	125	963	1380	e189
29	151	1430	194	193	1790	1120	201	123	405	1250	1510	e184
30	193	1060	194	294	---	1290	168	26	178	1340	1450	e184
31	195	---	65	408	---	3070	---	286	---	588	1250	---
TOTAL	28112.30	49183	8523.8	7379.0	22087	45638	20654	6548	7463.1	27837	29964	10783.7
MEAN	907	1639	275	238	762	1472	688	211	249	898	967	359
MAX	4890	3500	928	796	3520	3590	4190	408	625	2140	2330	1160
MIN	.10	228	3.7	8.0	47	192	10	15	6.1	51	271	6.0
AC-FT	55760	97550	16910	14640	43810	90520	40970	12990	14800	55210	59430	21390

CAL YR 1987 TOTAL 220683.80 MEAN 605 MAX 4890 MIN .00 AC-FT 437700
WTR YR 1988 TOTAL 264172.90 MEAN 722 MAX 4890 MIN .10 AC-FT 524000

e Estimated

CALOOSAHATCHEE RIVER

02292480 CALOOSAHATCHEE CANAL AT ORTONA LOCK, NEAR LA BELLE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	WEATHER (WMO CODE NUMBER) (00041)	GAGE HEIGHT (FEET ABOVE DATUM) (00065)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)
NOV												
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	0925	--	--	--	--	--	1028	1028	--	--	--	--
17...	1150	0.50	290	23.5	--	--	1028	1028	--	--	--	--
17...	1151	3.00	290	23.5	--	--	1028	1028	--	--	--	--
17...	1152	5.00	290	23.0	--	--	1028	1028	--	--	--	--
17...	1153	10.0	290	23.0	--	--	1028	1028	--	--	--	--
17...	1154	12.0	290	23.0	--	--	1028	1028	--	--	--	--
17...	1155	0.50	60.0	23.5	--	--	1028	1028	--	--	--	--
17...	1156	3.00	60.0	23.0	--	--	1028	1028	--	--	--	--
17...	1157	5.00	60.0	23.5	--	--	1028	1028	--	--	--	--
17...	1158	--	--	--	--	--	1028	1028	--	--	--	--
17...	1159	--	--	--	--	--	1028	1028	--	--	--	--
17...	1210	--	--	--	29.0	772	--	80020	2	11.25	1.2	38.0
17...	1211	0.50	175	23.5	--	--	1028	1028	--	--	--	--
17...	1212	3.00	175	23.0	--	--	1028	1028	--	--	--	--
17...	1213	5.00	175	23.5	--	--	1028	1028	--	--	--	--
17...	1214	10.0	175	23.0	--	--	1028	1028	--	--	--	--
17...	1215	20.0	175	23.0	--	--	1028	1028	--	--	--	--
JAN												
20...	0910	--	--	--	--	--	1028	1028	--	--	--	--
20...	0911	--	--	--	--	--	1028	1028	--	--	--	--
20...	0912	--	--	--	--	--	1028	1028	--	--	--	--
20...	0913	--	--	--	--	--	1028	1028	--	--	--	--
20...	0914	--	--	--	--	--	1028	1028	--	--	--	--
20...	0925	--	--	--	21.0	--	--	80020	0	11.15	1.5	50.0
APR												
06...	1100	--	--	--	--	--	--	80020	0	11.20	2.3	56.0
JUL												
19...	1000	--	--	--	--	--	--	80020	--	--	1.6	--
20...	1000	--	--	--	30.0	--	--	80020	2	11.03	1.6	39.0

DATE	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 WH WAT TOTAL MG/L AS CACO3 (00410)	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)
NOV												
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	387	5.7	7.12	--	--	--	--	--	--	--	--	--
17...	386	5.7	7.11	--	--	--	--	--	--	--	--	--
17...	391	5.1	7.11	--	--	--	--	--	--	--	--	--
17...	415	4.9	7.10	--	--	--	--	--	--	--	--	--
17...	431	5.0	7.10	--	--	--	--	--	--	--	--	--
17...	389	5.3	7.13	--	--	--	--	--	--	--	--	--
17...	389	5.1	7.10	--	--	--	--	--	--	--	--	--
17...	389	5.1	7.10	--	--	--	--	--	--	--	--	--
17...	415	--	--	--	--	--	--	--	--	--	--	--
17...	445	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	7.58	7.80	123	0.070	0.070	<0.010	1.5	0.300	0.170	0.150
17...	389	5.3	7.15	--	--	--	--	--	--	--	--	--
17...	390	5.1	7.18	--	--	--	--	--	--	--	--	--
17...	389	5.1	7.09	--	--	--	--	--	--	--	--	--
17...	415	4.9	7.07	--	--	--	--	--	--	--	--	--
17...	445	4.5	7.11	--	--	--	--	--	--	--	--	--
JAN												
20...	563	--	--	--	--	--	--	--	--	--	--	--
20...	567	--	--	--	--	--	--	--	--	--	--	--
20...	565	--	--	--	--	--	--	--	--	--	--	--
20...	564	--	--	--	--	--	--	--	--	--	--	--
20...	565	--	--	--	--	--	--	--	--	--	--	--
20...	564	--	7.52	8.00	160	0.050	0.030	<0.010	1.5	0.350	0.130	0.110
APR												
06...	437	--	7.18	7.60	84	0.060	0.060	0.010	0.70	<0.100	0.070	0.060
JUL												
19...	--	--	--	8.00	--	--	--	--	--	--	--	--
20...	614	--	7.52	8.00	140	0.030	0.030	0.010	1.1	0.350	0.150	0.150

02292480 CALOOSAHATCHEE CANAL AT ORTONA LOCK, NEAR LA BELLE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	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)	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)
NOV												
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	0.130	55	6.7	24	3.8	44	28	0.20	7.8	1	24	<0.5
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	0.080	66	11	39	5.6	59	39	0.20	7.0	<1	29	<0.5
APR												
06...	0.040	35	11	37	4.0	61	32	0.40	4.4	<1	31	<0.5
JUL												
19...	--	49	12	41	5.8	72	40	0.20	6.4	3	38	0.9
20...	0.120	49	12	41	5.8	72	40	0.20	6.4	3	38	0.9

DATE	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)	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)
NOV												
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	<1	<1	<3	1	360	<5	14	<10	<1	<1	350	<6
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	<1	<1	<3	18	160	<5	5	<10	1	<1	610	<6
APR												
06...	<1	<1	<3	2	81	<5	5	<10	<1	<1	680	<6
JUL												
19...	<1	<1	<3	2	25	<5	3	<10	<1	<1	690	<6
20...	<1	<1	<3	2	25	<5	3	<10	<1	<1	690	<6

CALOOSAHATCHEE RIVER

02292480 CALOOSAHATCHEE CANAL AT ORTONA LOCK, NEAR LA BELLE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	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)	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)	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- LINEITY LAB (MG/L AS CACO3) (90410)
NOV												
17...	--	--	--	--	--	--	--	60	--	5	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	20	30	10	<1	12	64	276	60	<0.1	5	415	126
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	28	<10	5	<1	15	49	366	79	<0.1	52	565	163
APR												
06...	38	<10	<4	<1	13	140	276	100	0.3	3	442	96
JUL												
19...	15	<10	8	<1	--	--	353	--	<0.1	--	512	124
20...	15	<10	8	<1	14	260	353	75	<0.1	4	512	124

CALOOSAHATCHEE RIVER

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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.--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 or 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, 681 ft³/s Aug. 9; maximum gage height, 7.11 ft Aug. 9; maximum daily reverse flow, 759 ft³/s Sept. 27; minimum gage height, 2.04 ft June 18.

DISCHARGE, IN 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		---	---	-335	---	e-187	e-120	43	104	118	e35	290
2		---	---	-157	---	e-138	e-88	131	e-14	85	e49	244
3		---	---	-110	---	e-94	e-92	112	e-146	99	150	224
4		---	---	-70	---	e-165	e-45	e-43	e-295	111	76	199
5		---	86	-7.0	---	e-70	e-116	e-71	e-297	47	59	130
6		---	29	-112	---	111	e-76	e-201	e-15	e-13	e-243	143
7		---	81	-157	---	141	e-61	e-221	259	e-82	e5.0	187
8		---	72	e-284	---	76	e-145	e-134	99	153	518	196
9		---	-214	-141	---	46	e-392	e-210	74	158	681	187
10		---	-65	1.0	---	114	e-361	e-101	76	186	414	176
11		---	-91	47	---	85	e-140	e-158	78	127	676	152
12		---	-78	-25	---	42	e-81	e-147	75	89	572	121
13		---	-21	-19	---	42	e-121	e-129	e-89	83	340	e-58
14		---	117	-115	---	49	e-210	e-8.3	e-188	66	213	e-41
15		---	107	-67	---	e-3.5	e-303	21	e-178	106	138	e-25
16		---	53	9.0	---	e-98	e-132	e-21	e-241	79	190	e-116
17		---	72	-16	---	e-242	e-16	e-66	e-527	68	207	e-428
18		---	340	48	---	e-141	e-32	e-32	e-532	55	235	e-187
19		---	536	14	---	148	e-182	e.00	e-440	62	226	e-121
20		---	---	32	---	242	e-26	e-9.3	e-167	55	215	e-177
21		---	-46	---	---	162	181	e-19	e-97	82	155	e-331
22		---	-107	---	---	94	94	e-189	e-96	96	162	e-531
23		---	-302	---	---	70	12	e-268	e-103	258	90	e-625
24		---	-263	---	---	54	e-21	e-238	e-156	196	123	e-583
25		---	30	---	---	36	e-29	e-128	e-91	198	125	e-485
26		---	4.0	---	---	e5.0	e-199	112	e-96	206	125	e-560
27		---	-39	---	11	e18	e-318	e14	e-278	177	203	e-759
28		---	-139	---	e-48	125	e-284	e-1.9	e-493	245	364	e-719
29		---	-147	---	e-94	88	e-272	50	e-26	227	430	e-654
30		---	e-411	---	---	e28	e-210	92	145	176	354	e-577
31		---	-352	---	---	e-17	---	117	---	143	338	---
TOTAL		---	---	---	---	620.5	-3785	-1703.50	-3655	3656	7225.0	-4728
MEAN		---	---	---	---	20.0	-126	-55.0	-122	118	233	-158
MAX		---	---	---	---	242	181	131	259	258	681	290
MIN		---	---	---	---	-242	-392	-268	-532	-82	-243	-759
AC-FT		---	---	---	---	1230	-7510	-3380	-7250	7250	14330	-9380

e Estimated

CALOOSAHATCHEE RIVER

02292780 TOWNSEND CANAL NEAR ALVA, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	2.73	---	2.87	2.94	3.52	4.21	4.41	3.87	5.31
2		---	---	2.93	---	2.97	3.05	4.38	3.49	4.13	3.90	5.10
3		---	---	3.00	---	3.00	3.03	4.22	2.93	4.25	4.63	5.01
4		---	---	3.07	---	2.87	3.10	3.17	2.67	4.34	4.10	4.88
5		---	3.27	3.16	---	3.25	3.00	3.02	2.65	3.78	3.91	4.46
6		---	3.12	2.99	---	4.18	3.02	2.76	3.92	3.45	2.75	4.54
7		---	3.26	2.96	---	4.43	3.06	2.78	5.14	3.14	3.14	4.81
8		---	3.42	2.87	---	3.85	2.84	3.01	4.20	4.58	6.17	4.84
9		---	2.82	2.98	---	3.58	2.58	2.91	3.98	4.70	6.63	4.80
10		---	3.02	3.17	---	4.20	2.62	2.99	4.01	4.86	5.74	4.74
11		---	2.97	3.35	---	3.97	2.90	2.94	4.03	4.50	6.62	4.59
12		---	2.99	3.20	---	3.57	3.05	2.90	4.00	4.18	6.33	4.37
13		3.45	3.09	3.14	---	3.58	2.95	2.90	3.35	4.13	5.58	3.55
14		3.44	2.95	---	---	3.65	2.75	3.08	2.82	3.97	4.92	3.29
15		3.35	3.03	---	---	3.54	2.64	3.24	2.84	4.33	4.53	3.34
16		3.18	3.15	---	---	3.05	3.04	3.17	2.72	4.10	4.89	3.00
17		3.21	3.11	---	---	2.79	3.26	2.93	2.46	4.00	4.97	2.55
18		4.40	3.21	---	---	2.94	3.09	3.01	2.43	3.89	5.09	2.83
19		5.20	3.16	---	---	4.28	2.82	3.14	2.56	3.95	5.05	2.98
20		---	3.19	---	---	4.97	4.36	3.22	2.93	3.90	4.99	2.92
21		---	3.06	---	---	4.57	4.68	3.22	3.06	4.14	4.68	2.72
22		---	2.99	---	---	4.06	4.02	2.89	3.05	4.26	4.70	2.51
23		---	2.76	---	---	3.85	3.23	2.71	2.91	5.17	4.18	2.39
24		---	2.82	---	---	3.70	3.14	2.73	2.88	4.93	4.38	2.44
25		---	3.19	---	---	3.50	3.11	3.28	3.04	4.95	4.33	2.55
26		---	3.15	---	3.03	3.37	2.81	4.26	2.95	5.00	4.39	2.49
27		---	3.09	---	3.21	3.68	2.63	3.32	2.71	4.82	4.91	2.31
28		---	2.96	---	3.09	4.29	2.74	3.08	2.45	5.18	5.52	2.35
29		---	2.96	---	2.97	4.01	2.76	3.64	3.76	5.10	5.84	2.42
30		---	2.70	---	---	3.48	2.83	4.12	4.61	4.85	5.58	2.49
31		---	2.73	---	---	3.11	---	4.30	---	4.65	5.52	---
MEAN		---	---	---	---	3.65	3.07	3.25	3.29	4.38	4.90	3.55
MAX		---	---	---	---	4.97	4.68	4.38	5.14	5.18	6.63	5.31
MIN		---	---	---	---	2.79	2.58	2.71	2.43	3.14	2.75	2.31

CALOOSAHATCHEE RIVER

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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.--No estimated daily discharges. Records good. 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.--22 years, 1,790 ft³/s, 1,297,000 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, 12,600 ft³/s Oct. 13; maximum gage height, 3.74 ft Apr. 17; minimum daily discharge, 4.5 ft³/s Sept. 23; minimum gage height, 2.38 ft Apr. 17.

DISCHARGE, IN 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	2900	2320	2620	19	765	1780	4880	662	657	537	1490	3680
2	2740	2720	2420	18	746	1440	5010	736	112	898	1420	3050
3	1800	6080	2370	13	278	1010	4230	17	12	606	1520	2590
4	816	10300	1850	147	13	217	3540	15	18	663	1050	2230
5	730	7360	1910	920	13	106	1780	10	19	510	1380	1720
6	673	7350	1280	599	14	1490	1350	17	861	89	988	2490
7	326	5640	1640	209	17	1060	719	32	1470	205	778	1840
8	66	5930	1690	12	1120	887	172	33	1170	877	3150	2450
9	93	4620	1240	30	2000	1820	22	13	1170	1680	4230	2920
10	452	4400	1100	474	2180	3910	24	19	1050	2970	3010	2300
11	1230	3580	1500	1720	1180	4810	11	11	511	2420	6780	2080
12	9560	2950	678	1800	577	3550	5.9	12	477	2180	5980	1620
13	12600	2570	1220	1290	751	3320	8.7	13	717	1150	4470	1520
14	9600	1600	730	1250	543	2750	14	25	15	790	3250	1200
15	8220	1510	658	869	655	1970	17	23	13	770	2220	395
16	5940	1470	897	497	1280	1240	25	13	17	1100	3360	553
17	4800	1770	432	671	798	306	869	11	14	832	3590	305
18	4190	4210	584	544	480	206	14	9.3	25	748	3740	19
19	3900	4300	764	482	662	2310	7.9	12	17	981	3560	79
20	2150	9060	856	77	629	2370	169	15	8.9	1520	3470	170
21	2730	6910	978	133	518	1370	617	29	11	1830	2600	90
22	2210	5710	581	1100	1230	1540	301	28	561	2260	2320	7.6
23	1100	5060	362	839	1370	3940	224	8.9	799	3690	1920	4.5
24	1760	3520	90	817	1850	4690	19	9.9	9.2	3540	1550	17
25	1350	3520	242	590	3400	4620	14	7.3	21	3390	1370	20
26	1010	3910	397	57	4570	2900	10	12	21	3350	1980	5.0
27	829	5050	397	15	3800	2190	12	925	11	2740	3150	7.6
28	613	4530	243	8.6	2950	2800	16	79	6.5	2360	3380	5.3
29	534	3420	350	405	2400	1900	21	161	154	2890	4470	7.4
30	831	3260	287	1180	---	2450	17	196	915	2250	3760	7.2
31	803	---	13	1080	---	3950	---	1070	---	1250	3820	---
TOTAL	86556	134630	30379	17865.6	36789	68902	24119.5	4224.4	10862.6	51076	89756	33382.6
MEAN	2792	4488	980	576	1269	2223	804	136	362	1648	2895	1113
MAX	12600	10300	2620	1800	4570	4810	5010	1070	1470	3690	6780	3680
MIN	66	1470	13	8.6	13	106	5.9	7.3	6.5	89	778	4.5
AC-FT	171700	267000	60260	35440	72970	136700	47840	8380	21550	101300	178000	66210

CAL YR 1987 TOTAL 620507.9 MEAN 1700 MAX 12600 MIN 4.6 AC-FT 1231000
WTR YR 1988 TOTAL 588542.7 MEAN 1608 MAX 12600 MIN 4.5 AC-FT 1167000

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.--No estimated daily discharges during 1988 water year. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70 ft³/s Oct. 12, 1987, gage height, 6.79 ft; no flow for many days; minimum gage height, 4.36 ft Sept. 27, 28, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70 ft³/s Oct. 12, gage height, 6.79 ft; no flow for many days; minimum gage height, 4.36 ft Sept. 27, 28.

DISCHARGE, IN 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		---	1.8	4.5	e1.3	2.6	8.9	2.6	1.4	11	10	3.3
2		---	1.6	3.3	e1.1	2.8	8.0	2.6	1.6	9.7	10	5.6
3		---	1.6	3.0	e1.1	2.6	7.3	2.6	1.4	8.4	10	5.8
4		---	1.4	3.3	e.90	2.4	6.6	2.6	1.4	7.3	9.2	7.2
5		---	1.6	3.6	e6.0	2.1	5.9	3.1	1.3	10	8.6	6.8
6		---	1.5	3.3	e7.5	2.1	5.6	4.3	1.2	11	8.0	5.3
7		---	1.4	3.2	e6.2	5.7	5.4	4.9	1.1	8.8	7.6	4.7
8		---	1.5	3.0	e4.8	5.1	5.2	5.4	1.4	7.4	7.5	4.5
9		---	1.6	2.9	e3.8	4.4	4.8	4.1	1.1	6.5	7.2	3.8
10		---	1.6	2.9	e3.0	3.9	4.6	3.9	.99	6.2	10	3.8
11		---	1.6	2.6	e2.6	3.4	4.4	3.6	1.2	6.1	11	4.3
12		---	1.6	2.3	2.5	3.2	4.3	3.4	2.7	7.5	11	5.0
13		---	1.5	2.2	2.4	2.9	4.1	4.2	4.1	6.7	9.0	4.7
14		---	1.3	e2.1	2.2	2.6	4.0	5.7	3.6	6.2	7.3	4.2
15		---	1.3	e1.8	2.1	2.6	4.0	4.7	3.3	6.0	6.1	4.0
16		---	1.3	e1.9	2.1	2.4	3.8	4.6	5.7	5.7	5.1	4.0
17		---	1.1	e1.9	2.1	2.3	3.6	4.5	7.8	5.3	4.5	4.4
18		---	.80	e1.8	1.9	2.2	3.4	4.0	5.3	5.1	4.6	3.9
19	1.6		.79	e1.7	1.7	2.2	3.3	4.0	5.1	15	5.2	3.9
20	1.6		.79	e1.7	2.3	2.1	3.2	4.4	7.8	25	6.1	3.3
21		1.8	.74	e2.1	5.2	2.0	3.2	4.1	8.7	24	4.7	3.0
22		1.7	.64	e2.0	3.9	1.8	3.2	3.7	7.1	20	4.2	2.7
23		1.6	.68	e1.9	3.5	1.9	3.2	3.5	6.0	14	3.8	2.7
24		1.6	1.5	e1.8	3.2	2.9	3.2	3.1	4.9	11	3.7	2.9
25		1.6	1.3	e1.8	3.3	3.1	3.0	2.7	4.2	10	3.8	2.9
26		1.6	1.2	e1.7	3.1	6.3	2.8	2.3	3.8	9.6	4.2	3.1
27		1.6	2.2	e1.6	2.9	13	2.8	1.8	6.7	9.4	4.3	3.6
28		1.6	2.5	e1.6	2.7	10	2.7	1.7	9.7	12	4.6	4.4
29		1.6	2.0	e1.6	---	8.5	2.8	1.5	18	13	5.1	4.1
30		1.7	1.8	e1.5	---	7.5	2.7	1.5	20	12	6.2	6.2
31		---	2.9	e1.4	---	10	---	1.6	---	11	3.1	---
TOTAL		---	45.14	72.0	85.40	126.6	130.0	106.7	148.59	320.9	205.7	128.1
MEAN		---	1.46	2.32	3.05	4.08	4.33	3.44	4.95	10.4	6.64	4.27
MAX		---	2.9	4.5	7.5	13	8.9	5.7	20	25	11	7.2
MIN		---	.64	1.4	.90	1.8	2.7	1.5	.99	5.1	3.1	2.7
AC-FT		---	90	143	169	251	258	212	295	637	408	254

e Estimated

CALOOSAHATCHEE RIVER

02293214 MEADE CANAL AT CAPE CORAL, FL

DISCHARGE, IN 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	6.0	6.1	3.2	.89	.41	2.6	1.4	.79	.20	2.3	12	14
2	5.9	7.1	3.0	1.0	.42	2.7	1.4	.62	.09	2.5	14	20
3	5.9	9.5	3.0	.99	.38	2.8	1.2	.41	.00	3.2	14	14
4	5.5	12	3.0	1.1	.30	3.0	1.1	.30	.00	2.6	14	8.4
5	5.0	9.9	2.8	.90	.29	3.9	1.2	.27	.00	2.2	21	5.9
6	4.6	9.0	2.6	.71	.19	6.7	1.0	.14	.00	1.7	33	4.8
7	4.2	7.9	2.7	.81	.04	4.4	.81	.01	.00	1.6	24	5.3
8	3.8	7.2	2.8	.96	1.2	3.5	.53	.00	.00	2.0	24	8.4
9	3.3	5.8	3.0	.97	1.4	3.0	.50	.00	.00	2.1	19	9.4
10	3.2	5.2	2.9	1.4	1.5	3.7	.53	.00	.00	1.9	17	8.9
11	3.2	4.8	3.0	2.1	1.3	3.1	.60	.00	.43	1.7	16	7.7
12	36	4.2	2.8	1.6	1.1	2.9	.58	.00	1.4	1.5	15	6.1
13	25	3.9	2.6	1.4	1.1	2.8	.50	.38	1.0	1.3	14	4.7
14	15	3.7	2.2	1.3	1.3	3.2	.45	1.4	.87	3.2	14	3.9
15	12	3.9	1.9	1.1	1.8	2.5	.42	1.0	.72	5.5	14	3.6
16	10	3.5	2.6	.92	2.8	2.2	.48	.82	.59	4.8	16	3.3
17	9.2	3.5	1.8	.94	2.9	2.2	.45	.90	.49	6.3	16	2.9
18	8.5	4.2	1.6	.88	2.8	2.3	.41	1.2	.38	13	17	2.3
19	7.6	4.1	1.6	.90	2.8	4.6	.74	1.1	.68	14	17	1.8
20	7.1	4.4	1.4	.90	2.9	3.7	2.1	.91	1.1	11	16	1.3
21	6.8	3.8	1.4	.91	3.0	3.2	1.3	.75	1.5	10	14	.99
22	6.3	3.6	1.4	1.2	2.7	3.2	1.0	.61	3.2	9.0	14	.74
23	6.2	3.4	1.4	.80	2.7	2.9	.88	.53	4.3	8.2	13	.58
24	6.0	3.4	1.4	.65	2.9	2.8	.80	.47	3.8	7.7	12	.46
25	6.4	3.4	1.3	.91	2.7	2.7	.76	.55	3.1	7.3	13	.31
26	7.2	3.6	1.3	.70	2.4	2.5	.66	.53	3.0	7.2	16	.20
27	7.6	4.0	1.3	.47	2.3	2.3	.62	.43	3.2	7.3	21	.08
28	7.4	3.9	1.3	.32	2.5	2.2	.48	.40	2.9	8.0	18	.00
29	6.4	3.7	1.1	.27	2.6	2.0	.35	.37	2.7	11	16	.00
30	5.8	3.3	.76	.38	---	1.9	.42	.30	2.5	15	15	.00
31	5.4	---	.80	.47	---	1.6	---	.27	---	13	14	---
TOTAL	252.5	156.0	63.96	28.85	50.73	93.1	23.67	15.46	38.15	188.1	513	140.06
MEAN	8.15	5.20	2.06	.93	1.75	3.00	.79	.50	1.27	6.07	16.5	4.67
MAX	36	12	3.2	2.1	3.0	6.7	2.1	1.4	4.3	15	33	20
MIN	3.2	3.3	.76	.27	.04	1.6	.35	.00	.00	1.3	12	.00
AC-FT	501	309	127	57	101	185	47	31	76	373	1020	278

CAL YR 1987	TOTAL	1796.45	MEAN 4.92	MAX 36	MIN .76	AC-FT 3560
WTR YR 1988	TOTAL	1563.68	MEAN 4.27	MAX 36	MIN .00	AC-FT 3100

CALOOSAHATCHEE RIVER

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02293214 MEADE CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.48	5.37	5.33	5.25	5.29	5.32	5.26	5.24	5.18	5.28	5.43	5.43
2	5.48	5.41	5.32	5.25	5.29	5.32	5.26	5.23	5.17	5.28	5.45	5.28
3	5.48	5.52	5.32	5.26	5.29	5.31	5.25	5.21	5.16	5.32	5.44	4.93
4	5.46	5.59	5.32	5.27	5.29	5.31	5.25	5.20	5.16	5.29	5.42	4.76
5	5.44	5.54	5.31	5.26	5.29	5.34	5.25	5.20	5.15	5.27	5.61	4.67
6	5.43	5.51	5.31	5.24	5.28	5.44	5.25	5.18	5.15	5.25	5.89	4.63
7	5.41	5.47	5.32	5.25	5.27	5.34	5.24	5.17	5.15	5.24	5.69	4.65
8	5.40	5.44	5.32	5.26	5.36	5.30	5.22	5.16	5.16	5.26	5.68	4.76
9	5.37	5.39	5.33	5.26	5.39	5.28	5.22	5.15	5.16	5.26	5.56	4.79
10	5.37	5.37	5.33	5.28	5.40	5.32	5.22	5.15	5.16	5.25	5.50	4.77
11	5.37	5.36	5.34	5.32	5.40	5.30	5.23	5.15	5.19	5.24	5.47	4.73
12	6.10	5.33	5.33	5.30	5.40	5.29	5.22	5.15	5.25	5.23	5.45	4.67
13	5.90	5.32	5.32	5.29	5.40	5.29	5.22	5.18	5.22	5.22	5.43	4.62
14	5.66	5.31	5.30	5.28	5.40	5.31	5.21	5.28	5.21	5.30	5.43	4.59
15	5.56	5.32	5.29	5.27	5.42	5.28	5.21	5.26	5.20	5.38	5.42	4.58
16	5.51	5.31	5.33	5.27	5.46	5.26	5.22	5.24	5.19	5.36	5.47	4.57
17	5.47	5.31	5.29	5.27	5.46	5.26	5.21	5.25	5.19	5.39	5.49	4.54
18	5.45	5.34	5.28	5.27	5.44	5.27	5.21	5.27	5.18	5.55	5.51	4.51
19	5.42	5.34	5.28	5.28	5.43	5.38	5.23	5.25	5.20	5.55	5.51	4.49
20	5.40	5.35	5.28	5.28	5.43	5.34	5.31	5.24	5.23	5.48	5.47	4.46
21	5.39	5.33	5.28	5.28	5.43	5.33	5.27	5.23	5.25	5.44	5.44	4.44
22	5.37	5.33	5.28	5.30	5.40	5.33	5.26	5.22	5.32	5.41	5.42	4.43
23	5.37	5.32	5.28	5.28	5.39	5.32	5.25	5.21	5.37	5.38	5.40	4.41
24	5.36	5.32	5.28	5.28	5.39	5.31	5.24	5.20	5.34	5.36	5.38	4.40
25	5.38	5.32	5.27	5.30	5.37	5.31	5.24	5.21	5.32	5.35	5.40	4.39
26	5.41	5.34	5.27	5.29	5.34	5.31	5.23	5.21	5.31	5.35	5.49	4.38
27	5.42	5.36	5.27	5.27	5.33	5.30	5.23	5.20	5.32	5.35	5.62	4.37
28	5.41	5.35	5.27	5.26	5.33	5.29	5.22	5.20	5.30	5.37	5.53	4.37
29	5.38	5.34	5.26	5.26	5.33	5.28	5.20	5.20	5.29	5.44	5.49	4.42
30	5.35	5.33	5.24	5.28	---	5.28	5.21	5.19	5.29	5.51	5.47	4.47
31	5.34	---	5.24	5.28	---	5.27	---	5.19	---	5.46	5.44	---
MEAN	5.46	5.37	5.30	5.27	5.37	5.31	5.23	5.21	5.23	5.35	5.50	4.62
MAX	6.10	5.59	5.34	5.32	5.46	5.44	5.31	5.28	5.37	5.55	5.89	5.43
MIN	5.34	5.31	5.24	5.24	5.27	5.26	5.20	5.15	5.15	5.22	5.38	4.37

WTR YR 1988 MEAN 5.27 MAX 6.10 MIN 4.37

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 discharges. 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.--Maximum discharge, 77 ft³/s Oct. 12; gage height, 7.95 ft; no flow for many days.

DISCHARGE, IN 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		---	.00	.00	.00	.00	.00	.00	.00	.11	.00	.00
2		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5		---	.00	.00	.00	.00	.00	.00	.00	4.4	.00	.00
6		---	.00	.00	.00	.00	.00	.00	.00	15	.00	.00
7		---	.00	.00	.00	.00	.00	.00	.00	2.7	.00	.00
8		---	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00
9		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11		---	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
12		---	.00	.00	.00	.00	.00	.00	.04	.00	.14	.00
13		---	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
14		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19		.00	.00	.00	.00	.00	.00	.00	.00	31	.00	.00
20		.00	.00	.00	.00	.00	.00	.00	.00	72	.00	.00
21		.00	.00	.00	.00	.00	.00	.00	.00	34	.00	.00
22		.00	.00	.00	.00	.00	.00	.00	.00	20	.00	.00
23		.00	.00	.00	.00	.00	.00	.00	.00	2.9	.00	.00
24		.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00
25		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29		.00	.00	.00	---	.00	.00	.00	.60	.00	.00	.00
30		.00	.00	.00	---	.00	.00	.00	2.4	.00	.00	.00
31		---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL		---	.00	.00	.00	.00	.00	.00	3.05	182.17	.16	.00
MEAN		---	.000	.000	.000	.000	.000	.000	.10	5.88	.005	.000
MAX		---	.00	.00	.00	.00	.00	.00	2.4	72	.14	.00
MIN		---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT		---	.00	.00	.00	.00	.00	.00	6.0	361	.3	.00

CALOOSAHATCHEE RIVER

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02293216 MACKINAC CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	6.32	6.67	6.33	6.52	6.80	6.26	6.34	7.12	6.69	6.54
2		---	6.31	6.63	6.33	6.52	6.74	6.25	6.36	6.99	6.75	6.56
3		---	6.30	6.59	6.33	6.52	6.69	6.25	6.37	6.90	6.83	6.55
4		---	6.28	6.60	6.33	6.50	6.65	6.24	6.40	6.85	6.79	6.54
5		---	6.28	6.62	6.47	6.48	6.60	6.30	6.39	7.09	6.74	6.54
6		---	6.27	6.57	6.52	6.48	6.57	6.45	6.37	7.49	6.69	6.58
7		---	6.26	6.55	6.53	6.57	6.55	6.45	6.36	7.27	6.66	6.70
8		---	6.26	6.53	6.51	6.60	6.53	6.48	6.36	7.09	6.64	6.66
9		---	6.26	6.51	6.48	6.60	6.50	6.46	6.37	6.95	6.61	6.62
10		---	6.26	6.50	6.45	6.60	6.48	6.44	6.42	6.85	6.75	6.59
11		---	6.26	6.49	6.45	6.58	6.46	6.43	6.51	6.80	7.11	6.58
12		---	6.26	6.45	6.44	6.56	6.45	6.42	6.94	6.77	7.15	6.59
13		---	6.26	6.44	6.43	6.52	6.44	6.49	7.08	6.74	7.05	6.57
14		---	6.23	6.42	6.43	6.49	6.43	6.73	6.95	6.70	6.96	6.56
15		---	6.23	6.41	6.41	6.47	6.43	6.68	6.84	6.68	6.87	6.53
16		---	6.23	6.41	6.42	6.47	6.41	6.63	6.81	6.65	6.79	6.51
17		6.33	6.23	6.40	6.42	6.46	6.40	6.59	6.88	6.64	6.74	6.49
18		6.33	6.23	6.40	6.41	6.44	6.39	6.55	6.83	6.73	6.76	6.47
19		6.33	6.23	6.40	6.40	6.44	6.37	6.54	6.78	7.14	6.78	6.46
20		6.33	6.23	6.38	6.43	6.44	6.36	6.57	6.84	7.91	6.89	6.45
21		6.32	6.22	6.38	6.75	6.42	6.35	6.54	7.05	7.67	6.82	6.43
22		6.31	6.21	6.40	6.71	6.39	6.34	6.50	6.96	7.54	6.76	6.43
23		6.30	6.21	6.38	6.67	6.39	6.34	6.48	6.88	7.27	6.70	6.42
24		6.30	6.30	6.35	6.63	6.44	6.33	6.46	6.81	7.10	6.66	6.43
25		6.29	6.30	6.36	6.61	6.48	6.32	6.43	6.75	6.98	6.63	6.44
26		6.31	6.29	6.39	6.59	6.57	6.30	6.40	6.69	6.89	6.61	6.42
27		6.31	6.36	6.37	6.56	6.87	6.29	6.38	6.84	6.82	6.58	6.42
28		6.30	6.42	6.35	6.54	6.87	6.28	6.37	7.09	6.78	6.55	6.48
29		6.31	6.41	6.35	---	6.80	6.28	6.35	7.11	6.76	6.53	6.46
30		6.32	6.40	6.35	---	6.75	6.27	6.34	7.26	6.76	6.56	6.55
31		---	6.47	6.34	---	6.84	---	6.34	---	6.74	6.53	---
MEAN		---	6.28	6.45	6.49	6.55	6.45	6.45	6.72	6.99	6.75	6.52
MAX		---	6.47	6.67	6.75	6.87	6.80	6.73	7.26	7.91	7.15	6.70
MIN		---	6.21	6.34	6.33	6.39	6.27	6.24	6.34	6.64	6.53	6.42

CALOOSAHATCHEE RIVER

02293216 MACKINAC CANAL AT CAPE CORAL, FL

DISCHARGE, IN 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	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.5
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.1
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.9
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.4
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.9
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	17
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	16
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	11
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.0
12	38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.6
13	24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.3
14	3.2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1
15	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.84
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
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	.92	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.2	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.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
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	65.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.13	91.75
MEAN	2.10	.000	.000	.000	.000	.000	.000	.000	.000	.000	.10	3.06
MAX	38	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.2	17
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	129	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.2	182
CAL YR 1987	TOTAL	250.60	MEAN	.69	MAX	72	MIN	.00	AC-FT	497		
WTR YR 1988	TOTAL	160.10	MEAN	.44	MAX	38	MIN	.00	AC-FT	318		

CALOOSAHATCHEE RIVER

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02293216 MACKINAC CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.62	6.41	6.39	6.25	6.30	6.26	6.34	6.24	6.04	6.13	6.68	6.75
2	6.59	6.47	6.38	6.25	6.31	6.26	6.33	6.22	6.04	6.13	6.67	6.71
3	6.56	6.54	6.37	6.27	6.31	6.25	6.33	6.20	6.03	6.17	6.66	6.62
4	6.53	6.61	6.37	6.28	6.30	6.25	6.32	6.18	6.02	6.16	6.65	6.55
5	6.50	6.62	6.36	6.26	6.30	6.29	6.32	6.18	6.00	6.15	6.76	6.51
6	6.48	6.61	6.34	6.24	6.29	6.41	6.32	6.16	5.99	6.14	6.86	6.49
7	6.46	6.56	6.33	6.24	6.25	6.41	6.30	6.14	5.99	6.14	6.85	6.58
8	6.44	6.53	6.33	6.26	6.33	6.39	6.27	6.12	5.99	6.18	6.88	6.75
9	6.41	6.51	6.33	6.27	6.34	6.38	6.26	6.10	5.98	6.21	6.83	6.74
10	6.40	6.51	6.34	6.31	6.34	6.45	6.26	6.10	5.98	6.21	6.76	6.68
11	6.40	6.50	6.34	6.44	6.33	6.42	6.26	6.09	5.97	6.20	6.74	6.63
12	7.35	6.47	6.33	6.43	6.33	6.41	6.26	6.08	5.95	6.20	6.74	6.57
13	7.57	6.45	6.33	6.42	6.32	6.41	6.25	6.09	5.92	6.19	6.71	6.50
14	7.28	6.43	6.32	6.40	6.31	6.43	6.23	6.16	5.91	6.27	6.72	6.46
15	7.08	6.42	6.33	6.38	6.32	6.40	6.23	6.16	5.89	6.46	6.69	6.47
16	6.95	6.41	6.37	6.36	6.34	6.38	6.22	6.15	5.88	6.55	6.74	6.46
17	6.85	6.41	6.35	6.35	6.33	6.36	6.22	6.15	5.87	6.56	6.76	6.45
18	6.78	6.44	6.33	6.35	6.32	6.37	6.21	6.16	5.85	6.64	6.80	6.43
19	6.73	6.44	6.32	6.35	6.33	6.50	6.23	6.16	5.88	6.67	6.80	6.41
20	6.69	6.44	6.32	6.35	6.33	6.50	6.31	6.15	5.95	6.66	6.76	6.40
21	6.65	6.41	6.32	6.37	6.33	6.48	6.30	6.13	5.96	6.62	6.73	6.38
22	6.61	6.39	6.32	6.40	6.31	6.47	6.29	6.12	6.01	6.60	6.68	6.37
23	6.57	6.38	6.33	6.37	6.31	6.46	6.28	6.10	6.07	6.59	6.64	6.36
24	6.53	6.37	6.32	6.35	6.32	6.44	6.27	6.09	6.11	6.61	6.62	6.36
25	6.50	6.37	6.31	6.36	6.30	6.44	6.27	6.12	6.13	6.57	6.68	6.36
26	6.49	6.39	6.31	6.35	6.28	6.43	6.26	6.13	6.13	6.60	6.91	6.36
27	6.49	6.42	6.31	6.33	6.27	6.43	6.25	6.11	6.14	6.68	7.25	6.35
28	6.47	6.42	6.31	6.32	6.27	6.41	6.23	6.10	6.13	6.69	7.08	6.33
29	6.44	6.42	6.30	6.31	6.27	6.39	6.21	6.09	6.13	6.73	6.95	6.33
30	6.41	6.40	6.27	6.30	---	6.38	6.21	6.07	6.14	6.77	6.88	6.32
31	6.40	---	6.25	6.30	---	6.36	---	6.06	---	6.72	6.80	---
MEAN	6.65	6.46	6.33	6.33	6.31	6.39	6.27	6.13	6.00	6.43	6.78	6.49
MAX	7.57	6.62	6.39	6.44	6.34	6.50	6.34	6.24	6.14	6.77	7.25	6.75
MIN	6.40	6.37	6.25	6.24	6.25	6.25	6.21	6.06	5.85	6.13	6.62	6.32

CAL YR 1987	TOTAL	2397.07	MEAN 6.57	MAX 7.91	MIN 6.24
WTR YR 1988	TOTAL	2336.03	MEAN 6.38	MAX 7.57	MIN 5.85

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.--No estimated daily discharges during 1988 water year. Records 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, 174 ft³/s Oct. 12; gage height, 7.04 ft; no flow for many days; minimum gage height, 4.95 ft Dec. 23.

DISCHARGE, IN 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		---	.45	8.1	.34	3.2	5.9	.00	1.0	13	8.3	2.1
2		---	.27	5.5	.35	3.5	4.7	.00	1.0	8.3	8.9	3.3
3		---	.26	5.4	.42	3.1	4.1	.00	.72	6.5	8.8	3.0
4		---	.14	5.8	.33	2.9	3.7	.00	2.2	9.2	7.5	2.9
5		---	.23	4.9	3.5	2.8	3.2	.14	2.0	20	6.4	2.5
6		---	.15	3.2	3.7	5.5	2.9	.43	1.4	20	5.4	4.3
7		---	.05	2.5	3.5	4.9	2.8	.57	1.4	16	5.9	5.5
8		---	.04	2.2	2.9	4.5	2.8	.86	1.2	9.9	7.3	4.1
9		---	.06	1.9	2.2	3.6	2.7	.72	5.5	6.9	6.0	3.4
10		---	.06	1.8	1.7	3.2	2.5	.57	2.9	5.3	20	2.8
11		---	.04	1.7	1.8	2.9	2.4	.57	9.2	4.9	32	2.9
12		---	.05	1.2	2.0	2.7	2.3	.72	17	4.8	26	3.5
13		---	.06	1.1	1.9	5.5	2.2	4.3	11	4.6	13	3.0
14		---	.00	1.1	1.9	2.4	2.2	12	7.0	4.1	8.0	2.7
15		---	.00	1.0	1.9	2.4	2.2	6.2	5.0	3.8	5.9	2.3
16		---	.00	1.0	1.8	2.3	2.1	5.2	5.5	3.2	4.9	2.0
17		---	.00	.97	1.9	2.2	2.0	4.1	7.6	5.5	4.2	1.8
18		---	.00	1.0	1.9	2.1	1.7	3.2	6.1	12	3.8	1.6
19		.22	.00	.93	1.7	2.2	1.4	2.8	5.3	14	3.7	1.4
20		.20	.00	.93	3.5	2.2	1.4	3.1	7.6	e38	4.2	1.2
21		.22	.00	.77	18	2.1	1.2	2.9	14	e27	3.6	1.1
22		.13	.00	1.1	11	2.1	1.0	2.4	8.5	e14	3.2	1.0
23		.06	.00	.89	6.9	2.0	.86	2.3	6.0	e10	2.9	.96
24		.09	.16	.49	5.1	4.3	.86	2.4	4.7	8.8	2.9	1.4
25		.14	.23	.62	4.9	3.4	.72	2.2	4.0	8.1	2.6	1.5
26		.33	.25	.99	4.4	2.9	.57	2.0	3.5	7.5	2.5	1.3
27		.30	1.8	.72	3.8	9.8	.43	1.7	7.8	7.6	2.2	1.4
28		.24	3.1	.55	3.4	5.9	.14	1.4	9.6	8.0	1.8	2.1
29		.29	2.2	.54	---	4.5	.00	1.2	12	11	1.6	1.8
30		.42	1.8	.45	---	3.7	.00	1.0	18	16	2.1	3.0
31		---	3.7	.49	---	8.2	---	1.0	---	12	1.8	---
TOTAL		---	15.10	59.84	96.74	113.0	60.98	65.98	188.72	340.0	217.4	71.86
MEAN		---	.49	1.93	3.46	3.65	2.03	2.13	6.29	11.0	7.01	2.40
MAX		---	3.7	8.1	18	9.8	5.9	12	18	38	32	5.5
MIN		---	.00	.45	.33	2.0	.00	.00	.72	3.2	1.6	.96
AC-FT		---	30	119	192	224	121	131	374	674	431	143

e Estimated

CALOOSAHATCHEE RIVER

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02293241 SAN CARLOS CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	5.10	5.37	5.09	5.17	5.37	5.02	5.60	5.44	5.33	5.22
2		---	5.08	5.30	5.09	5.18	5.32	5.01	5.06	5.35	5.35	5.26
3		---	5.08	5.30	5.10	5.17	5.29	5.01	5.04	5.30	5.36	5.25
4		---	5.07	5.31	5.09	5.16	5.27	5.00	5.13	5.35	5.32	5.25
5		---	5.08	5.28	5.23	5.15	5.24	5.04	5.11	5.58	5.30	5.24
6		---	5.07	5.23	5.25	5.13	5.22	5.06	5.09	5.58	5.27	5.29
7		---	5.05	5.21	5.24	5.28	5.21	5.07	5.09	5.51	5.28	5.34
8		---	5.05	5.19	5.22	5.26	5.21	5.09	5.08	5.39	5.32	5.30
9		---	5.05	5.18	5.19	5.23	5.20	5.08	5.16	5.32	5.29	5.28
10		---	5.05	5.17	5.17	5.21	5.19	5.07	5.19	5.28	5.53	5.26
11		---	5.05	5.17	5.17	5.19	5.18	5.07	5.34	5.27	5.79	5.26
12		---	5.05	5.15	5.17	5.17	5.17	5.08	5.53	5.26	5.72	5.28
13		---	5.05	5.14	5.16	5.16	5.16	5.28	5.41	5.26	5.50	5.26
14		---	5.03	5.14	5.16	5.15	5.16	5.48	5.31	5.24	5.40	5.25
15		---	5.02	5.14	5.16	5.15	5.16	5.34	5.26	5.23	5.34	5.24
16		---	5.01	5.14	5.16	5.14	5.15	5.30	5.27	5.21	5.31	5.22
17		---	5.01	5.13	5.16	5.13	5.14	5.23	5.33	5.26	5.29	5.21
18		---	5.01	5.14	5.16	5.12	5.13	5.20	5.29	5.43	5.28	5.20
19		5.08	5.01	5.13	5.15	5.13	5.12	5.17	5.27	5.44	5.28	5.20
20		5.08	5.00	5.13	5.19	5.13	5.12	5.19	5.32	---	5.29	5.19
21		5.08	5.00	5.12	5.52	5.12	5.11	5.18	5.46	---	5.27	5.18
22		5.06	4.99	5.14	5.37	5.12	5.10	5.14	5.35	---	5.26	5.18
23		5.05	4.98	5.13	5.28	5.11	5.09	5.13	5.29	---	5.25	5.17
24		5.06	5.07	5.10	5.23	5.27	5.09	5.14	5.25	5.34	5.25	5.19
25		5.06	5.08	5.11	5.23	5.22	5.08	5.12	5.23	5.32	5.24	5.20
26		5.09	5.08	5.13	5.21	5.30	5.07	5.10	5.21	5.30	5.24	5.19
27		5.09	5.16	5.12	5.19	5.48	5.06	5.09	5.32	5.31	5.22	5.19
28		5.08	5.23	5.11	5.18	5.37	5.04	5.08	5.38	5.32	5.21	5.23
29		5.09	5.19	5.11	---	5.31	5.03	5.07	5.41	5.37	5.19	5.21
30		5.10	5.17	5.10	---	5.27	5.03	5.06	5.54	5.49	5.22	5.26
31		---	5.23	5.10	---	5.44	---	5.06	---	5.41	5.21	---
MEAN		---	5.07	5.17	5.20	5.21	5.16	5.13	5.28	---	5.33	5.23
MAX		---	5.23	5.37	5.52	5.48	5.37	5.48	5.60	---	5.79	5.34
MIN		---	4.98	5.10	5.09	5.11	5.03	5.00	5.04	---	5.19	5.17

CALOOSAHATCHEE RIVER

02293241 SAN CARLOS CANAL AT CAPE CORAL, FL

DISCHARGE, IN 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	4.3	3.7	2.3	.09	.78	.24	1.2	.00	.00	.78	6.0	9.0
2	3.4	4.9	2.0	.11	.78	.19	1.1	.00	.00	1.1	5.6	9.0
3	2.9	6.1	1.7	.16	.78	.14	1.0	.00	.00	2.3	5.9	7.5
4	2.5	8.6	1.6	.24	.73	.13	.91	.00	.00	1.6	7.5	6.5
5	2.0	7.3	1.4	.21	.70	.47	.88	.00	.00	1.2	10	5.9
6	1.7	6.0	1.1	.08	.57	2.6	.79	.00	.00	.91	9.5	6.0
7	1.5	4.5	1.0	.05	.21	2.4	.60	.00	.00	1.1	9.0	9.5
8	1.3	3.8	1.0	.10	1.4	2.0	.23	.00	.00	1.3	12	15
9	.96	3.6	1.1	.28	1.4	1.7	.12	.00	.00	1.2	11	13
10	1.1	3.5	1.3	2.8	1.3	2.9	.09	.00	.00	1.0	7.9	11
11	1.2	3.3	1.3	7.0	1.0	2.5	.07	.00	.00	.82	6.9	9.5
12	89	2.6	1.3	4.6	.96	2.2	.01	.00	.00	.70	7.3	7.8
13	54	2.2	1.3	3.7	.85	2.2	.00	.00	.00	.53	6.5	6.7
14	25	2.1	1.1	3.1	.70	3.0	.00	.00	.00	.96	6.7	6.2
15	17	2.1	.88	2.6	.80	2.3	.00	.00	.00	7.8	5.9	6.6
16	12	1.8	1.6	2.2	1.4	1.7	.00	.00	.00	8.0	6.1	6.3
17	9.8	1.9	1.1	1.9	1.1	1.5	.00	.00	.00	5.9	6.1	5.9
18	8.7	2.4	.81	1.9	1.0	1.3	.00	.00	.00	6.2	6.3	5.6
19	7.7	2.4	.71	1.8	1.0	5.1	.04	.00	.00	6.4	6.3	5.4
20	7.2	2.4	.72	1.7	1.0	4.5	.38	.00	.00	5.3	5.5	5.1
21	6.9	1.9	.69	1.7	1.3	3.9	.22	.00	.00	4.6	5.0	4.9
22	6.4	1.6	.78	2.3	.82	3.5	.13	.00	.00	4.1	4.5	4.7
23	5.2	1.4	.90	1.8	.71	3.0	.09	.00	.00	4.1	4.2	4.6
24	4.7	1.3	.79	1.6	1.0	3.1	.09	.00	.00	4.3	4.2	4.4
25	4.6	1.3	.73	1.6	.91	3.0	.07	.00	.06	3.9	15	4.3
26	4.5	1.9	.62	1.4	.54	2.8	.00	.00	.14	3.8	37	4.1
27	4.1	3.0	.53	1.3	.35	2.6	.00	.00	.17	3.8	44	3.7
28	3.9	2.9	.44	1.0	.33	2.4	.00	.00	.17	4.6	22	3.7
29	3.5	2.7	.50	.84	.26	2.0	.00	.00	.46	7.5	15	3.4
30	3.1	2.5	.18	.75	---	1.8	.00	.00	.97	9.0	12	3.1
31	2.7	---	.10	.75	---	1.5	---	.00	---	6.9	9.6	---
TOTAL	302.86	95.7	31.58	49.66	24.68	68.67	8.02	.00	1.97	111.70	320.5	198.4
MEAN	9.77	3.19	1.02	1.60	.85	2.22	.27	.000	.066	3.60	10.3	6.61
MAX	89	8.6	2.3	7.0	1.4	5.1	1.2	.00	.97	9.0	44	15
MIN	.96	1.3	.10	.05	.21	.13	.00	.00	.00	.53	4.2	3.1
AC-FT	601	190	63	99	49	136	16	.00	3.9	222	636	394

CAL YR 1987	TOTAL	1644.66	MEAN	4.51	MAX	89	MIN	.00	AC-FT	3260
WTR YR 1988	TOTAL	1213.74	MEAN	3.32	MAX	89	MIN	.00	AC-FT	2410

CALOOSAHATCHEE RIVER

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02293241 SAN CARLOS CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.30	5.22	5.22	5.10	5.13	5.08	5.13	5.00	4.68	5.09	5.26	5.29
2	5.28	5.27	5.21	5.10	5.13	5.07	5.12	4.99	4.66	5.11	5.25	5.29
3	5.26	5.32	5.20	5.11	5.13	5.07	5.11	4.97	4.64	5.16	5.25	5.25
4	5.24	5.39	5.19	5.12	5.13	5.06	5.10	4.93	4.63	5.14	5.29	5.23
5	5.22	5.36	5.18	5.12	5.13	5.10	5.10	4.89	4.61	5.11	5.36	5.21
6	5.21	5.33	5.17	5.10	5.12	5.21	5.09	4.86	4.60	5.10	5.34	5.22
7	5.20	5.28	5.17	5.09	5.09	5.20	5.08	4.83	4.59	5.11	5.33	5.30
8	5.19	5.26	5.17	5.10	5.16	5.19	5.05	4.80	4.59	5.12	5.39	5.41
9	5.17	5.25	5.17	5.11	5.17	5.17	5.03	4.77	4.58	5.11	5.38	5.37
10	5.18	5.25	5.18	5.19	5.16	5.22	5.03	4.74	4.57	5.11	5.30	5.33
11	5.18	5.24	5.18	5.35	5.15	5.21	5.02	4.72	4.58	5.09	5.28	5.30
12	6.23	5.22	5.18	5.29	5.14	5.19	5.01	4.71	4.59	5.09	5.29	5.26
13	6.01	5.20	5.18	5.26	5.14	5.19	5.00	4.71	4.56	5.07	5.27	5.24
14	5.66	5.20	5.17	5.24	5.13	5.21	4.99	4.75	4.54	5.10	5.27	5.22
15	5.51	5.20	5.16	5.22	5.13	5.19	4.99	4.74	4.52	5.30	5.25	5.23
16	5.43	5.19	5.21	5.20	5.17	5.16	4.98	4.73	4.51	5.32	5.26	5.23
17	5.38	5.19	5.18	5.19	5.15	5.15	4.98	4.72	4.49	5.26	5.26	5.22
18	5.35	5.21	5.16	5.19	5.15	5.14	4.96	4.72	4.48	5.27	5.27	5.21
19	5.33	5.21	5.16	5.19	5.15	5.28	4.97	4.72	4.54	5.28	5.26	5.20
20	5.32	5.22	5.16	5.18	5.14	5.26	5.07	4.73	4.66	5.25	5.24	5.19
21	5.31	5.20	5.16	5.18	5.16	5.24	5.07	4.71	4.74	5.23	5.23	5.19
22	5.30	5.18	5.16	5.21	5.13	5.23	5.05	4.70	4.91	5.21	5.21	5.18
23	5.27	5.18	5.17	5.19	5.13	5.21	5.05	4.69	4.97	5.21	5.20	5.18
24	5.25	5.17	5.16	5.18	5.14	5.21	5.05	4.68	5.01	5.22	5.20	5.17
25	5.25	5.17	5.16	5.17	5.13	5.20	5.04	4.70	5.03	5.20	5.40	5.17
26	5.24	5.20	5.15	5.17	5.11	5.20	5.02	4.71	5.04	5.20	5.76	5.16
27	5.23	5.24	5.15	5.16	5.09	5.19	5.02	4.71	5.04	5.20	5.83	5.15
28	5.22	5.24	5.14	5.15	5.09	5.18	5.01	4.70	5.04	5.22	5.54	5.15
29	5.21	5.23	5.14	5.14	5.08	5.17	4.98	4.70	5.06	5.30	5.42	5.14
30	5.20	5.23	5.11	5.13	---	5.16	4.97	4.70	5.10	5.33	5.35	5.13
31	5.18	---	5.10	5.13	---	5.14	---	4.69	---	5.28	5.31	---
MEAN	5.33	5.24	5.17	5.17	5.13	5.18	5.04	4.77	4.72	5.19	5.33	5.23
MAX	6.23	5.39	5.22	5.35	5.17	5.28	5.13	5.00	5.10	5.33	5.83	5.41
MIN	5.17	5.17	5.10	5.09	5.08	5.06	4.96	4.68	4.48	5.07	5.20	5.13

WTR YR 1988 TOTAL 1875.37 MEAN 5.12 MAX 6.23 MIN 4.48

CALOOSAHATCHEE RIVER

02293243 COURTNEY CANAL AT CAPE 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 poor.

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, 72 ft³/s Oct. 12, gage height, 5.34 ft; no flow for many days.

DISCHARGE, IN 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		---	.00	14	e.00	e10	19	.00	.00	e24	9.0	e4.0
2		---	.00	12	e.00	e12	16	.00	.00	e20	8.6	e6.0
3		---	.00	11	e.00	e9.5	13	.00	.00	e17	13	e5.9
4		---	.00	11	e.00	e6.9	12	.00	.00	e21	13	e5.8
5		---	.00	12	e4.5	e6.5	9.5	.00	.00	e39	11	e5.0
6		---	.00	9.8	e3.7	e13	8.0	.00	.00	e35	8.8	e8.5
7		---	.00	8.5	e3.3	e12	6.8	.00	.00	e30	8.5	e11
8		---	.00	7.4	e2.8	e11	6.1	.00	.00	e25	8.5	e8.1
9		---	.00	6.3	e2.5	e9.9	e4.8	.03	.05	e21	7.0	e7.0
10		---	.00	5.4	e2.3	9.2	e3.6	.06	2.6	e20	24	e6.3
11		---	.00	e4.7	e2.0	7.8	e3.1	.25	9.3	e20	40	e6.5
12		---	.00	e3.7	e1.9	6.9	e2.7	.16	32	e19	35	e7.0
13		---	.00	e3.0	1.6	5.8	e1.5	1.7	26	e19	30	e6.7
14		---	.00	e2.5	1.3	4.6	e1.1	10	24	e18	25	e5.8
15		---	.00	e1.8	.94	3.8	.76	10	20	e15	21	e4.8
16		---	.00	e1.2	.34	3.3	.32	e9.8	17	13	19	e3.9
17		---	.00	e1.1	.36	2.6	.00	e8.2	19	13	15	e3.2
18		.00	.00	e.96	.22	1.2	.00	e6.7	18	17	13	e2.7
19		.00	.00	e.50	.07	.76	.00	e5.4	15	31	14	e1.8
20		.00	.00	e.40	1.8	1.1	.00	e4.2	16	71	17	e.80
21		.00	.00	e.10	15	1.0	.00	e3.9	25	54	15	e.30
22		.00	.00	e2.3	13	.70	.00	3.2	23	47	12	e.00
23		.00	.00	e1.4	12	.51	.00	2.1	20	35	9.4	.00
24		.00	.00	e.80	11	4.0	.00	1.8	17	26	7.1	.05
25		.00	.00	e.30	11	5.2	.00	.95	e15	21	4.7	.16
26		.00	.00	e.60	9.8	9.3	.00	.18	e13	17	3.2	.07
27		.00	.00	e.30	6.1	23	.00	.01	e12	15	1.3	.41
28		.00	.58	e.10	4.7	21	.00	.00	e18	12	e.05	2.6
29		.00	1.4	e.00	---	18	.00	.00	e14	11	e.00	2.1
30		.00	1.5	e.00	---	16	.00	.00	e30	11	e3.0	4.2
31		---	4.9	e.00	---	23	---	.00	---	11	e1.1	---
TOTAL		---	8.38	123.16	112.23	259.57	108.28	68.64	385.95	748	397.25	120.69
MEAN		---	.27	3.97	4.01	8.37	3.61	2.21	12.9	24.1	12.8	4.02
MAX		---	4.9	14	15	23	19	10	32	71	40	11
MIN		---	.00	.00	.00	.51	.00	.00	.00	11	.00	.00
AC-FT		---	17	244	223	515	215	136	766	1480	788	239

e Estimated

CALOOSAHATCHEE RIVER

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02293243 COURTNEY CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	4.23	4.61	---	e4.55	4.73	4.10	4.22	---	4.60	---
2		---	4.22	4.59	---	---	4.68	4.08	4.21	---	4.60	---
3		---	4.21	4.56	---	---	4.63	4.06	4.25	---	4.67	---
4		---	4.20	4.56	---	---	4.61	4.04	4.34	---	4.67	---
5		---	4.21	4.58	---	---	4.57	4.02	4.32	---	4.63	---
6		---	4.20	4.55	---	---	4.55	4.11	4.31	---	4.60	---
7		---	4.18	4.52	---	---	4.52	4.22	4.30	---	4.59	---
8		---	4.16	4.50	---	---	4.51	4.31	4.30	---	4.60	---
9		---	4.13	4.48	---	e4.55	e4.48	4.35	4.30	---	4.57	---
10		---	4.11	4.47	---	4.54	---	4.36	4.43	---	4.80	---
11		---	4.08	e4.45	---	4.51	---	4.36	4.57	---	5.03	---
12		---	4.07	---	e4.39	4.50	---	4.36	4.92	---	4.96	---
13		---	4.08	---	4.38	4.47	---	4.39	4.85	---	4.89	---
14		---	4.06	---	4.37	4.45	e4.40	4.59	4.81	---	4.82	---
15		---	4.02	---	4.36	4.43	4.39	4.59	4.75	e4.62	4.76	---
16		---	3.97	---	4.34	4.42	4.37	e4.58	4.70	4.58	4.72	---
17		---	3.95	---	4.35	4.40	4.35	---	4.74	4.58	4.66	---
18		4.23	3.92	---	4.34	4.37	4.33	---	4.73	4.66	4.64	---
19		4.21	3.90	---	4.33	4.36	4.32	---	4.68	4.88	4.64	---
20		4.21	3.89	---	4.36	4.37	4.31	---	4.70	5.45	4.70	---
21		4.21	3.88	---	4.63	4.37	4.28	e4.47	4.82	5.24	4.67	---
22		4.19	3.86	---	4.60	4.36	4.27	4.45	4.79	5.16	4.61	e4.33
23		4.17	3.84	---	4.59	4.35	4.26	4.42	4.74	5.00	4.57	4.32
24		4.16	3.93	---	4.57	4.44	4.25	4.42	4.70	4.88	4.53	4.35
25		4.17	3.98	---	4.57	4.47	4.23	4.39	e4.66	4.79	4.48	4.37
26		4.26	4.02	---	4.55	4.54	4.22	4.37	---	4.74	4.45	4.36
27		4.23	4.17	---	4.48	4.77	4.20	4.35	---	4.71	4.40	4.37
28		4.22	4.35	---	4.45	4.75	4.17	4.32	---	4.67	e4.35	4.44
29		4.21	4.38	---	---	4.71	4.15	4.29	---	4.64	---	4.43
30		4.22	4.38	---	---	4.68	4.13	4.27	---	4.64	---	4.47
31		---	4.45	---	---	4.79	---	4.25	---	4.64	---	---
MEAN		---	4.10	---	---	---	---	---	---	---	---	---
MAX		---	4.45	---	---	---	---	---	---	---	---	---
MIN		---	3.84	---	---	---	---	---	---	---	---	---

e Estimated

CALOOSAHATCHEE RIVER

02293243 COURTNEY CANAL AT CAPE CORAL, FL

DISCHARGE, IN 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	8.6	3.0	.00	.00	.00	.00	e.00	e.00	e.00	.00	3.4	18
2	8.5	5.8	.00	.00	.00	.00	e.00	e.00	e.00	.00	2.7	17
3	7.4	7.6	.00	.00	.00	.00	e.00	e.00	e.00	.00	7.6	12
4	6.1	9.4	.00	.00	.00	.00	e.00	e.00	e.00	.00	15	8.5
5	4.8	10	.00	.00	.00	.00	e.00	.00	e.00	.00	19	5.8
6	3.8	10	.00	.00	.00	.00	e.00	.00	e.00	.00	18	5.1
7	3.0	8.8	.00	.00	.00	.00	e.00	.00	e.00	.00	21	10
8	2.2	6.5	.00	.00	e.00	.00	e.00	.00	e.00	.00	29	20
9	.96	5.5	.00	.00	e.00	.00	.00	.00	e.00	.00	27	18
10	.60	4.8	e.00	.00	e.00	.60	.00	.00	e.00	.00	19	15
11	.32	4.3	e.00	.00	e.00	.73	.00	.00	e.00	.00	16	13
12	43	e2.8	e.00	.07	.00	.31	.00	.00	e.00	.00	17	9.9
13	55	e1.9	e.00	.12	.00	.08	.00	.00	e.00	.00	14	7.6
14	45	1.5	e.00	.16	.00	.69	.00	.00	.00	.00	14	5.7
15	37	1.3	e.00	.05	.00	.19	.00	.00	.00	.00	13	5.3
16	31	.79	e.00	.00	.00	.00	e.00	.00	.00	.00	13	4.9
17	26	.25	e.00	.00	.00	.00	e.00	.00	.00	.00	15	4.1
18	22	.86	e.00	.00	.00	.00	e.00	.00	.00	.01	15	3.2
19	18	.97	e.00	.00	.00	3.3	e.00	.00	.00	.62	15	2.6
20	16	1.7	e.00	.00	.00	4.6	e.00	.00	.00	1.1	14	2.1
21	15	.70	e.00	.00	.00	4.0	e.00	.00	.00	.58	12	1.2
22	13	.05	.00	.00	.00	3.7	e.00	.00	.00	.15	11	.81
23	11	.00	.00	.00	.00	e3.4	e.00	.00	.00	.14	9.4	.74
24	9.1	.01	.00	.00	.00	e2.2	e.00	.00	.00	.54	11	.52
25	7.9	.00	.00	.00	.00	e1.9	e.00	.00	.00	.05	18	.08
26	6.6	.08	.00	.00	.00	e1.1	e.00	.00	.00	.01	28	.00
27	5.5	.74	.00	.00	.00	e.75	e.00	.00	.00	.82	36	.00
28	5.1	.65	.00	.00	.00	e.50	e.00	.00	.00	2.8	32	.00
29	4.3	.45	.00	.00	.00	e.06	e.00	.00	.00	4.4	26	.00
30	3.1	.15	.00	.00	---	e.00	e.00	.00	.00	5.5	22	.00
31	2.0	---	.00	.00	---	e.00	---	e.00	---	4.2	19	---
TOTAL	421.88	90.60	.00	.40	.00	28.11	.00	.00	.00	20.92	532.1	191.15
MEAN	13.6	3.02	.000	.013	.000	.91	.000	.000	.000	.67	17.2	6.37
MAX	55	10	.00	.16	.00	4.6	.00	.00	.00	5.5	36	20
MIN	.32	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.7	.00
AC-FT	837	180	.00	.8	.00	56	.00	.00	.00	41	1060	379

CAL YR 1987 TOTAL 2836.25 MEAN 7.77 MAX 71 MIN .00 AC-FT 5630
 WIR YR 1988 TOTAL 1285.16 MEAN 3.51 MAX 55 MIN .00 AC-FT 2550

e Estimated

CALOOSAHATCHEE RIVER

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02293243 COURTNEY CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.56	4.41	4.34	4.06	4.19	3.98	---	---	---	2.99	4.43	4.52
2	4.55	4.47	4.33	4.03	4.19	3.97	---	---	---	3.00	4.42	4.51
3	4.53	4.51	4.31	4.00	4.17	3.94	---	---	---	3.04	4.42	4.43
4	4.51	4.55	4.29	4.01	4.15	3.92	---	---	---	3.03	4.47	4.37
5	4.48	4.57	4.28	4.01	4.14	3.96	---	---	---	3.02	4.53	4.31
6	4.46	4.57	4.26	3.99	4.13	4.12	---	---	---	3.04	4.53	4.30
7	4.45	4.54	4.25	3.97	4.17	4.24	---	---	---	3.10	4.58	4.39
8	4.43	4.51	4.24	3.96	e4.24	4.28	e4.11	---	---	3.11	4.68	4.56
9	4.40	4.49	4.22	3.96	---	4.27	4.07	---	---	3.13	4.66	4.52
10	4.38	4.47	e4.24	4.03	---	4.35	4.02	---	---	3.14	4.54	4.48
11	4.37	4.47	---	4.32	e4.24	4.37	3.91	---	---	3.15	4.50	4.44
12	4.97	e4.44	---	4.35	4.24	4.35	3.76	---	---	3.15	4.50	4.39
13	5.14	e4.42	---	4.35	4.23	4.34	3.65	e2.84	---	3.14	4.47	4.35
14	5.01	4.41	---	4.35	4.22	4.37	3.71	---	2.82	3.16	4.45	4.31
15	4.92	4.41	---	4.34	4.20	4.34	3.75	---	2.80	3.39	4.44	4.30
16	4.83	4.39	---	4.33	4.23	4.31	e3.74	---	2.78	3.65	4.44	4.30
17	4.76	4.37	---	4.31	4.21	4.28	---	---	2.76	3.93	4.47	4.28
18	4.70	4.39	---	4.29	4.19	4.25	---	---	2.74	4.22	4.48	4.26
19	4.66	4.39	---	4.27	4.19	4.43	---	---	2.79	4.36	4.48	4.25
20	4.63	4.41	---	4.24	4.18	4.46	---	---	2.90	4.38	4.46	4.23
21	4.60	4.38	e4.15	4.22	4.22	4.45	---	---	2.91	4.36	4.43	4.21
22	4.58	4.35	4.15	4.29	4.21	4.44	---	---	2.95	4.34	4.40	4.20
23	4.55	4.34	4.15	4.28	4.19	e4.43	---	---	2.96	4.33	4.38	4.20
24	4.52	4.34	4.16	4.28	4.20	---	---	---	2.96	4.36	4.41	4.19
25	4.49	4.34	4.17	4.28	4.17	---	---	---	2.97	4.33	4.51	4.17
26	4.47	4.35	4.17	4.27	4.13	---	---	---	2.97	4.32	4.67	4.15
27	4.46	4.38	4.17	4.26	4.09	---	---	---	2.97	4.37	4.79	4.13
28	4.45	4.38	4.16	4.24	4.05	---	---	---	2.97	4.42	4.73	4.10
29	4.43	4.37	4.16	4.23	4.01	---	---	---	2.99	4.46	4.65	4.07
30	4.41	4.35	4.13	4.21	---	---	---	---	2.99	4.48	4.59	4.04
31	4.39	---	4.10	4.20	---	---	---	---	---	4.45	4.54	---
MEAN	4.58	4.43	---	4.19	---	---	---	---	---	3.72	4.52	4.30
MAX	5.14	4.57	---	4.35	---	---	---	---	---	4.48	4.79	4.56
MIN	4.37	4.34	---	3.96	---	---	---	---	---	2.99	4.38	4.04

e Estimated

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, 3.25 ft Jan. 1, 1987; minimum, 0.79 ft May 31, June 18, 19, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.49 ft Oct. 12; minimum, 0.79 ft May 31, June 18, 19.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	1.74	2.40	1.35	1.62	1.91	1.35	1.36	1.86	1.81	---
2		---	1.77	1.93	1.32	1.64	1.86	1.35	1.36	1.85	1.79	---
3		---	1.77	1.83	1.33	1.61	1.84	1.34	1.37	1.84	1.80	---
4		---	1.69	1.83	1.32	1.58	1.84	1.34	1.45	1.86	1.84	---
5		---	1.65	1.92	1.43	1.54	1.78	1.34	1.45	1.96	1.82	---
6		---	1.58	1.82	1.51	1.49	1.75	1.34	1.43	2.00	1.81	---
7		---	1.51	1.77	1.55	1.72	1.73	1.33	1.41	1.97	1.82	---
8		---	1.47	1.74	1.56	1.94	1.72	1.33	1.40	1.95	1.86	---
9		---	1.45	1.71	1.51	1.85	1.69	1.33	1.40	1.95	1.87	---
10		---	1.42	1.69	1.46	1.80	1.67	1.32	1.55	1.97	2.01	---
11		---	1.42	1.72	1.43	1.74	1.64	1.32	1.96	2.01	2.19	---
12		---	1.41	1.65	1.42	1.70	1.62	1.33	2.08	2.00	2.13	---
13		---	1.40	1.61	1.41	1.66	1.60	1.35	1.98	1.97	---	---
14		---	1.36	1.57	1.40	1.61	1.59	1.40	1.94	1.93	---	---
15		---	1.33	1.55	1.39	1.58	1.60	1.46	1.90	1.89	---	---
16		---	1.32	1.55	1.41	1.58	1.59	1.50	1.85	1.86	---	---
17		---	1.31	1.54	1.44	1.57	1.58	1.51	1.81	1.84	---	---
18		1.42	1.31	1.53	1.43	1.56	1.55	1.51	1.77	1.87	---	---
19		1.43	1.30	1.52	1.39	1.66	1.54	1.53	1.75	2.00	---	---
20		1.44	1.31	1.50	1.38	1.79	1.52	1.56	1.73	2.13	---	---
21		1.45	1.30	1.46	1.59	1.73	1.50	1.54	1.74	2.05	---	---
22		1.42	1.27	1.51	1.61	1.68	1.48	1.52	1.75	2.01	---	1.67
23		1.39	1.25	1.52	1.63	1.66	1.47	1.50	1.75	1.97	---	1.67
24		1.37	1.41	1.45	1.60	1.74	1.46	1.49	1.74	1.95	---	---
25		1.37	1.44	1.44	1.60	1.84	1.44	1.47	1.72	1.92	---	---
26		1.44	1.41	1.51	1.61	1.86	1.42	1.45	1.70	1.90	---	---
27		1.45	1.51	1.47	1.61	1.99	1.39	1.43	1.79	1.89	---	---
28		1.44	1.66	1.41	1.60	1.95	1.37	1.41	1.89	1.88	---	---
29		1.45	1.63	1.39	---	1.90	1.37	1.40	1.87	1.86	---	---
30		1.51	1.62	1.38	---	1.88	1.36	1.39	1.87	1.86	---	---
31		---	1.69	1.39	---	2.01	---	1.38	---	1.84	---	---
MEAN		---	1.47	1.62	1.47	1.73	1.60	1.41	1.69	1.93	---	---
MAX		---	1.77	2.40	1.63	2.01	1.91	1.56	2.08	2.13	---	---
MIN		---	1.25	1.38	1.32	1.49	1.36	1.32	1.36	1.84	---	---

CALOOSAHATCHEE RIVER

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02293245 CAMELOT CANAL AT CONTROL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.61	1.57	1.18	1.21	1.05	1.17	1.02	.82	.97	1.61	1.91
2	1.64	1.67	---	1.19	1.22	1.03	1.16	1.04	.84	.98	1.74	1.92
3	1.63	1.73	---	1.20	1.22	1.02	1.15	1.00	.85	1.00	1.72	1.83
4	1.59	1.83	1.52	1.23	1.21	1.03	1.14	.99	.85	.98	1.68	1.77
5	1.56	1.95	1.50	1.21	1.20	1.06	1.16	.99	.84	.95	1.68	1.88
6	1.54	1.89	1.46	1.16	1.19	1.16	1.14	.98	.84	.92	1.67	2.03
7	1.53	1.80	1.44	1.13	1.12	1.15	1.14	.94	.85	.92	1.64	1.99
8	1.51	1.74	1.44	1.16	1.19	1.12	1.09	.91	.89	.92	1.65	2.02
9	1.46	1.72	1.45	1.16	1.20	1.11	1.05	.89	.89	.94	1.72	1.96
10	1.44	1.73	1.47	1.21	1.19	1.22	1.04	.89	.91	.97	1.71	1.89
11	1.43	1.72	1.46	1.38	1.18	1.21	1.05	.89	.91	.96	1.70	1.82
12	2.05	1.66	1.43	1.36	1.20	1.19	1.07	.88	.88	.95	1.69	1.75
13	2.09	1.61	1.41	1.36	1.16	1.20	1.06	.89	.85	.95	1.68	1.69
14	1.97	1.59	1.38	1.35	1.12	1.26	1.03	.93	.83	.96	1.63	1.64
15	1.92	1.57	1.37	1.34	1.14	1.22	1.02	.93	.83	1.07	1.59	1.79
16	1.88	1.54	1.43	1.31	1.23	1.17	1.02	.93	.83	1.15	1.56	1.83
17	1.86	1.54	1.39	1.31	1.22	1.14	1.02	.93	.82	1.13	1.54	1.78
18	1.84	1.57	1.35	1.33	1.20	1.11	1.00	.93	.81	1.14	1.51	1.72
19	1.83	1.58	1.33	1.39	1.21	1.32	1.04	.94	.85	1.19	1.48	1.70
20	1.82	1.63	1.34	1.49	1.23	1.33	1.11	.94	.93	1.18	1.45	1.72
21	1.82	1.58	1.34	1.54	1.26	1.31	1.10	.92	.93	1.20	1.44	1.69
22	1.79	1.53	1.35	1.59	1.20	1.31	1.08	.90	.92	1.20	1.42	1.67
23	1.75	1.52	1.35	1.51	1.18	1.29	1.06	.89	.92	1.21	1.40	1.65
24	1.71	1.51	1.34	1.46	1.19	1.30	1.06	.87	.93	1.26	1.43	1.64
25	1.70	1.51	1.33	1.43	1.16	1.30	1.05	.89	.93	1.25	1.54	1.61
26	1.69	1.56	1.32	1.38	1.11	1.29	1.03	.89	.92	1.26	1.70	1.58
27	1.71	1.61	1.30	1.34	1.08	1.29	1.03	.88	.93	1.26	1.83	1.53
28	1.73	1.62	1.29	1.30	1.06	1.27	1.02	.86	.94	1.33	1.86	1.49
29	1.68	1.61	1.29	1.27	1.06	1.24	.99	.84	.95	1.53	1.86	1.44
30	1.63	1.58	1.23	1.23	---	1.22	.97	.83	.96	1.58	1.87	1.40
31	1.60	---	1.19	1.22	---	1.19	---	.83	---	1.56	1.86	---
MEAN	---	1.64	---	1.31	1.18	1.20	1.07	.92	.88	1.12	1.64	1.74
MAX	---	1.95	---	1.59	1.26	1.33	1.17	1.04	.96	1.58	1.87	2.03
MIN	---	1.51	---	1.13	1.06	1.02	.97	.83	.81	.92	1.40	1.40

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, 3.45 ft Jan. 1, 1987; minimum, -1.40 ft Dec. 30, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.64 ft Sept. 5; minimum, -1.40 ft Dec. 30.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	2.45	3.45	1.23	1.84	.74	1.43	1.49	1.55	1.44	1.62
2		---	2.15	1.61	1.42	1.34	1.38	1.61	1.30	1.38	1.62	1.81
3		---	2.15	1.57	1.18	1.19	1.94	1.38	1.41	1.19	1.71	1.84
4		---	1.72	2.39	1.25	1.02	.63	1.36	1.11	1.22	1.81	1.92
5		---	1.30	1.47	1.57	.78	.90	1.03	1.16	1.36	1.92	2.23
6		---	.86	.83	1.69	.56	1.01	.86	1.16	1.53	2.06	2.14
7		---	.82	1.37	1.59	2.40	1.07	1.13	1.39	1.80	2.09	1.97
8		---	1.28	1.49	.95	1.38	.88	1.05	1.53	2.01	2.16	1.79
9		---	1.33	1.54	.66	1.55	.94	1.14	1.68	2.01	2.10	1.51
10		---	1.81	2.03	.87	1.04	1.00	1.21	1.84	2.23	1.85	1.48
11		---	1.59	1.82	1.27	1.23	1.12	1.52	2.01	2.34	1.88	1.48
12		---	1.40	1.10	1.27	1.26	1.14	1.60	2.22	2.27	1.54	1.46
13		---	1.17	1.15	1.16	.96	1.19	1.62	2.20	2.10	1.58	1.57
14		---	1.22	1.58	1.39	.93	1.39	1.77	2.17	1.75	1.56	1.49
15		---	1.50	1.70	1.54	1.48	1.66	1.87	1.81	1.52	1.63	1.33
16		---	1.51	1.61	1.84	1.69	1.37	1.92	1.54	1.43	1.53	1.32
17		---	1.50	1.58	1.37	1.80	1.53	1.92	1.27	1.36	1.45	1.61
18		---	1.48	1.61	1.01	2.18	1.69	1.80	.97	1.34	1.24	1.62
19		1.92	1.65	1.41	1.02	2.38	1.17	1.69	1.00	1.54	1.40	1.58
20		1.99	1.66	.99	1.14	1.83	1.15	1.40	1.37	1.71	1.47	1.71
21		1.84	1.34	1.51	1.42	1.53	1.03	1.21	1.55	1.60	1.47	1.68
22		1.42	1.16	2.05	1.70	1.81	1.21	1.10	1.64	1.59	1.44	1.55
23		1.37	1.95	.48	.92	1.91	1.20	1.32	1.69	1.91	1.56	1.67
24		1.21	1.97	1.21	.90	2.14	1.22	1.43	1.66	1.98	1.57	1.57
25		1.42	1.31	1.97	1.55	1.91	1.23	1.49	1.59	1.85	1.69	1.71
26		1.56	1.36	1.55	1.80	2.00	1.12	1.54	1.93	1.67	1.47	1.60
27		1.56	1.74	1.24	1.80	2.20	.96	1.49	2.26	1.64	1.37	1.65
28		1.87	1.61	1.41	1.86	2.12	1.23	1.60	1.83	1.71	1.43	1.76
29		2.10	1.83	1.49	---	1.75	1.52	1.74	1.71	1.46	1.50	1.64
30		2.43	1.86	1.74	---	2.06	1.37	1.58	1.44	1.43	1.64	1.87
31		---	2.99	1.74	---	1.94	---	1.40	---	1.26	1.54	---
MEAN		---	1.60	1.57	1.33	1.62	1.20	1.46	1.60	1.67	1.64	1.67
MAX		---	2.99	3.45	1.86	2.40	1.94	1.92	2.26	2.34	2.16	2.23
MIN		---	.82	.48	.66	.56	.63	.86	.97	1.19	1.24	1.32

CALOOSAHATCHEE RIVER

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02293246 CAMELOT CANAL BELOW CONTROL CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	.32	.43	-.32	.35	-.71	-.21	-.34	.04	.26	.07
2		---	.14	-.19	.25	-.21	-.72	-.09	-.12	.23	.40	.04
3		---	-.09	-.21	.13	-.25	-.20	-.03	-.10	.26	.27	.07
4		---	-.37	.49	.10	-.55	-.23	-.05	.12	.31	.14	.19
5		---	-.57	-.44	-.01	-.72	-.58	-.16	.17	.34	.07	.39
6		---	-.57	-.63	.25	-.82	-.25	-.26	.08	.13	.00	.36
7		---	-.47	-.12	.23	-.79	-.18	-.23	.07	.04	.01	.31
8		---	.15	.20	-.21	.59	-.01	.07	.01	.09	.03	.21
9		---	.48	.08	-.35	-.02	-.35	.05	-.08	-.03	.06	-.04
10		---	.27	.10	-1.11	.02	-.11	-.07	-.08	.10	.04	-.08
11		---	.39	-.16	-.64	-.33	-.07	-.05	.12	.19	.07	-.04
12		---	.16	-.90	-.40	-.24	-.15	-.05	.20	.29	.24	.10
13		---	-.41	-.38	-.47	-.72	-.30	-.21	.23	.25	.27	.04
14		---	-.73	-.43	-.19	-.61	-.26	-.29	.23	.21	.26	.04
15		---	-.51	-.09	-.01	.10	-.12	-.16	.25	.20	.19	-.07
16		---	-.21	-.02	.57	.29	-.23	-.14	.11	.24	.06	.10
17		---	-.29	-.04	.13	.34	-.15	-.10	.09	.20	-.11	.20
18		---	-.24	.19	-.47	.51	-.24	.03	.06	.10	-.21	.27
19		.16	-.09	.08	-.42	.63	-.03	.01	.11	.22	-.14	.23
20		.29	.07	-.03	-.37	.54	-.47	.09	.20	.00	-.14	.30
21		.17	-.19	.18	-.23	.19	-.40	.14	.15	.06	-.14	.36
22		-.07	-.10	.48	-.24	-.10	-.39	.05	.11	-.01	-.21	.30
23		.03	.82	-.49	-.12	.00	-.06	.00	.06	.17	-.05	.25
24		.17	.91	-.78	-.76	.28	.02	-.06	-.11	.23	.03	.19
25		.27	.49	-.29	-.71	.42	-.14	-.20	-.08	.18	.13	.22
26		.43	.01	.19	-.25	.40	-.47	-.19	.14	.05	.18	.07
27		.44	-.15	-.43	.01	.68	-.57	-.29	.27	.07	.14	.00
28		.20	-.09	-.65	.22	.68	-.39	-.27	.17	.15	.24	.14
29		.30	-.29	-.36	---	-.03	-.23	-.22	.09	.13	.23	-.02
30		.28	-.20	-.14	---	.54	-.22	-.23	.04	.14	.21	.37
31		---	-.36	-.20	---	-.59	---	-.20	---	.30	.04	---
MEAN		---	-.06	-.15	-.19	.02	-.27	-.11	.07	.16	.08	.15
MAX		---	.91	.49	.57	.68	.02	.14	.27	.34	.40	.39
MIN		---	-.73	-.90	-1.11	-.82	-.72	-.29	-.34	-.03	-.21	-.08

CALOOSAHATCHEE RIVER

02293246 CAMELOT CANAL BELOW CONTROL CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.91	1.31	1.86	1.64	1.45	1.19	1.28	1.94	1.67	1.88	1.45	1.77
2	1.34	1.73	1.68	1.62	1.55	1.16	1.24	1.17	1.70	1.70	1.22	1.72
3	1.29	2.14	2.05	1.62	1.25	1.34	1.33	1.36	1.70	1.72	1.11	1.57
4	1.05	2.38	2.07	1.66	1.21	1.38	1.47	1.61	1.51	1.41	1.40	1.85
5	1.18	2.45	1.83	1.03	1.21	1.11	1.39	1.29	1.20	1.07	1.31	2.46
6	1.59	2.05	1.72	.80	.77	1.01	1.35	.96	1.26	.94	1.44	2.64
7	1.53	1.17	1.76	1.18	.35	.92	.87	.88	1.36	1.10	1.35	2.01
8	1.42	1.57	1.89	1.10	.46	1.10	1.21	.90	1.57	1.43	1.56	2.22
9	.69	1.81	1.81	1.14	.92	1.45	1.13	1.15	1.70	1.78	1.73	1.94
10	.56	2.06	1.66	.72	1.29	1.18	1.41	1.07	1.51	1.57	1.71	1.57
11	1.25	1.59	1.41	.76	1.49	1.19	1.79	1.01	1.30	1.61	1.64	1.34
12	1.20	.54	1.41	1.10	.82	1.34	1.61	1.16	1.00	1.53	1.37	1.09
13	1.01	.95	1.20	1.21	.98	1.44	1.45	1.05	1.24	1.73	1.26	1.08
14	.82	1.21	1.40	.81	1.54	1.16	1.08	1.23	1.39	1.69	1.50	1.74
15	.83	1.13	1.51	1.01	2.09	.75	1.16	1.41	1.34	1.39	1.24	2.43
16	1.23	1.56	1.05	1.46	2.12	.79	1.43	1.55	1.52	1.36	1.09	1.96
17	1.48	1.81	1.00	1.91	1.50	.90	1.33	1.59	1.45	1.34	1.07	1.52
18	1.48	1.76	1.44	1.97	1.51	1.43	1.99	1.52	1.30	1.18	.95	1.75
19	1.64	2.11	1.95	2.15	1.74	1.50	1.92	1.48	1.03	.91	1.18	1.86
20	1.84	2.12	1.96	2.30	1.69	.43	1.41	1.25	.80	.91	1.30	1.74
21	1.90	1.23	1.79	2.01	1.26	.62	1.36	1.22	.66	.84	1.52	1.60
22	1.72	1.69	1.39	1.30	.93	.83	1.17	1.10	1.09	1.02	1.36	1.84
23	1.50	1.88	1.71	.73	1.45	1.24	1.24	.96	1.13	1.19	1.47	1.91
24	1.64	1.71	1.57	.97	.97	1.17	.94	.95	1.32	1.28	1.68	1.95
25	1.84	2.03	1.37	1.16	.42	1.07	1.05	1.02	1.29	1.38	1.89	1.86
26	1.87	2.20	1.16	.37	.59	1.15	1.19	1.30	1.47	1.57	1.91	1.60
27	2.17	1.94	1.04	.18	1.09	.67	1.10	1.04	1.80	1.71	1.97	1.70
28	2.12	1.74	1.27	.53	1.40	.74	1.02	1.16	1.87	1.80	1.93	1.66
29	.93	1.55	.70	.45	1.31	.91	.69	1.29	1.77	1.70	1.66	1.67
30	.85	1.78	.70	.91	---	.96	1.57	1.36	1.82	1.66	1.30	1.75
31	1.05	---	1.15	1.27	---	.97	---	1.45	---	1.55	1.57	---
MEAN	1.38	1.71	1.50	1.20	1.22	1.07	1.31	1.24	1.39	1.42	1.46	1.79
MAX	2.17	2.45	2.07	2.30	2.12	1.50	1.99	1.94	1.87	1.88	1.97	2.64
MIN	.56	.54	.70	.18	.35	.43	.69	.88	.66	.84	.95	1.08

CAL YR 1987 MEAN .37 MAX 2.45 MIN -1.11
WTR YR 1988 MEAN 1.39 MAX 2.64 MIN .18

CALOOSAHATCHEE RIVER

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02293246 CAMELOT CANAL BELOW CONTROL CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-.33	.13	.36	-.55	-.40	-.31	.02	.23	-.34	-.10	-.01	.30
2	-.26	.17	.04	-.18	-.30	-.30	-.10	-.57	-.22	-.09	.14	.25
3	-.35	.46	-.16	-.23	-.29	-.02	-.07	-.46	-.22	-.11	.00	.21
4	-.36	.67	.22	-.19	-.26	.08	-.12	-.41	-.05	.01	.06	.40
5	-.42	.66	-.29	-.78	-.21	-.21	-.21	-.28	-.19	.07	-.13	1.18
6	-.13	-.01	-.28	-1.02	-1.31	-.40	-.26	-.44	-.14	-.08	-.15	1.01
7	-.04	-.73	-.15	-.12	-.12	-.42	-.30	-.62	-.06	-.26	-.08	.48
8	-.50	-.23	.15	-.03	-.40	-.16	-.43	-.69	.41	-.04	.02	.84
9	-.96	.22	.16	-.46	-.26	-.29	-.41	-.66	.30	.11	.19	.59
10	-.77	.33	.17	-.40	-.22	.09	-.45	-.11	-.15	-.08	.02	.25
11	-.20	-.13	.03	-.31	-.24	-.46	-.16	-.05	-.43	-.04	.00	.01
12	-.45	-.68	.22	-.56	-.09	-.48	.20	-.20	-.69	-.06	-.15	-.08
13	-.28	-.17	.11	-.20	-.82	-.28	-.18	-.43	-.54	.19	-.13	-.04
14	-.27	.19	.33	-.44	-.77	-.21	-.32	-.47	-.79	-.16	-.08	.24
15	-.30	.21	.49	-.66	-.43	-.90	-.26	-.39	-.42	-.13	.09	.94
16	.06	.20	-.03	-.95	-.10	-.90	-.29	-.22	-.43	-.06	.06	.53
17	.34	.44	-.84	-.67	-.50	-.76	-.37	-.18	-.18	-.04	.00	.19
18	.37	.05	-.66	-.91	-.60	-.22	-.05	-.20	-.08	-.05	-.06	.22
19	.49	.08	-.47	.03	-.16	-.78	.28	-.24	-.06	-.10	-.13	.24
20	.47	.16	-.16	.11	-.34	-1.09	-.03	-.15	-.28	-.01	-.01	.18
21	.40	-.69	-.27	.16	-.94	-1.09	-.27	-.20	-.30	-.10	.06	-.09
22	-.21	-.52	-.93	-.52	-.69	-.86	-.17	-.09	.02	-.02	-.16	.12
23	-.30	-.14	-.27	-.68	-.49	-.73	-.17	-.06	.24	-.05	-.24	.18
24	-.32	-.17	-.19	-.45	.01	-.46	-.08	-.05	.02	-.16	-.17	.33
25	-.07	.19	-.09	-.34	-.73	-.37	-.20	.00	-.10	-.22	-.02	.21
26	.03	.51	-.06	-.60	-1.00	-.46	.36	.13	-.10	-.18	.03	-.01
27	.31	.46	.21	-.90	-.72	-.33	.23	-.27	-.04	-.16	.08	-.03
28	.19	.49	-.16	-1.34	-.48	-.52	-.17	-.27	-.09	-.14	.22	-.14
29	-.48	.46	-.59	-1.35	-.16	-.53	-.51	-.36	-.15	-.24	-.02	-.08
30	-.44	.36	-1.40	-.86	---	-.25	.22	-.45	-.12	-.16	-.13	-.04
31	-.16	---	-.73	-.46	---	-.32	---	-.46	---	-.06	.10	---
MEAN	-.16	.10	-.17	-.51	-.45	-.45	-.14	-.28	-.17	-.08	-.02	.28
MAX	.49	.67	.49	.16	.01	.09	.36	.23	.41	.19	.22	1.18
MIN	-.96	-.73	-1.40	-1.35	-1.31	-1.09	-.51	-.69	-.79	-.26	-.24	-.14

WTR YR 1988 MEAN -.17 MAX 1.18 MIN -1.40

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 discharges. 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 325 ft³/s Oct. 12, gage height, 3.94 ft; no flow for many days.

DISCHARGE, IN 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				---	6.3	6.4	25	3.5	30	15	25	32
2				---	6.1	5.6	13	2.9	28	10	30	31
3				---	6.4	4.9	13	1.5	29	8.0	35	29
4				---	7.4	5.0	12	.97	27	19	23	28
5				---	18	4.6	9.6	3.8	25	21	22	29
6				---	14	5.3	8.6	11	23	18	23	30
7				---	12	27	7.9	5.6	22	16	23	31
8				---	9.8	14	7.7	4.6	22	11	22	27
9				---	8.5	8.0	7.8	4.2	25	9.8	21	25
10				---	7.5	7.7	8.2	7.2	25	7.3	67	26
11				---	7.1	7.7	9.0	7.6	53	5.2	85	29
12				---	7.1	7.4	8.1	4.6	54	4.9	111	29
13				---	6.4	6.7	6.6	25	36	4.6	62	29
14				---	6.4	5.0	6.4	50	15	3.5	46	29
15				---	5.9	5.0	8.4	25	8.0	2.7	36	28
16				---	6.2	4.8	8.4	18	6.0	3.5	31	27
17				---	6.3	4.2	7.1	13	4.9	5.6	31	27
18				---	6.4	4.6	6.1	9.3	4.8	9.5	45	26
19				---	6.4	4.0	5.5	25	4.5	63	34	25
20				---	8.2	5.1	4.7	48	10	131	37	24
21				9.0	15	5.0	5.8	35	18	101	32	25
22				13	8.4	4.9	7.8	22	16	51	29	25
23				11	6.6	4.5	8.0	20	12	53	28	26
24				8.7	6.9	3.7	7.8	18	8.0	35	30	28
25				11	7.8	15	7.1	16	4.7	29	28	24
26				11	7.3	10	5.2	13	4.6	29	29	23
27				8.8	6.4	30	3.4	12	17	28	26	28
28				7.9	6.4	37	3.5	10	28	27	24	35
29				7.9	---	22	3.8	10	20	27	24	27
30				7.1	---	16	3.9	10	18	26	27	27
31				6.2	---	15	---	11	---	25	27	---
TOTAL				---	227.2	306.1	239.4	447.77	598.5	799.6	1113	829
MEAN				---	8.11	9.87	7.98	14.4	20.0	25.8	35.9	27.6
MAX				---	18	37	25	50	54	131	111	35
MIN				---	5.9	3.7	3.4	.97	4.5	2.7	21	23
AC-FT				---	451	607	475	891	1190	1590	2210	1640

CHARLOTTE HARBOR AND COASTAL AREA

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02293345 SHADROE CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	2.51	2.52	2.64	2.51	---	---	---	2.66
2				---	2.51	2.51	2.57	2.51	---	---	---	2.66
3				---	2.51	2.51	2.57	2.49	---	---	---	2.64
4				---	2.52	2.51	2.56	2.49	---	---	2.60	2.64
5				---	2.58	2.51	2.55	2.51	---	---	2.60	2.65
6				---	2.56	2.51	2.54	2.56	---	---	2.60	2.65
7				---	2.55	2.65	2.54	2.52	---	---	2.60	2.66
8				---	2.53	2.58	2.54	2.52	---	---	2.60	2.64
9				---	2.52	2.55	2.54	2.52	---	---	2.59	2.63
10				---	2.52	2.54	2.54	2.53	---	---	3.09	2.63
11				---	2.51	2.54	2.55	2.54	2.80	---	3.30	2.65
12				---	2.51	2.54	2.54	2.52	2.84	---	3.05	2.65
13				---	2.51	2.53	2.53	2.62	2.77	2.59	2.82	2.64
14				---	2.51	2.52	2.53	2.77	2.65	2.58	2.73	2.64
15				---	2.51	2.52	2.54	2.63	2.61	2.57	2.69	2.64
16				---	2.51	2.52	2.54	2.59	2.60	2.58	2.66	2.64
17				---	2.51	2.52	2.53	2.56	2.59	2.59	2.66	2.64
18				---	2.51	2.52	2.53	2.54	---	2.62	2.73	2.63
19				---	2.51	2.51	2.52	2.62	---	2.88	2.68	2.63
20				---	2.52	2.52	2.52	---	---	3.19	2.69	2.62
21				2.53	2.58	2.52	2.53	---	---	3.04	2.66	2.63
22				2.55	2.53	2.52	2.54	---	---	2.76	2.65	2.62
23				2.54	2.52	2.52	2.54	---	---	2.76	2.64	2.63
24				2.53	2.52	2.51	2.54	---	---	2.67	2.65	2.64
25				2.54	2.53	2.59	2.53	---	---	2.64	2.64	2.62
26				2.54	2.53	2.55	2.52	---	---	---	2.64	2.61
27				2.53	2.52	2.66	2.51	---	---	---	2.63	2.64
28				2.52	2.52	2.71	2.51	---	---	---	2.62	2.68
29				2.52	---	2.63	2.51	---	---	---	2.62	2.64
30				2.51	---	2.59	2.51	---	---	---	2.64	2.63
31				2.51	---	2.59	---	---	---	---	2.63	---
MEAN				---	2.52	2.55	2.54	---	---	---	---	2.64
MAX				---	2.58	2.71	2.64	---	---	---	---	2.68
MIN				---	2.51	2.51	2.51	---	---	---	---	2.61

CHARLOTTE HARBOR AND COASTAL AREA

02293345 SHADROE CANAL AT CAPE CORAL, FL

DISCHARGE, IN 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	26	20	7.9	2.1	3.6	1.0	2.9	1.1	.00	.00	5.2	43
2	23	24	7.3	1.1	3.5	1.0	2.3	.81	.00	.00	6.7	34
3	22	25	6.4	2.1	3.5	1.0	2.2	.61	.00	.00	6.9	19
4	19	23	6.1	3.5	3.5	1.1	2.2	.47	.00	.00	5.3	15
5	17	21	5.6	2.6	3.5	3.2	2.0	.48	.00	.00	3.8	16
6	17	18	4.9	2.2	2.8	8.6	1.5	.32	.00	.00	2.9	20
7	16	15	5.1	2.5	2.5	3.9	.78	.20	.00	.00	2.3	66
8	15	16	5.7	3.5	12	2.9	.63	.13	.00	.00	2.8	94
9	13	16	6.3	2.7	9.5	3.4	.62	.00	.00	.00	2.8	46
10	13	16	6.4	10	7.9	8.8	.71	.00	.00	.00	1.7	26
11	13	14	5.4	16	7.9	8.7	.68	.10	.00	.00	6.1	20
12	174	11	4.9	13	7.7	5.7	.67	.17	.00	.00	9.1	16
13	103	9.4	4.9	12	7.7	4.0	.74	.33	.00	.00	3.6	13
14	51	9.4	5.5	10	7.6	5.3	.75	.60	.00	.13	3.5	12
15	39	8.9	6.7	8.5	8.1	1.7	.75	.58	.00	4.4	6.0	14
16	34	8.1	9.6	6.7	8.3	.95	.70	.53	.00	3.3	10	14
17	30	8.3	6.7	5.0	5.8	1.0	.66	.50	.00	1.0	10	12
18	29	16	6.4	4.9	5.0	1.7	.62	.44	.00	1.2	8.4	10
19	27	13	6.4	4.9	4.9	15	2.0	.38	.00	3.8	7.5	9.2
20	25	11	6.4	4.9	4.9	8.0	6.8	.25	.00	3.7	6.4	8.8
21	24	8.3	6.4	6.0	5.4	6.3	4.8	.08	.00	13	5.3	7.9
22	23	7.9	6.4	7.1	3.8	5.7	3.4	.00	.00	10	4.3	7.9
23	21	7.5	6.4	4.9	3.5	5.3	2.8	.00	.00	5.4	3.5	9.5
24	20	7.1	6.1	4.9	3.1	5.0	1.8	.00	.05	5.5	5.6	10
25	19	7.6	6.0	6.3	1.8	5.0	.99	.01	.22	1.7	15	8.7
26	18	9.4	5.9	5.6	1.1	5.5	.95	.00	.07	1.7	24	7.8
27	17	10	5.9	3.7	.98	6.4	.91	.00	.00	7.7	23	7.3
28	17	9.4	4.9	2.6	.97	6.4	.81	.00	.00	13	18	6.4
29	15	9.1	3.9	2.4	.97	5.2	.66	.00	.00	11	16	6.4
30	14	7.9	1.9	2.6	---	4.4	.86	.02	.00	10	27	6.4
31	14	---	2.2	3.2	---	3.5	---	.01	---	6.2	31	---
TOTAL	908	387.3	180.6	167.5	141.82	145.65	48.19	8.12	.34	102.73	283.7	586.3
MEAN	29.3	12.9	5.83	5.40	4.89	4.70	1.61	.26	.011	3.31	9.15	19.5
MAX	174	25	9.6	16	12	15	6.8	1.1	.22	13	31	94
MIN	13	7.1	1.9	1.1	.97	.95	.62	.00	.00	.00	1.7	6.4
AC-FT	1800	768	358	332	281	289	96	16	.7	204	563	1160

WTR YR 1988 TOTAL 2960.25 MEAN 8.09 MAX 174 MIN .00 AC-FT 5870

CHARLOTTE HARBOR AND COASTAL AREA

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02293345 SHADROE CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.64	2.59	2.53	2.48	2.50	2.48	2.51	2.48	2.40	2.36	2.54	2.75
2	2.62	2.62	2.53	2.47	2.50	2.49	2.50	2.46	2.39	2.35	2.55	2.71
3	2.61	2.63	2.52	2.48	2.50	2.49	2.50	2.45	2.38	2.35	2.55	2.62
4	2.60	2.62	2.52	2.49	2.50	2.49	2.50	2.44	2.37	2.33	2.54	2.60
5	2.59	2.61	2.51	2.48	2.50	2.51	2.50	2.44	2.36	2.30	2.53	2.60
6	2.59	2.59	2.51	2.48	2.49	2.54	2.49	2.43	2.35	2.29	2.53	2.62
7	2.58	2.58	2.51	2.48	2.49	2.51	2.47	2.42	2.35	2.27	2.52	2.86
8	2.57	2.58	2.52	2.49	2.55	2.51	2.46	2.41	2.36	2.28	2.52	3.01
9	2.56	2.58	2.52	2.48	2.53	2.51	2.46	2.40	2.38	2.28	2.52	2.77
10	2.56	2.58	2.52	2.53	2.52	2.55	2.47	2.40	2.38	2.31	2.52	2.66
11	2.56	2.57	2.51	2.58	2.52	2.55	2.46	2.41	2.38	2.31	2.55	2.62
12	3.29	2.55	2.51	2.56	2.52	2.53	2.46	2.41	2.36	2.30	2.57	2.60
13	3.00	2.55	2.51	2.55	2.52	2.51	2.47	2.43	2.33	2.30	2.53	2.58
14	2.75	2.55	2.51	2.55	2.52	2.52	2.47	2.45	2.32	2.35	2.53	2.58
15	2.68	2.55	2.51	2.53	2.52	2.49	2.47	2.45	2.30	2.51	2.55	2.59
16	2.66	2.54	2.53	2.52	2.53	2.49	2.47	2.44	2.29	2.52	2.57	2.59
17	2.64	2.54	2.51	2.51	2.52	2.49	2.46	2.44	2.28	2.50	2.58	2.58
18	2.63	2.59	2.51	2.51	2.51	2.49	2.46	2.44	2.27	2.50	2.56	2.57
19	2.62	2.57	2.51	2.51	2.51	2.58	2.48	2.43	2.28	2.52	2.56	2.56
20	2.62	2.56	2.51	2.51	2.51	2.54	2.53	2.43	2.31	2.53	2.55	2.56
21	2.61	2.54	2.51	2.52	2.51	2.53	2.51	2.42	2.33	2.59	2.54	2.55
22	2.60	2.54	2.51	2.52	2.50	2.53	2.50	2.41	2.35	2.58	2.54	2.55
23	2.59	2.54	2.51	2.51	2.50	2.52	2.49	2.40	2.35	2.54	2.53	2.56
24	2.59	2.53	2.51	2.51	2.50	2.52	2.49	2.40	2.38	2.54	2.54	2.57
25	2.58	2.54	2.51	2.52	2.49	2.52	2.48	2.40	2.44	2.52	2.60	2.56
26	2.58	2.54	2.51	2.51	2.48	2.52	2.48	2.41	2.43	2.52	2.66	2.55
27	2.58	2.55	2.51	2.50	2.48	2.53	2.47	2.40	2.42	2.56	2.65	2.55
28	2.58	2.54	2.50	2.49	2.48	2.53	2.46	2.40	2.40	2.59	2.62	2.54
29	2.57	2.54	2.49	2.49	2.48	2.52	2.45	2.39	2.39	2.58	2.60	2.54
30	2.56	2.53	2.48	2.49	---	2.52	2.46	2.41	2.38	2.57	2.66	2.54
31	2.56	---	2.48	2.50	---	2.51	---	2.41	---	2.55	2.69	---
MEAN	2.64	2.56	2.51	2.51	2.51	2.52	2.48	2.42	2.36	2.44	2.56	2.62
MAX	3.29	2.63	2.53	2.58	2.55	2.58	2.53	2.48	2.44	2.59	2.69	3.01
MIN	2.56	2.53	2.48	2.47	2.48	2.48	2.45	2.39	2.27	2.27	2.52	2.54

WTR YR 1988 MEAN 2.51 MAX 3.29 MIN 2.27

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.--No estimated daily discharges during 1988 water year. 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 1988 water year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 617 ft³/s Oct. 12, gage height, 4.27 ft; no flow for many days.

DISCHARGE, IN 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				---	11	14	65	15	25	e55	41	29
2				---	11	14	59	15	28	e40	50	43
3				---	10	14	53	15	28	e30	48	53
4				---	10	13	43	15	27	e35	32	55
5				---	17	12	39	16	24	e36	27	57
6				---	16	13	37	27	23	e29	26	55
7				---	14	37	36	22	22	e28	25	50
8				---	12	32	32	21	22	e27	23	41
9				---	12	30	30	20	22	e25	22	36
10				---	12	28	28	20	23	e24	56	34
11				---	12	28	28	20	35	e59	78	33
12				---	11	25	27	19	136	e57	79	36
13				---	11	24	26	38	189	e56	76	33
14				---	12	22	25	58	e83	56	64	30
15				---	11	21	23	40	e45	67	51	29
16				---	11	20	23	36	e40	67	43	27
17				---	11	20	22	35	e37	60	38	26
18				---	9.9	19	21	30	e36	57	48	23
19				---	9.5	17	20	52	e34	155	43	21
20				---	11	17	20	96	e85	269	41	20
21				7.3	25	16	20	65	e53	206	37	19
22				8.1	19	17	19	54	e42	159	34	18
23				7.3	17	17	19	47	e38	101	31	18
24				7.4	17	23	19	42	e30	96	32	22
25				7.8	17	22	18	37	e27	78	29	20
26				7.2	17	37	17	33	e26	65	28	19
27				12	15	78	17	30	e77	56	25	26
28				12	15	66	16	28	e95	51	23	35
29				12	---	64	16	26	e80	50	21	27
30				11	---	60	16	27	e72	51	24	32
31				10	---	70	---	26	---	45	24	---
TOTAL				---	376.4	890	834	1025	1504	2190	1219	967
MEAN				---	13.4	28.7	27.8	33.1	50.1	70.6	39.3	32.2
MAX				---	25	78	65	96	189	269	79	57
MIN				---	9.5	12	16	15	22	24	21	18
AC-FT				---	747	1770	1650	2030	2980	4340	2420	1920

e Estimated

CHARLOTTE HARBOR AND COSTAL AREA

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02293346 HORSESHOE CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	2.70	2.72	2.94	2.67	2.72	---	2.87	2.79
2				---	2.70	2.72	2.92	2.68	2.75	---	2.90	2.86
3				---	2.70	2.72	2.89	2.68	2.76	---	2.89	2.91
4				---	2.69	2.71	2.85	2.67	2.75	---	2.81	2.92
5				---	2.75	2.70	2.83	2.68	2.74	---	2.79	2.93
6				---	2.74	2.71	2.81	2.76	2.73	---	2.78	2.92
7				---	2.73	2.85	2.81	2.73	2.72	---	2.77	2.90
8				---	2.71	2.81	2.79	2.72	2.72	---	2.76	2.86
9				---	2.71	2.80	2.77	2.71	2.73	---	2.75	2.83
10				---	2.71	2.79	2.76	2.71	2.74	---	2.89	2.81
11				---	2.71	2.79	2.76	2.71	2.80	---	3.01	2.81
12				---	2.70	2.78	2.76	2.71	3.20	---	3.02	2.83
13				---	2.70	2.77	2.75	2.79	3.40	2.97	3.01	2.81
14				---	2.71	2.76	2.75	2.90	3.07	2.97	2.96	2.79
15				---	2.70	2.75	2.73	2.82	---	3.01	2.90	2.79
16				---	2.70	2.74	2.73	2.80	---	3.01	2.86	2.77
17				---	2.70	2.74	2.72	2.79	---	2.98	2.84	2.77
18				---	2.69	2.73	2.72	2.77	---	2.97	2.89	2.75
19				---	2.69	2.72	2.71	2.84	---	3.23	2.87	2.74
20				---	2.70	2.72	2.71	3.04	---	3.58	2.86	2.73
21				2.71	2.80	2.71	2.71	2.92	---	3.43	2.83	2.73
22				2.72	2.75	2.72	2.70	2.87	---	3.30	2.82	2.71
23				2.71	2.74	2.72	2.70	2.84	---	3.12	2.80	2.72
24				2.71	2.74	2.76	2.70	2.82	---	3.10	2.81	2.74
25				2.72	2.74	2.75	2.70	2.80	---	3.03	2.79	2.73
26				2.71	2.74	2.82	2.69	2.77	---	2.97	2.78	2.73
27				2.71	2.73	3.00	2.69	2.75	---	2.94	2.76	2.76
28				2.71	2.72	2.96	2.68	2.74	---	2.91	2.75	2.83
29				2.71	---	2.95	2.68	2.73	---	2.91	2.74	2.78
30				2.70	---	2.93	2.68	2.74	---	2.91	2.76	2.81
31				2.70	---	2.96	---	2.73	---	2.89	2.76	---
MEAN				---	2.72	2.78	2.75	2.77	---	---	2.84	2.80
MAX				---	2.80	3.00	2.94	3.04	---	---	3.02	2.93
MIN				---	2.69	2.70	2.68	2.67	---	---	2.74	2.71

CHARLOTTE HARBOR AND COSTAL AREA

02293346 HORSESHOE CANAL AT CAPE CORAL, FL

DISCHARGE, IN 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	34	20	6.3	2.0	.71	1.9	6.6	4.3	.44	.79	47	58
2	33	27	5.5	2.3	.57	1.9	6.5	3.8	.05	1.5	44	51
3	33	29	5.0	1.8	.42	1.6	5.7	2.6	.00	1.8	42	44
4	32	32	4.2	1.7	.37	1.6	5.5	1.3	.00	.99	38	40
5	29	31	4.5	1.5	.61	3.0	5.4	.99	.00	.38	38	39
6	26	29	4.7	1.1	.41	5.8	5.2	.53	.00	.22	54	41
7	23	26	4.8	1.1	.49	4.4	3.9	.33	.01	.84	63	79
8	21	23	3.9	1.4	3.2	3.5	3.8	.61	.05	8.4	71	154
9	20	22	3.5	1.6	2.4	3.1	5.1	.30	.19	31	62	148
10	19	20	4.0	3.9	1.9	3.3	4.9	.32	.09	30	55	123
11	19	17	4.0	5.4	1.5	3.5	4.2	.22	.04	27	64	96
12	355	15	4.0	3.9	1.1	3.0	3.7	.20	.02	24	81	74
13	342	14	3.4	2.8	.89	2.9	4.3	.46	.00	21	64	56
14	199	13	3.3	2.5	1.1	5.6	4.2	1.5	.00	34	55	44
15	126	13	3.4	1.8	2.0	3.3	4.0	1.7	.00	69	56	37
16	89	13	4.5	2.0	2.6	3.6	3.7	1.4	.00	67	64	35
17	68	11	3.6	1.3	1.9	3.4	3.5	1.3	.00	57	85	31
18	55	20	3.1	1.2	2.0	4.1	3.4	1.2	.00	67	80	28
19	43	20	3.6	1.5	1.8	12	4.2	1.0	.00	63	89	26
20	37	20	3.4	1.1	2.0	10	7.4	1.3	.02	56	86	23
21	33	18	3.2	1.9	2.0	9.1	5.4	.78	.68	49	77	21
22	31	18	3.0	2.3	2.1	9.0	4.0	.48	1.4	42	67	18
23	28	16	3.2	1.3	1.7	9.1	3.6	.47	1.4	39	57	19
24	24	14	3.0	.98	2.0	9.9	3.2	.62	2.2	40	55	18
25	22	13	3.3	1.3	1.9	9.6	3.2	.59	3.3	37	56	16
26	20	11	2.9	1.6	1.7	8.7	2.6	1.0	1.9	42	100	14
27	19	11	2.4	.93	1.6	8.3	2.5	.59	1.4	72	111	13
28	18	8.8	2.2	.53	1.4	9.2	1.7	.38	1.1	69	88	12
29	17	7.0	1.8	.54	1.7	7.9	1.6	.63	.77	63	77	12
30	15	6.2	1.7	.78	---	7.6	2.6	1.3	.39	64	76	11
31	13	---	1.8	.66	---	6.8	---	.84	---	55	65	---
TOTAL	1843	538.0	111.2	54.72	44.07	176.7	125.6	33.04	15.45	1132.92	2067	1381
MEAN	59.5	17.9	3.59	1.77	1.52	5.70	4.19	1.07	.52	36.5	66.7	46.0
MAX	355	32	6.3	5.4	3.2	12	7.4	4.3	3.3	72	111	154
MIN	13	6.2	1.7	.53	.37	1.6	1.6	.20	.00	.22	38	11
AC-FT	3660	1070	221	109	87	350	249	66	31	2250	4100	2740

WTR YR 1988 TOTAL 7522.70 MEAN 20.6 MAX 355 MIN .00 AC-FT 14920

CHARLOTTE HARBOR AND COSTAL AREA

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02293346 HORSESHOE CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.82	2.79	2.67	2.59	2.57	2.59	2.64	2.62	2.52	2.53	2.88	2.91
2	2.82	2.84	2.66	2.59	2.57	2.59	2.64	2.62	2.50	2.55	2.86	2.88
3	2.82	2.85	2.65	2.59	2.56	2.58	2.63	2.60	2.49	2.56	2.85	2.85
4	2.82	2.86	2.64	2.58	2.56	2.58	2.63	2.58	2.48	2.54	2.83	2.83
5	2.80	2.86	2.65	2.58	2.57	2.61	2.63	2.57	2.47	2.52	2.83	2.83
6	2.78	2.85	2.65	2.57	2.56	2.64	2.63	2.56	2.47	2.51	2.90	2.83
7	2.76	2.83	2.65	2.57	2.56	2.62	2.61	2.55	2.47	2.53	2.94	2.99
8	2.75	2.81	2.64	2.58	2.62	2.61	2.61	2.56	2.50	2.62	2.98	3.29
9	2.74	2.80	2.63	2.58	2.61	2.61	2.62	2.55	2.51	2.80	2.94	3.31
10	2.74	2.79	2.63	2.61	2.60	2.61	2.62	2.54	2.51	2.79	2.91	3.23
11	2.73	2.78	2.63	2.64	2.59	2.61	2.61	2.53	2.50	2.78	2.95	3.14
12	3.66	2.77	2.63	2.62	2.58	2.61	2.61	2.53	2.49	2.76	3.02	3.06
13	3.76	2.76	2.62	2.60	2.58	2.60	2.61	2.54	2.47	2.74	2.95	2.99
14	3.43	2.75	2.62	2.60	2.58	2.64	2.61	2.57	2.46	2.81	2.91	2.93
15	3.22	2.75	2.62	2.59	2.60	2.61	2.61	2.57	2.44	2.98	2.91	2.90
16	3.10	2.75	2.64	2.59	2.61	2.61	2.61	2.57	2.42	2.97	2.95	2.88
17	3.02	2.73	2.62	2.58	2.60	2.61	2.60	2.57	2.41	2.93	3.03	2.86
18	2.96	2.80	2.62	2.57	2.60	2.62	2.60	2.56	2.40	2.97	3.00	2.84
19	2.92	2.80	2.61	2.58	2.60	2.70	2.61	2.56	2.43	2.95	3.04	2.83
20	2.88	2.80	2.61	2.57	2.60	2.68	2.65	2.56	2.49	2.92	3.02	2.81
21	2.86	2.79	2.61	2.59	2.60	2.68	2.63	2.54	2.53	2.89	2.99	2.80
22	2.85	2.78	2.61	2.59	2.60	2.67	2.62	2.53	2.55	2.86	2.95	2.78
23	2.83	2.77	2.61	2.58	2.59	2.68	2.61	2.53	2.55	2.85	2.91	2.79
24	2.81	2.75	2.61	2.57	2.59	2.67	2.61	2.54	2.56	2.85	2.90	2.78
25	2.79	2.74	2.61	2.57	2.59	2.67	2.61	2.54	2.58	2.84	2.90	2.76
26	2.78	2.72	2.60	2.58	2.58	2.66	2.60	2.55	2.56	2.85	3.07	2.75
27	2.77	2.72	2.60	2.57	2.58	2.66	2.60	2.54	2.55	2.99	3.11	2.74
28	2.77	2.70	2.59	2.56	2.58	2.67	2.58	2.53	2.54	2.98	3.03	2.73
29	2.76	2.68	2.59	2.57	2.58	2.65	2.58	2.53	2.53	2.95	2.99	2.73
30	2.75	2.68	2.58	2.57	---	2.65	2.60	2.55	2.52	2.96	2.99	2.72
31	2.74	---	2.59	2.57	---	2.64	---	2.54	---	2.92	2.94	---
MEAN	2.91	2.78	2.62	2.58	2.59	2.63	2.61	2.56	2.50	2.80	2.95	2.89
MAX	3.76	2.86	2.67	2.64	2.62	2.70	2.65	2.62	2.58	2.99	3.11	3.31
MIN	2.73	2.68	2.58	2.56	2.56	2.58	2.58	2.53	2.40	2.51	2.83	2.72

WTR YR 1988 MEAN 2.70 MAX 3.76 MIN 2.40

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.--No estimated discharges during 1987 water year. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 370 ft³/s Oct. 12, 1987; maximum gage height, 4.00 ft July 19, 1987; no flow for some days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 370 ft³/s Oct. 12; maximum gage height, 3.49 ft Oct. 9; no flow for some days.

DISCHARGE, IN 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				---	1.9	2.1	3.0	.47	24	11	6.5	8.0
2				---	1.8	2.1	2.4	.47	28	8.6	20	11
3				---	1.8	2.1	2.1	.46	31	7.4	45	13
4				---	1.8	2.1	1.9	.42	27	16	22	15
5				---	3.0	2.0	1.7	.51	21	18	17	15
6				---	2.4	2.0	1.6	1.2	19	13	17	14
7				---	2.2	5.8	1.5	.83	19	9.6	15	12
8				---	2.0	3.0	1.4	.70	21	8.3	13	9.6
9				---	2.1	2.8	1.3	.64	23	7.8	11	7.6
10				---	2.0	2.7	1.2	.72	23	7.5	62	6.8
11				---	2.0	2.6	1.2	.71	29	8.8	75	6.6
12				---	2.0	2.5	1.2	.61	69	6.6	64	7.4
13				---	2.0	2.5	1.1	4.9	100	5.4	49	6.5
14				---	2.0	2.3	1.1	8.2	53	5.0	36	5.9
15				---	2.0	2.2	.97	3.7	38	5.7	25	5.6
16				---	1.9	2.1	.95	3.1	33	6.1	19	4.9
17				---	1.9	2.1	.90	2.9	29	5.4	17	4.6
18				---	1.8	2.0	.85	3.7	26	5.2	27	4.6
19				---	1.8	1.9	.86	8.9	25	184	17	4.5
20				---	1.9	2.0	.82	23	33	202	16	4.2
21				---	3.5	1.9	.79	13	37	111	12	4.0
22				2.3	2.6	1.8	.77	9.3	33	90	9.7	3.9
23				2.2	2.4	1.9	.77	7.8	27	40	9.5	3.7
24				2.1	2.5	2.9	.74	6.7	23	50	9.7	3.7
25				2.2	2.5	2.4	.65	6.0	21	25	8.4	3.7
26				2.1	2.4	5.0	.64	5.3	20	13	8.3	3.6
27				2.1	2.1	6.8	.61	4.9	51	11	7.4	6.5
28				2.1	2.1	3.8	.56	4.7	64	9.2	6.7	8.9
29				2.0	---	3.5	.55	4.6	44	8.9	6.1	5.9
30				2.0	---	3.2	.52	4.6	47	9.2	7.5	5.5
31				2.0	---	4.2	---	4.7	---	7.6	6.4	---
TOTAL				---	60.4	86.3	34.65	137.74	1038	916.3	665.2	216.2
MEAN				---	2.16	2.78	1.16	4.44	34.6	29.6	21.5	7.21
MAX				---	3.5	6.8	3.0	23	100	202	75	15
MIN				---	1.8	1.8	.52	.42	19	5.0	6.1	3.6
AC-FT				---	120	171	69	273	2060	1820	1320	429

CHARLOTTE HARBOR AND COSTAL AREA

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02293347 HERMOSA CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	2.56	2.57	2.72	2.54	2.64	2.87	2.75	2.82
2				---	2.55	2.57	2.70	2.54	2.67	2.84	2.84	2.87
3				---	2.55	2.57	2.68	2.54	2.70	2.82	3.01	2.89
4				---	2.55	2.57	2.66	2.53	2.70	2.88	2.91	2.91
5				---	2.61	2.56	2.65	2.54	2.66	2.94	2.88	2.91
6				---	2.59	2.56	2.64	2.61	2.65	2.90	2.87	2.90
7				---	2.58	2.69	2.64	2.57	2.65	2.85	2.86	2.88
8				---	2.56	2.63	2.63	2.56	2.66	2.84	2.84	2.84
9				---	2.57	2.61	2.62	2.55	2.68	2.83	2.82	2.81
10				---	2.56	2.61	2.61	2.56	2.72	2.82	3.05	2.80
11				---	2.56	2.61	2.61	2.56	2.76	2.84	3.13	2.80
12				---	2.56	2.60	2.61	2.55	3.04	2.81	3.09	2.81
13				---	2.56	2.60	2.60	2.62	3.24	2.78	3.06	2.79
14				---	2.56	2.59	2.60	2.73	2.95	2.77	3.01	2.78
15				---	2.56	2.59	2.59	2.64	2.86	2.79	2.96	2.77
16				---	2.56	2.58	2.59	2.62	2.82	2.80	2.92	2.76
17				---	2.55	2.58	2.58	2.61	2.79	2.78	2.90	2.75
18				---	2.55	2.57	2.58	2.64	2.77	2.77	2.98	2.75
19				---	2.55	2.57	2.58	2.70	2.77	3.08	2.92	2.75
20				---	2.56	2.57	2.57	2.86	2.82	3.48	2.91	2.74
21				---	2.63	2.56	2.57	2.79	2.85	3.26	2.88	2.73
22				2.58	2.59	2.56	2.57	2.74	2.82	3.15	2.85	2.73
23				2.57	2.58	2.56	2.57	2.72	2.78	3.00	2.84	2.72
24				2.57	2.59	2.61	2.56	2.70	2.76	3.02	2.85	2.72
25				2.57	2.59	2.60	2.56	2.68	2.74	2.93	2.83	2.72
26				2.57	2.58	2.66	2.55	2.67	2.73	2.85	2.83	2.72
27				2.57	2.57	2.79	2.55	2.66	2.93	2.82	2.81	2.76
28				2.57	2.57	2.72	2.55	2.65	3.01	2.80	2.80	2.83
29				2.56	---	2.71	2.54	2.65	2.89	2.80	2.79	2.78
30				2.56	---	2.70	2.54	2.65	2.90	2.80	2.81	2.77
31				2.56	---	2.76	---	2.65	---	2.77	2.79	---
MEAN				---	2.57	2.61	2.60	2.63	2.80	2.89	2.90	2.79
MAX				---	2.63	2.79	2.72	2.86	3.24	3.48	3.13	2.91
MIN				---	2.55	2.56	2.54	2.53	2.64	2.77	2.75	2.72

CHARLOTTE HARBOR AND COSTAL AREA

02293347 HERMOSA CANAL AT CAPE CORAL, FL

DISCHARGE, IN 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	30	62	29	e4.0	7.8	5.8	9.8	4.3	.67	2.6	58	54
2	30	68	28	e4.1	7.0	6.7	8.6	4.3	.50	4.5	57	46
3	30	69	25	e3.9	7.2	6.2	7.3	2.5	.40	6.5	58	38
4	30	68	22	e4.4	7.8	5.5	6.8	1.0	.25	5.0	58	35
5	29	65	24	e3.7	8.0	9.5	7.0	.93	.17	3.3	56	35
6	25	63	22	e3.2	8.5	17	6.8	.79	.20	2.2	58	38
7	23	59	22	e2.8	7.8	13	4.2	.75	.37	4.1	60	63
8	21	55	21	e3.3	16	11	2.8	.86	.50	10	63	77
9	e21	51	19	e3.1	16	7.2	4.1	.82	.62	30	63	69
10	e20	48	18	e6.4	14	7.5	4.1	.80	.58	47	62	61
11	e20	46	17	e11	12	9.1	2.9	.79	.57	46	61	53
12	e370	43	15	e9.5	11	8.1	1.7	.80	.58	42	61	46
13	e350	42	15	e8.9	10	7.1	2.9	.90	.49	37	61	39
14	e225	40	13	e8.8	10	14	3.2	1.6	.47	40	58	34
15	e136	40	12	8.7	10	9.2	3.0	1.6	.34	62	53	32
16	125	39	16	9.9	14	8.8	2.7	1.5	.23	72	51	30
17	113	35	13	7.8	13	8.7	2.1	1.1	.16	66	51	28
18	105	46	12	7.8	12	8.1	1.6	1.1	.15	65	51	27
19	96	46	11	8.3	11	25	2.4	1.0	.27	66	51	25
20	90	46	10	7.1	10	22	11	.93	.59	63	51	23
21	84	45	9.3	7.3	12	20	8.6	.85	.88	59	50	21
22	82	43	7.5	11	11	19	6.1	.76	1.0	56	50	21
23	77	42	e8.1	8.9	9.2	20	4.7	.68	1.4	52	50	22
24	73	40	e6.0	9.0	9.0	17	3.4	.67	7.1	50	48	22
25	70	38	e5.9	9.5	8.5	17	3.0	.69	8.4	49	46	18
26	67	38	e5.8	9.9	7.1	15	1.6	.70	5.8	50	49	16
27	64	38	e5.8	9.3	5.6	15	1.1	.69	5.2	58	69	15
28	62	34	e5.6	8.8	5.6	15	1.1	.66	4.0	67	67	14
29	59	32	e4.7	9.7	6.0	15	1.0	.67	3.2	63	62	13
30	56	30	e3.8	9.5	---	14	2.2	.81	2.4	61	59	13
31	55	---	e4.2	8.5	---	12	---	.72	---	60	57	---
TOTAL	2638	1411	430.7	228.1	287.1	388.5	127.8	36.27	47.49	1299.2	1749	1028
MEAN	85.1	47.0	13.9	7.36	9.90	12.5	4.26	1.17	1.58	41.9	56.4	34.3
MAX	370	69	29	11	16	25	11	4.3	8.4	72	69	77
MIN	20	30	3.8	2.8	5.6	5.5	1.0	.66	.15	2.2	46	13
AC-FT	5230	2800	854	452	569	771	253	72	94	2580	3470	2040

WTR YR 1988 TOTAL 9671.16 MEAN 26.4 MAX 370 MIN .15 AC-FT 19180

e Estimated

CHARLOTTE HARBOR AND COSTAL AREA

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02293347 HERMOSA CANAL AT CAPE CORAL, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.78	2.80	2.74	---	2.63	2.58	2.64	2.60	2.52	2.54	2.85	2.88
2	2.78	2.86	2.74	---	2.63	2.60	2.64	2.60	2.50	2.56	2.85	2.84
3	2.78	2.87	2.73	---	2.62	2.60	2.63	2.58	2.49	2.56	2.85	2.79
4	2.78	2.87	2.71	---	2.62	2.59	2.62	2.56	2.48	2.55	2.85	2.77
5	2.77	2.85	2.72	---	2.62	2.63	2.63	2.55	2.47	2.54	2.85	2.77
6	2.75	2.85	2.72	---	2.63	2.67	2.62	2.54	2.47	2.53	2.86	2.78
7	2.73	2.83	2.72	---	2.62	2.65	2.60	2.53	2.48	2.54	2.88	2.96
8	2.72	2.81	2.71	---	2.68	2.63	2.59	2.54	2.49	2.59	2.89	3.08
9	e3.07	2.80	2.71	---	2.67	2.59	2.60	2.54	2.51	2.71	2.89	3.03
10	---	2.78	2.70	---	2.66	2.61	2.60	2.54	2.50	2.81	2.89	2.98
11	---	2.77	2.70	---	2.62	2.62	2.59	2.54	2.50	2.79	2.89	2.93
12	---	2.77	2.69	---	2.63	2.61	2.58	2.54	2.50	2.77	2.89	2.88
13	---	2.76	2.69	---	2.63	2.61	2.59	2.55	2.49	2.74	2.89	2.85
14	---	2.76	2.69	---	2.63	2.65	2.60	2.57	2.48	2.76	2.87	2.82
15	e3.13	2.76	2.68	2.67	2.63	2.62	2.60	2.57	2.47	2.88	2.85	2.80
16	3.07	2.75	2.71	2.68	2.66	2.62	2.59	2.57	2.46	2.94	2.84	2.79
17	3.01	2.74	2.70	2.66	2.65	2.62	2.59	2.57	2.45	2.90	2.84	2.78
18	2.97	2.81	2.69	2.65	2.64	2.61	2.58	2.57	2.45	2.89	2.84	2.77
19	2.93	2.81	2.69	2.66	2.63	2.73	2.58	2.56	2.46	2.90	2.84	2.76
20	2.89	2.81	2.69	2.65	2.63	2.71	2.64	2.55	2.49	2.88	2.84	2.75
21	2.87	2.81	2.68	2.65	2.64	2.69	2.63	2.54	2.52	2.86	2.84	2.73
22	2.86	2.81	2.68	2.67	2.63	2.69	2.61	2.53	2.53	2.84	2.84	2.73
23	2.84	2.80	2.68	2.66	2.62	2.70	2.60	2.52	2.54	2.81	2.84	2.74
24	2.82	2.79	---	2.65	2.62	2.68	2.59	2.52	2.59	2.80	2.83	2.74
25	2.81	2.78	---	2.65	2.62	2.68	2.59	2.53	2.60	2.80	2.82	2.72
26	2.80	2.78	---	2.66	2.61	2.67	2.57	2.53	2.57	2.80	2.84	2.71
27	2.79	2.79	---	2.65	2.60	2.67	2.57	2.53	2.56	2.85	2.97	2.70
28	2.78	2.77	---	2.65	2.59	2.67	2.57	2.52	2.55	2.91	2.96	2.70
29	2.77	2.75	---	2.65	2.60	2.67	2.56	2.52	2.55	2.88	2.93	2.69
30	2.76	2.75	---	2.64	---	2.66	2.57	2.54	2.54	2.87	2.91	2.69
31	2.76	---	---	2.64	---	2.65	---	2.53	---	2.86	2.90	---
MEAN	---	2.80	---	---	2.63	2.64	2.60	2.55	2.51	2.76	2.87	2.81
MAX	---	2.87	---	---	2.68	2.73	2.64	2.60	2.60	2.94	2.97	3.08
MIN	---	2.74	---	---	2.59	2.58	2.56	2.52	2.45	2.53	2.82	2.69

e Estimated

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.--No estimated daily discharges. Records poor.

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, 290 ft³/s July 14, gage height, 18.58 ft; no flow for many days.

DISCHARGE, IN 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	13	8.4	3.2	1.2	.89	.16	1.3	.27	.00	.04	19	18
2	15	10	2.9	1.1	.81	.14	1.2	.19	.00	.04	14	15
3	12	12	2.7	1.1	.72	.13	1.1	.12	.00	.03	11	15
4	9.0	14	2.5	1.1	.67	.11	.98	.08	.00	.02	7.5	12
5	6.7	14	2.4	1.1	.58	.14	.91	.06	.00	.00	23	11
6	5.2	12	2.3	.94	.50	.31	.81	.04	.00	.00	108	13
7	4.2	10	2.2	.88	.42	.46	.72	.01	.00	.18	74	40
8	3.4	8.3	2.2	.89	1.2	.46	.63	.00	.00	4.2	48	102
9	2.6	7.1	2.2	.88	1.6	.42	.58	.00	.00	17	38	77
10	2.3	6.6	2.2	1.2	1.5	.47	.53	.00	.00	34	65	56
11	2.1	6.0	2.2	2.1	1.3	.45	.48	.00	.00	28	50	42
12	49	5.2	2.1	2.0	1.2	.37	.47	.00	.00	17	37	32
13	79	4.5	2.0	1.8	1.0	.30	.42	.01	.00	11	26	24
14	63	4.0	2.0	1.6	.88	.81	.40	.04	.00	106	18	20
15	47	3.6	2.0	1.6	.76	.85	.39	.03	.00	175	17	17
16	35	3.2	2.3	1.4	1.0	.61	.36	.02	.00	102	31	20
17	28	2.9	2.2	1.3	.97	.41	.34	.02	.00	65	32	17
18	24	13	2.0	1.3	.86	.35	.30	.01	.00	51	39	14
19	21	22	1.9	1.2	.77	4.2	.51	.00	.00	37	36	12
20	18	20	1.8	1.2	.73	6.8	.90	.00	.00	32	29	9.7
21	17	14	1.8	1.2	.73	5.5	.50	.00	.00	28	21	8.5
22	15	10	1.8	1.7	.67	4.1	.46	.00	.07	28	15	7.7
23	14	7.6	1.7	1.6	.57	3.3	.38	.00	.09	28	11	7.1
24	12	6.1	1.7	1.5	.52	2.9	.33	.00	.08	32	9.9	7.0
25	12	5.2	1.6	1.6	.42	2.6	.29	.00	.07	24	36	6.2
26	11	4.6	1.6	1.8	.34	2.4	.30	.00	.06	43	69	5.6
27	10	4.4	1.6	1.6	.28	2.2	.26	.00	.06	83	50	5.0
28	9.5	4.0	1.6	1.4	.23	2.0	.18	.00	.05	55	40	3.8
29	8.8	3.7	1.5	1.3	.19	1.8	.14	.00	.05	29	33	1.2
30	8.2	3.4	1.3	1.2	---	1.6	.17	.00	.06	33	25	.38
31	7.6	---	1.3	1.0	---	1.4	---	.00	---	27	20	---
TOTAL	564.6	249.8	62.8	41.79	22.31	47.75	16.34	.90	.59	1089.51	1052.4	619.18
MEAN	18.2	8.33	2.03	1.35	.77	1.54	.54	.029	.020	35.1	33.9	20.6
MAX	79	22	3.2	2.1	1.6	6.8	1.3	.27	.09	175	108	102
MIN	2.1	2.9	1.3	.88	.19	.11	.14	.00	.00	.00	7.5	.38
AC-FT	1120	495	125	83	44	95	32	1.8	1.2	2160	2090	1230

CAL YR 1987 TOTAL 2326.57 MEAN 6.37 MAX 79 MIN .10 AC-FT 4610
WTR YR 1988 TOTAL 3767.97 MEAN 10.3 MAX 175 MIN .00 AC-FT 7470

CHARLOTTE HARBOR AND COASTAL AREA

201

264437081550100 GATOR SLOUGH AT U.S. 41 NEAR FT. MYERS, FL

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.06	15.32	15.36	15.14	15.09	14.91	14.99	15.91	15.61	15.83	16.81	16.60
2	16.18	15.48	15.33	15.13	15.08	14.90	14.98	15.89	15.61	15.83	16.70	16.54
3	16.04	15.60	15.32	15.13	15.06	14.89	14.97	15.87	15.61	15.82	16.63	16.53
4	15.84	15.77	15.30	15.13	15.05	14.89	14.96	15.85	15.60	15.80	16.51	16.46
5	15.67	15.74	15.29	15.12	15.03	14.90	14.95	15.83	15.60	15.78	16.81	16.43
6	15.55	15.68	15.26	15.10	15.01	14.96	14.94	15.79	15.60	15.77	17.76	16.48
7	15.45	15.59	15.26	15.09	15.00	15.00	14.92	15.74	15.60	15.87	17.47	16.87
8	15.38	15.50	15.25	15.09	15.13	15.01	14.90	15.64	15.59	16.10	17.18	17.57
9	15.31	15.44	15.26	15.09	15.20	14.99	14.89	15.63	15.59	16.72	17.04	17.35
10	15.27	15.42	15.26	15.14	15.18	15.01	14.88	15.63	15.59	17.03	17.36	17.13
11	15.25	15.40	15.26	15.25	15.16	15.00	14.87	15.62	15.59	16.94	17.18	16.96
12	16.80	15.36	15.25	15.24	15.14	14.98	14.87	15.62	15.59	16.73	17.01	16.81
13	17.58	15.32	15.24	15.22	15.11	14.96	14.86	15.66	15.58	16.59	16.84	16.68
14	17.12	15.30	15.24	15.20	15.09	15.08	14.85	15.81	15.58	17.35	16.68	16.59
15	16.63	15.29	15.24	15.19	15.07	15.08	14.85	15.79	15.58	18.25	16.64	16.53
16	16.25	15.27	15.27	15.17	15.12	15.04	14.84	15.78	15.57	17.77	16.89	16.58
17	15.99	15.27	15.26	15.16	15.10	14.99	14.83	15.78	15.57	17.45	16.89	16.50
18	15.82	15.99	15.24	15.15	15.09	14.97	14.82	15.76	15.57	17.29	17.00	16.44
19	15.69	16.52	15.23	15.14	15.07	15.35	14.86	15.71	15.57	17.11	16.97	16.38
20	15.60	16.47	15.22	15.13	15.06	15.49	15.02	15.63	15.56	17.03	16.85	16.32
21	15.53	16.17	15.22	15.14	15.06	15.39	14.95	15.63	15.58	16.96	16.71	16.28
22	15.47	15.91	15.22	15.21	15.05	15.26	14.95	15.63	15.72	16.96	16.59	16.26
23	15.42	15.74	15.21	15.20	15.03	15.18	14.93	15.62	15.88	16.97	16.48	16.23
24	15.38	15.63	15.21	15.18	15.02	15.15	14.92	15.62	15.87	17.03	16.43	16.23
25	15.35	15.55	15.20	15.19	14.99	15.12	14.91	15.63	15.86	16.89	16.90	16.20
26	15.33	15.50	15.20	15.22	14.97	15.10	15.38	15.63	15.85	17.11	17.32	16.17
27	15.32	15.48	15.19	15.19	14.95	15.08	15.89	15.63	15.85	17.64	17.11	16.15
28	15.30	15.44	15.19	15.17	14.94	15.07	15.87	15.63	15.84	17.34	16.98	16.08
29	15.28	15.41	15.18	15.15	14.92	15.05	15.86	15.62	15.84	17.01	16.87	15.88
30	15.26	15.38	15.16	15.14	---	15.03	15.87	15.62	15.85	17.06	16.75	15.78
31	15.25	---	15.15	15.11	---	15.01	---	15.62	---	16.97	16.65	---
MEAN	15.75	15.60	15.24	15.16	15.06	15.06	15.05	15.70	15.66	16.81	16.90	16.50
MAX	17.58	16.52	15.36	15.25	15.20	15.49	15.89	15.91	15.88	18.25	17.76	17.57
MIN	15.25	15.27	15.15	15.09	14.92	14.89	14.82	15.62	15.56	15.77	16.43	15.78
CAL YR 1987	MEAN 15.47		MAX 17.58	MIN 14.85								
WTR YR 1988	MEAN 15.71		MAX 18.25	MIN 14.82								

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.--No estimated daily discharges. Records poor.

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, 618 ft³/s Oct. 12, 13, gage height, 4.07 ft; no flow for some days; minimum gage height, 2.48 ft June 16, 17.

DISCHARGE, IN 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	35	19	28	8.2	3.7	5.3	17	9.6	1.3	1.5	99	119
2	41	27	27	8.2	3.3	5.3	17	7.3	.36	3.3	86	104
3	45	34	27	7.4	2.7	5.7	16	5.2	.06	3.4	77	88
4	43	42	24	5.3	2.4	7.1	15	3.4	.00	1.4	71	77
5	35	48	23	4.9	2.5	13	13	2.7	.05	.97	69	71
6	32	47	22	3.8	1.9	18	14	1.8	.40	.57	108	73
7	27	41	22	4.5	1.6	15	12	2.0	1.1	4.1	152	145
8	20	38	23	5.0	8.9	13	10	2.6	1.7	22	153	465
9	16	39	24	5.0	7.6	11	9.9	2.1	1.6	78	128	507
10	15	36	24	8.2	7.1	11	10	1.4	.97	73	147	416
11	14	30	22	13	6.5	11	8.9	1.4	.50	73	199	321
12	313	27	20	11	6.0	9.7	8.5	1.4	.40	65	222	236
13	595	29	21	9.2	5.6	10	8.5	2.8	.00	51	177	173
14	473	28	21	8.7	5.4	16	7.6	6.0	.00	73	138	130
15	336	26	21	8.2	8.3	12	6.7	4.5	.00	245	128	104
16	223	24	23	7.9	12	11	6.5	3.9	.00	262	172	96
17	160	24	20	7.3	9.2	10	6.0	3.7	.00	209	205	88
18	110	34	21	7.1	8.3	13	5.4	3.2	.00	201	237	78
19	74	54	22	6.5	8.9	33	7.2	2.4	1.8	168	266	68
20	59	75	21	7.1	9.6	32	16	2.0	2.3	158	224	59
21	47	77	20	8.8	10	33	11	1.5	3.5	130	181	51
22	37	68	19	8.6	9.2	33	8.2	2.4	2.8	105	143	46
23	30	52	16	6.6	8.1	31	7.3	1.9	2.4	89	111	41
24	27	41	11	6.6	8.5	30	6.5	1.9	3.9	102	93	40
25	24	37	9.9	8.6	8.2	28	5.9	3.0	5.2	91	105	35
26	24	34	9.9	9.0	6.6	25	4.8	3.1	3.3	90	201	31
27	24	34	9.9	7.5	5.7	23	4.5	2.1	2.4	167	273	29
28	22	33	9.9	5.3	5.2	22	3.8	2.1	2.4	157	244	26
29	19	32	8.3	4.4	5.6	21	3.8	2.5	2.1	136	201	23
30	18	29	7.0	4.1	---	19	5.6	2.9	1.4	128	173	22
31	15	---	7.9	3.8	---	18	---	2.1	---	115	141	---
TOTAL	2953	1159	584.8	219.8	188.6	545.1	276.6	94.9	41.94	3003.24	4924	3762
MEAN	95.3	38.6	18.9	7.09	6.50	17.6	9.22	3.06	1.40	96.9	159	125
MAX	595	77	28	13	12	33	17	9.6	5.2	262	273	507
MIN	14	19	7.0	3.8	1.6	5.3	3.8	1.4	.00	.57	69	22
AC-FT	5860	2300	1160	436	374	1080	549	188	83	5960	9770	7460

CAL YR 1987 TOTAL 20463.80 MEAN 56.1 MAX 595 MIN 7.0 AC-FT 40590
WTR YR 1988 TOTAL 17752.98 MEAN 48.5 MAX 595 MIN .00 AC-FT 35210

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.		1983-88	09-09-88	4.11	24.6
02293050	Orange River at Buckingham, near Fort Myers, FL	Lat 26°40'12", long 81°43'56", in NE¼, sec.8, T.44 S., R.26 E., Lee County, Hydrologic Unit 03090205, at bridge on Buckingham, 2.5 mi upstream from mouth, and 9 mi east of Fort Myers. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1978 at datum 2.61 ft higher.		1960-88	12-02-87	3.42	500

The following table contains the annual maximum stream elevation at selected gaging stations in several river basins during the water year 1988.

These stations are equipped with a crest-stage which records the peak stage occurring between inspections of the gage.

Annual maximum flood-profile data during the water year 1988

Station number	Station name	Location	Miles above mouth	Drainage area (sq mi)	Period of record (water years)	Annual Maximum Date	Annual Maximum Elevation (feet)
Big Cypress Swamp and Southwestern coastal area							
261952 081454700	Oak Creek at Bonita Springs, FL	Lat 26°19'52", long 81°45'47", in NW¼ sec.1, T.48 S., R.25 E., Lee County, Hydrologic Unit 03090204, at bridge on Imperial Street, 1.2 mi south- east of Bonita Springs, and 2.5 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	10-14-87	8.01
262032 081464500	Imperial River at Bonita Springs, FL	Lat 26°20'32", long 81°46'45", in NE¼ sec.35, T.47 S., R.25 E., Lee County, Hydrologic Unit 03090204, at bridge on U.S. Highway 41 at Bonita Springs, 5.20 mi upstream from mouth. Datum of gage is National Geodetic Verti- cal Datum of 1929.			1972-88	10-14-87	3.95
262604 81481900	Estero River near Estero, FL	Lat 26°26'04", long 81°48'19", in NE¼ sec.33, T.46 S., R.25 E., Lee County, Hydrologic Unit 03090204, at bridge on Sandy Lane, 1/2 mi north of Corkscrew Road, 1 mi southeast of Estero, and 4.3 mi from mouth. Datum of gage is National Geo- detic Vertical Datum of 1929.			1973-88	10-19-87	4.76
262957 081511400	Tenmile Canal near Estero, FL	Lat 26°29'57", long 81°51'14", in SW¼ sec.6, T.46 S., R.25 E., Lee County, Hydrologic Unit 03090204, at bridge on U.S. Highway 41, 1.90 mi upstream from mouth, and 5.4 mi north of Estero. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	11-03-87	4.29
263113 081525900	Hendry Creek at St. Hwy 865 near Ft. Myers, FL	Lat 26°31'13", long 81°52'59", in NW¼ sec.35, T.45 S., R.24 E., Lee County, Hydrologic Unit 03090204, at bridge on Gladiolus Drive, 5.19 mi up- stream from mouth, and 8.8 mi south of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1972-88	12-11-87	2.49
263247 081500400	Sixmile Cypress Creek near Ft. Myers Villas, FL	Lat 26°32'47", long 81°50'04", in SW¼ sec.20, T.45 S., R.24 E., Lee County, Hydrologic Unit 03090204, at bridge on Daniels Road, 1.2 mi west of Ft. Myers Villas, above con- fluence with Ten mile canal, and 6.5 mi southeast of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	07-07-88	16.52

Annual maximum flood-profile data during the water year 1988

Station number	Station name	Location	Miles above mouth	Drainage area (sq mi)	Period of record (water years)	Annual Maximum	
						Date	Elevation (feet)
Big Cypress Swamp and Southwestern coastal area							
263247 081512000	Tenmile Canal near Ft. Myers Villas, FL	Lat 26°32'47", long 81°51'20", in NW¼ sec. 19, T.45 S., R.25 E., Lee County, Hydrologic Unit 03090204, at bridge on Daniels Road, 1.3 mi southwest of Ft. Myers Villas, and 5.20 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	11-03-87	14.58
263719 081512200	Tenmile Canal near Ft. Myers, FL	Lat 26°37'19", long 81°51'20", in NE¼ sec.25, T.44 S., R.24 E., Lee County, Hydrologic Unit 03090204, at railroad bridge, 100 ft south of Ranson Street in Ft. Myers, and 10.4 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	12-11-87	14.31
263736 081464301	Sixmile Cypress Creek near Ft. Myers, FL	Lat 26°37'36", long 81°46'43", in NE¼ sec.26, T.44 S., R.25 E., Lee County, Hydrologic Unit 03090204, at bridge on State Highway 82, 5.6 mi east of Ft. Myers, and 10 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	11-03-87	20.76
Caloosahatchee River							
263239 081534500	Wyonia Creek near Ft. Myers, FL	Lat 26°32'39", long 81°53'45", in SW¼ sec.22, T.45 S., R.24 E., Lee County, Hydrologic Unit 03080101, at bridge on Cypress Lake Drive, 2.62 mi upstream from mouth, and 7.0 mi south of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	12-11-87	4.47
263428 081533400	Whiskey Creek near Ft. Myers, FL	Lat 26°34'28", long 81°53'34", in SW¼ sec.10, T.45 S., R.24 E., Lee County, Hydrologic Unit 03090205, at bridge on Whiskey Creek Drive, 0.29 mi upstream from mouth, and 5.1 mi south of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	12-11-87	4.04
263543 081522500	Whiskey Creek at Ft. Myers, FL	Lat 26°35'43", long 81°52'25", in NE¼ sec.2, T.45 S., R.24 E., Lee County, Hydrologic Unit 03090205, at bridge on Colonial Blvd., 2.93 mi upstream from mouth, and 3.6 mi south of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	08-19-88	8.28
263904 081512500	Billy Creek at Ft. Myers, FL	Lat 26°35'04", long 81°51'25", in NE¼, sec.13, T.44 S., R.24 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 80, 0.09 mi upstream from mouth, and 1 mi east of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	09-20-88	3.05

ANNUAL MAXIMUM FLOOD-PROFILE DATA

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Annual maximum flood-profile data during the water year 1988

Station number	Station name	Location	Miles above mouth	Drainage area (sq mi)	Period of record (water years)	Annual Maximum Date	Maximum Elevation (feet)
Caloosahatchee River--Continued							
263953 081484600	Billy Creek at Tice, FL	Lat 26°39'53", long 81°48'46" in SE¼ sec.9, T.44 S., R.25 E., Lee County, Hydrologic Unit 03090205, at culvert on Ortiz Avenue, 3.45 mi upstream from mouth in Tice, FL. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	09-20-88	3.05
264054 081524000	Powell Creek at North Ft. Myers, FL	Lat 26°40'54", long 81°52'40", in SE¼ sec.35, T.43 S., R.24 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 78, 1.53 mi upstream from mouth, and 3.0 mi north of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1974-88	09-21-88	2.20
264054 081544000	Yellow Fever Creek at North Ft. Myers, FL	Lat 26°40'54", long 81°54'40", in NE¼ sec.4, T.44 S., R.24 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 78, 0.71 mi west of North Ft. Myers, 3.13 mi upstream from mouth, and 4.0 mi northwest of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1972-88	09-21-88	5.08
264115 081473200	Orange River near Tice, FL	Lat 26°41'15", long 81°47'32", in SW¼ sec.35, T.43 S., R.25 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 80 at Tice, 0.85 mi upstream from mouth, and 5.6 mi east of Fort Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	11-03-87	3.62
264147 081551200	Yellow Fever near North Ft. Myers, FL	Lat 26°41'47", long 81°55'12", in NW¼ sec.33, T.43 S., R.24 E., Lee County, Hydrologic Unit 03090205, at bridge on Corbett Road, 1.20 mi northwest of North Ft. Myers, 4.45 mi upstream from mouth, and 5.5 mi northwest of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	09-21-88	5.08
264214 081504201	Daughtrey Creek at Ft. Myers, FL	Lat 26°42'14", long 81°50'42", in SE¼ sec.30, T.43 S., R.25 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 78, 1.69 mi upstream from mouth, and 4.3 mi north of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1972-88	12-11-87	2.83
264230 081355800	Bedman Creek at Alva, FL	Lat 26°42'30", long 81°35'58", in SW¼ sec.25, T.43 S., R.26 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 80 at Alva, and 0.44 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.			1972-88	11-03-87	4.23

Annual maximum flood-profile data during the water year 1988

Station number	Station name	Location	Miles above mouth	Drainage area (sq mi)	Period of record (water years)	Annual Maximum	
						Date	Elevation (feet)
Caloosahatchee River--Continued							
264253 081402200	Hickey Creek near Olga, FL	Lat 26°42'53", long 81°40'22", in NW¼ sec.25, T.43S., R.27 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 80, 0.31 mi upstream from mouth, and 2.5 mi east of Olga. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	11-03-87	4.61
264253 081483200	Popash Creek at Bayshore, FL	Lat 26°42'53", long 81°40'32", in SW¼ sec.22, T.43 S., R.25 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 78, 0.9 mi east of Bayshore, 1.4 mi upstream from mouth, and 6.1 mi northeast of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1972-88	12-11-87	1.74
264349 081420600	Telegraph Creek near Olga, FL	Lat 26°43'49", long 81°42'06", in SE¼ sec.15, T.43 S., R.26 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 78, 0.60 mi upstream from mouth, and 1.1 mi north-east of Olga. Datum of gage is National Geodetic Vertical Datum of 1929.			1972-88	09-21-88	3.72
264253 081494400	Caloosahatchee River tributary at Bayshore, FL	Lat 26°42'53", long 81°49'20", in SW¼ sec.21, T.43 S., R.25 E., Lee County, Hydrologic Unit 03090205, at bridge on State Highway 78 at Bayshore, 1.36 mi upstream from mouth, and 5.6 mi north of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	11-04-87	8.30
264518 081500500	Caloosahatchee River tributary near Bayshore, FL	Lat 26°45'18", long 81°50'05", in SW¼ sec.5, T.43 S., R.25 E., Lee County, Hydrologic Unit 03090205, at culvert on Nalle Grande Road, 4.5 mi upstream from mouth, and 8.2 mi north-east of Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	08-18-88	23.56
264519 081483400	Popash Creek near Bayshore, FL	Lat 26°45'19", long 81°48'34", in SE¼ sec.3, T.43 S., R.25 E., Lee County, Hydrologic Unit 03090205, at bridge on Nalle Grande Road, 3.6 mi north of Bayshore, 4.71 mi upstream from mouth, and 7.5 mi northeast of North Ft. Myers. Datum of gage is National Geodetic Vertical Datum of 1929.			1973-88	09-21-88	23.40

< Actual value is known to be less than the value shown.

> Actual value is known to be equal to or greater than value shown.

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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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