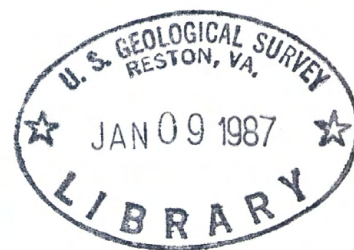


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Water Resources Data Florida Water Year 1985

Volume 1A: Northeast Florida Surface Water



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-85-1A
Prepared in cooperation with the State of Florida
and with other agencies

CALENDAR FOR WATER YEAR 1985

1984

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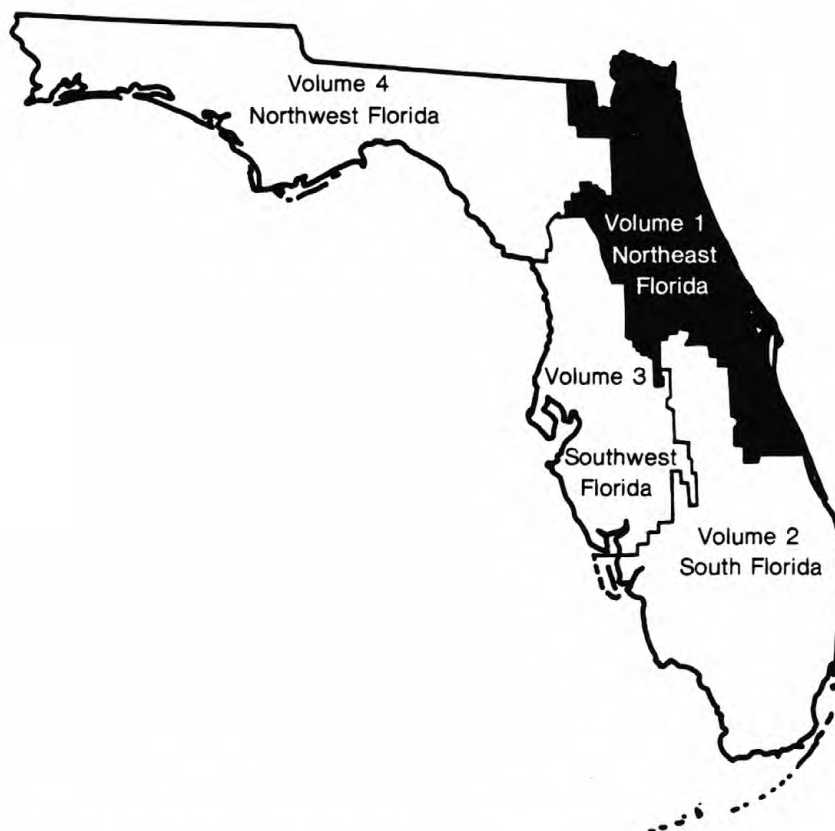
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Water Resources Data Florida Water Year 1985

Volume 1A: Northeast Florida Surface Water



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-85-1A
Prepared in cooperation with the State of Florida
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

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

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WATER RESOURCES DATA - FLORIDA, 1985
Volume 1A: Northeast Florida

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

ACKNOWLEDGMENT

The water-resources data for northeast Florida were processed and prepared for publication under the supervision of Larry D. Fayard, Chief, Hydrologic Surveillance and Data Analysis Section,

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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 1985 water year in Florida consist of continuous or daily discharge for 285 streams, periodic discharge for 38 streams, miscellaneous discharge for 110 streams, continuous or daily stage for 124 streams, periodic stage for 32 streams, peak discharge for 98 streams, and peak stage for 87 streams; continuous or daily elevations for 89 lakes, periodic elevations for 82 lakes; continuous ground-water levels for 473 wells, periodic ground-water levels for 550 wells, and miscellaneous water-level measurements for 2,588 wells; quality-of-water data for 239 surface-water sites and 699 wells. The data for northeast Florida include continuous or daily discharge for 75 streams, periodic discharge for 9 streams, miscellaneous discharge for 21 streams, continuous or daily stage for 22 streams, periodic stage for 21 streams, peak discharge for 17 streams, and peak stage for 25 streams; continuous or daily elevations for 20 lakes, periodic elevations for 35 lakes; continuous ground-water levels for 40 wells, periodic ground-water levels for 103 wells, and miscellaneous water-level measurements for 590 wells; quality-of-water data for 19 surface-water sites and 82 wells. These data represent the National Water Data System records collected by the U.S. Geological Survey and cooperating local, state and federal agencies in Florida.					
17. Document Analysis. a. Descriptors *Florida, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Elevations, Water wells. b. Identifiers/Open-Ended Terms c. COSATI Field/Group					
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Volume 1A: Northeast Florida

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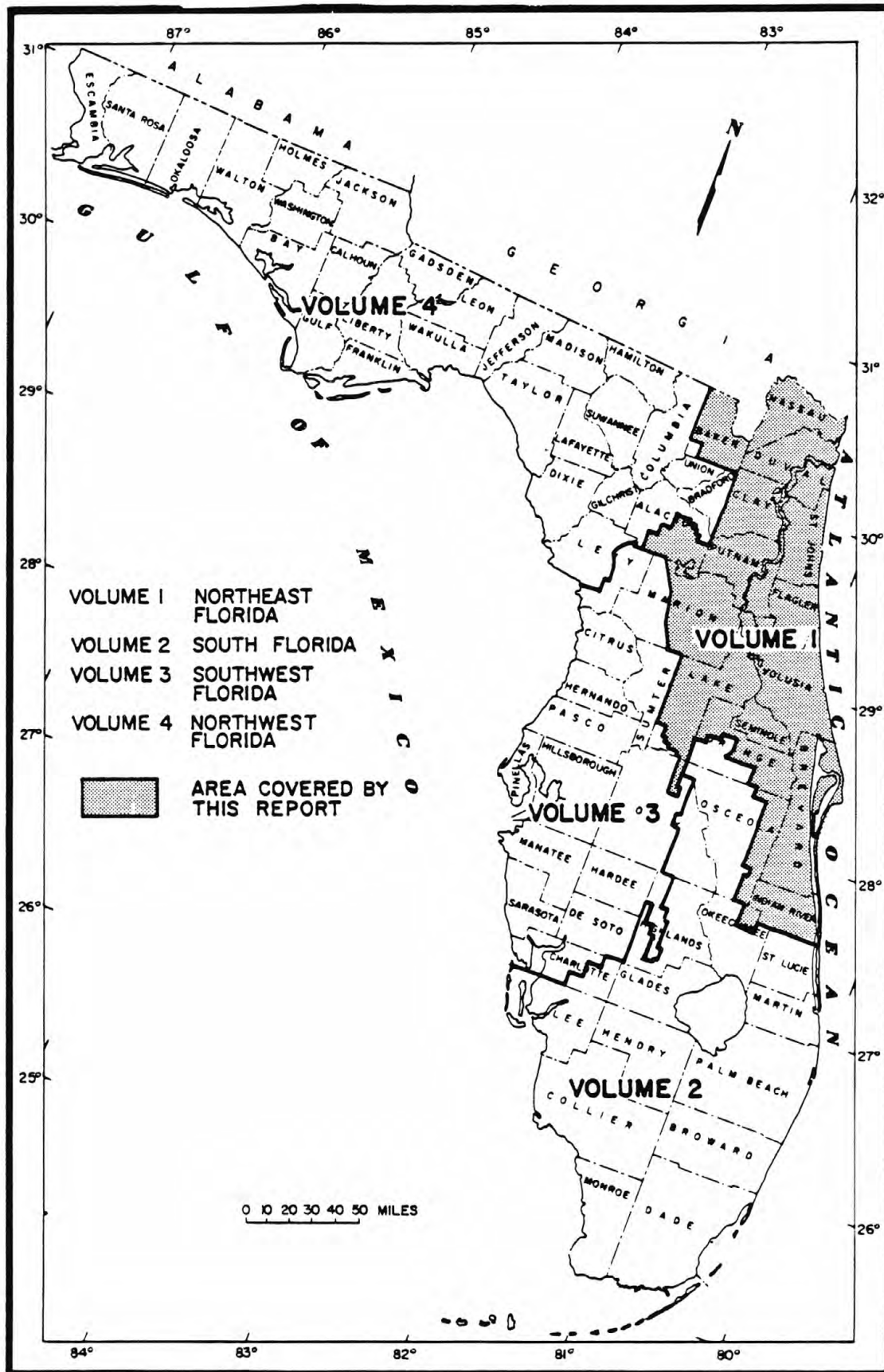


Figure 1. Geographic area covered by this report.

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WATER RESOURCES DATA - FLORIDA, 1985
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WATER RESOURCES DATA - FLORIDA, 1985
Volume 1A: Northeast 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 northeast Florida include continuous or daily discharge for 75 streams, periodic discharge for 9 streams, miscellaneous discharge for 21 streams, continuous or daily stage for 22 streams, periodic stage for 21 streams, peak discharge for 17 streams, and peak stage for 25 streams; continuous or daily elevations for 20 lakes, periodic elevations for 35 lakes; continuous ground-water levels for 40 wells, periodic ground-water levels for 103 wells, and miscellaneous water-level measurements for 590 wells; quality-of-water data for 19 surface-water sites and 82 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, Parts 2A and 2B." 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, 604 South Pickett Street, Alexandria, VA 22304.

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-85-1A." 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 district chief at the address given on the back of the title page or by telephone (904) 681-7620.

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:

Florida Department of Environmental Regulation	County of St. Johns
Florida Department of Transportation	County of Volusia
Florida Department of Natural Resources	City of Cocoa
St. Johns River Water Management District	City of Daytona Beach
County of Lake	City of Jacksonville

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

Organizations that provided data are acknowledged in station descriptions.

WATER RESOURCES DATA - FLORIDA, 1985
Volume 1A: Northeast Florida

SUMMARY OF HYDROLOGIC CONDITIONS

Rainfall was above normal at one and below normal at four of the five rainfall stations represented in the St. Johns River basin. These stations are at Melbourne in the upper St. Johns River basin, Orlando in the middle basin, Clermont in the Oklawaha basin, and Crescent City and Jacksonville in the lower St. Johns River basin.

The departure from normal rainfall in each area is as follows: Melbourne, +1.09 inches; Orlando, -4.61 inches; Clermont, -1.91 inches; Crescent City, -11.06 inches; Jacksonville, -3.41 inches.

Figures 2-5 present discharge hydrographs for four streams in the area covered by this report. The upper hydrograph is the daily mean discharge for the water year, and the lower is the annual mean discharge for the period of record.

Streamflow in St. Marys River near Macclenny (base period 1927-84; fig. 2) was below average during the months of October, and December through June. The St. Johns River near Cocoa (base period 1954-84; fig. 3) was below average in October, November, and January through August. The St. Johns River near De Land (base period 1934-84; fig. 4) had below average flow from October through May, July, and August. Discharge at Silver Springs near Ocala (base period 1933-84; fig. 5) was average for January and below average from February through September. All other months had above average streamflow at each station.

SUMMARY OF HYDROLOGIC CONDITIONS--Continued

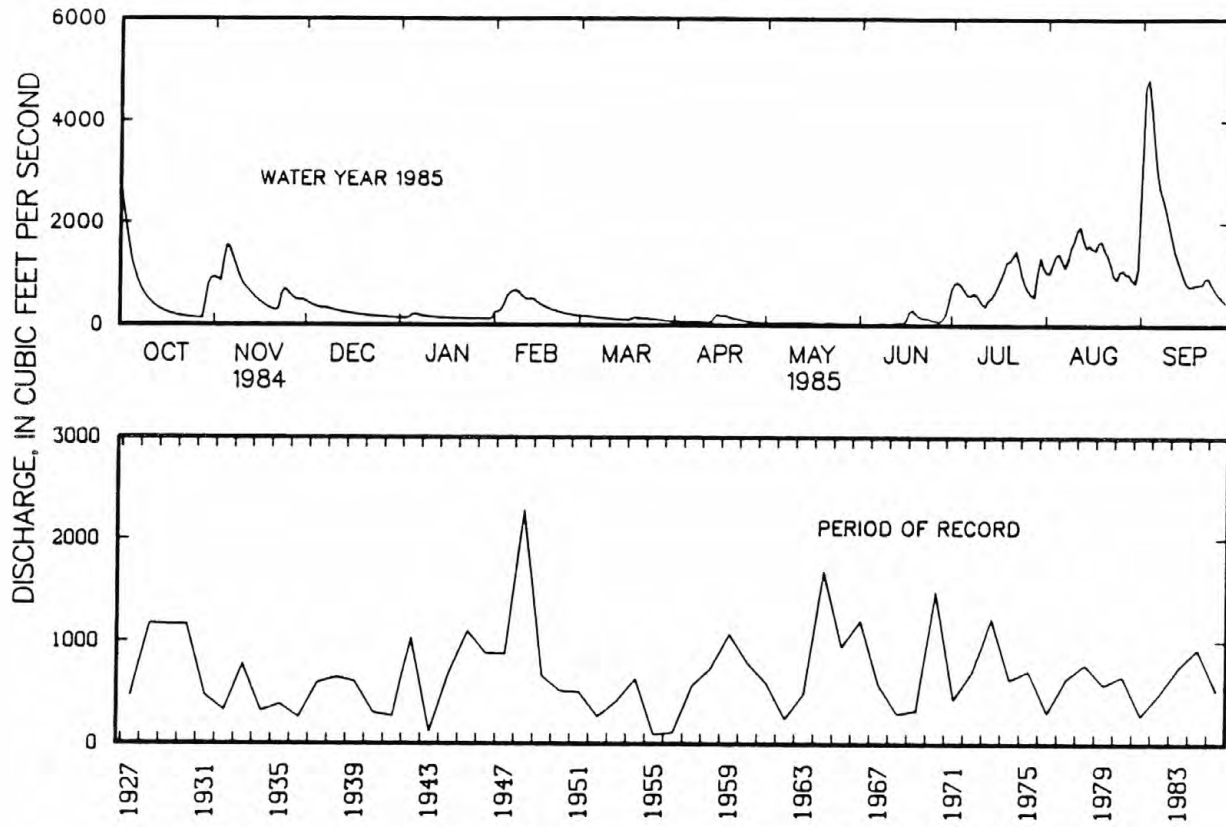


Figure 2.--Water-year and long-term hydrograph for 02231000
St. Marys River near Macclenny, FL.

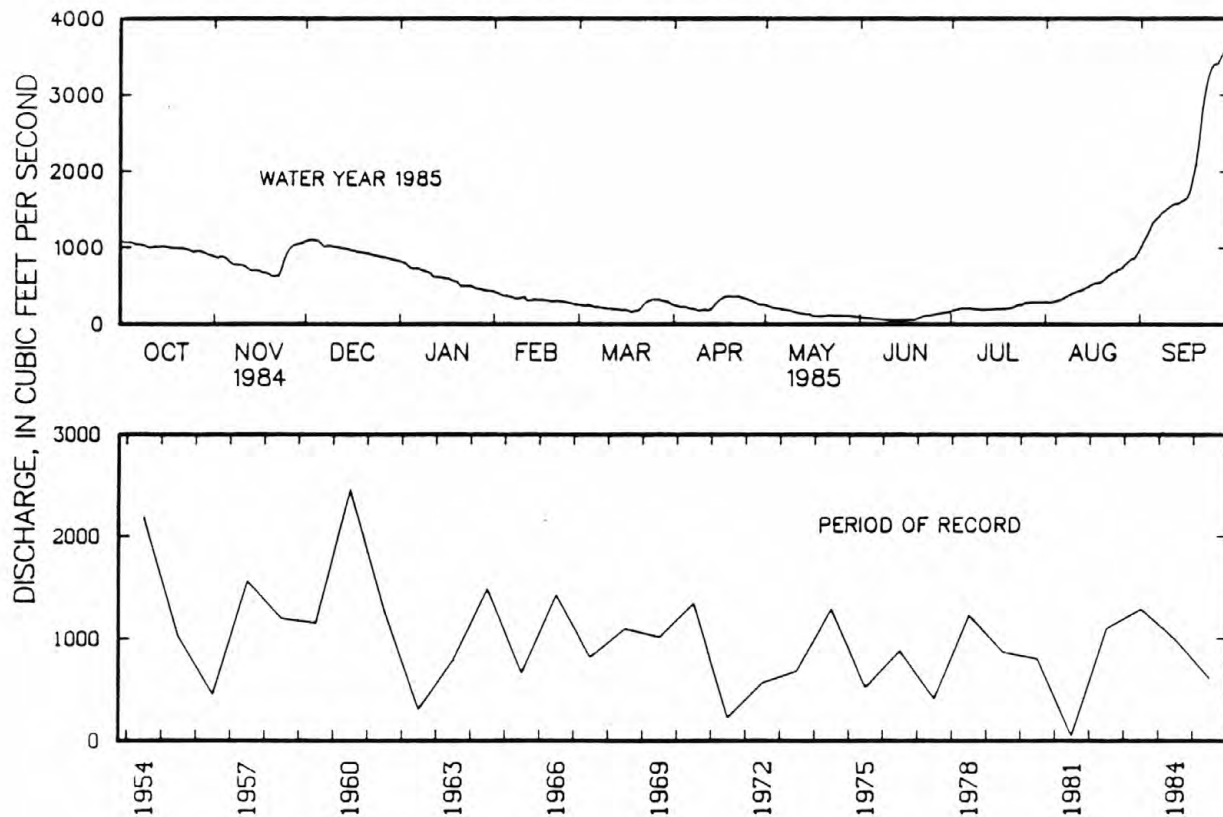


Figure 3.--Water-year and long-term hydrographs for 02232400
St. Johns River near Cocoa, FL.

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SUMMARY OF HYDROLOGIC CONDITIONS--Continued

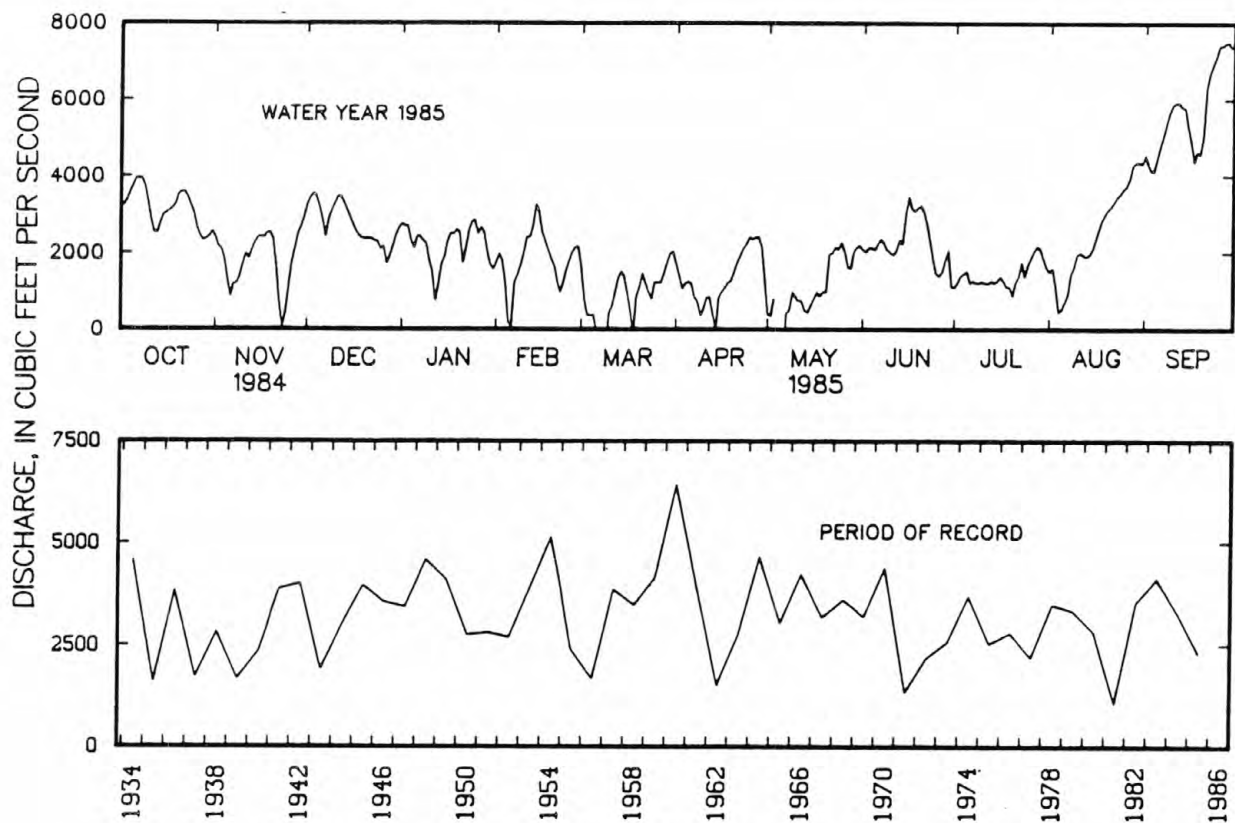


Figure 4.--Water-year and long-term hydrographs for 02236000
St. Johns River near De Land, FL.

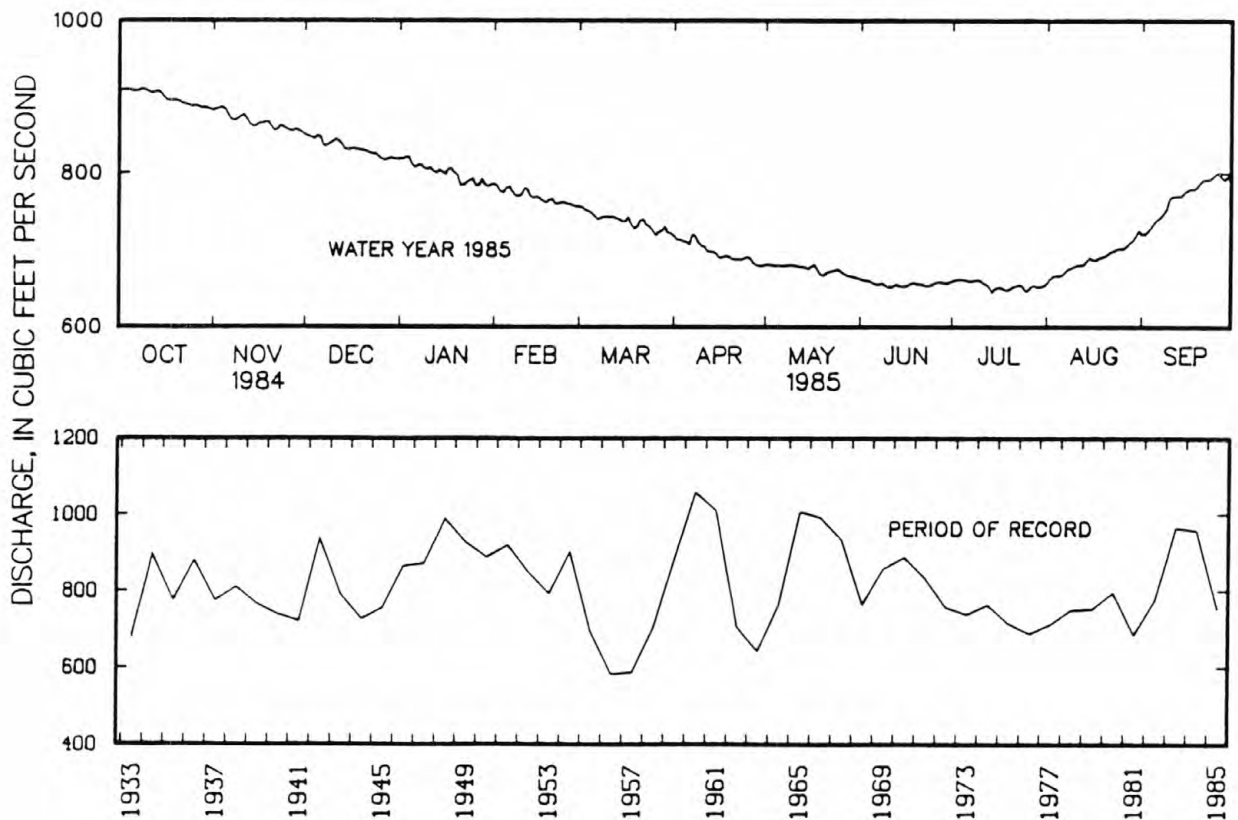


Figure 5.--Water-year and long-term hydrographs for 02239500
Silver Springs near Ocala, FL.

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 6. 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 1985 water year that began October 1, 1984, and ended September 30, 1985. 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.)

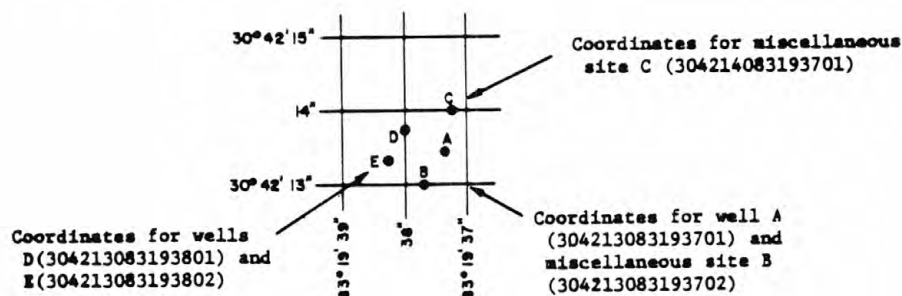


Figure 7. System for numbering wells and miscellaneous sites.
(latitude and longitude)

Records of Stage and Water Discharge

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

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

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

Data Collection and Computation

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

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

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

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

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

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

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 Orlando 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 in situ quality of the water. 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 in situ 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). These unit values may be obtained from the Orlando Subdistrict Office, 80 North Hughey Avenue, Suite 216, Orlando, Florida 32801.

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

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

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

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

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

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

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

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

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

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

Remark Codes

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

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

Records of Ground-Water Levels

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

Data Collection and Computation

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

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

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

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

Data Presentation

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

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

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

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

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

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

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

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

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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.

ACCESS TO WATSTORE DATA

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

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

General inquiries about WATSTORE may be directed to:

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

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Bottom material: See Bed material.

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

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

CFSM (cubic feet 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 chloroplatinate 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 feet 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.

Cubic foot per second (ft³/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.

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 μ m 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 (ug/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 (UG/L, ug/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).

Partical-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 microcurie, 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.

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-micrometer 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 um 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 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

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

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

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

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

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

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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, 1985, is called the "1985 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 publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 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-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-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. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

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STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

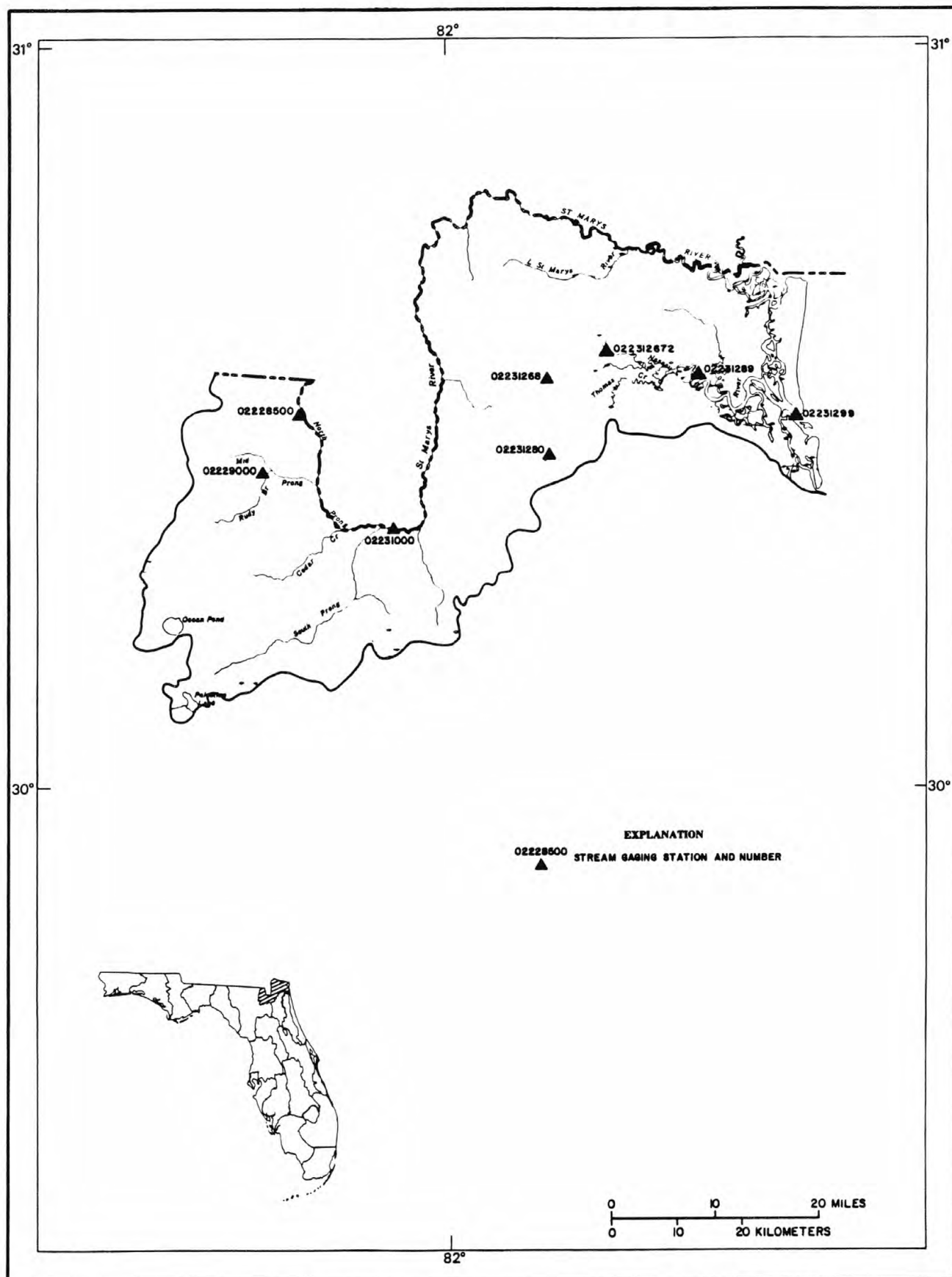


Figure 8. Location of stream gaging stations in the St. Marys River basin and the coastal area between the St. Marys and St. Johns Rivers.

ST. MARYS RIVER BASIN

02228500 NORTH PRONG ST. MARYS RIVER AT MONIAC, GA

LOCATION.--Lat 30°31'03", long 82°13'50", in NW¼ sec.8, T.1 N., R.21 E., Baker County, FL, Hydrologic Unit 03070204, near right bank at upstream side of bridge on State Highway 2 and 94, 0.2 mi upstream from Georgia Southern & Florida Railway bridge, 0.4 mi west of Moniac, 1.0 mi downstream from Moccasin Creek, and 122 mi upstream from mouth of St. Marys River.

DRAINAGE AREA.--160 mi², approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--January 1921 to December 1923 (published as St. Marys River at Moniac), January 1927 to June 1930, July 1932 to June 1934, October 1950 to current year.

REVISED RECORDS.--WSP 1234; Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 89.40 ft above National Geodetic Vertical Datum of 1929. January 1921 to June 1934, nonrecording gage at site 800 ft downstream at datum 3.22 ft higher.

REMARKS.--Estimated daily discharges: Jan. 24 to Feb. 11. Records good.

AVERAGE DISCHARGE.--40 years (water years 1922-23, 1928-29, 1933, 1951-85), 157 ft³/s, 13.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft³/s, Apr. 5, 1973, gage height, 22.98 ft; no flow for many days in some years; minimum gage height, 3.62 ft, June 26, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 873 ft³/s, Sept. 2, gage height, 11.23 ft; no flow May 30 to June 15; minimum gage height, 4.07 ft, June 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	22	40	15	43	33	11	.97	.00	4.9	6.4	785
2	42	25	38	14	57	35	9.0	.78	.00	4.8	16	850
3	39	29	37	15	64	34	7.3	3.3	.00	3.3	146	746
4	38	48	35	23	92	33	6.3	22	.00	2.2	78	672
5	36	58	34	27	115	32	5.4	24	.00	1.5	43	622
6	35	57	37	25	130	30	5.1	21	.00	1.1	33	590
7	33	50	44	23	135	28	6.0	17	.00	2.6	68	548
8	31	45	43	22	145	27	5.7	14	.00	3.6	68	484
9	28	40	40	21	130	26	4.7	15	.00	2.5	214	412
10	26	36	38	20	120	24	3.8	31	.00	1.6	309	342
11	23	35	36	19	113	23	3.2	28	.00	.98	179	281
12	21	34	35	18	126	21	2.8	21	.00	.84	117	239
13	18	32	33	17	126	20	6.1	16	.00	.79	108	259
14	16	31	32	16	110	19	22	13	.00	.69	108	246
15	14	28	31	15	98	18	22	9.5	.00	.58	107	188
16	12	26	30	14	89	17	19	7.3	1.9	1.7	98	150
17	11	25	29	13	80	25	20	5.3	12	3.9	81	140
18	9.3	23	28	14	73	31	19	3.7	9.7	3.4	66	185
19	8.0	21	27	14	68	29	16	2.6	6.5	2.8	54	194
20	7.0	20	25	13	62	26	14	2.4	4.1	2.6	46	195
21	6.0	19	24	13	58	25	12	2.7	2.8	7.4	39	181
22	5.1	27	23	12	52	25	9.8	2.2	2.0	6.3	35	204
23	4.4	46	22	11	49	24	8.3	1.5	1.5	4.3	33	197
24	3.7	46	22	11	46	22	7.0	1.6	.95	3.0	38	179
25	3.1	44	20	10	43	20	5.8	1.5	.63	2.7	42	157
26	2.6	42	19	9.7	41	18	4.6	.96	.41	2.0	40	129
27	2.4	41	19	9.2	38	17	3.5	.70	.24	1.5	50	107
28	2.3	40	18	9.2	35	15	2.7	.46	.31	2.6	52	89
29	11	44	17	8.9	---	14	1.9	.17	.35	24	47	75
30	16	42	17	8.9	---	12	1.4	.00	2.4	15	49	81
31	22	---	16	8.3	---	12	---	.00	---	8.5	334	---
TOTAL	573.9	1076	909	469.2	2338	735	265.4	269.64	45.79	123.68	2704.4	9527
MEAN	18.5	35.9	29.3	15.1	83.5	23.7	8.85	8.70	1.53	3.99	87.2	318
MAX	48	58	44	27	145	35	22	31	12	24	334	850
MIN	2.3	19	16	8.3	35	12	1.4	.00	.00	.58	6.4	75
CFSM	.12	.22	.18	.09	.52	.15	.06	.05	.01	.02	.54	1.99
IN.	.13	.25	.21	.11	.54	.17	.06	.06	.01	.03	.63	2.22
CAL YR 1984	TOTAL	47924.34	MEAN	131	MAX	2620	MIN	.00	CFSM	.82	IN.	11.14
WTR YR 1985	TOTAL	19037.01	MEAN	52.2	MAX	850	MIN	.00	CFSM	.33	IN.	4.43

ALTAMAHA-ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02229000 MIDDLE PRONG ST. MARYS RIVER AT TAYLOR, FL

LOCATION.--Lat 30°26'10", long 82°17'15", in SW¼ sec.2, T.1 S., R.20 E., Baker County, Hydrologic Unit 03070204, near center of span on upstream side of bridge on State Highway 125, 0.5 mi southeast of Taylor, 0.9 mi upstream from Little River, and 7.4 mi upstream from mouth.

DRAINAGE AREA.--125 mi², approximately.

PERIOD OF RECORD.--September 1955 to September 1967, April 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 89.51 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to April 1976 at same site at datum 0.11 ft lower.

REMARKS.--Estimated daily discharges: June 16 to July 21. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--21 years (water years 1955-67, 1977-85), 112 ft³/s, 12.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,920 ft³/s, Sept. 12, 1964, gage height, 14.49 ft, present datum; minimum discharge, 0.03 ft³/s, June 6, 1985, gage height, 0.89 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 29	1400	493	8.68	Sept. 1	0400	*930	*10.48

Minimum discharge, 0.03 ft³/s, June 6, gage height, 0.89 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	479	237	80	19	38	30	4.5	1.1	.09	170	252	906
2	368	198	76	17	41	30	4.0	.89	.08	190	229	885
3	290	178	73	19	64	29	3.7	.81	.07	180	276	812
4	243	336	70	33	77	27	3.2	.95	.06	160	294	741
5	214	381	67	36	93	25	2.8	1.4	.06	150	241	708
6	196	310	68	30	94	23	3.1	1.2	.09	140	190	753
7	180	253	66	27	102	21	4.3	.85	.22	140	175	738
8	167	213	61	25	92	19	4.4	.67	.23	150	156	680
9	153	187	57	23	83	17	4.1	.58	.18	125	188	600
10	138	168	54	22	77	17	3.3	.60	.13	115	199	506
11	125	158	52	21	74	15	2.8	.77	.10	100	205	423
12	112	151	50	20	83	14	2.4	.63	.16	100	211	363
13	101	137	48	19	81	13	6.5	.55	.50	115	233	313
14	90	124	45	17	75	12	24	.59	.67	140	280	272
15	82	113	43	17	71	11	21	.47	.58	155	235	238
16	74	104	41	15	67	9.9	18	.37	6.0	180	219	211
17	68	96	39	15	63	14	22	.30	27	215	289	189
18	62	88	38	15	59	18	18	.24	23	240	299	168
19	55	82	36	15	55	16	13	.22	21	260	248	152
20	49	78	34	14	53	14	10	.22	19	275	217	157
21	44	73	32	13	50	12	8.1	.25	17	290	190	160
22	39	90	31	12	47	13	6.3	.26	16	309	163	166
23	36	120	29	11	44	12	5.1	.25	15	260	151	154
24	33	112	28	12	41	11	4.1	.22	14	213	249	142
25	29	102	26	12	39	9.7	3.3	.18	14	194	233	132
26	26	94	25	12	36	8.7	2.6	.15	13	168	200	123
27	25	89	24	12	34	7.6	2.2	.13	12	171	216	114
28	26	87	23	11	32	6.8	1.7	.12	26	286	186	105
29	85	90	22	10	---	6.2	1.5	.11	50	442	178	97
30	135	85	21	11	---	5.6	1.3	.11	110	360	232	94
31	214	---	19	35	---	5.0	---	.10	---	268	474	---
TOTAL	3938	4534	1378	570	1765	472.5	211.3	15.29	386.22	6261	7108	11102
MEAN	127	151	44.5	18.4	63.0	15.2	7.04	.49	12.9	202	229	370
MAX	479	381	80	36	102	30	24	1.4	110	442	474	906
MIN	25	73	19	10	32	5.0	1.3	.10	.06	100	151	94
CFSM	1.02	1.21	.36	.15	.50	.12	.06	.00	.10	1.62	1.83	2.96
IN.	1.17	1.35	.41	.17	.53	.14	.06	.00	.11	1.86	2.12	3.30
CAL YR 1984	TOTAL	73023.7	MEAN	200	MAX	2440	MIN	3.7	CFSM	1.60	IN.	21.73
WTR YR 1985	TOTAL	37741.31	MEAN	103	MAX	906	MIN	.06	CFSM	.82	IN.	11.23

ST. MARYS RIVER BASIN

02231000 ST. MARYS RIVER NEAR MACCLENNEY, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°21'31", long 82°04'54", in NW¼ sec.2, T.2 S., R.22 E., Baker County, Hydrologic Unit 03070204, on right bank 200 ft downstream from site of former Stokes Bridge, 1 mi downstream from confluence of North and South Prongs, 6 mi northeast of Macclenny, and 100 mi upstream from mouth.

DRAINAGE AREA.--700 mi², approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1926 to current year.

REVISED RECORDS.--WSP 1082: 1928(M), 1945(M). WSP 1142: 1928, 1945. WSP 1434: 1927. WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 40.00 ft above National Geodetic Vertical Datum of 1929 (levels by Mees and Mees). Prior to Feb. 21, 1939, nonrecording gage and Feb. 21, 1939, to Aug. 15, 1948, water-stage recorder, at site of former bridge 200 ft upstream at same datum.

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

AVERAGE DISCHARGE.--59 years, 673 ft³/s, 13.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,100 ft³/s, Sept. 25, 1947; maximum gage height, 23.25 ft, Sept. 13, 1964, from floodmark; minimum discharge observed, 12 ft³/s, May 22, 1932; minimum gage height observed, 0.04 ft, June 4, 5, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 3	0400	*4,950	*14.92	No other peak greater than base discharge.			
Minimum discharge, 23 ft³/s, June 6, gage height, 1.01 ft.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2870	938	455	138	253	174	78	50	27	728	1030	2880
2	2400	898	422	137	265	170	74	46	27	837	1020	4700
3	1990	866	392	136	297	171	71	44	26	841	1210	4830
4	1600	1280	366	157	412	167	69	46	25	787	1380	4290
5	1250	1570	344	207	565	158	66	47	24	690	1410	3600
6	1040	1520	334	213	636	151	66	57	26	591	1280	3010
7	862	1350	331	191	666	143	67	59	42	575	1130	2670
8	719	1170	323	176	684	139	68	58	36	628	1270	2470
9	609	991	307	166	635	135	66	58	34	589	1530	2250
10	523	851	290	158	568	130	65	53	31	502	1660	1970
11	454	756	275	152	517	125	62	53	29	424	1870	1700
12	398	693	262	147	501	120	60	60	41	378	1940	1440
13	349	627	251	142	513	115	71	58	58	497	1700	1270
14	310	558	240	138	489	111	151	53	58	543	1530	1100
15	278	499	230	138	444	107	208	49	53	631	1570	928
16	252	449	220	134	405	104	185	46	103	770	1500	798
17	228	405	211	131	371	107	183	43	263	904	1480	757
18	209	367	203	129	341	133	175	39	296	1050	1630	776
19	192	332	196	129	315	151	153	36	235	1240	1650	803
20	178	305	189	128	293	141	137	40	177	1260	1470	804
21	168	284	182	125	274	135	125	49	146	1350	1360	817
22	160	327	176	124	255	130	112	49	136	1460	1180	928
23	156	605	171	122	239	128	99	45	133	1250	967	939
24	145	714	166	120	225	123	88	41	112	978	895	808
25	138	659	161	120	212	116	80	39	94	792	1060	698
26	136	583	157	121	200	109	73	37	82	680	1080	614
27	134	524	153	121	190	102	67	36	80	590	1010	542
28	133	487	150	119	181	96	61	34	128	564	993	484
29	487	487	146	116	---	91	56	32	223	1020	890	436
30	816	486	143	115	---	86	53	30	469	1340	835	406
31	923	---	139	142	---	83	---	29	---	1140	1140	---
TOTAL	20107	21581	7585	4392	10946	3951	2889	1416	3214	25629	40670	49718
MEAN	649	719	245	142	391	127	96.3	45.7	107	827	1312	1657
MAX	2870	1570	455	213	684	174	208	60	469	1460	1940	4830
MIN	133	284	139	115	181	83	53	29	24	378	835	406
CFSM	.93	1.03	.35	.20	.56	.18	.14	.07	.15	1.18	1.87	2.37
IN.	1.07	1.15	.40	.23	.58	.21	.15	.08	.17	1.36	2.16	2.64
CAL YR 1984	TOTAL	344384	MEAN	941	MAX	8050	MIN	95	CFSM	1.34	IN.	18.30
WTR YR 1985	TOTAL	192098	MEAN	526	MAX	4830	MIN	24	CFSM	.75	IN.	10.21

ALTAMAHA-ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231000 ST. MARYS RIVER NEAR MACCLENNY, FL
(National stream-quality accounting network station)

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.70	7.10	4.55	2.33	3.31	2.68	1.73	1.40	1.09	6.01	7.56	12.49
2	11.90	6.90	4.36	2.32	3.40	2.64	1.69	1.36	1.08	6.58	7.51	14.70
3	11.05	6.73	4.19	2.31	3.61	2.65	1.66	1.33	1.07	6.61	8.38	14.82
4	10.07	8.68	4.04	2.52	4.31	2.61	1.63	1.35	1.05	6.32	9.13	14.33
5	9.12	9.82	3.91	2.97	5.16	2.53	1.60	1.36	1.04	5.81	9.26	13.61
6	8.16	9.65	3.85	3.02	5.53	2.46	1.59	1.49	1.06	5.30	8.71	12.91
7	7.14	8.99	3.83	2.83	5.68	2.38	1.61	1.52	1.30	5.22	8.04	12.39
8	6.30	8.19	3.78	2.70	5.77	2.34	1.62	1.50	1.22	5.49	8.68	12.04
9	5.66	7.36	3.68	2.60	5.52	2.30	1.60	1.50	1.20	5.29	9.68	11.61
10	5.14	6.66	3.57	2.53	5.18	2.25	1.58	1.44	1.15	4.82	10.13	11.02
11	4.70	6.16	3.47	2.47	4.90	2.20	1.55	1.44	1.12	4.37	10.75	10.29
12	4.34	5.82	3.38	2.42	4.81	2.16	1.52	1.53	1.28	4.11	10.95	9.54
13	4.02	5.48	3.30	2.37	4.88	2.11	1.65	1.50	1.50	4.79	10.23	8.92
14	3.74	5.13	3.23	2.33	4.75	2.07	2.45	1.44	1.50	5.05	9.69	8.26
15	3.51	4.80	3.15	2.33	4.49	2.03	2.98	1.39	1.44	5.50	9.84	7.53
16	3.31	4.52	3.08	2.29	4.26	2.00	2.78	1.35	1.97	6.23	9.58	6.93
17	3.14	4.27	3.00	2.26	4.07	2.03	2.76	1.31	3.38	6.92	9.51	6.69
18	2.99	4.04	2.94	2.24	3.89	2.28	2.69	1.26	3.60	7.66	10.03	6.81
19	2.84	3.83	2.88	2.24	3.73	2.46	2.48	1.23	3.18	8.54	10.09	6.98
20	2.72	3.67	2.82	2.23	3.59	2.36	2.32	1.28	2.70	8.65	9.49	6.98
21	2.62	3.53	2.76	2.21	3.46	2.30	2.20	1.39	2.41	9.02	9.07	7.04
22	2.55	3.80	2.70	2.20	3.33	2.25	2.08	1.39	2.31	9.43	8.27	7.53
23	2.51	5.36	2.65	2.18	3.21	2.23	1.95	1.35	2.28	8.59	7.24	7.58
24	2.40	5.93	2.61	2.16	3.11	2.19	1.84	1.29	2.08	7.29	6.88	6.98
25	2.33	5.65	2.56	2.16	3.01	2.12	1.75	1.27	1.90	6.35	7.71	6.32
26	2.31	5.26	2.52	2.17	2.91	2.05	1.67	1.24	1.78	5.75	7.80	5.80
27	2.29	4.94	2.48	2.17	2.83	1.98	1.61	1.22	1.75	5.30	7.44	5.36
28	2.28	4.74	2.45	2.15	2.75	1.92	1.54	1.20	2.24	5.16	7.37	4.98
29	4.66	4.74	2.41	2.12	---	1.87	1.48	1.17	3.07	7.45	6.85	4.65
30	6.47	4.73	2.38	2.11	---	1.82	1.44	1.14	4.62	8.97	6.57	4.45
31	7.02	---	2.34	2.37	---	1.78	---	1.12	---	8.09	8.00	---
MEAN	5.16	5.88	3.19	2.36	4.12	2.23	1.90	1.35	1.91	6.47	8.72	8.98
MAX	12.70	9.82	4.55	3.02	5.77	2.68	2.98	1.53	4.62	9.43	10.95	14.82
MIN	2.28	3.53	2.34	2.11	2.75	1.78	1.44	1.12	1.04	4.11	6.57	4.45
CAL YR 1984	MEAN	5.82	MAX	17.02	MIN	1.91						
WTR YR 1985	MEAN	4.36	MAX	14.82	MIN	1.04						

ALTAMAHA-ST. MARYS RIVERS

31

ST. MARYS RIVER BASIN

02231000 ST. MARYS RIVER NEAR MACCLENNY, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1965 to October 1969, January 1974 to September 1981.

WATER TEMPERATURE: March 1965 to October 1969, January 1974 to September 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 204 microsiemens, Mar. 31, 1974; minimum daily, 25 microsiemens, Jan. 7, 1975.

WATER TEMPERATURES: Maximum daily, 30.0°C, July 28, 1966, several days during August and September 1976; minimum daily, 6.0°C, Jan. 21, 1966, Jan. 17, 19-21, 1968.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM	STREAM-	SPE-	PH	TEMPER-	TUR-	OXYGEN,	COLI-	STREP-	CALCIUM	MAGNE-	
		STAGE	FLOW,	CIFIC					FORM,	TOCOCCI		DIS-	SIUM,
		(FT	INSTAN-	CON-	(STAND-	ATURE	BID-	DIS-	0.7	KF AGAR	DIS-	DIS-	
		ABOVE	TANEOUS	DUCT-	(STAND-	(DEG C)	ITY	SOLVED	UM-MF	(COLS.	SOLVED	SOLVED	
		DATUM)	(CFS)	ANCE	ARD		(NTU)	(MG/L)	(COLS./	PER	(MG/L	(MG/L	
		(00065)	(00061)	(UMHOS)	UNITS)	(00010)	(00076)	(00300)	100 ML)	100 ML)	AS CA)	AS MG)	
				(00095)	(00400)				(31625)	(31673)	(00915)	(00925)	
JAN													
07...	1100	2.84	190	55	6.4	11.0	--	10.4	--	--	--	--	
FEB													
25...	1100	3.02	213	47	5.0	19.5	1.0	9.6	13	180	2.6	1.3	
MAY													
07...	1200	--	56	80	6.8	25.0	1.0	6.9	270	390	6.0	2.9	
JUL													
29...	1200	7.35	1050	39	4.7	28.0	3.5	6.3	320	400	2.2	.92	
DATE		SODIUM,	POTAS-	ALKA-	SULFATE	CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	NITRO-	PHOS-
		DIS-	SIUM,	LINITY	DIS-	RIDE,	RIDE,	DIS-	RESIDUE	GEN,	GEN,	GEN,AM-	PHOS-
		SOLVED	DIS-	LAB	DIS-	DIS-	DIS-	SOLVED	AT 180	NO2+NO3	AMMONIA	MONIA +	PHORUS,
		(MG/L	SOLVED	(MG/L	SOLVED	SOLVED	SOLVED	(MG/L	DEG. C	DIS-	DIS-	ORGANIC	TOTAL
		AS NA)	(MG/L	AS	(MG/L	(MG/L	(MG/L	AS	DIS-	SOLVED	SOLVED	TOTAL	TOTAL
		(00930)	AS K)	CACO3)	AS SO4)	AS CL)	AS F)	SiO2)	(MG/L)	AS N)	AS N)	AS N)	AS P)
JAN													
07...	--	--	--	--	--	--	--	--	--	<.10	.050	.70	.080
FEB													
25...	4.3	.40	4.0	1.9	9.3	<.10	5.7	30	.10	.050	.40	.050	
MAY													
07...	4.5	.70	23	4.6	8.2	<.10	6.8	53	<.10	.030	.70	.070	
JUL													
29...	3.1	.40	<1.0	6.1	7.2	.10	5.5	78	<.10	.060	.60	.050	
DATE		PHOS-	PHOS-	ALUM-	ARSENIC	BARIUM,	BERYL-	CADMIUM	CHRO-	COBALT,	COPPER,	IRON,	LEAD,
		PHORUS,	PHORUS,	INUM,	DIS-	DIS-	LIUM,	DIS-	MIUM,	DIS-	DIS-	DIS-	DIS-
		DIS-	ORTHO,	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-
		SOLVED	DIS-	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED
		(MG/L	SOLVED	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L
		AS P)	AS P)	AS AL)	AS AS)	AS BA)	AS BE)	AS CD)	AS CR)	AS CO)	AS CU)	AS FE)	AS PB)
		(00666)	(00671)	(01106)	(01000)	(01005)	(01010)	(01025)	(01030)	(01035)	(01040)	(01046)	(01049)
JAN													
07...	.060	.050	--	--	--	--	--	--	--	--	--	--	--
FEB													
25...	.050	.060	260	<1	19	<.5	1	<1	<3	7	370	1	
MAY													
07...	.050	.040	140	<1	25	.7	<1	<1	<3	7	230	5	
JUL													
29...	.070	.020	510	<1	26	<.5	3	<1	<3	12	1100	6	

ALTAMAHA-ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231000 ST. MARYS RIVER NEAR MACCLENNY, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	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)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN 07...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 25...	<4	7	.3	<10	<1	<1	1	13	<6	140	1	<1
MAY 07...	10	3	.3	<10	1	<1	<1	25	<6	25	6	50
JUL 29...	23	15	<.1	<10	8	<1	<1	17	<6	100	15	80

ALTAMAHA-ST. MARYS RIVERS

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COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231268 ALLIGATOR CREEK AT CALLAHAN, FL

LOCATION.--Lat 30°33'59", long 81°50'01", in NW¼ sec. 29, T.2 N., R.25 E., Nassau County, Hydrologic Unit 03070205, on downstream side of bridge on U.S. Highway 1, 0.2 mi northwest of the intersection of U.S. Highway 1 and State Highway 200 at Callahan.

DRAINAGE AREA.--14.0 mi².

PERIOD OF RECORD.--October 1981 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, 495 ft³/s, Sept. 2, 1985, gage height, 13.85 ft; no flow for many days in some years; minimum gage height, 6.24 ft, June 5-7, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 495 ft³/s, Sept. 2, gage height, 13.85 ft; minimum, 0.04 ft³/s, June 5-7, gage height, 6.24 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	4.0	3.8	2.4	19	2.8	.78	.35	.09	2.1	8.6	355
2	9.8	3.6	3.4	2.3	15	3.4	.69	.32	.06	1.7	7.2	434
3	6.3	4.0	3.1	2.4	10	4.0	.57	3.1	.08	2.3	15	294
4	4.3	5.0	2.9	3.7	14	3.8	.51	3.2	.06	2.2	20	175
5	3.2	7.0	2.8	4.5	19	3.2	.49	2.7	.05	1.4	13	91
6	2.6	6.2	3.0	5.4	20	2.7	1.2	2.2	.07	2.2	8.2	47
7	2.2	3.8	3.0	4.4	16	2.4	1.3	1.5	.09	6.9	15	27
8	2.0	2.7	3.4	3.5	13	2.2	1.6	1.0	.12	6.2	34	18
9	1.8	2.1	3.5	3.3	9.8	2.1	1.3	.98	.13	6.8	39	13
10	1.7	1.8	3.4	3.0	7.3	2.0	1.1	.98	.11	4.8	27	9.7
11	1.4	1.7	3.3	2.9	5.9	1.9	.96	.95	.11	2.8	23	7.5
12	1.3	1.7	3.1	2.9	5.9	1.8	.87	.77	.45	2.4	14	5.8
13	1.3	1.7	2.9	2.7	5.9	1.6	3.5	.64	.14	2.3	8.6	4.8
14	1.1	1.6	2.8	2.6	5.8	1.5	7.2	.58	.35	3.9	26	4.5
15	1.1	1.4	2.7	2.5	5.0	1.3	15	.46	.17	6.1	148	5.2
16	.98	1.4	2.6	2.5	4.4	1.2	7.2	.33	2.8	5.0	91	13
17	.98	1.3	2.5	2.5	4.0	4.0	3.9	.27	3.0	7.4	70	63
18	.98	1.3	2.5	2.5	3.8	8.1	2.6	.23	6.1	21	46	99
19	.97	1.3	2.5	2.5	3.7	11	2.0	.23	3.2	25	22	83
20	.91	1.2	2.4	2.6	3.6	5.2	1.5	.54	1.5	13	20	86
21	.91	1.2	2.4	2.6	3.5	3.6	1.2	.39	.92	7.4	67	85
22	.97	3.5	2.4	2.4	3.5	3.2	.91	.73	.55	3.6	62	50
23	.99	8.5	2.4	2.4	3.5	2.9	.74	1.2	.39	2.0	25	30
24	1.1	17	2.4	2.7	3.5	2.4	.61	.86	.25	1.9	13	22
25	1.1	9.4	2.4	2.9	3.4	1.9	.51	.54	.18	3.5	8.0	16
26	1.1	5.3	2.4	3.0	3.5	1.5	.44	.38	.15	2.8	7.3	9.9
27	1.0	3.8	2.4	2.9	3.6	1.3	.40	.24	.43	2.2	6.2	8.6
28	1.1	3.4	2.4	2.7	3.1	1.2	.40	.15	.59	2.9	6.5	5.3
29	1.4	3.4	2.4	2.7	---	1.1	.59	.10	.80	4.6	7.3	5.3
30	2.0	3.6	2.4	3.4	---	.96	.44	.08	3.6	5.0	6.8	5.6
31	3.3	---	2.4	8.5	---	.86	---	.16	---	8.0	59	---
TOTAL	77.89	113.9	86.0	97.3	218.7	87.12	60.51	26.16	26.54	169.4	923.7	2073.2
MEAN	2.51	3.80	2.77	3.14	7.81	2.81	2.02	.84	.88	5.46	29.8	69.1
MAX	18	17	3.8	8.5	20	11	15	3.2	6.1	25	148	434
MIN	.91	1.2	2.4	2.3	3.1	.86	.40	.08	.05	1.4	6.2	4.5
CFSM	.18	.27	.20	.22	.56	.20	.14	.06	.06	.39	2.13	4.94
IN.	.21	.30	.23	.26	.58	.23	.16	.07	.07	.45	2.45	5.51
CAL YR 1984	TOTAL	3955.86	MEAN	10.8	MAX	380	MIN	.18	CFSM	.77	IN.	10.51
WTR YR 1985	TOTAL	3960.42	MEAN	10.9	MAX	434	MIN	.05	CFSM	.78	IN.	10.52

ALTA MAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312672 MILLS CREEK NEAR ITALIA, FL

LOCATION.--Lat 30°36'31", long 81°44'32", in NW¼ sec.7, T.2 N., R.26 E., Nassau County, Hydrologic Unit 03070205, on downstream side of bridge on U.S. Highway 1A, 1.5 mi west of Italia, and 5.5 mi east of Callahan.

DRAINAGE AREA.--56.6 mi².

PERIOD OF RECORD.--August 1982 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 5.00 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR CURRENT PERIOD.--August to September 1982; maximum gage height, 9.74 ft, Sept. 14; minimum, 6.17 ft, Aug. 26.

Water Year 1983: Maximum gage height, 11.11 ft, Mar. 19; minimum, 5.63 ft, July 22.

Water Year 1984: Maximum gage height, 11.37 ft, Mar. 30; minimum, 5.45 ft, Feb. 6.

Water Year 1985: Maximum gage height, 13.26 ft, Sept. 3; minimum 4.92 ft, Jan. 26.

GAGE HEIGHT, IN FEET ABOVE DATUM, PERIOD AUGUST TO SEPTEMBER 1982
MEAN VALUES

[illegible]

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312672 MILLS CREEK NEAR ITALIA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.33	9.04	8.36	9.11	9.49	9.64	9.27	7.84	7.88	8.90	8.86	8.38
2	9.21	9.00	8.39	9.19	9.53	9.40	9.25	7.69	8.07	9.35	8.56	8.60
3	9.15	8.99	8.46	9.26	9.26	9.06	8.53	7.50	8.32	9.54	8.42	8.64
4	9.21	8.97	8.50	9.29	8.44	8.85	8.07	7.26	7.92	9.66	8.65	8.57
5	9.21	8.51	8.49	9.49	8.34	8.68	8.15	7.36	7.66	9.63	9.01	8.55
6	9.15	8.47	8.37	9.39	8.71	8.42	8.12	7.49	7.66	9.42	8.88	8.67
7	9.11	8.76	8.31	9.07	8.60	8.51	8.09	7.67	7.94	9.21	8.76	8.68
8	9.11	9.06	8.82	8.69	8.36	9.00	8.34	7.71	8.39	9.29	8.91	---
9	9.08	9.14	9.06	8.75	8.38	9.17	9.00	7.64	8.71	9.43	8.99	---
10	8.99	9.07	9.12	9.01	8.61	9.23	10.00	8.21	9.10	9.34	8.95	---
11	9.18	9.00	9.12	8.89	8.79	9.15	10.35	8.48	9.32	9.12	8.81	---
12	9.37	8.90	8.91	7.99	8.80	8.97	10.30	8.28	9.49	8.99	8.39	---
13	9.38	8.56	8.87	8.46	9.22	8.89	10.13	8.14	9.54	8.85	7.83	---
14	9.23	8.73	9.12	8.61	10.06	8.83	9.90	8.08	9.45	8.75	8.29	---
15	9.14	8.92	9.07	8.20	10.19	8.77	9.66	7.84	9.24	8.63	8.93	---
16	9.11	9.09	8.86	8.04	10.33	9.10	9.40	7.73	9.02	8.60	8.91	---
17	9.12	9.25	8.36	8.24	10.27	9.68	9.22	7.95	8.94	8.65	8.86	---
18	9.24	9.29	8.63	8.15	10.08	10.50	9.00	8.77	8.82	8.59	8.63	---
19	9.38	9.21	8.69	8.58	9.84	11.06	8.80	8.91	8.74	8.43	8.32	---
20	9.25	9.21	8.21	8.93	9.62	10.89	8.87	8.71	8.67	8.13	7.89	---
21	8.98	9.17	7.98	9.77	9.46	10.51	8.71	8.27	8.67	7.67	7.99	---
22	8.63	9.05	8.25	10.29	9.33	9.99	8.49	8.04	8.71	7.26	8.06	---
23	9.06	8.93	8.43	10.62	9.02	9.52	8.70	7.94	8.85	7.44	7.96	---
24	9.57	8.70	8.36	10.80	8.60	9.37	8.50	7.86	8.90	7.72	7.91	---
25	9.70	8.40	8.09	10.66	8.66	9.41	8.15	8.01	8.66	7.94	8.36	---
26	9.41	9.00	7.97	10.37	8.83	9.47	8.47	8.27	8.23	8.37	8.64	---
27	9.18	8.78	8.15	10.09	9.24	9.54	8.60	8.24	8.18	8.76	8.71	---
28	9.27	8.60	8.28	9.90	9.53	9.42	8.47	8.31	8.14	8.99	8.70	---
29	9.37	8.60	8.25	9.77	---	9.19	8.26	8.47	8.26	9.13	8.36	---
30	9.34	8.24	8.40	9.69	---	9.18	8.04	8.18	8.43	9.17	8.05	---
31	9.20	---	8.92	9.60	---	9.24	---	7.92	---	9.02	8.20	---
MEAN	9.21	8.89	8.54	9.25	9.20	9.38	8.89	8.02	8.60	8.77	8.51	---
MAX	9.70	9.29	9.12	10.80	10.33	11.06	10.35	8.91	9.54	9.66	9.01	---
MIN	8.63	8.24	7.97	7.99	8.34	8.42	8.04	7.26	7.66	7.26	7.83	---

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312672 MILLS CREEK NEAR ITALIA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.24	9.78	7.93	8.50	10.43		8.50		8.95	8.13
2	---	---	8.35	9.68	8.07	8.68	9.95		8.53		8.78	8.28
3	---	---	8.36	9.42	8.19	8.59	9.61		8.21		8.36	8.26
4	---	---	8.16	9.03	8.13	8.55	9.49		8.25		7.84	8.10
5	---	---	8.02	8.70	7.86	8.61	9.32		8.32		7.56	8.16
6	---	---	8.13	8.13	6.96	8.61	9.10		8.21		7.68	8.79
7	---	---	7.46	8.29	7.17	8.80	8.90		8.19		7.71	9.30
8	---	9.29	7.78	8.05	7.79	9.04	8.87		8.08		7.66	9.54
9	---	9.41	7.70	8.17	7.91	8.86	9.01		7.72		7.62	9.78
10	---	9.34	7.56	7.49	7.63	8.76	9.20		7.94		7.68	9.92
11	---	8.75	7.71	---	7.44	8.75	9.37		---		7.83	9.67
12	---	7.95	8.22	---	7.69	8.61	9.50		---		7.91	9.37
13	9.15	8.19	8.21	---	8.09	8.69	9.51		---		7.76	8.61
14	8.82	8.33	8.04	---	8.32	8.60	9.42		---		7.70	8.01
15	8.77	8.35	7.84	---	8.34	8.44	9.30		---		7.70	7.97
16	8.94	7.88	7.86	9.09	8.45	8.44	9.17		---		7.83	8.05
17	8.94	7.79	8.20	9.05	8.55	8.49	8.80		---		8.01	9.08
18	8.83	8.20	8.70	9.01	8.62	8.83	8.28		---		8.09	9.59
19	9.20	8.33	8.92	8.85	8.67	8.95	8.04		---		8.10	9.80
20	---	8.73	9.10	8.73	8.64	8.89	7.91		---		7.85	9.69
21	---	8.90	9.43	9.15	8.52	8.45	7.92		---		8.03	9.53
22	---	8.81	9.45	9.34	8.68	7.81	7.95		---		8.57	9.40
23	---	8.81	9.08	9.29	8.94	7.49	7.89		---		8.42	9.31
24	---	8.86	8.43	9.07	8.28	7.73	7.29		---		8.08	9.30
25	---	8.56	7.85	8.62	7.72	7.87	7.48		---		8.33	9.28
26	---	8.43	8.08	8.35	7.81	7.49	7.60		---		8.88	9.21
27	---	8.69	8.24	8.53	8.58	8.32	7.80		---		9.06	9.17
28	---	8.78	8.34	8.52	8.71	10.05	7.82		---		9.21	9.71
29	---	8.35	8.51	8.30	8.14	11.15	8.14		---		9.21	10.08
30	---	8.08	9.10	8.16	---	11.30	7.96		---		9.05	10.04
31	---	---	9.58	7.86	---	10.94	---		---		8.58	---
MEAN	---	---	8.34	---	8.13	8.78	8.70		---		8.19	9.10
MAX	---	---	9.58	---	8.94	11.30	10.43		---		9.21	10.08
MIN	---	---	7.46	---	6.96	7.49	7.29		---		7.56	7.97

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312672 MILLS CREEK NEAR ITALIA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.39	8.84	8.09	8.12	7.44	8.23	7.28				---	10.91
2	9.82	8.91	8.09	8.16	7.47	8.10	7.43				---	12.71
3	9.66	8.94	8.32	8.08	7.54	7.84	7.93				---	13.14
4	9.44	9.24	8.24	8.03	8.56	8.28	8.10				---	12.55
5	9.13	9.32	8.63	7.56	9.11	8.26	8.18				---	11.79
6	8.96	9.11	8.77	8.11	9.13	8.13	8.33				---	10.98
7	9.03	8.93	8.10	8.27	8.91	8.93	8.31				---	10.23
8	9.14	9.02	8.13	8.02	8.69	9.00	8.31				---	9.63
9	9.27	9.02	7.98	8.44	8.69	8.66	8.19				---	9.15
10	9.40	8.93	7.96	8.89	8.58	8.46	8.04				---	8.78
11	9.55	8.73	7.94	8.84	8.61	8.59	8.02				---	8.55
12	9.59	8.21	8.24	8.52	7.51	8.04	---				---	8.63
13	9.46	8.37	8.42	8.64	6.53	7.61	---				9.20	9.09
14	9.26	8.37	8.34	8.42	7.19	7.60	---				9.21	9.51
15	9.15	8.39	8.31	7.52	7.60	7.61	---				9.19	9.81
16	9.11	8.35	8.57	7.99	7.73	8.30	---				9.09	10.14
17	9.01	8.20	8.52	8.21	7.74	8.48	---				9.14	10.61
18	8.70	8.53	8.56	7.70	7.72	8.23	---				9.11	10.64
19	8.51	8.51	8.60	7.65	7.92	8.12	---				9.08	10.51
20	8.53	8.27	8.70	7.67	7.98	8.07	---				9.14	10.45
21	8.67	8.90	8.74	7.45	8.44	8.20	---				9.16	10.26
22	8.76	9.38	8.76	7.17	8.21	8.47	---				8.97	10.05
23	8.85	9.69	8.57	7.25	7.80	8.61	---				9.08	9.88
24	8.96	9.87	8.76	7.32	7.63	8.13	---				9.31	9.67
25	9.05	9.80	8.79	6.99	7.35	7.85	---				9.35	9.51
26	9.20	9.50	8.56	6.70	7.18	8.26	---				9.09	9.55
27	9.35	9.18	8.80	7.30	7.05	8.13	---				8.94	9.65
28	9.24	8.84	8.43	7.31	7.40	7.54	---				9.08	9.54
29	8.98	8.28	8.06	7.53	---	7.11	---				9.21	9.45
30	8.75	8.12	7.85	7.91	---	7.11	---				9.21	9.52
31	8.60	---	7.86	7.99	---	7.22	---				9.56	---
MEAN	9.18	8.86	8.38	7.86	7.92	8.10	---				---	10.16
MAX	11.39	9.87	8.80	8.89	9.13	9.00	---				---	13.14
MIN	8.51	8.12	7.85	6.70	6.53	7.11	---				---	8.55

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231280 THOMAS CREEK NEAR CRAWFORD, FL

LOCATION.--Lat 30°27'39", long 81°49'57", in NW¼ sec.32, T.1 N., R.25 E., Duval County, Hydrologic Unit 03070205, on downstream side of bridge on Acree Road, 4.4 mi southeast of Crawford, 4.4 mi northwest of Dinsmore, 7.1 mi south of Callahan, and 24 mi upstream from mouth.

DRAINAGE AREA.--29.9 mi².

PERIOD OF RECORD.--January 1965 to May 1984, October 1984 to September 1985.

REVISED RECORDS.--WDR FL-76-1: Drainage area.

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

REMARKS.--Estimated daily discharges: Oct. 1-17. Records good.

AVERAGE DISCHARGE.--20 years, 34.5 ft³/s, 15.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,020 ft³/s, Apr. 4, 1973, gage height, 21.04 ft, from rating curve extended above 1,600 ft³/s; minimum, 0.41 ft³/s, July 16, 1981, gage height, 14.50 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1950 reached a stage of 23.3 ft, from floodmark pointed out by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 1	1900	*632	*18.09	Sept. 18	1000	533	17.96

Minimum discharge, 1.2 ft³/s, June 6-12, gage height, 14.70 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO MAY 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	43	17	5.8	26	6.9	3.1	2.1	1.7	8.8	16	416
2	91	28	15	5.6	15	10	3.0	2.0	1.6	5.2	16	578
3	69	35	14	6.1	16	8.7	2.9	2.1	1.6	3.1	33	412
4	53	80	13	8.4	31	7.4	2.7	4.9	1.5	2.6	31	245
5	43	76	12	8.1	47	6.6	2.8	4.3	1.4	2.2	27	157
6	31	52	13	7.2	32	5.7	3.6	3.1	1.3	2.6	21	102
7	24	35	13	6.7	25	5.3	5.3	2.6	1.3	5.6	17	69
8	19	23	12	6.5	19	5.2	4.4	2.4	1.3	6.9	34	51
9	15	18	11	6.2	15	5.0	3.5	6.7	1.2	3.6	44	34
10	13	15	10	6.1	13	4.8	3.2	5.8	1.2	2.5	44	22
11	11	14	9.7	6.1	12	4.6	3.0	3.5	1.2	2.7	40	17
12	9.9	13	9.4	5.9	16	4.4	3.0	2.7	2.3	6.6	26	14
13	8.9	12	9.2	5.6	14	4.4	7.9	2.5	6.4	4.2	27	52
14	7.7	10	8.8	5.5	12	4.2	37	2.5	3.7	3.9	17	54
15	6.9	9.3	8.5	5.5	10	4.0	22	2.2	3.4	2.8	28	42
16	6.0	8.7	8.3	5.3	9.5	4.0	10	1.9	10	2.7	18	158
17	5.4	8.1	8.0	5.5	9.1	13	8.0	1.8	18	21	12	402
18	4.8	7.5	7.7	6.0	8.7	14	6.2	1.8	7.8	74	9.4	479
19	4.6	7.2	7.5	5.9	8.3	8.5	5.2	1.7	4.2	94	7.4	314
20	4.4	7.4	7.2	5.4	8.1	6.7	4.4	2.3	2.9	57	6.1	233
21	4.4	7.5	6.9	5.3	7.7	6.3	3.7	6.7	2.6	25	6.3	176
22	4.6	18	6.7	5.2	7.4	6.5	3.4	4.3	2.3	12	4.9	131
23	4.5	70	6.5	5.5	7.3	5.7	3.1	3.2	2.2	7.8	4.1	96
24	4.3	57	6.5	5.8	7.0	5.1	2.9	7.4	2.1	5.9	3.9	69
25	4.1	33	6.5	6.6	6.7	4.4	2.6	4.8	1.8	6.9	12	50
26	4.2	23	6.4	6.5	6.4	4.0	2.5	3.0	1.8	8.2	20	37
27	5.9	20	6.5	5.9	6.1	3.8	2.4	2.3	1.9	6.5	17	27
28	6.4	19	6.5	5.9	5.9	3.6	2.2	2.1	2.4	5.4	15	19
29	15	22	6.4	5.9	---	3.5	2.1	1.9	2.7	15	13	16
30	90	20	6.2	6.0	---	3.4	2.1	1.8	4.0	19	15	130
31	85	---	6.0	22	---	3.2	---	1.8	---	16	157	---
TOTAL	785.0	791.7	285.4	204.0	401.2	182.9	168.2	98.2	97.8	439.7	742.1	4602
MEAN	25.3	26.4	9.21	6.58	14.3	5.90	5.61	3.17	3.26	14.2	23.9	153
MAX	129	80	17	22	47	14	37	7.4	18	94	157	578
MIN	4.1	7.2	6.0	5.2	5.9	3.2	2.1	1.7	1.2	2.2	3.9	14
CFSM	.85	.88	.31	.22	.48	.20	.19	.11	.11	.47	.80	5.12
IN.	.98	.98	.36	.25	.50	.23	.21	.12	.12	.55	.92	5.73
WTR YR 1985	TOTAL	8798.2	MEAN	24.1	MAX	578	MIN	1.2	CFSM	.81	IN.	10.95

ALTAMAHA-ST. MARYS RIVER

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COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

LOCATION.--Lat 30°34'28" long 81°36'32", in land grant 47, T.2 N., R.27 E., Nassau County, Hydrologic Unit 03070205, near left bank at upstream side of bridge on U.S. Highway 17, 0.5 mi north of Halfmoon Island, 1.8 mi south of Hedges, and about 21 mi upstream from mouth.

DRAINAGE AREA.--274 mi², approximately, does not include Inconstantion Creek.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1983 to current year, incomplete.

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Discharge computed using continuous velocity record obtained from recording electromagnetic current meter record and represents net of much larger upstream and downstream discharges.

EXTREMES FOR CURRENT PERIOD.--April 1983 to September 1983: Maximum daily discharge during period, 4,140 ft³/s, July 2; maximum gage height, 13.76 ft, Sept. 4; minimum daily discharge, 808 ft³/s, July 7; minimum gage height, 6.89 ft, July 4.

Water year 1984: Maximum daily discharge, 8,550 ft³/s, Mar. 28; maximum gage height, 14.50 ft, Jan. 21; maximum daily reverse flow, 523 ft³/s, May 12; minimum gage height, 6.00 ft, Feb. 29.

Water year 1985: Maximum daily discharge, 11,300 ft³/s, Sept. 2; maximum gage height, 14.29 ft, Nov. 23; maximum daily reverse flow, 1,620 ft³/s, Apr. 5; minimum gage height, 6.17 ft, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, PERIOD APRIL TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	3210		
2									---	4140		
3									---	4120		
4									---	3950		
5									---	3440		
6									---	2300		
7									---	808		
8									---	1030		
9									---	3540		
10									1680	3260		
11									2100	2520		
12									2380	2710		
13									3070	2530		
14									3260	1690		
15									3230	---		
16									2080	---		
17									1680	---		
18									1460	---		
19									1520	---		
20									1790	---		
21									1650	---		
22									2030	---		
23									2160	---		
24									3110	---		
25									2610	---		
26									2080	---		
27									2160	---		
28									2620	---		
29									3540	---		
30									3500	---		
31									---	---		
TOTAL									---	---		
MEAN									---	---		
MAX									---	---		
MIN									---	---		

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, PERIOD APRIL TO SEPTEMBER 1983
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	12.46	12.32	11.58		12.92
2							---	12.38	12.55	11.58		13.31
3							---	12.27	12.63	11.43		13.28
4							---	11.98	12.30	11.46		13.76
5							---	12.01	12.34	11.60		13.57
6							---	12.04	12.47	11.81		13.46
7							---	12.19	12.71	12.21		13.40
8							---	12.26	12.89	12.60		13.21
9							---	12.56	12.77	12.41		13.36
10							---	12.86	12.65	12.25		13.04
11							---	12.80	12.64	12.23		12.84
12							---	12.76	12.74	12.24		12.79
13							---	12.81	12.67	12.12		12.56
14							---	12.72	12.43	13.11		12.11
15							---	12.71	12.19	---		13.05
16							---	12.62	12.06	---		13.31
17							---	12.65	12.03	---		12.97
18							---	13.23	11.87	---		12.77
19							12.58	13.03	11.90	---		12.79
20							12.80	12.75	11.91	---		12.76
21							12.63	12.53	11.99	---		12.73
22							12.64	12.57	12.06	---		12.83
23							12.74	12.59	12.18	---		13.22
24							12.46	12.63	12.01	---		13.22
25							12.64	12.82	11.91	---		13.48
26							12.80	12.61	11.77	---		13.42
27							12.71	12.61	11.75	---		13.31
28							12.65	12.66	11.64	---		12.91
29							12.64	12.67	11.51	---		13.25
30							12.56	12.47	11.50	---		13.05
31							---	12.32	---	---		---
MEAN							---	12.57	12.21	---		13.09
MAX							---	13.23	12.89	---		13.76
MIN							---	11.98	11.50	---		12.11

ALTAMAHA-ST. MARYS RIVERS

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COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, PERIOD APRIL TO SEPTEMBER 1983
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	7.69	8.10	7.69		8.47
2							---	7.86	9.07	7.67		9.61
3							---	7.70	8.83	7.31		9.53
4							---	7.57	8.13	6.89		9.00
5							---	7.90	7.98	6.90		9.04
6							---	7.76	7.82	6.95		9.10
7							---	8.11	7.87	7.28		9.33
8							---	7.80	7.93	8.76		9.54
9							---	7.68	9.15	8.27		9.74
10							---	8.52	8.89	7.35		9.74
11							---	8.21	9.24	7.42		9.52
12							---	7.76	8.98	7.40		9.02
13							---	7.70	8.52	7.43		8.88
14							---	7.40	8.06	8.81		8.25
15							---	7.22	7.72	---		9.05
16							---	7.06	8.29	---		11.13
17							---	8.08	8.21	---		10.44
18							---	9.20	7.92	---		9.81
19							8.60	8.70	7.86	---		9.48
20							8.41	8.36	7.65	---		9.66
21							8.21	7.99	7.80	---		9.37
22							8.06	7.84	7.67	---		9.18
23							8.43	7.57	8.24	---		10.19
24							7.19	7.48	7.93	---		10.79
25							7.28	7.92	7.33	---		11.58
26							7.74	7.96	7.15	---		11.10
27							7.64	7.89	7.45	---		11.06
28							7.52	8.26	7.12	---		10.79
29							7.47	8.34	7.27	---		11.27
30							7.64	7.93	7.27	---		10.57
31							---	8.01	---	---		---
MEAN							---	7.92	8.05	---		9.81
MAX							---	9.20	9.24	---		11.58
MIN							---	7.06	7.12	---		8.25

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	-41	2480	5080	---	3860	1400		
2				---	5090	4510	4460	881	3830	1870		
3				---	3070	7660	4630	1610	3430	1940		
4				---	2970	5480	5250	1410	3430	1720		
5				---	12	3460	5670	970	3200	1390		
6				---	2810	3270	5180	1280	2990	1910		
7				---	3630	3090	4850	1090	2890	2120		
8				---	3070	2600	4010	888	2760	2720		
9				---	4480	3310	4640	97	2720	2480		
10				---	2940	4830	3990	-504	2510	3910		
11				---	2970	5340	3240	-109	2300	---		
12				---	3490	6010	3570	-523	2680	---		
13				---	3850	2930	3250	-375	3040	---		
14				---	4140	2460	3040	-405	4210	---		
15				---	4120	1620	3040	-373	4310	---		
16				---	3460	1220	3750	1750	4210	---		
17				---	3760	328	3870	2250	4580	---		
18				---	3280	1610	3400	2710	4830	---		
19				2000	2040	2090	3450	3530	4910	---		
20				1930	1640	3570	3540	3020	4680	---		
21				3270	2110	4350	2920	3230	4250	---		
22				4000	2190	3540	---	3260	4570	---		
23				4590	2370	3210	---	4440	4860	---		
24				3910	3060	3150	---	4240	3820	---		
25				3210	2370	4450	---	3450	3890	---		
26				3470	1840	3530	---	3290	3430	---		
27				4760	5470	4560	---	3140	4730	---		
28				2540	5260	8550	---	2340	3900	---		
29				3150	4560	8010	---	2400	2640	---		
30				5140	---	5330	---	2840	1520	---		
31				4390	---	4600	---	3370	---	---		
TOTAL				---	90011	121148	---	---	108980	---		
MEAN				---	3104	3908	---	---	3633	---		
MAX				---	5470	8550	---	---	4910	---		
MIN				---	-41	328	---	---	1520	---		

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.89	13.17	12.53	12.87	12.91	11.76	12.96	12.79	13.16	12.71	13.03	12.69
2	12.71	12.84	12.66	12.93	12.86	12.39	12.81	12.79	13.11	12.79	12.78	12.69
3	12.66	12.67	12.70	11.99	12.99	12.74	12.81	12.74	12.80	12.86	12.50	12.70
4	12.75	12.56	12.59	11.93	12.55	12.89	12.78	12.64	12.89	12.73	12.47	12.56
5	12.76	12.72	12.57	11.29	12.50	12.36	12.83	12.59	12.90	12.70	12.56	12.74
6	12.76	12.88	12.38	11.32	11.37	12.30	11.99	12.68	12.88	12.72	12.64	13.30
7	12.92	12.63	11.58	11.43	11.79	12.05	12.01	12.49	12.78	12.74	12.70	13.49
8	13.29	13.39	11.74	11.02	12.05	12.06	12.67	12.46	12.73	12.69	12.69	13.56
9	13.01	13.36	11.65	11.06	12.30	11.86	13.08	12.59	12.77	13.06	12.62	13.60
10	13.09	12.97	11.50	11.02	12.15	12.45	12.84	12.61	12.85	12.89	12.67	13.64
11	13.19	12.41	11.61	10.94	12.36	12.83	13.69	12.78	12.91	12.72	12.70	13.09
12	12.70	12.59	11.57	11.09	12.81	12.98	13.53	12.88	12.95	12.65	12.69	12.90
13	12.40	12.59	11.40	11.39	13.29	13.08	13.53	12.82	13.01	12.53	12.57	12.49
14	12.44	12.65	11.37	11.00	12.98	13.02	13.52	12.80	12.98	12.53	12.51	12.38
15	12.42	12.50	11.32	11.90	12.99	12.92	13.46	13.20	12.85	12.54	12.40	12.39
16	12.53	12.43	11.46	12.07	13.28	13.22	13.40	13.25	12.78	12.49	12.40	12.79
17	12.46	12.52	11.82	11.71	13.29	13.45	13.32	13.12	12.69	12.33	12.44	13.46
18	12.62	12.75	12.24	13.08	13.34	13.50	12.99	13.08	12.61	11.95	12.58	13.42
19	12.61	12.86	12.12	13.81	13.21	13.50	12.87	12.86	12.40	11.67	12.49	13.36
20	12.75	13.06	12.37	14.16	13.24	13.44	12.80	12.43	12.34	12.11	12.52	13.20
21	13.13	12.90	12.76	14.50	13.17	13.22	12.68	12.33	12.70	12.34	12.69	13.19
22	13.22	12.96	12.28	13.99	13.23	12.93	12.80	12.41	12.83	12.50	12.77	13.19
23	13.21	13.07	12.07	13.55	12.69	12.70	12.80	12.39	12.89	12.55	12.72	13.23
24	12.79	13.01	11.67	13.23	11.99	12.80	11.59	12.51	12.85	12.63	12.74	13.18
25	12.63	12.55	11.61	13.10	11.98	12.91	12.40	12.66	12.81	12.70	13.11	13.11
26	12.92	12.88	11.66	12.87	12.61	12.59	11.97	12.46	12.94	12.75	13.13	13.13
27	12.71	12.92	11.82	12.79	13.00	12.68	12.03	12.55	12.93	12.77	13.22	13.34
28	12.59	12.73	11.90	12.39	11.59	12.50	12.88	12.68	12.87	12.91	13.29	14.01
29	12.36	12.46	11.77	12.70	10.64	11.51	13.00	12.73	12.77	13.00	13.19	13.29
30	12.54	12.52	11.79	12.79	---	12.62	12.98	13.02	12.76	13.15	12.94	13.29
31	12.71	---	12.05	11.97	---	13.09	---	13.11	---	13.19	12.63	---
MEAN	12.77	12.78	11.95	12.32	12.59	12.72	12.83	12.72	12.82	12.64	12.72	13.11
MAX	13.29	13.39	12.76	14.50	13.34	13.50	13.69	13.25	13.16	13.19	13.29	14.01
MIN	12.36	12.41	11.32	10.94	10.64	11.51	11.59	12.33	12.34	11.67	12.40	12.38
WTR YR 1984	MEAN	12.66	MAX	14.50	MIN	10.64						

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.34	10.22	8.09	8.85	7.64	6.84	9.00	7.71	8.60	7.33	8.51	7.59
2	9.60	10.51	7.86	8.83	8.11	7.64	9.17	7.78	7.86	7.93	8.12	7.99
3	9.19	9.99	7.89	8.44	8.56	7.96	9.00	7.52	7.85	7.96	7.57	7.96
4	9.33	9.46	7.57	8.35	8.64	8.33	8.01	7.20	8.26	8.15	7.28	7.75
5	9.39	9.02	7.41	7.45	8.09	8.76	7.65	7.83	8.58	8.01	7.31	8.17
6	9.30	9.97	7.83	7.48	7.36	8.49	7.70	7.67	8.59	7.88	7.46	9.17
7	9.59	9.54	6.86	6.93	7.93	8.27	8.14	7.64	8.48	7.78	7.51	10.49
8	10.95	10.30	7.27	7.80	8.91	8.53	8.70	7.38	8.02	7.27	7.52	10.74
9	10.46	10.59	7.39	7.61	8.58	7.90	9.00	7.69	7.74	8.20	7.46	11.45
10	10.45	9.72	7.38	7.72	8.21	8.72	9.09	7.94	7.65	8.01	7.70	9.93
11	11.37	8.41	7.60	7.33	8.24	8.50	10.07	7.98	7.59	7.61	7.92	9.47
12	10.37	8.73	7.59	8.61	8.51	8.64	9.90	7.93	7.63	7.43	7.93	8.67
13	9.78	9.08	7.89	8.82	8.58	8.47	9.69	7.32	8.04	7.43	7.97	8.12
14	9.59	9.22	6.99	8.55	8.58	8.39	9.29	6.94	8.02	7.47	7.84	7.80
15	10.12	8.81	6.93	7.97	8.34	8.09	9.00	7.63	7.89	7.80	7.85	7.95
16	10.29	8.25	6.74	8.39	8.36	8.24	8.38	8.25	7.98	7.87	7.98	8.20
17	10.34	8.05	6.87	7.79	8.30	8.00	7.66	8.39	8.18	7.58	8.31	10.91
18	9.80	8.38	7.65	7.52	8.23	9.27	7.50	8.44	8.21	6.84	8.53	11.40
19	9.99	8.35	7.84	9.19	8.70	9.00	7.90	7.78	7.89	6.95	8.22	10.58
20	10.32	8.69	8.05	9.11	8.73	9.28	8.10	7.73	8.13	7.66	7.94	9.94
21	10.75	8.13	9.20	10.60	8.85	7.98	8.40	7.87	8.67	7.99	8.34	9.65
22	11.37	8.23	8.80	10.78	9.69	7.82	8.74	8.28	9.16	7.94	8.81	9.22
23	10.06	8.41	8.04	9.70	7.90	8.02	8.38	8.33	9.12	8.22	7.69	9.05
24	9.91	8.55	6.48	8.80	7.67	8.73	7.50	8.07	8.90	7.84	7.33	9.17
25	9.22	7.49	7.40	8.27	7.68	8.29	8.26	8.91	8.45	7.66	7.98	9.17
26	9.69	8.19	8.05	8.59	7.69	8.29	8.20	8.04	8.37	7.37	8.38	9.10
27	9.62	8.77	7.91	8.61	8.81	8.56	8.40	7.81	8.16	7.35	8.87	9.05
28	9.45	8.37	7.55	8.34	6.55	8.50	8.15	7.95	7.74	7.25	9.23	11.23
29	8.59	7.96	7.34	7.89	6.00	6.29	8.57	7.67	7.33	7.90	8.91	9.28
30	8.63	7.83	7.31	7.46	---	7.87	8.49	7.82	7.02	8.81	8.51	9.75
31	10.08	---	8.98	7.27	---	8.60	---	8.87	---	8.69	7.70	---
MEAN	9.93	8.91	7.64	8.36	8.19	8.27	8.53	7.88	8.14	7.75	8.02	9.30
MAX	11.37	10.59	9.20	10.78	9.69	9.28	10.07	8.91	9.16	8.81	9.23	11.45
MIN	8.59	7.49	6.48	6.93	6.00	6.29	7.50	6.94	7.02	6.84	7.28	7.59
WTR YR 1984	MEAN	8.41	MAX	11.45	MIN	6.00						

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3700	---	3150	2420	2740	1100	---	---	3110	---	6340
2	---	4620	---	3410	1880	3290	6	---	---	3770	---	11300
3	---	4040	---	2560	892	1990	-970	---	---	---	---	10600
4	---	4710	---	2720	19	1220	-1120	---	---	---	---	9350
5	---	5700	2030	2210	1800	1250	-1620	1850	---	---	---	7930
6	---	5870	3410	1600	2190	-960	-226	2060	---	---	---	6790
7	---	4500	1720	2250	1570	1820	395	2210	---	---	---	4720
8	---	5530	2090	2010	1790	2560	1100	1680	---	---	---	3890
9	---	5560	1380	1580	2430	2520	2190	1930	---	---	---	3190
10	---	5100	1450	2490	2340	2010	2390	2950	---	---	---	1530
11	---	6000	1660	3900	2480	2880	2810	2470	---	---	---	---
12	---	4920	2050	3530	4600	3270	3230	2410	---	---	---	---
13	---	5280	2380	3520	1640	2620	3520	2820	---	---	---	---
14	---	5300	3520	4180	1230	2710	---	2920	---	---	---	---
15	---	4820	1770	3080	1800	2740	---	2340	1660	---	---	---
16	---	5350	2100	2450	1400	4440	---	2700	2570	---	---	---
17	---	4500	2200	3040	1420	5970	---	3190	859	---	---	---
18	1900	4240	1350	2090	942	6490	---	3100	1230	---	---	---
19	1210	3370	848	2090	1230	3780	---	3770	1450	---	---	---
20	416	-454	975	2400	1250	1420	---	4250	1380	---	---	---
21	269	-487	95	2380	2260	551	---	4370	1850	---	---	---
22	123	459	1310	2680	2800	739	---	4570	1950	---	---	---
23	99	1040	732	2960	2800	2310	---	5030	2050	---	---	---
24	1160	4150	1700	3690	2830	2410	---	5250	1760	---	---	---
25	968	5170	3060	3660	3330	2100	---	5150	1240	---	---	---
26	969	4670	2550	2990	3250	2640	---	---	1440	---	---	---
27	2340	3620	3430	4450	3600	3590	---	---	1180	---	---	---
28	3230	3830	4120	5090	2970	3970	---	---	1650	---	---	---
29	3340	---	4000	3810	---	3560	---	---	2410	---	---	---
30	3590	---	3580	3240	---	2660	---	---	2690	---	1070	---
31	2730	---	3180	3760	---	2170	---	---	---	---	1430	---
TOTAL	---	---	---	92970	59163	81460	---	---	---	---	---	---
MEAN	---	---	---	2999	2113	2628	---	---	---	---	---	---
MAX	---	---	---	5090	4600	6490	---	---	---	---	---	---
MIN	---	---	---	1580	19	-960	---	---	---	---	---	---

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.00	13.01	---	12.52	12.26	12.65	12.20	12.80	12.95	12.89	12.93	13.80
2	13.02	12.89	---	12.57	12.41	12.61	12.43	12.85	13.01	12.81	12.86	13.36
3	12.94	13.28	---	12.65	12.51	12.53	12.71	13.02	13.04	12.79	13.20	13.13
4	12.78	13.33	12.57	12.75	13.20	12.83	12.76	13.55	13.07	12.73	13.49	12.92
5	12.79	13.11	13.02	12.33	13.31	12.77	12.89	13.62	13.01	12.78	13.25	12.73
6	12.93	12.83	12.94	12.84	13.07	13.09	12.90	13.31	12.87	12.59	13.01	12.63
7	13.07	13.15	12.73	12.84	12.85	13.30	12.88	13.10	12.84	12.46	12.84	12.62
8	13.14	13.18	12.68	12.72	12.88	13.04	12.87	12.86	12.78	12.27	12.74	12.66
9	13.24	13.19	12.72	13.10	12.75	12.93	12.83	13.10	12.56	12.41	12.65	12.68
10	13.40	13.09	12.72	13.15	12.69	12.80	12.69	12.88	12.43	12.44	12.77	12.73
11	13.51	12.80	12.71	12.89	12.76	12.99	12.69	12.72	12.28	12.37	12.81	12.76
12	13.34	12.90	12.89	12.85	12.18	12.77	12.55	12.67	11.95	12.59	12.94	13.25
13	13.10	12.98	12.88	12.80	11.42	12.38	12.44	12.59	12.46	12.61	12.94	13.91
14	13.11	12.88	12.72	12.69	12.19	12.45	12.70	12.56	12.63	12.64	12.85	13.90
15	13.14	12.92	12.85	12.14	12.36	12.39	12.60	12.69	12.56	12.73	12.85	13.88
16	13.15	12.68	12.77	12.68	12.51	12.75	12.30	12.76	12.37	12.86	12.91	14.01
17	12.94	12.86	12.79	12.80	12.53	12.79	12.56	12.73	12.46	13.07	12.94	13.87
18	12.86	12.93	12.97	12.62	12.47	12.49	12.57	12.87	12.40	13.20	12.90	13.66
19	12.87	12.77	13.02	12.59	12.60	12.55	12.50	12.85	12.35	13.28	12.94	13.65
20	12.97	13.07	13.09	12.63	12.67	12.50	12.45	12.85	12.41	13.28	13.04	13.46
21	13.03	13.78	13.17	12.61	12.75	12.72	12.53	12.88	12.57	13.07	12.89	13.32
22	13.06	14.04	13.11	12.25	12.57	12.85	12.57	12.75	12.68	12.91	12.96	13.30
23	13.18	14.29	13.03	12.44	12.34	12.82	12.56	12.79	12.72	12.70	13.11	13.26
24	13.29	13.96	13.15	12.20	12.31	12.67	12.51	12.59	12.67	13.02	13.10	12.82
25	13.41	13.42	12.92	11.92	12.13	12.47	12.46	12.65	12.66	12.51	12.80	---
26	13.71	13.12	12.97	12.04	11.96	12.67	12.40	12.85	12.59	12.74	12.83	---
27	13.44	12.94	12.88	11.95	11.89	12.62	12.38	12.80	12.82	12.83	13.06	---
28	13.16	12.67	12.60	11.91	11.91	12.33	12.27	12.64	13.08	12.89	13.21	---
29	12.94	---	12.33	12.03	---	11.86	12.54	12.53	13.10	12.91	13.11	---
30	12.87	---	12.23	12.41	---	11.81	13.00	12.88	13.01	12.93	13.09	---
31	12.98	---	12.26	12.51	---	12.08	---	13.06	---	12.91	13.32	---
MEAN	13.11	---	---	12.53	12.48	12.63	12.59	12.86	12.68	12.78	12.98	---
MAX	13.71	---	---	13.15	13.31	13.30	13.00	13.62	13.10	13.28	13.49	---
MIN	12.78	---	---	11.91	11.42	11.81	12.20	12.53	11.95	12.27	12.65	---

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.29	10.01	---	8.69	7.67	8.60	7.51	8.55	7.46	7.43	8.08	11.19
2	9.48	9.77	---	8.59	7.59	8.26	7.31	8.06	7.52	7.52	8.39	10.33
3	9.31	9.94	---	8.35	7.29	7.93	7.47	7.84	7.73	7.54	10.13	10.06
4	8.98	11.02	9.11	8.25	8.47	8.46	7.64	9.69	8.12	7.85	10.35	9.60
5	8.70	10.14	9.15	7.48	9.42	7.97	7.77	9.08	8.08	8.08	10.01	9.04
6	9.12	9.31	8.55	7.96	8.63	7.35	7.53	8.31	8.04	8.01	9.84	8.79
7	9.64	9.35	7.66	8.09	8.02	9.45	7.66	7.83	8.29	7.89	9.40	8.56
8	10.04	9.91	7.98	7.59	7.90	8.46	8.02	8.38	8.56	7.67	9.06	8.56
9	10.27	9.71	7.67	8.31	8.26	7.77	7.65	8.86	8.35	8.00	8.65	8.42
10	10.70	9.34	7.67	9.19	8.34	8.18	8.14	8.75	8.16	8.16	8.87	8.27
11	11.09	8.68	7.70	8.84	8.42	8.07	7.98	8.90	7.91	7.90	8.92	7.94
12	10.60	8.45	8.25	8.38	6.17	7.28	8.08	8.97	7.37	8.26	8.92	8.58
13	9.79	8.88	8.50	8.60	6.68	7.73	8.77	8.78	7.46	8.42	8.63	10.14
14	9.59	8.84	8.41	7.31	6.92	7.52	9.19	8.67	8.36	8.06	8.45	11.22
15	9.69	8.94	8.59	7.70	7.47	8.01	8.57	8.55	7.79	7.94	8.15	11.55
16	9.81	8.76	8.68	7.67	7.51	8.76	7.92	8.74	7.12	8.08	8.11	11.56
17	9.34	8.65	8.83	8.25	7.54	8.54	7.80	8.30	7.31	8.51	8.17	11.29
18	8.81	9.23	8.58	7.27	7.34	8.13	8.16	8.56	7.15	9.08	8.33	10.92
19	8.63	8.49	8.45	7.37	7.69	8.21	7.86	8.46	6.99	9.39	8.69	10.76
20	8.75	7.98	8.43	7.45	7.62	8.06	7.69	8.96	7.48	8.88	9.08	10.58
21	8.88	9.93	8.40	7.20	8.65	8.13	7.60	8.21	7.89	8.74	8.80	10.11
22	9.03	10.85	8.48	6.88	7.87	8.58	7.89	8.33	8.24	8.62	8.34	9.95
23	9.14	11.49	8.03	7.15	7.75	8.61	7.88	8.18	8.28	8.23	8.86	9.88
24	9.23	11.34	8.80	7.31	7.84	7.69	7.98	8.00	8.39	8.92	8.94	9.75
25	9.44	10.22	8.77	7.15	7.66	8.14	8.09	8.78	8.41	7.48	8.41	---
26	10.09	9.25	8.52	6.73	7.63	8.57	8.08	8.96	7.96	7.77	8.07	---
27	9.95	8.95	9.15	7.96	7.59	8.33	8.06	8.68	7.86	7.78	8.61	---
28	9.27	8.85	8.70	8.17	8.26	7.79	7.89	8.24	8.74	7.82	9.05	---
29	8.79	---	8.35	8.66	---	7.57	8.08	7.61	8.45	7.96	9.20	---
30	8.91	---	8.19	8.69	---	7.71	9.28	7.93	7.80	8.00	9.05	---
31	9.27	---	8.54	7.81	---	7.56	---	8.34	---	8.09	9.62	---
MEAN	9.47	---	---	7.90	7.79	8.11	7.98	8.50	7.91	8.13	8.88	---
MAX	11.09	---	---	9.19	9.42	9.45	9.28	9.69	8.74	9.39	10.35	---
MIN	8.63	---	---	6.73	6.17	7.28	7.31	7.61	6.99	7.43	8.07	---

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1984 to current year.

WATER TEMPERATURE: January 1984 to current year.

INSTRUMENTATION: Water-quality monitor since January 1984. Digital recorder set for one-hour punch interval.
 Shallow sensors located approximately 22 ft from bottom, deep sensors located approximately 5 ft from bottom.

EXTREMES FOR PERIOD.--January to September 1984:

SHALLOW TEMPERATURE: Maximum daily, 30.5°C, Aug. 8-18; minimum daily, 8.0°C, Jan. 22, 23.

SHALLOW SPECIFIC CONDUCTANCE: Maximum daily, 37,500 microsiemens, June 13, 14; minimum daily, 100 microsiemens, Mar. 29 to Apr. 3, Apr. 6, 7.

DEEP TEMPERATURE: Maximum daily, 30.8°C, Aug. 10, 11; minimum daily, 8.0°C, Jan. 22.

DEEP SPECIFIC CONDUCTANCE: Maximum daily 35,700 microsiemens, Sept. 25; minimum daily, 500 microsiemens, Mar. 30, Apr. 1.

EXTREMES FOR CURRENT YEAR.--

SHALLOW TEMPERATURE: Maximum daily, 31.5°C, Aug. 26; minimum daily, 6.5°C, Jan. 23, 24.

SHALLOW SPECIFIC CONDUCTANCE: Maximum daily, 44,200 microsiemens, June 4, 5, 8; minimum daily, less than 100 microsiemens, Sept. 2-10, 19-24.

DEEP TEMPERATURE: Maximum daily, 29.8°C, July 11; minimum daily, 7.2°C, Jan. 23.

DEEP SPECIFIC CONDUCTANCE: Maximum daily, 45,500 microsiemens, June 28; minimum daily, 500 microsiemens, Sept. 4-7.

 SHALLOW TEMPERATURE, WATER (DEG. C), PERIOD JANUARY TO SEPTEMBER 1984
 MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	12.5	13.0	17.0	24.5	24.5	27.5	28.0	28.0
2				---	12.5	12.5	17.5	24.5	24.0	27.5	28.5	28.5
3				---	13.0	13.0	17.5	25.0	24.5	27.5	29.0	28.5
4				---	14.0	13.5	17.0	25.0	25.5	28.0	29.5	29.0
5				---	13.5	14.5	17.0	25.5	26.0	28.5	30.0	28.0
6				---	13.0	15.0	17.0	26.0	26.5	28.5	30.0	28.0
7				---	12.0	15.5	17.5	26.5	27.0	29.0	30.0	27.0
8				---	11.5	15.5	18.5	27.0	27.0	29.5	30.5	25.5
9				---	11.5	15.5	19.0	26.5	27.5	29.5	30.5	25.0
10				---	12.0	15.5	19.0	26.0	27.5	29.5	30.5	24.5
11				---	12.5	15.5	18.0	25.5	27.5	29.5	30.5	25.0
12				---	13.5	15.0	18.0	25.5	27.5	30.0	30.5	25.5
13				---	14.0	16.0	19.0	25.5	27.5	30.0	30.5	26.0
14				---	15.0	16.5	20.5	26.0	27.0	30.0	30.5	27.0
15				---	15.0	17.0	20.0	26.0	27.5	29.5	30.5	27.5
16				---	15.0	18.0	20.0	25.0	28.0	30.0	30.5	27.0
17				---	15.5	18.5	19.5	24.5	28.0	30.0	30.5	26.5
18				---	16.0	19.0	19.0	24.0	28.5	29.5	30.5	25.5
19				11.0	16.0	19.5	19.5	24.0	29.0	29.0	30.0	24.5
20				10.5	16.5	19.5	20.0	24.5	29.5	28.0	30.0	24.5
21				9.5	16.5	19.0	21.0	25.0	29.5	28.5	29.5	24.5
22				8.5	16.5	18.5	21.5	25.5	29.0	28.0	29.0	25.0
23				9.0	16.0	18.5	21.5	25.5	29.0	28.5	27.5	25.0
24				10.0	16.0	19.0	21.5	25.5	29.0	29.0	27.5	25.0
25				11.0	16.0	19.5	21.5	26.0	29.0	29.0	27.5	25.5
26				11.0	16.0	19.5	22.5	26.5	29.0	29.5	27.5	25.5
27				12.0	16.0	19.5	23.0	26.0	29.0	29.5	27.5	25.5
28				12.5	16.0	19.5	23.5	26.0	28.5	29.0	27.5	25.5
29				13.0	14.0	19.0	24.0	26.0	28.5	29.0	27.0	24.5
30				13.5	---	17.5	24.5	26.0	28.0	28.5	27.5	23.5
31				13.0	---	17.5	---	25.5	---	28.0	27.5	---
MAX				---	16.5	19.5	24.5	27.0	29.5	30.0	30.5	29.0

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

SHALLOW TEMPERATURE, WATER (DEG.C), PERIOD JANUARY TO SEPTEMBER 1984
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	12.0	12.0	16.0	24.0	23.5	27.0	27.0	27.0
2				---	11.5	12.0	16.0	24.0	23.0	27.0	27.5	27.5
3				---	12.0	11.5	16.5	24.5	23.5	26.5	28.0	28.0
4				---	12.5	12.0	16.5	24.5	24.0	27.0	28.5	28.0
5				---	13.0	13.0	16.5	24.5	25.0	27.5	28.5	27.5
6				---	12.5	14.0	16.5	25.0	25.5	27.5	29.0	27.0
7				---	11.5	15.0	16.5	25.5	26.0	28.0	29.0	25.5
8				---	11.0	14.5	17.0	26.0	26.0	28.5	29.5	25.0
9				---	11.0	15.0	18.0	25.5	26.5	29.0	29.5	24.5
10				---	11.0	14.5	18.0	25.0	26.5	29.0	30.0	24.0
11				---	11.5	14.5	17.5	25.0	26.0	29.0	30.0	24.0
12				---	12.5	14.5	17.0	24.5	26.5	29.0	29.5	24.5
13				---	13.5	15.0	17.5	24.5	26.5	29.0	29.5	25.0
14				---	14.0	16.0	19.0	25.0	26.0	29.0	29.5	26.0
15				---	14.5	16.0	20.0	25.0	26.0	29.0	30.0	26.5
16				---	14.5	16.5	19.5	24.5	26.5	29.0	30.0	26.5
17				---	14.5	17.5	18.5	24.0	27.0	29.0	30.0	25.5
18				---	15.0	18.0	18.0	23.5	27.5	29.0	30.0	25.0
19				10.5	15.5	18.5	18.5	23.0	28.0	28.0	30.0	24.0
20				9.5	16.0	19.0	19.0	23.5	28.5	27.5	29.5	23.5
21				9.0	16.0	18.0	19.5	24.0	28.5	27.5	29.0	23.5
22				8.0	15.5	17.5	20.5	24.5	28.5	27.5	28.0	24.0
23				8.0	15.5	18.0	21.5	25.0	28.5	27.5	26.5	24.0
24				9.0	15.5	18.0	21.0	25.0	28.5	27.5	26.5	24.5
25				9.5	15.5	18.5	21.0	25.5	28.5	28.0	27.0	24.5
26				10.5	15.5	19.0	21.5	25.5	28.5	28.5	27.0	24.5
27				11.0	16.0	18.5	22.0	26.0	28.5	28.5	26.5	25.0
28				11.5	14.5	18.5	22.5	25.5	28.0	28.5	26.5	24.5
29				12.0	13.0	17.5	23.0	25.5	27.5	28.0	26.5	23.0
30				12.0	---	17.0	23.5	25.5	27.5	27.5	26.5	22.5
31				12.0	---	16.5	---	24.5	---	27.5	26.5	---
MIN				---	11.0	11.5	16.0	---	23.0	26.5	26.5	22.5

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

SHALLOW SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD JANUARY TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	1300	400	200	8110	34500	24700		
2				---	1700	400	300	7100	35900	25200		
3				---	2100	400	300	5210	31000	25300		
4				---	2200	400	300	10600	32800	23800		
5				---	1500	500	300	11300	33700	25600		
6				---	1100	500	300	12400	32400	---		
7				---	1400	400	300	11600	33600	---		
8				---	2800	400	300	11800	33400	---		
9				---	3700	300	400	14700	34200	---		
10				---	3400	400	500	16400	35700	---		
11				---	3300	400	1200	19600	36500	---		
12				---	5110	400	1700	22000	36900	---		
13				---	8610	601	1700	21900	37500	---		
14				---	9510	701	1400	21100	37500	---		
15				---	10100	901	1300	25300	32000	---		
16				---	11400	1200	1300	32000	31200	---		
17				---	12300	3600	901	31200	30000	---		
18				---	12900	5510	701	31600	29800	---		
19				9610	12900	8010	701	29200	28100	---		
20				12700	12800	7610	901	23900	28200	---		
21				21400	11800	5710	1200	23600	32400	---		
22				16900	14000	3000	1600	25100	33100	---		
23				13100	13800	2600	1800	26000	32000	---		
24				8110	3000	3400	1000	26500	30500	---		
25				3300	1800	5510	2200	29800	30100	---		
26				2400	2200	3900	3200	27600	31400	---		
27				2300	8510	5910	5810	26900	29400	---		
28				1600	601	701	6610	28000	27400	---		
29				1100	300	300	9310	27200	27100	---		
30				1100	---	200	10000	29400	24900	---		
31				1000	---	200	---	32500	---	---		
MAX				---	14000	8010	10000	---	37500	---		

ALTAMAHA-ST. MARYS RIVERS

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COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

SHALLOW SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD JANUARY TO SEPTEMBER 1984
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	400	200	100	801	14700	11100		
2				---	500	200	100	801	13200	11000		
3				---	500	200	100	901	13100	11300		
4				---	500	200	200	901	14100	11600		
5				---	500	200	200	1200	15200	11400		
6				---	500	200	100	1100	15400	---		
7				---	500	300	100	1200	16400	---		
8				---	601	200	200	1200	14800	---		
9				---	500	200	200	1200	15200	---		
10				---	601	200	200	2100	15400	---		
11				---	601	200	200	2400	15600	---		
12				---	500	200	200	3600	16200	---		
13				---	601	200	200	3300	17700	---		
14				---	601	300	300	3200	15600	---		
15				---	701	300	300	4800	15000	---		
16				---	801	300	300	8410	14900	---		
17				---	901	400	300	10000	15000	---		
18				---	1100	500	200	10300	15400	---		
19				1100	1300	601	300	8510	15000	---		
20				1000	1400	601	300	8310	15000	---		
21				2100	1400	601	300	8510	16700	---		
22				3000	1900	500	300	9510	17800	---		
23				1900	1100	500	300	9810	17100	---		
24				1200	801	601	300	9210	16500	---		
25				801	601	601	400	12400	15600	---		
26				801	601	601	400	11000	15100	---		
27				601	601	601	400	10000	15300	---		
28				601	300	300	500	10300	12400	---		
29				500	200	100	601	10300	11500	---		
30				400	---	100	701	9810	11100	---		
31				400	---	100	---	14200	---	---		
MIN				---	200	100	100	---	11100	---		

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

DEEP TEMPERATURE, WATER (DEG. C), PERIOD JANUARY TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	12.9	12.9	17.3	24.9	24.5	27.6	28.1	28.3
2				---	12.8	12.8	17.4	24.9	24.3	27.7	28.4	28.7
3				---	13.2	13.1	17.5	25.0	24.8	27.5	29.0	28.8
4				---	13.9	13.7	17.2	25.2	25.4	27.9	29.5	28.9
5				---	13.7	14.5	17.3	25.4	25.9	28.4	30.1	28.3
6				---	13.1	15.0	17.3	25.9	26.6	28.7	30.0	28.0
7				---	12.2	15.5	17.8	26.5	26.9	29.1	30.3	27.0
8				---	11.6	15.5	18.5	27.0	27.3	29.6	30.5	25.7
9				---	11.7	15.5	18.9	26.7	27.5	29.8	30.7	25.2
10				---	12.0	15.4	18.8	25.9	27.5	29.8	30.8	24.4
11				---	12.6	15.4	18.3	25.6	27.4	29.8	30.8	25.0
12				---	13.4	15.2	18.1	25.6	27.6	29.9	30.5	25.7
13				---	14.0	16.0	19.2	25.8	27.5	30.0	30.4	26.4
14				---	14.9	16.7	20.4	26.0	26.9	29.9	30.6	27.0
15				---	15.1	17.3	20.2	25.9	27.4	29.8	30.7	27.5
16				---	15.3	17.9	20.2	25.2	27.9	30.0	30.8	27.3
17				---	15.7	18.5	19.6	24.8	28.1	30.0	30.8	26.8
18				---	15.9	19.2	19.0	24.3	28.5	29.7	30.5	25.6
19				10.9	16.2	19.6	19.5	24.1	28.9	29.2	30.3	24.8
20				10.7	16.4	19.7	20.2	24.5	29.5	28.3	30.1	24.6
21				9.8	16.4	19.3	21.0	25.0	29.7	28.4	29.5	24.7
22				8.9	16.4	18.6	21.7	25.5	29.2	28.2	29.0	24.9
23				8.9	16.0	18.5	21.7	25.4	28.9	28.4	27.9	25.2
24				9.9	16.1	18.9	21.5	25.8	29.1	28.9	27.6	25.3
25				10.9	16.2	19.5	21.8	26.2	29.2	29.4	27.7	25.4
26				11.3	16.2	19.8	22.4	26.4	29.2	29.6	27.6	25.7
27				12.2	16.2	19.6	23.0	26.1	29.1	29.4	27.6	25.7
28				12.7	16.1	19.8	23.4	26.2	28.7	29.3	27.5	25.5
29				13.2	14.3	19.3	24.2	26.2	28.7	29.1	27.3	24.4
30				13.4	---	17.6	24.6	26.1	28.2	28.5	27.4	23.8
31				13.2	---	17.4	---	25.4	---	28.2	27.7	---
MAX				---	16.4	19.8	24.6	27.0	29.7	30.0	30.8	28.9

ALTAMAHA-ST. MARYS RIVERS

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COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

DEEP TEMPERATURE, WATER (DEG. C), PERIOD JANUARY TO SEPTEMBER 1984
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	11.9	12.3	16.3	24.1	23.6	27.0	27.2	27.3
2				---	11.6	11.8	16.2	24.4	23.3	26.9	27.5	27.8
3				---	12.1	11.8	16.5	24.3	23.6	26.5	28.0	27.9
4				---	12.6	12.1	16.4	24.4	24.2	26.9	28.4	28.1
5				---	13.1	13.0	16.5	24.7	24.9	27.4	28.8	27.8
6				---	12.4	14.3	16.5	24.9	25.5	27.8	29.3	26.9
7				---	11.7	15.0	16.8	25.5	26.1	28.1	29.2	25.7
8				---	11.2	14.7	17.4	26.1	26.3	28.5	29.5	25.0
9				---	10.9	14.9	18.1	25.7	26.5	29.0	29.8	24.5
10				---	11.2	14.8	18.3	25.2	26.6	28.9	30.0	24.1
11				---	11.8	14.7	17.5	24.9	26.3	28.9	30.2	24.0
12				---	12.5	14.7	17.1	24.6	26.4	28.9	29.7	24.5
13				---	13.4	15.0	17.7	24.7	26.6	29.2	29.7	25.3
14				---	13.9	15.9	18.9	25.0	25.9	29.2	29.7	26.0
15				---	14.4	16.3	19.9	25.3	26.2	29.2	30.0	26.6
16				---	14.6	16.8	19.4	24.5	26.9	29.1	30.1	26.7
17				---	14.7	17.4	18.8	23.9	27.2	29.3	30.2	25.6
18				---	15.1	18.0	18.3	23.4	27.5	29.2	30.0	24.8
19				10.7	15.4	18.5	18.4	23.2	28.0	28.3	29.9	24.3
20				9.7	15.9	19.0	19.0	23.5	28.5	27.8	29.5	23.8
21				8.9	16.1	18.3	19.8	24.1	28.8	27.7	29.1	23.7
22				8.0	15.8	17.8	20.7	24.7	28.5	27.7	28.0	23.9
23				8.1	15.6	18.2	21.4	25.1	28.4	27.5	26.8	24.1
24				8.9	15.4	18.1	20.9	25.0	28.4	27.8	26.5	24.5
25				9.8	15.6	18.8	20.9	25.5	28.5	28.1	27.0	24.5
26				10.7	15.5	19.1	21.4	25.7	28.6	28.5	27.1	24.7
27				11.0	15.9	18.6	22.1	26.0	28.6	28.6	26.8	25.0
28				11.7	14.5	18.3	22.5	25.8	27.9	28.4	26.6	24.5
29				12.1	13.0	17.5	23.0	25.8	27.8	28.3	26.4	23.1
30				12.3	---	17.0	23.7	25.4	27.4	27.8	26.5	22.7
31				12.2	---	16.6	---	24.4	---	27.6	26.8	---
MIN				---	10.9	11.8	16.2	23.2	23.3	26.5	26.4	22.7

ALTAMAHA-ST. MARYS RIVERS
COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

DEEP SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD JANUARY TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	1500	701	601	7410	29400	20500	24200	26900
2				---	1900	801	701	6900	30900	21800	19300	27300
3				---	2400	801	701	5110	27400	21900	15200	27300
4				---	2600	801	701	10000	29600	21200	14700	26600
5				---	1900	901	701	10300	28100	21900	16900	26800
6				---	1400	1000	701	11300	29800	22100	18300	31900
7				---	1700	801	701	10500	28600	22500	20100	33200
8				---	3100	801	701	10900	30500	22400	21300	33800
9				---	3800	701	801	13300	31900	26700	22000	34200
10				---	3500	801	901	14700	32600	25200	22400	31900
11				---	3400	801	1500	17400	33300	24600	23500	27500
12				---	4900	901	1900	19400	33800	24500	24700	25300
13				---	8410	1000	1900	19200	34300	24200	23700	22400
14				---	9110	1100	1700	18800	34400	24000	23600	22400
15				---	9710	1200	1600	22100	29000	23800	23000	22900
16				---	10900	1600	1600	27600	28200	24300	23900	26900
17				---	11700	3700	1300	26900	27200	23300	25100	35600
18				---	12600	5610	1000	27200	27200	21900	26700	35600
19				9410	12200	7910	1100	25600	25900	19200	25500	30700
20				12400	12400	7410	1200	21500	25800	19600	26400	29400
21				19100	11300	5810	1500	21600	27500	20900	28800	28500
22				15200	13000	3100	1900	21900	30100	22300	26000	27400
23				11900	12700	2800	2200	21600	27400	21500	24200	27000
24				7610	3200	3500	1300	24000	26200	20900	24400	27200
25				3300	2000	5610	2400	26600	26200	21400	28700	35700
26				2500	2400	4000	3300	25100	26000	21000	29200	28300
27				2500	8310	6110	5610	24500	25300	21200	30400	26300
28				1900	1000	1100	6110	25300	23700	20600	32100	34000
29				1400	701	701	8710	25000	23100	23100	32600	19400
30				1400	---	601	9310	26100	21600	27400	30400	18800
31				1400	---	601	---	28200	---	28400	27500	---
MAX				---	13000	7910	9310	---	34400	28400	32600	35700

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

DEEP SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD JANUARY TO SEPTEMBER 1984
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	801	601	500	1200	13100	9510	8010	14400
2				---	801	601	601	1200	12100	9810	6910	14200
3				---	901	601	601	1200	11900	10200	5810	14300
4				---	901	601	601	1200	12700	10300	5310	14300
5				---	901	701	601	1400	11200	9910	5110	13900
6				---	901	701	601	1500	14100	10100	5000	15100
7				---	801	601	601	1500	14100	9910	4700	20200
8				---	901	601	601	1600	14200	9710	4800	24900
9				---	901	601	601	1600	13800	10600	5000	26100
10				---	901	601	601	2300	13900	11100	5510	21200
11				---	901	601	601	2600	14400	11000	6410	19100
12				---	901	601	701	3500	14900	11300	7010	17000
13				---	1000	701	701	3400	16300	11100	7210	15300
14				---	1000	701	701	3300	14100	11300	7310	14800
15				---	1100	701	701	4500	13500	11400	7310	15200
16				---	1200	701	701	7910	13500	11300	8110	15500
17				---	1200	801	701	8810	13800	10600	9210	23300
18				---	1400	901	701	9510	13700	10400	10700	25300
19				1500	1600	1000	701	6810	13000	10000	10000	20500
20				1300	1800	1000	701	7310	13000	10000	9610	19100
21				2200	1700	901	701	7810	14700	9710	10800	17300
22				3000	2200	1000	801	8710	12500	9810	12000	17100
23				2100	1400	901	701	8510	15500	9710	9510	16100
24				1500	1200	1000	801	7910	14200	8810	9010	17000
25				1200	1000	1000	701	10200	13300	8510	10300	14200
26				1100	1000	1000	801	9210	13200	7910	13500	15700
27				1000	1000	1000	801	9310	13000	7310	16100	15300
28				901	601	701	901	8910	10500	6910	18800	18500
29				801	601	601	901	7510	10000	7810	18500	10300
30				801	---	500	1100	9510	9810	9810	16600	8510
31				801	---	601	---	12700	---	8910	15000	---
MIN				---	601	500	500	---	9810	6910	4700	8510

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

SHALLOW TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	---	14.0	18.5	11.0	17.5	21.0	25.0	27.5	---	29.0	---
2	22.5	---	14.5	18.5	---	17.5	20.5	25.0	28.0	---	28.5	---
3	21.5	---	15.0	18.5	---	17.5	20.0	24.5	29.0	---	28.5	---
4	21.5	---	15.0	18.5	---	18.5	20.0	24.0	29.5	---	28.0	---
5	21.5	---	15.5	17.0	---	19.0	20.5	23.5	30.0	---	28.0	---
6	22.0	---	15.5	15.5	---	19.0	20.5	24.0	30.0	---	28.0	---
7	22.5	---	14.5	15.0	13.0	18.5	20.5	24.0	30.0	---	28.0	---
8	23.0	---	13.5	14.5	13.0	19.0	20.5	24.0	29.5	---	29.5	---
9	23.0	---	12.5	13.5	12.0	19.0	20.0	24.0	30.0	---	27.5	---
10	23.5	---	12.5	13.0	11.5	19.0	19.5	24.5	30.0	---	29.0	---
11	23.5	---	13.0	13.0	11.5	19.0	19.5	25.0	30.0	---	29.0	---
12	23.0	---	13.0	13.0	11.5	19.5	19.5	25.5	29.5	---	29.0	---
13	23.0	---	13.5	11.5	10.5	20.0	19.5	26.0	30.0	---	29.5	---
14	22.5	---	13.5	11.0	10.0	20.5	19.0	26.5	---	---	28.5	---
15	23.0	---	14.5	10.5	10.5	20.0	20.0	27.0	---	---	29.5	---
16	23.5	---	15.0	10.0	10.5	19.5	20.0	27.0	---	30.5	29.5	---
17	23.0	---	15.5	11.0	10.5	19.0	20.5	27.0	---	29.5	28.5	---
18	---	---	16.0	11.0	11.0	18.0	21.0	26.0	---	29.5	30.0	---
19	---	17.0	16.0	11.0	11.5	17.5	21.5	25.5	---	29.5	31.0	---
20	---	17.0	16.0	10.5	12.0	17.5	22.0	25.0	---	29.0	30.5	---
21	---	16.5	16.0	9.5	12.5	17.5	22.5	25.0	---	29.5	28.5	---
22	---	15.5	16.5	8.0	13.0	18.5	23.0	25.5	---	29.5	29.5	---
23	---	13.5	16.5	7.0	14.0	18.5	23.0	25.5	---	30.0	29.5	---
24	---	13.0	17.0	7.0	15.0	18.5	23.5	26.0	---	29.5	30.0	25.0
25	---	13.0	17.0	8.0	15.5	18.5	24.0	25.5	---	29.0	29.5	26.0
26	---	13.5	17.0	7.5	16.5	18.5	24.5	26.0	---	29.0	31.5	26.0
27	---	14.0	17.0	7.5	17.0	18.5	25.0	26.0	---	30.0	28.0	26.0
28	---	14.5	17.5	8.5	17.0	19.0	25.0	26.0	---	30.5	28.0	26.0
29	---	14.0	17.5	9.0	---	20.0	25.5	26.5	---	29.5	---	25.0
30	---	14.0	18.0	9.0	---	20.5	25.0	27.0	---	30.5	---	25.0
31	---	---	18.0	10.5	---	21.0	---	27.5	---	29.0	---	---
MAX	---	---	18.0	18.5	---	21.0	25.5	27.5	---	---	---	---p

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

SHALLOW TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.5	---	13.5	18.0	10.0	17.0	20.5	24.0	26.5	---	23.5	---
2	21.5	---	13.5	18.0	---	17.0	20.0	24.5	27.0	---	25.0	---
3	20.5	---	14.0	18.0	---	17.0	19.5	24.0	27.5	---	25.5	---
4	20.5	---	14.5	17.0	---	17.5	19.0	22.5	28.5	---	25.0	---
5	20.5	---	14.5	16.0	---	18.0	19.5	22.0	29.0	---	26.0	---
6	20.5	---	14.5	15.0	---	18.5	20.0	22.5	29.0	---	25.5	---
7	21.0	---	13.5	14.0	13.0	18.0	19.5	22.5	29.0	---	24.0	---
8	21.5	---	12.5	13.5	12.5	18.0	19.5	23.0	29.0	---	25.0	---
9	22.0	---	12.0	13.0	11.5	18.0	19.0	23.5	29.0	---	25.0	---
10	22.5	---	12.0	13.0	11.0	18.5	18.5	23.5	29.5	---	25.0	---
11	22.5	---	12.5	13.0	11.0	18.0	19.0	24.0	29.5	---	24.5	---
12	22.0	---	12.5	11.5	10.5	18.5	19.0	24.5	29.0	---	25.0	---
13	21.5	---	13.0	11.0	10.0	19.0	19.0	25.0	28.5	---	25.0	---
14	21.5	---	13.0	10.0	9.5	19.5	19.0	25.5	---	---	24.5	---
15	22.0	---	13.5	10.0	10.0	19.5	19.0	26.0	---	---	24.0	---
16	22.0	---	14.0	10.0	10.0	19.0	19.5	26.5	---	29.0	25.5	---
17	22.5	---	14.5	10.0	10.0	18.5	19.5	26.0	---	24.0	24.5	---
18	---	---	15.0	10.5	10.5	17.5	20.0	25.5	---	24.0	25.0	---
19	---	16.5	15.0	10.5	10.5	17.0	20.5	25.0	---	25.5	25.0	---
20	---	16.5	15.5	10.0	11.5	17.0	21.0	24.5	---	24.5	25.0	---
21	---	15.5	15.5	8.0	11.5	17.0	21.5	24.0	---	26.0	25.0	---
22	---	13.5	15.5	7.0	12.0	17.0	22.0	24.5	---	26.0	25.0	---
23	---	12.5	16.0	6.5	13.0	18.0	22.5	25.0	---	25.5	26.0	---
24	---	12.5	16.0	6.5	13.5	18.0	22.5	25.0	---	25.0	25.5	24.5
25	---	12.0	16.5	7.0	14.5	18.0	23.0	25.0	---	25.0	24.5	24.5
26	---	12.5	16.5	7.5	15.0	17.5	23.5	25.0	---	25.0	24.0	25.0
27	---	13.0	16.5	7.0	16.0	18.0	24.0	25.0	---	25.5	23.5	25.5
28	---	14.0	16.5	7.5	16.5	18.5	24.5	25.0	---	24.5	24.5	25.0
29	---	13.5	17.0	8.5	---	18.5	24.5	25.5	---	24.0	---	24.5
30	---	13.0	17.5	8.5	---	19.5	24.5	26.0	---	24.5	---	24.5
31	---	---	17.5	9.0	---	20.0	---	26.0	---	24.0	---	---
MIN	---	---	12.0	6.5	---	17.0	18.5	22.0	---	---	---	---

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

SHALLOW SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	17000	25800	27300	29400	27300	37500	41700	39100	30500	12000
2		---	18800	26700	---	27900	30500	38300	42100	39300	29600	701
3		---	19700	27500	---	26900	34000	36600	42800	38400	37000	0
4		---	20000	28400	---	30700	35200	39200	44200	37800	41900	0
5		---	25100	24700	---	29800	36800	41800	44200	38200	39500	0
6		---	24900	30200	---	32300	37000	40100	44000	36700	36200	0
7		---	21500	30700	25500	38200	36300	38000	43700	34300	31000	0
8		---	21500	29600	27500	36600	36400	36400	44200	30400	22000	0
9		---	21800	33900	26700	34500	36500	37900	43000	31000	17700	300
10		---	22000	35900	25200	32000	35400	37200	42300	32400	17600	500
11		---	22600	33400	26400	34200	35800	35600	41100	31400	18000	601
12		---	24900	32100	19400	32000	34800	35700	39800	32400	19400	2000
13		---	25500	32500	15200	27800	33900	35700	40600	29600	18600	12700
14		---	23800	31200	19400	29100	34600	35400	38900	26500	15300	19200
15		---	25800	25800	21700	29400	32900	38200	38900	24900	13300	20500
16		---	25200	30600	23400	33100	27400	37900	35500	27100	13800	21000
17		---	25900	31800	23800	33100	30600	37900	32900	28300	12400	13300
18		---	28100	30100	23700	28900	30600	38900	32200	30900	10700	2400
19	20300	29000	29600	25400	29600	29500	39200	32900	34900	11900	801	
20	26800	29800	30100	26000	29100	30900	38800	33400	36500	15000	500	
21	39000	30400	30400	28400	31000	30500	36800	34800	33600	9910	400	
22	40500	30900	27800	27000	32100	31800	35000	36300	31300	10100	400	
23	41800	29300	29100	24200	33400	32300	35400	37300	28400	13700	400	
24	38900	32000	28300	23600	31700	32800	34100	38100	33000	14800	901	
25	34100	29700	26100	22600	28700	30700	34600	38300	24600	8610	1100	
26	27500	30000	26700	20500	32000	31000	37800	38100	27200	7710	3200	
27	23800	29200	27400	20500	31800	32800	37200	40700	27400	11600	4100	
28	19500	25900	27500	22600	29000	31700	37300	42400	29100	14000	2000	
29	18300	23400	29900	---	26200	33800	37200	41600	28600	15000	2600	
30	17800	23300	31300	---	25600	38300	40100	40100	28400	14400	4000	
31	---	23500	30600	---	26400	---	42400	---	26100	12200	---	
MAX	---	---	32000	35900	---	38200	38300	42400	44200	39300	41900	21000

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

SHALLOW SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	8210	12700	14800	11800	13500	22500	27200	26400	12900	701
2		---	7910	12900	---	11000	13700	21700	27500	26500	13000	0
3		---	8210	12600	---	10400	15900	21600	28600	26500	17500	0
4		---	7710	12400	---	11800	17200	25300	30400	26500	24400	0
5		---	8510	11800	---	12200	18000	28300	30900	26800	22300	0
6		---	9410	12600	---	11200	18400	25800	30900	25800	19000	0
7		---	7210	13700	14200	18400	17700	23700	31200	24300	16500	0
8		---	7810	13000	13500	18600	19600	23900	32100	22800	13100	0
9		---	7410	14300	13900	15900	19100	25200	31700	23300	9110	0
10		---	7410	18900	12300	16200	17600	24500	31400	22800	7210	0
11		---	7310	18200	11700	16100	19500	24700	30200	22200	6210	100
12		---	8010	16900	8210	14200	19500	24500	29600	16500	5210	300
13		---	8710	17600	8410	14300	18700	24700	28600	20400	4200	500
14		---	8510	15300	8310	13800	20000	23000	28500	13700	4200	4700
15		---	8910	15200	9010	13900	17800	21100	27400	14500	3300	7210
16		---	10900	15200	8810	16300	16900	23400	23500	6510	2700	4900
17		---	10300	16200	8810	16600	16500	14200	23400	13600	2300	1100
18		---	10400	15000	8610	15500	16500	25500	23300	15200	2300	400
19		8610	10900	15100	9210	15200	16500	25800	23100	17300	2300	0
20		7310	11300	15200	9010	14900	16000	25200	23500	16900	2300	0
21		12400	12000	14900	11400	14800	17000	23600	24300	16100	2100	0
22		22900	13000	14700	10000	16200	15100	23400	25400	14000	1900	0
23		27300	11700	14600	9510	16900	17100	23000	25300	13600	1900	0
24		28800	13400	15200	9210	15200	16200	22700	26300	14200	1900	0
25		21700	14400	14400	8810	15000	15900	24000	26200	12400	1700	701
26		16400	13200	13800	8110	16700	15600	25000	20900	11800	1700	801
27		13000	15200	15500	8310	16000	17800	25300	18900	11100	1700	801
28		10400	13500	15700	9210	14700	17100	25600	28100	11700	1700	801
29		9210	12600	17800	---	14300	17500	24900	26500	12000	1900	901
30		8610	12200	17300	---	13300	20100	25500	27400	11900	1900	901
31		---	12600	15400	---	13400	---	27600	---	12900	1700	---
MIN		---	7210	11800	---	10400	13500	14200	18900	6510	1700	0

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

DEEP TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.3		---	19.2	11.8	18.1	---	26.7	---	27.3	28.9	---
2	22.4		---	19.3	---	18.2	---	25.8	---	27.2	28.7	---
3	21.8		---	19.3	---	18.4	---	25.5	---	27.5	28.3	---
4	21.6		15.9	19.3	---	19.1	---	---	---	27.8	27.5	---
5	21.7		16.0	17.7	---	19.8	21.3	---	---	27.7	27.8	---
6	22.0		16.2	16.4	---	19.8	20.2	---	---	27.9	27.7	---
7	22.5		15.1	15.5	13.8	19.5	19.1	---	---	28.1	27.7	---
8	23.0		14.1	15.0	13.6	19.6	19.2	---	---	28.7	27.4	---
9	23.2		13.4	14.3	12.9	19.7	18.6	---	---	29.1	27.5	---
10	23.5		13.3	13.9	12.4	19.7	17.8	---	---	29.6	27.6	---
11	23.6		13.6	13.8	12.4	19.6	17.3	---	---	29.8	---	---
12	23.1		13.9	13.6	12.3	20.1	17.4	---	---	29.7	---	---
13	22.9		14.1	12.4	11.1	20.6	17.6	---	29.2	29.2	---	---
14	22.8		14.4	11.6	10.8	21.0	17.8	---	28.9	29.2	---	---
15	23.0		15.0	11.1	11.0	20.9	19.0	---	28.0	29.2	---	---
16	23.4		15.6	10.9	11.0	20.3	19.2	---	27.3	29.3	---	---
17	23.2		16.0	11.6	11.3	19.7	19.9	---	27.0	29.3	---	---
18	---		16.5	11.6	11.6	18.8	20.2	---	27.4	29.4	---	---
19	---		16.6	11.5	12.3	18.4	20.6	---	27.8	29.2	---	---
20	---		16.8	11.4	12.9	18.3	21.0	---	27.6	29.5	---	---
21	---		16.9	10.4	13.2	18.2	21.1	---	27.2	29.5	---	---
22	---		17.0	8.6	13.7	19.0	21.2	---	27.5	29.7	---	---
23	---		17.3	7.9	14.4	19.1	21.6	---	27.8	29.7	---	---
24	---		17.7	7.9	15.5	19.4	22.4	---	28.0	29.5	---	25.2
25	---		17.9	8.5	16.3	19.3	23.9	---	28.2	28.8	---	26.0
26	---		17.9	8.4	17.1	19.2	24.9	---	28.6	28.5	---	26.3
27	---		17.8	8.4	17.8	19.4	25.4	---	28.7	29.1	---	26.4
28	---		18.1	9.2	17.9	19.7	25.8	---	28.2	29.1	---	26.3
29	---		18.4	9.5	---	20.2	26.0	---	27.9	29.0	---	25.3
30	---		18.6	9.6	---	---	26.1	---	27.7	28.9	---	25.2
31	---		18.9	11.1	---	---	---	---	---	28.9	---	---
MAX	---		---	19.3	---	---	---	---	---	29.8	---	---

ALTAMAHA-ST. MARYS RIVERS

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COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

DEEP TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.4		---	18.5	10.8	17.6	---	29.8	---	26.6	28.0	---
2	21.3		---	18.8	---	17.7	---	30.2	---	26.5	28.3	---
3	20.7		---	18.9	---	17.8	---	29.7	---	26.7	27.7	---
4	20.6		15.4	17.9	---	18.1	---	---	---	26.7	27.1	---
5	20.6		15.4	16.5	---	18.7	25.0	---	---	27.1	26.8	---
6	20.8		15.3	15.4	---	19.3	24.0	---	---	27.1	27.3	---
7	21.1		14.2	14.7	13.6	18.6	23.3	---	---	27.4	27.1	---
8	21.4		13.4	14.3	13.0	18.7	23.2	---	---	27.7	26.7	---
9	21.9		12.8	13.8	12.1	18.8	22.6	---	---	28.2	26.9	---
10	22.5		12.6	13.5	11.7	19.2	21.8	---	---	28.7	27.3	---
11	22.8		13.0	13.5	11.9	18.8	21.7	---	---	29.1	---	---
12	22.1		13.3	12.3	11.2	19.2	21.8	---	---	29.0	---	---
13	21.7		13.5	11.5	10.5	19.8	22.0	---	28.9	28.7	---	---
14	21.7		13.9	10.8	10.4	20.2	22.3	---	28.0	28.2	---	---
15	21.9		14.4	10.5	10.5	20.3	22.6	---	27.3	28.5	---	---
16	22.2		14.7	10.4	10.4	19.7	23.2	---	26.2	28.2	---	---
17	22.7		15.2	10.5	10.6	19.0	23.5	---	26.0	28.4	---	---
18	---		15.6	11.5	10.9	18.3	24.2	---	26.6	28.4	---	---
19	---		15.9	11.1	11.3	17.8	24.5	---	26.9	28.4	---	---
20	---		16.0	10.6	12.0	17.5	24.5	---	27.2	28.3	---	---
21	---		16.1	8.5	12.4	17.8	24.8	---	26.6	28.6	---	---
22	---		16.3	7.6	12.9	17.9	25.1	---	26.6	28.8	---	---
23	---		16.7	7.2	13.5	18.5	25.3	---	26.9	28.9	---	---
24	---		16.8	7.3	14.2	18.5	26.0	---	27.2	28.8	---	24.7
25	---		17.1	7.6	15.1	18.7	26.8	---	27.4	28.3	---	24.7
26	---		17.3	8.0	15.8	18.4	28.2	---	27.6	28.1	---	25.2
27	---		17.1	7.8	16.7	18.6	29.1	---	27.9	28.1	---	25.5
28	---		17.4	8.0	17.2	19.0	29.6	---	27.8	28.5	---	25.1
29	---		17.8	8.9	---	19.4	29.9	---	27.4	28.4	---	24.5
30	---		18.0	9.2	---	---	30.1	---	26.9	28.2	---	24.6
31	---		18.2	9.6	---	---	---	---	---	28.2	---	---
MIN	---		---	7.2	---	---	---	---	---	26.5	---	---

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

DEEP SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13700	---	16000	21800	21200	20100	28800	38200	43000	43700	30200	11900
2	9610	---	17300	22600	---	19100	31000	37200	43200	42900	30200	1200
3	7110	---	17900	23100	---	18300	34200	37700	43500	42500	36300	601
4	12600	---	18400	23800	---	21200	35200	39200	44300	41500	41000	601
5	11500	---	23100	20100	---	20700	37000	43400	44200	41900	38200	601
6	4600	---	22800	21900	---	26700	37200	42100	43600	40600	35600	601
7	7110	---	19900	25700	22000	28800	35000	40400	43200	38000	31300	701
8	7810	---	17700	22500	21300	29400	36600	38000	43400	35200	23000	701
9	11200	---	18000	25300	20500	28600	36800	39600	42000	36400	18600	801
10	13700	---	17700	30100	20000	29100	35800	35700	41600	36300	18600	901
11	22200	---	18600	28200	20300	30800	36000	37000	40800	34800	18700	1000
12	14400	---	20400	27500	15200	26900	35000	37100	39400	35700	20200	2400
13	11100	---	21400	27500	11600	21900	34500	37100	40800	26000	19000	13200
14	11800	---	21600	25700	14100	24400	34700	37200	40400	27900	16300	19200
15	6410	---	23300	22000	12800	23600	33200	38200	39100	22000	14700	21200
16	10500	---	23000	25900	18000	26700	30000	39400	37100	23800	14500	19400
17	8610	---	23300	27100	18200	29600	30400	39200	33600	28000	13400	13400
18	---	---	25400	25200	18700	25500	31900	39700	33500	30200	11400	2700
19	---	18700	26000	25300	19900	29800	31500	39600	33700	34100	12800	1200
20	---	24500	26800	25700	19500	28600	31100	41200	34400	35800	15500	901
21	---	35300	28000	26100	22100	30400	31400	39300	37200	27400	10800	901
22	---	36700	27500	22700	20900	30100	32100	37700	39600	29900	10800	901
23	---	37900	26500	24000	18900	31300	32100	37700	41300	29500	15000	901
24	---	35300	25300	24500	18100	30800	33000	36800	41900	32400	15800	1100
25	---	30900	26600	22900	17100	29600	33000	37300	42000	25800	9010	1300
26	---	25200	24300	23300	15800	32400	32600	39300	42000	28600	8010	3500
27	---	21700	26700	23900	15400	32200	32600	39700	44000	30000	12000	4300
28	---	17900	23300	24000	16000	29700	32100	38900	45500	31100	14000	2300
29	---	16700	21500	24400	---	26800	33600	38500	45100	30100	15100	2700
30	---	16400	19500	24500	---	26000	39000	41300	44200	30300	14400	4200
31	---	---	19700	23600	---	27600	---	43700	---	31100	12400	---
MAX	---	---	28000	30100	---	32400	39000	43700	45500	43700	41000	21200

ALTAMAHA-ST. MARYS RIVERS

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COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

DEEP SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4600	---	7710	10700	11400	9210	14800	22100	28100	29700	14000	1100
2	3500	---	7510	10000	---	8610	14700	22200	28300	29700	14000	601
3	2700	---	7910	9710	---	8210	15900	21300	28700	29400	19600	601
4	2300	---	7310	9910	---	9310	17800	26200	30600	29200	25300	500
5	2800	---	8210	9410	---	9710	18800	29500	31100	29800	22800	500
6	1700	---	8910	10300	---	9310	18100	27200	30700	29300	21500	500
7	1800	---	7210	10700	12500	15100	16700	24900	29400	27400	17700	500
8	2300	---	6710	11200	11300	14300	18600	23700	30400	26700	13800	601
9	2600	---	7010	12100	11100	12900	17800	22200	30300	25700	10600	701
10	4000	---	6910	14700	10700	14600	19000	20400	30500	25900	8010	701
11	6610	---	6210	14800	10300	14400	19000	24400	30000	25200	6610	701
12	5410	---	6710	14400	7110	12900	20000	24100	29200	12200	6210	801
13	4500	---	7710	14600	7110	13000	19200	23600	28600	5000	5510	1000
14	3500	---	7410	12800	7110	12400	19200	25200	28700	4100	4700	4800
15	3500	---	8510	12300	7610	12000	18000	24800	27800	4000	3600	7710
16	3800	---	8910	12900	7510	14700	17200	25300	23700	6610	3200	5110
17	3600	---	8810	13900	7510	15200	17000	25400	23900	9010	2900	1400
18	---	---	8710	12900	7410	13600	17300	25000	23800	14900	2700	801
19	---	8410	9010	12700	7810	13300	16400	25200	23600	14500	2700	701
20	---	6910	9510	12400	7710	13500	15800	24500	25000	15900	2800	601
21	---	11500	9710	12700	9610	15100	16900	25200	26500	12500	2200	601
22	---	21000	10700	12100	8510	15900	17500	21700	28100	12500	2300	601
23	---	24900	9810	11100	7910	16900	17900	22100	29000	12900	2200	601
24	---	26200	11100	12700	7710	13900	18200	21600	29700	13300	2400	601
25	---	20000	11800	12500	7510	16100	18600	22800	29800	13300	2200	901
26	---	15100	10800	12200	6910	16600	16700	23900	29100	12700	2000	1000
27	---	12100	12600	13600	7010	16700	16000	25900	28700	10600	2000	1000
28	---	9810	11300	13500	7810	15500	16600	25100	31300	10100	2000	1000
29	---	8710	9810	14400	---	15100	19600	23100	31300	11400	2200	1000
30	---	8110	9210	13800	---	14400	21700	20700	29700	10400	2200	1100
31	---	---	9710	12000	---	15400	---	28600	---	11100	2100	---
MIN	---	---	6210	9410	---	8210	14700	20400	23600	4000	2000	500

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231299 NASSAU SOUND NEAR AMELIA CITY, FL

LOCATION.--Lat 30°31'18", long 81°26'50", in land grant 42, T.1 N., R.28 E., Nassau County, Hydrologic Unit 03070205, near left bank at downstream side of bridge on State Highway 1A, 0.3 mi upstream from Sawpit Creek, 0.5 mi downstream from Intracoastal Waterway, 0.6 mi upstream from Atlantic ocean and 5.0 mi south of Amelia City.

DRAINAGE AREA.--400 mi².

PERIOD OF RECORD.--October 1984 to current year (gage heights only) incomplete.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 16.60 ft, Nov. 23; minimum, 6.29 ft, Aug. 15.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	13.60	12.46	12.80	12.44				---	13.66	12.97	13.43
2	---	13.46	12.75	12.88	12.86				---	13.45	13.60	12.77
3	---	14.15	12.99	13.25	---				---	13.26	13.37	12.93
4	---	14.33	13.21	13.60	---				---	13.28	13.29	12.80
5	---	13.95	13.93	12.79	---				---	13.00	13.42	12.55
6	---	13.43	13.89	13.79	---				---	12.68	12.85	12.38
7	---	14.16	13.50	13.70	---				---	12.41	12.55	12.56
8	---	14.20	13.27	13.50	---				---	12.10	12.36	12.59
9	---	14.25	13.47	14.31	---				---	12.26	12.17	12.46
10	---	14.09	13.39	14.50	---				---	12.26	12.17	13.49
11	---	13.56	13.50	14.02	---				---	11.98	11.89	13.97
12	---	13.87	13.80	13.80	---				---	12.55	11.83	15.18
13	---	13.79	13.74	13.59	---				---	12.51	11.19	16.27
14	---	13.77	13.36	13.22	---				---	12.64	10.22	15.99
15	---	13.81	13.70	12.32	---				---	12.80	9.73	16.26
16	---	13.25	13.44	13.37	---				---	13.20	11.15	15.93
17	---	13.53	13.42	13.59	---				---	13.66	13.08	15.75
18	---	13.73	14.02	13.47	---				---	13.99	13.13	15.47
19	---	13.37	14.13	13.36	---				---	13.90	13.28	15.54
20	13.84	14.18	14.54	13.34	---				---	13.60	13.27	15.34
21	14.07	15.79	14.69	---	---				---	13.46	12.97	15.12
22	14.29	16.15	14.41	---	---				---	12.49	13.11	14.94
23	14.48	16.60	14.13	---	---				---	12.39	13.42	14.86
24	14.69	15.76	14.33	---	---				---	---	13.33	14.92
25	15.06	14.82	13.81	---	---				12.51	---	12.73	14.27
26	15.51	14.19	13.90	---	13.96				12.61	---	12.85	14.52
27	14.97	13.73	13.62	---	11.92				12.18	12.47	13.31	13.85
28	14.29	13.24	12.97	---	11.85				---	12.94	13.76	13.61
29	13.71	12.90	12.42	---	---				13.85	13.04	13.55	13.90
30	13.50	12.75	12.35	12.57	---				13.77	13.08	13.14	13.89
31	13.64	---	12.35	12.82	---				---	13.15	13.58	---
MEAN	---	14.08	13.53	---	---				---	---	12.69	14.25
MAX	---	16.60	14.69	---	---				---	---	13.76	16.27
MIN	---	12.75	12.35	---	---				---	---	9.73	12.38

ALTAMAHA-ST. MARYS RIVERS

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COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231299 NASSAU SOUND NEAR AMELIA CITY, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.59	8.43	8.56	7.47				---	7.10	7.31	8.18
2	---	9.49	8.58	8.22	7.21				---	7.09	7.12	8.02
3	---	9.58	8.44	8.20	---				---	7.09	8.68	7.82
4	---	9.94	8.28	7.59	---				---	7.09	8.77	8.15
5	---	9.37	8.98	7.29	---				---	7.26	8.66	8.18
6	---	8.60	7.79	7.64	---				---	7.11	8.50	8.22
7	---	8.93	7.37	7.54	---				---	7.36	8.61	8.30
8	---	9.14	7.51	7.31	---				---	7.10	10.31	8.49
9	---	8.97	7.36	7.74	---				---	7.57	9.91	8.31
10	---	8.71	7.39	8.32	---				---	7.76	9.91	8.79
11	---	8.13	7.36	8.08	---				---	7.58	8.97	11.13
12	---	8.43	7.99	7.99	---				---	7.94	8.37	11.71
13	---	8.76	8.19	8.11	---				---	8.45	8.39	13.12
14	---	8.79	8.14	7.32	---				---	8.10	7.19	10.04
15	---	8.84	8.39	7.33	---				---	7.48	6.29	10.37
16	---	8.30	8.14	7.90	---				---	7.58	8.14	9.97
17	---	8.64	8.10	7.31	---				---	7.90	7.02	9.75
18	---	8.23	7.77	7.31	---				---	8.38	6.78	9.63
19	---	7.70	7.86	7.30	---				---	8.45	7.60	9.91
20	8.24	7.30	7.72	7.28	---				---	8.04	7.39	9.90
21	8.09	8.97	7.56	---	---				---	7.87	7.30	9.89
22	7.89	9.24	7.58	---	---				---	8.04	7.10	10.01
23	7.84	9.81	7.37	---	---				---	7.45	7.72	9.95
24	7.84	9.04	8.09	---	---				---	---	7.75	9.59
25	8.07	8.52	8.10	---	---				7.77	---	7.21	8.62
26	8.78	8.31	8.20	---	8.82				7.15	---	7.00	9.43
27	8.58	8.49	8.68	---	8.22				7.09	8.12	7.30	8.73
28	8.33	8.50	8.44	---	8.40				---	8.14	7.61	8.49
29	8.37	8.47	8.30	---	---				7.50	6.91	7.66	8.80
30	8.72	8.57	8.17	8.55	---				7.10	6.82	7.54	9.21
31	9.19	---	8.52	7.65	---				---	6.82	8.06	---
MEAN	---	8.78	8.03	---	---				---	---	7.94	9.36
MAX	---	9.94	8.98	---	---				---	---	10.31	13.12
MIN	---	7.30	7.36	---	---				---	---	6.29	7.82

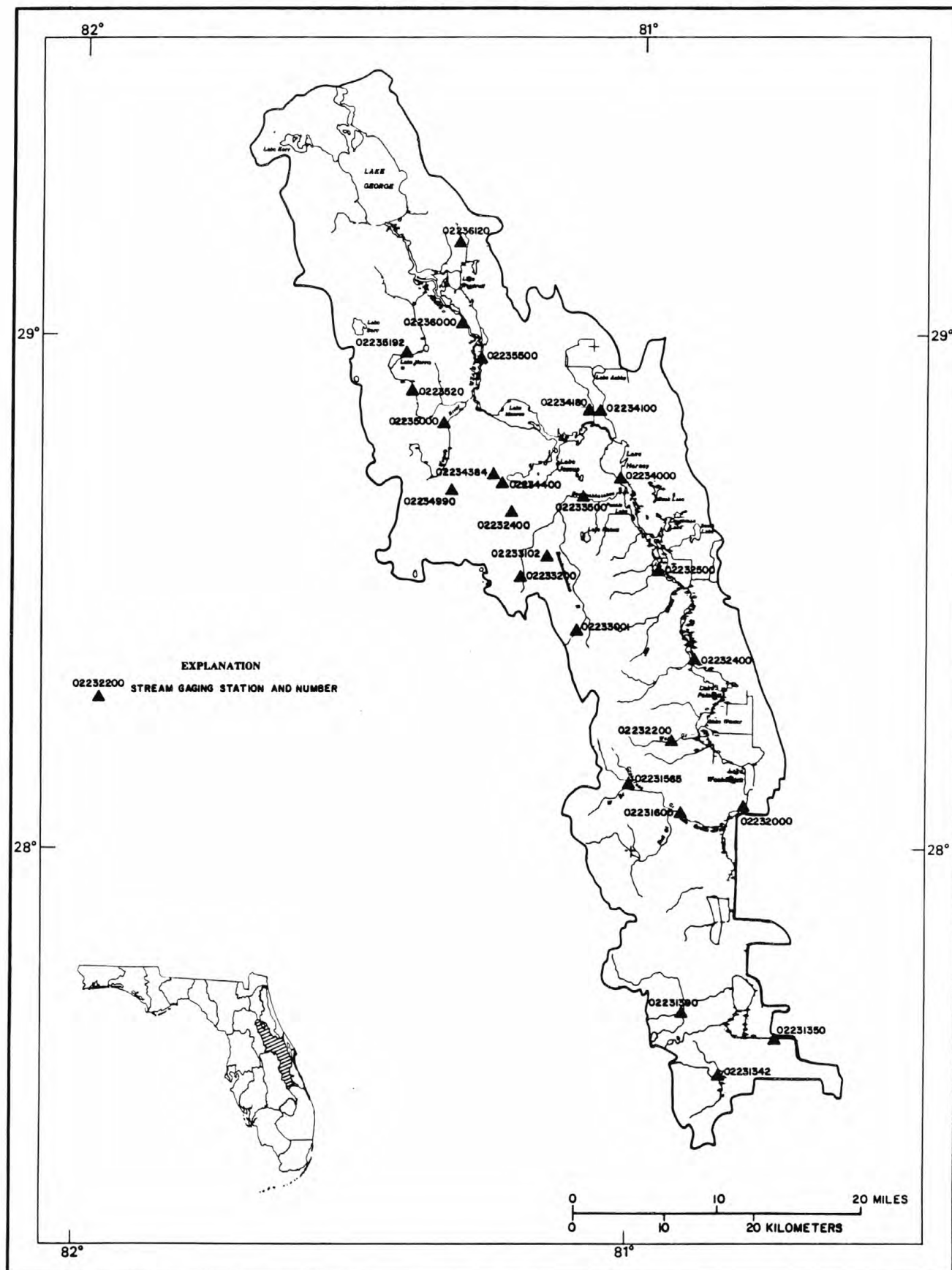


Figure 9. Location of stream gaging stations in the St. Johns River basin above the Oklawaha River.

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02231342 FT. DRUM CREEK AT SUNSHINE STATE PARKWAY NEAR FT. DRUM, FL

LOCATION.--Lat 27°34'06", long 80°47'47", in NE¼ sec.35, T.33 S., R.35 E., Okeechobee County, Hydrologic Unit 03080101, near right bank on downstream side of northbound bridge on Sunshine State Parkway, 2.7 mi southeast of the Ft. Drum Service Plaza, and 3.0 mi north of Ft. Drum.

DRAINAGE AREA.--52.6 mi².

PERIOD OF RECORD.--July 1969 to July 1970 (discharge measurements only), June 1977 to current year.

REVISED RECORDS.--WDR FL-79-1: 1978 (M).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Brevard Engineering Co.).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 45.6 ft³/s, 11.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s, Sept. 4, 1979; maximum gage height, 38.35 ft, Sept. 4,5, 1979; no flow for several days each year; creek dry at gage for many days in 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,010 ft³/s, Sept. 19, gage height, 37.91 ft; no flow May 10 to June 12; minimum gage height, 32.90 ft, June 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	107	5.5	35	11	5.9	2.7	2.2	.94	.00	.81	63	92	
2	85	5.7	43	11	5.6	2.5	4.0	.68	.00	2.3	133	177	
3	66	8.4	47	10	5.6	2.4	6.0	.45	.00	4.0	98	296	
4	52	12	43	12	5.6	2.1	5.3	.32	.00	3.7	72	270	
5	40	11	36	12	5.6	2.0	4.2	.26	.00	2.6	66	320	
6	30	9.2	31	11	5.5	1.8	3.5	.20	.00	4.1	57	504	
7	26	7.6	27	10	5.9	1.6	3.2	.12	.00	3.8	52	740	
8	23	6.6	24	9.5	6.2	1.5	3.1	.08	.00	3.1	43	585	
9	20	5.8	22	9.0	6.3	1.4	2.7	.02	.00	2.4	53	399	
10	18	5.4	20	8.5	6.0	1.3	2.1	.00	.00	1.8	78	288	
11	15	5.1	18	8.2	5.6	1.2	1.7	.00	.00	1.3	96	217	
12	14	4.7	17	7.7	5.5	1.1	1.6	.00	.00	1.4	88	167	
13	12	4.4	16	7.3	5.1	.94	4.2	.00	.01	1.8	84	128	
14	11	4.1	15	7.0	4.8	.81	7.2	.00	11	7.4	90	118	
15	9.3	3.9	15	6.7	4.8	1.1	11	.00	17	12	163	130	
16	8.3	3.8	14	6.3	4.8	7.8	15	.00	16	11	223	141	
17	7.4	3.7	14	6.3	4.8	13	14	.00	14	17	216	160	
18	6.8	3.6	14	6.5	4.7	19	11	.00	9.5	20	147	296	
19	6.2	3.6	13	7.4	4.5	16	7.8	.00	5.9	36	96	873	
20	5.8	3.9	13	7.2	4.3	11	6.3	.00	4.5	62	91	963	
21	6.6	4.8	13	6.6	4.0	10	5.2	.00	3.7	67	206	967	
22	9.0	16	12	6.1	3.8	16	4.4	.00	3.3	52	209	750	
23	11	107	11	6.3	3.6	15	3.8	.00	2.8	37	152	553	
24	10	166	11	6.3	3.5	12	3.0	.00	2.1	29	109	409	
25	9.0	153	10	6.3	3.3	8.6	2.5	.00	1.6	22	87	310	
26	8.4	118	12	6.4	3.1	6.4	2.0	.00	1.3	18	57	244	
27	8.1	84	17	6.3	3.0	5.0	1.6	.00	1.1	16	59	194	
28	8.0	56	16	6.2	2.8	4.3	1.2	.00	1.3	16	63	153	
29	7.3	41	15	6.3	---	3.6	.90	.00	1.2	17	64	135	
30	6.7	33	13	6.3	---	3.0	1.1	.00	.82	19	81	125	
31	6.0	---	12	6.2	---	2.6	---	.00	---	18	72	---	
TOTAL	652.9	896.8	619	243.9	134.2	177.75	141.80	3.07	97.13	509.51	3168	10704	
MEAN	21.1	29.9	20.0	7.87	4.79	5.73	4.73	.10	3.24	16.4	102	357	
MAX	107	166	47	12	6.3	19	15	.94	17	67	223	967	
MIN	5.8	3.6	10	6.1	2.8	.81	.90	.00	.00	.81	43	92	
CFSM	.40	.57	.38	.15	.09	.11	.09	.00	.06	.31	1.94	6.79	
IN.	.46	.63	.44	.17	.09	.13	.10	.00	.07	.36	2.24	7.57	
CAL YR 1984	TOTAL	18641.94		MEAN	50.9	MAX	825	MIN	.00	CFSM	.97	IN.	13.18
WTR YR 1985	TOTAL	17348.06		MEAN	47.5	MAX	967	MIN	.00	CFSM	.90	IN.	12.27

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02231350 ST. JOHNS HEADWATERS NEAR VERO BEACH, FL

LOCATION.--Lat 27°38'26", long 80°40'43", in NW¼ sec.6, T.33 S., R.37 E., Indian River County, Hydrologic Unit 03080101, on upstream side of bridge on State Highway 60, 17.1 mi west of courthouse in Vero Beach, and 297 mi upstream from mouth.

DRAINAGE AREA.--297 mi².

PERIOD OF RECORD.--February 1942 to current year (gage heights only). Records of gage heights prior to October 1962 and revised records of gage heights for water years 1962-81 are unpublished and are available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is 18.56 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to May 21, 1974, at site 0.3 mi east at same datum.

REMARKS.--Stage affected by development of system of dikes and controls; not equivalent to earlier record of headwaters marsh.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 9.08 ft, Sept. 5, 1979, estimated; minimum, 0.55 ft, May 23, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum daily gage height, 8.23 ft, Sept. 22,23; minimum, 4.88 ft, Mar. 14.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.71	6.03	6.93	6.22	5.83	5.58	5.30	5.63	5.15	6.15	6.01	6.61
2	6.78	6.06	6.89	6.21	5.81	5.57	5.34	5.61	5.12	6.51	5.98	6.65
3	6.76	6.14	6.96	6.21	5.80	5.56	5.36	5.58	5.09	6.17	5.97	7.20
4	6.73	6.21	6.96	6.21	5.79	5.55	5.35	5.57	5.05	5.73	5.96	7.27
5	6.69	6.29	6.90	6.19	5.78	5.57	5.33	5.55	5.03	5.62	5.98	7.20
6	6.65	6.33	6.82	6.17	5.77	5.48	5.31	5.54	4.99	5.57	6.04	7.22
7	6.61	6.34	6.75	6.16	5.77	5.34	5.30	5.53	4.97	5.53	6.09	7.20
8	6.58	6.35	6.71	6.15	5.76	5.29	5.29	5.51	4.94	5.49	6.18	7.17
9	6.56	6.34	6.66	6.13	5.75	5.23	5.27	5.49	4.92	5.46	6.24	7.17
10	6.54	6.31	6.61	6.12	5.74	5.17	5.24	5.47	4.90	5.44	6.53	7.16
11	6.51	6.27	6.57	6.10	5.73	5.12	5.22	5.45	4.90	5.40	6.86	7.14
12	6.48	6.23	6.55	6.08	5.73	5.05	5.21	5.44	4.90	5.39	6.76	7.08
13	6.45	6.22	6.52	6.06	5.73	4.97	5.27	5.41	4.99	5.38	6.71	7.03
14	6.41	6.19	6.50	6.05	5.71	4.88	5.33	5.39	5.13	5.37	6.78	7.03
15	6.38	6.17	6.47	6.04	5.70	4.93	5.38	5.37	5.14	5.37	6.82	7.00
16	6.34	6.16	6.45	6.02	5.70	5.10	5.46	5.36	5.18	5.40	6.81	7.22
17	6.31	6.13	6.43	6.00	5.69	5.17	5.60	5.37	5.21	5.45	6.80	7.29
18	6.29	6.10	6.42	5.99	5.67	5.22	5.66	5.33	5.33	5.52	6.74	7.44
19	6.27	6.07	6.40	5.99	5.66	5.28	5.66	5.31	5.39	5.54	6.79	7.72
20	6.23	6.05	6.38	5.98	5.67	5.31	5.68	5.28	5.43	5.56	6.85	7.92
21	6.21	6.05	6.36	5.95	5.68	5.34	5.78	5.27	5.54	5.60	6.87	8.11
22	6.19	6.21	6.34	5.93	5.67	5.40	5.81	5.25	5.54	5.69	6.87	8.23
23	6.17	7.14	6.32	5.92	5.66	5.40	5.78	5.22	5.46	6.65	6.84	8.23
24	6.15	7.52	6.30	5.91	5.65	5.40	5.76	5.21	5.43	7.02	6.76	8.15
25	6.13	7.48	6.28	5.90	5.63	5.40	5.74	5.22	5.43	6.82	6.72	8.06
26	6.12	7.40	6.28	5.89	5.62	5.38	5.72	5.25	5.42	6.46	6.67	8.00
27	6.10	7.27	6.29	5.87	5.60	5.37	5.70	5.25	5.45	6.20	6.61	7.91
28	6.10	7.18	6.28	5.86	5.59	5.36	5.66	5.23	5.48	6.16	6.63	7.80
29	6.08	7.10	6.26	5.86	---	5.35	5.64	5.22	5.46	6.10	6.62	7.71
30	6.06	7.01	6.24	5.85	---	5.33	5.64	5.20	5.42	6.07	6.62	7.71
31	6.04	---	6.23	5.84	---	5.32	---	5.17	---	6.03	6.60	---
MEAN	6.38	6.48	6.52	6.03	5.71	5.30	5.49	5.38	5.21	5.83	6.54	7.45
MAX	6.78	7.52	6.96	6.22	5.83	5.58	5.81	5.63	5.54	7.02	6.87	8.23
MIN	6.04	6.03	6.23	5.84	5.59	4.88	5.21	5.17	4.90	5.37	5.96	6.61
CAL YR 1984	MEAN	6.21	MAX	7.52	MIN	5.24						
WTR YR 1985	MEAN	6.03	MAX	8.23	MIN	4.88						

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02231390 COW LOG BRANCH NEAR YEEHAW JUNCTION, FL

LOCATION.--Lat 27°41'19", long 80°52'52", in SW¼ sec.13, T.32 S., R.34 E., Osceola County, Hydrologic Unit 03080101, on upstream side of bridge on State Highway 60, 1.6 mi southwest of Yeehaw Junction.

DRAINAGE AREA.--20.5 mi².

PERIOD OF RECORD.--

DISCHARGE: 1956, 1965, 1967 (one discharge measurement each year), October 1982 to current year (discharge measurements only).

WATER TEMPERATURE: October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum measured, 74 ft³/s July 24, 1984; no flow observed in 1956, 1967.

WATER TEMPERATURE: (1982-85); Maximum observed, 26.5°C Aug. 9, 1983, Oct. 4, 1985; minimum observed, 11.5°C Dec. 22, 1982.

DISCHARGE MEASUREMENTS AND WATER TEMPERATURE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)
OCT				APR			
31...	1620	4.5	23.0	30...	1120	e.22	--
DEC				JUN			
19...	1530	8.4	20.0	03...	1015	e.08	--
19...	1600	8.0	--	11...	1035	e.01	25.0
FEB				AUG			
21...	1640	1.7	--	09...	1510	6.2	26.0
APR							
25...	0840	.35	25.0				

e Estimated.

02231565 CRABGRASS CREEK NEAR HOLOPAW, FL

LOCATION.--Lat 28°07'48", long 81°00'07", in SE¼ sec.15, T.27 S., R.33 E., Osceola County, Hydrologic Unit 03080101, at bridge on U.S. Highway 192, 4.6 mi east of Holopaw.

DRAINAGE AREA.--30.2 mi².

PERIOD OF RECORD.--1965, 1967, 1969-70 (one to three discharge measurements each year), October 1970 to September 1983 (discharge measurements only), October 1983 to current year (annual peak discharge and periodic discharge measurements).

REVISED RECORDS.--WDR FL-72-3: Drainage area.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 34.93 ft above National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 891 ft³/s, July 25, 1984, gage height 7.81 ft; maximum discharge measured, 484 ft³/s Aug. 22, 1974; no flow for many years.

EXTREMES FOR CURRENT PERIOD.--

Water year 1984: Maximum discharge, 891 ft³/s, July 25, gage height, 7.81 ft.

Water year 1985: Maximum discharge, 764 ft³/s, Sept. 4, gage height, 7.78 ft.

DISCHARGE MEASUREMENTS AND WATER TEMPERATURE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)
NOV				MAY			
27...	1100	4.9	18.5	21...	0830	0	--
JAN				JUL			
18...	1425	1.1	16.0	10...	0815	.15	--
MAR				SEP			
18...	1346	.68	22.5	05...	0950	140	--

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02231600 JANE GREEN CREEK NEAR DEER PARK, FL

LOCATION.--Lat 28°04'27", long 80°53'18", in SE¼ sec.2, T.28 S., R.34 E., Osceola County, Hydrologic Unit 03080101, near right bank on upstream side of bridge on county road, 1.2 mi southeast of Deer Park, 2 mi downstream from confluence of Crabgrass and Bull Creeks, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--248 mi².

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 18.55 ft above National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--32 years, 238 ft³/s, 13.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s, Oct. 17, 1956, gage height, 10.95 ft, from rating curve extended above 11,000 ft³/s; no flow for many days in some years; creek dry at gage at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,800 ft³/s, Sept. 23, gage height, 7.36 ft; no flow May 17 to June 19; minimum gage height, 1.20 ft, June 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	2.1	180	14	6.7	4.7	1.0	2.3	.00	23	208	437
2	96	2.0	157	14	6.7	4.3	1.0	1.8	.00	25	181	758
3	101	2.9	135	14	6.7	3.7	1.0	1.4	.00	25	165	1640
4	96	6.8	117	14	6.6	3.3	.82	1.4	.00	24	162	1880
5	84	7.2	104	14	6.5	2.9	.60	2.1	.00	23	157	1780
6	72	7.8	93	13	6.6	2.5	.56	1.9	.00	23	149	1710
7	61	9.3	82	13	7.6	2.1	1.0	1.7	.00	21	157	1580
8	50	11	73	13	8.1	1.8	.98	1.4	.00	19	203	1370
9	42	13	66	13	8.2	1.5	.79	1.1	.00	17	227	1120
10	35	14	59	13	8.3	1.3	.57	.83	.00	14	267	906
11	28	14	53	13	8.5	1.0	.37	.65	.00	12	309	730
12	23	13	47	13	9.0	.88	.23	.46	.00	9.5	328	597
13	19	11	42	12	8.9	.71	1.4	.27	.00	8.9	331	488
14	16	9.8	38	11	9.0	.56	3.5	.13	.00	7.4	335	456
15	14	8.9	34	11	9.1	.42	6.9	.05	.00	6.2	360	446
16	12	7.9	30	10	9.2	.32	11	.01	.00	5.3	396	409
17	9.7	7.1	28	9.8	8.9	.25	14	.00	.00	4.5	423	381
18	8.5	6.4	25	9.6	8.7	.30	16	.00	.00	4.2	419	400
19	7.3	5.7	23	9.5	8.5	.20	17	.00	.00	5.3	418	477
20	6.3	5.2	22	9.1	8.3	.12	16	.00	.06	9.4	499	573
21	5.5	5.7	20	8.6	7.8	.19	14	.00	.19	23	498	1160
22	4.9	14	19	7.8	7.4	1.2	12	.00	1.8	54	468	2280
23	4.2	35	18	7.6	7.1	1.3	9.9	.00	3.5	103	426	2710
24	3.7	63	18	7.3	6.8	1.1	8.1	.00	4.5	169	384	2140
25	3.2	118	17	7.3	6.3	.95	6.5	.00	5.3	238	349	1590
26	3.3	202	16	7.2	6.0	1.3	5.1	.00	6.5	280	311	1260
27	3.5	250	16	7.0	5.7	2.2	3.9	.00	9.2	317	302	995
28	3.2	255	16	7.0	5.1	2.3	3.0	.00	14	329	320	814
29	3.0	233	15	6.9	---	2.0	2.6	.00	18	316	347	813
30	2.7	204	15	6.8	---	1.7	2.9	.00	19	280	387	1050
31	2.4	---	14	6.8	---	1.4	---	.00	---	241	401	---
TOTAL	890.4	1544.8	1592	323.3	212.3	48.50	162.72	17.50	82.05	2636.7	9887	32950
MEAN	28.7	51.5	51.4	10.4	7.58	1.56	5.42	.56	2.73	85.1	319	1098
MAX	101	255	180	14	9.2	4.7	17	2.3	19	329	499	2710
MIN	2.4	2.0	14	6.8	5.1	.12	.23	.00	.00	4.2	149	381
CFSM	.12	.21	.21	.04	.03	.01	.02	.00	.01	.34	1.29	4.43
IN.	.13	.23	.24	.05	.03	.01	.02	.00	.01	.40	1.48	4.94
CAL YR 1984	TOTAL	54557.96	MEAN	149	MAX	1330	MIN	.08	CFSM	.60	IN.	8.18
WTR YR 1985	TOTAL	50347.27	MEAN	138	MAX	2710	MIN	.00	CFSM	.56	IN.	7.55

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232000 ST. JOHNS RIVER NEAR MELBOURNE, FL

LOCATION.--Lat 28°05'04", long 80°45'08", in NW¼ sec.5, T.28 S., R.36 E., Brevard County, Hydrologic Unit 03080101, near center of span on upstream side of bridge on U.S. Highway 192, 1.1 mi downstream from Sawgrass Lake, 1.7 mi upstream from Lake Washington, 9.2 mi west of Melbourne, and 262 mi upstream from mouth.

DRAINAGE AREA.--968 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1304.

GAGE.--Water-stage and deflection-meter recorder. Datum of gage is 11.22 ft above National Geodetic Vertical Datum of 1929. Prior to July 26, 1940, nonrecording gage at site 200 ft upstream at same datum. July 26, 1940 to Jan. 11, 1973, water-stage recorder at site 200 ft upstream at same datum. Oct. 1, 1969, to Oct. 5, 1972, and Oct. 1, 1982, to Sept. 30, 1983, water-stage recorder for Lake Washington near Eau Gallie (station 02232100) used as auxiliary gage for this station.

REMARKS.--Estimated daily discharges: Nov. 11,16,18,19, Jan. 17,18,23-25, Jan. 28 to Feb. 2. Records poor.

AVERAGE DISCHARGE.--46 years, 675 ft³/s, 489,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,000 ft³/s, Oct. 18, 1956; maximum gage height, 9.66 ft, Sept. 30, 1960; minimum daily discharge, -118 ft³/s, May 23, 1984, affected by wind; minimum gage height, -1.28 ft, May 27, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,090 ft³/s, Sept. 27,30, stage rising, peak occurred Oct. 2,3, 1985; maximum peak daily discharge, 1,910 ft³/s, Sept. 9; maximum gage height, 6.91 ft, Sept. 30; minimum daily discharge, -20 ft³/s, May 4, affected by wind; minimum gage height, 1.95 ft, June 11, affected by wind.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	933	355	804	304	278	62	20	21	94	81	491	559
2	1000	286	809	369	206	41	20	0	94	81	496	812
3	1000	286	775	299	170	61	20	20	93	81	500	923
4	1000	355	850	299	128	41	20	-20	93	101	384	1050
5	1010	355	743	515	127	41	39	20	92	100	405	1320
6	1010	501	705	511	148	41	.00	20	91	100	405	1590
7	1040	645	885	464	107	62	20	20	90	100	403	1730
8	1070	490	815	355	64	61	20	20	89	100	401	1870
9	1070	394	815	407	64	40	20	20	88	100	378	1910
10	1070	194	777	351	85	40	40	40	87	79	379	1890
11	1040	180	740	284	21	40	20	40	86	98	428	1840
12	1010	188	703	568	127	40	20	39	70	79	547	1750
13	976	324	703	527	148	40	40	39	109	101	502	1710
14	900	260	740	341	126	40	43	58	74	101	512	1830
15	820	181	736	338	126	20	22	58	74	121	593	1730
16	815	180	658	337	125	40	22	19	94	102	605	1650
17	812	176	656	290	104	40	44	60	58	122	722	1550
18	768	170	653	231	104	20	44	39	58	331	702	1530
19	722	165	653	190	104	40	44	39	58	403	600	1530
20	674	246	606	267	105	20	22	58	78	87	605	1710
21	579	393	599	462	42	40	22	58	58	131	648	1880
22	524	811	510	185	41	21	22	58	58	154	614	1990
23	460	983	506	163	41	21	22	58	78	178	659	2370
24	559	815	449	155	41	21	22	58	98	314	661	3560
25	639	661	500	151	41	20	22	58	97	249	661	3930
26	549	671	499	406	41	40	.00	78	97	271	661	4030
27	385	637	497	178	41	20	.00	97	100	386	704	4090
28	379	683	493	166	41	20	.00	96	79	366	809	3970
29	305	792	491	160	---	20	.00	96	79	391	742	4060
30	368	798	535	250	---	20	.00	96	80	437	673	4090
31	468	---	431	350	---	20	---	95	---	464	446	---
TOTAL	23955	13175	20336	9873	2796	1093	650.00	1458	2494	5809	17336	64454
MEAN	773	439	656	318	99.9	35.3	21.7	47.0	83.1	187	559	2148
MAX	1070	983	885	568	278	62	44	97	109	464	809	4090
MIN	305	165	431	151	21	20	.00	-20	58	79	378	559
AC-FT	47510	26130	40340	19580	5550	2170	1290	2890	4950	11520	34390	127800
CAL YR 1984	TOTAL	224447		MEAN	613	MAX	2010	MIN	-118	AC-FT	445200	
WTR YR 1985	TOTAL	163429		MEAN	448	MAX	4090	MIN	-20	AC-FT	324200	

NOTE.--Negative figures indicate reverse flow.

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232000 ST. JOHNS RIVER NEAR MELBOURNE, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.12	3.29	3.82	3.47	2.67	2.58	2.43	2.58	2.28	2.51	3.02	3.74
2	4.13	3.24	3.84	3.45	2.67	2.57	2.43	2.55	2.26	2.51	3.04	3.86
3	4.13	3.24	3.85	3.42	2.69	2.57	2.43	2.53	2.24	2.50	3.07	3.91
4	4.14	3.29	3.87	3.41	2.69	2.54	2.41	2.55	2.23	2.50	3.11	3.98
5	4.15	3.30	3.86	3.40	2.66	2.54	2.38	2.53	2.19	2.48	3.08	4.13
6	4.15	3.29	3.87	3.37	2.66	2.56	2.40	2.50	2.16	2.47	3.07	4.33
7	4.16	3.27	3.88	3.34	2.70	2.55	2.46	2.48	2.13	2.47	3.06	4.49
8	4.17	3.20	3.87	3.30	2.72	2.51	2.48	2.46	2.10	2.46	3.04	4.63
9	4.17	3.16	3.87	3.28	2.69	2.50	2.48	2.45	2.08	2.46	3.05	4.73
10	4.17	3.10	3.86	3.25	2.67	2.50	2.43	2.43	2.05	2.43	3.06	4.80
11	4.16	3.04	3.85	3.22	2.63	2.49	2.40	2.43	2.03	2.39	3.07	4.84
12	4.16	2.99	3.89	3.22	2.66	2.47	2.41	2.41	2.07	2.42	3.07	4.85
13	4.15	2.95	3.84	3.18	2.65	2.46	2.49	2.39	2.16	2.50	3.09	4.86
14	4.12	2.89	3.84	3.14	2.64	2.45	2.59	2.37	2.21	2.50	3.17	4.93
15	4.09	2.89	3.83	3.11	2.63	2.45	2.71	2.36	2.24	2.50	3.22	4.93
16	4.06	2.79	3.81	3.09	2.62	2.43	2.77	2.37	2.28	2.52	3.29	4.91
17	4.04	2.75	3.80	3.02	2.62	2.43	2.79	2.45	2.34	2.54	3.38	4.95
18	4.00	2.71	3.79	3.02	2.62	2.47	2.79	2.42	2.33	2.58	3.41	5.07
19	3.96	2.69	3.78	3.01	2.62	2.44	2.78	2.38	2.35	2.66	3.43	5.17
20	3.92	2.70	3.76	2.99	2.63	2.42	2.79	2.34	2.36	2.75	3.46	5.31
21	3.88	2.74	3.74	2.98	2.61	2.44	2.78	2.35	2.37	2.76	3.50	5.55
22	3.84	3.03	3.72	2.92	2.59	2.57	2.77	2.36	2.39	2.80	3.53	5.68
23	3.78	3.39	3.70	2.89	2.58	2.57	2.75	2.37	2.39	2.84	3.57	5.90
24	3.74	3.54	3.67	2.86	2.58	2.56	2.74	2.36	2.38	2.86	3.58	6.20
25	3.69	3.59	3.65	2.83	2.59	2.54	2.72	2.38	2.37	2.89	3.59	6.43
26	3.66	3.64	3.63	2.85	2.59	2.52	2.68	2.39	2.40	2.90	3.59	6.59
27	3.61	3.67	3.61	2.80	2.58	2.49	2.67	2.37	2.45	2.91	3.63	6.67
28	3.55	3.72	3.59	2.75	2.59	2.47	2.65	2.35	2.43	2.94	3.66	6.73
29	3.49	3.76	3.57	2.76	---	2.46	2.63	2.34	2.42	2.95	3.66	6.88
30	3.43	3.78	3.55	2.73	---	2.43	2.62	2.33	2.45	2.96	3.66	6.91
31	3.37	---	3.51	2.70	---	2.42	---	2.30	---	2.98	3.65	---
MEAN	3.94	3.19	3.77	3.09	2.64	2.50	2.60	2.42	2.27	2.64	3.32	5.20
MAX	4.17	3.78	3.89	3.47	2.72	2.58	2.79	2.58	2.45	2.98	3.66	6.91
MIN	3.37	2.69	3.51	2.70	2.58	2.42	2.38	2.30	2.03	2.39	3.02	3.74
CAL YR 1984	MEAN	3.60		MAX	5.01	MIN	2.30					
WTR YR 1985	MEAN	3.13		MAX	6.91	MIN	2.03					

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232000 ST. JOHNS RIVER NEAR MELBOURNE, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952-58, 1962, 1964, 1966-78, 1980 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1969 to September 1970.

WATER TEMPERATURE: August 1969 to December 1970.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 359 microsiemens July 19, 1970; minimum observed, 68 microsiemens Oct. 7, 1969.

WATER TEMPERATURES: Maximum observed, 32.5°C Aug. 19, 1970; minimum observed, 7.0°C, Jan. 10, 1970.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 975 microsiemens Apr. 8, 1975.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM STAGE (FT ABOVE DATUM) (00065)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00060)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
DEC 04...	1030	3.87	850	380	6.8	21.0	160	1.3	39
SEP 04...	1215	3.98	1050	330	6.5	28.0	320	1.0	30

DATE	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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
DEC 04...	7.4	33	3.9	61	33	67	.30	7.6	284
SEP 04...	5.9	29	3.1	102	13	61	.30	13	279

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, ORTHOPHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHOPHOS- PHORUS, TOTAL (MG/L AS P) (70507)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
DEC 04...	.010	.07	.100	1.4	.080	.070	1100	31
SEP 04...	.010	.01	.120	2.2	.160	.130	780	43

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
SEP 04...	1215	60	<1	1	8	400	330

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232000 ST. JOHNS RIVER NEAR MELBOURNE, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, TOTAL DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
SEP 04...	4	3	30	21	<.1	2	3

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232200 WOLF CREEK NEAR DEER PARK, FL

LOCATION.--Lat 28°12'46", long 80°54'40", in NW¼ sec.22, T.26 S., R.34 E., Osceola County, Hydrologic Unit 03080101, near right bank on upstream side of bridge on State Highway 419, 2.9 mi upstream from mouth, and 8.5 mi north of Deer Park.

DRAINAGE AREA.--25.7 mi².

PERIOD OF RECORD.--January 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 19.35 ft above National Geodetic Vertical Datum of 1929. Prior to July 13, 1967, at site 0.8 mi downstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated to some extent since October 1970 by the construction of Jane Green Reservoir; levees were constructed and an interconnecting canal was dug joining the watershed areas of Taylor Creek, Pennywash Creek, Cox Creek, and Wolf Creek.

AVERAGE DISCHARGE.--29 years, 32.1 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,700 ft³/s Oct. 16, 1956, from rating curve extended above 1,400 ft³/s; maximum gage height, 10.2 ft, estimated, Aug. 28, 1964, present site; no flow for many days in some years; minimum gage height, 1.01 ft Aug. 14, 1972, caused by temporary earthen dam upstream and pumpage from gage pool; prior to Aug 14, 1972, minimum gage height observed, 2.23 ft, May 9, 1967, present site.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 792 ft³/s, Sept. 2, gage height, 7.84 ft; minimum, 0.03 ft³/s, May 19-21; minimum gage height, 2.96 ft, May 19,20..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	.20	2.9	1.4	1.0	.48	.48	.23	.20	1.4	2.0	183
2	5.6	.20	2.9	1.3	.99	.40	.43	.24	.12	1.1	2.0	639
3	4.3	.22	2.8	1.4	.92	.32	.43	.22	.10	.78	4.9	287
4	3.4	.39	2.7	2.4	.89	.25	.37	.38	.09	.52	48	165
5	2.8	.50	2.5	2.8	.92	.20	.27	.74	.09	.32	90	156
6	2.2	.40	2.3	2.6	1.0	.18	.26	.63	.09	.26	41	286
7	1.7	.29	2.0	2.2	1.5	.17	1.1	.39	.09	.21	21	154
8	1.4	.24	1.8	2.0	2.1	.15	3.4	.20	.08	.16	16	79
9	1.2	.22	1.6	1.7	2.6	.15	2.9	.15	.07	.12	27	54
10	1.1	.22	1.5	1.5	2.4	.13	1.9	.12	.08	.10	37	40
11	.99	.22	1.4	1.4	2.2	.12	1.2	.12	.07	.10	40	31
12	.89	.20	1.4	1.2	2.1	.12	.86	.10	.08	.14	34	25
13	.70	.18	1.4	1.0	2.0	.11	8.5	.09	.15	1.6	26	20
14	.53	.18	1.4	.98	1.8	.09	41	.09	.42	1.3	29	22
15	.40	.18	1.3	.93	1.7	.09	33	.08	.39	.65	28	29
16	.30	.18	1.3	.88	1.7	.09	22	.06	.30	.39	27	25
17	.25	.18	1.5	.86	1.8	.10	14	.06	.78	.30	22	22
18	.22	.18	1.7	.92	1.7	.11	7.6	.05	5.8	.24	15	29
19	.21	.18	1.8	1.1	1.5	.10	4.8	.05	3.0	2.3	11	70
20	.19	.19	1.8	1.3	1.5	.09	3.6	.03	1.9	12	9.6	118
21	.18	.30	1.7	1.2	1.4	.34	3.0	.05	2.1	5.9	13	365
22	.18	1.8	1.5	1.0	1.2	29	2.6	.56	3.1	3.8	10	260
23	.18	7.6	1.5	1.0	1.0	41	2.2	2.6	3.8	3.7	7.8	122
24	.17	18	1.4	1.1	.93	16	1.6	3.5	3.1	8.3	6.9	72
25	.15	16	1.4	1.3	.82	6.2	1.1	4.1	2.3	15	8.1	52
26	.19	10	1.4	1.4	.68	3.4	.74	3.6	2.2	9.6	7.4	39
27	.25	6.7	1.5	1.4	.60	2.4	.50	2.3	2.6	6.2	21	30
28	.28	4.9	1.6	1.4	.54	1.8	.32	1.5	2.2	4.3	60	24
29	.27	3.9	1.6	1.2	---	1.3	.20	.93	1.8	3.1	59	28
30	.26	3.2	1.5	1.1	---	.93	.20	.61	1.4	2.4	46	31
31	.22	---	1.4	1.1	---	.67	---	.38	---	2.1	42	---
TOTAL	35.71	77.15	54.5	43.07	39.49	106.49	160.56	24.16	38.50	88.39	811.7	3457
MEAN	1.15	2.57	1.76	1.39	1.41	3.44	5.35	.78	1.28	2.85	26.2	115
MAX.	5.6	18	2.9	2.8	2.6	41	41	4.1	5.8	15	90	639
MIN	.15	.18	1.3	.86	.54	.09	.20	.03	.07	.10	2.0	20
CAL YR 1984	TOTAL	7237.24	MEAN	19.8	MAX	728	MIN	.03				
WTR YR 1985	TOTAL	4936.72	MEAN	13.5	MAX	639	MIN	.03				

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232400 ST. JOHNS RIVER NEAR COCOA, FL

LOCATION.--Lat 28°22'10", long 80°52'22", in SE¼ sec.25, T.24 S., R.34 E., Brevard County, Hydrologic Unit 03080101, near right bank on downstream side of bridge on State Highway 520, 0.6 mi upstream from Taylor Creek, 0.7 mi downstream from outlet of Lake Poinsett, 8.8 mi west of Cocoa, and 232 mi upstream from mouth.

DRAINAGE AREA.--1,331 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1959, nonrecording gage at site 3.7 mi east on north shore of Lake Poinsett at datum 5.06 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Records include inflow from Taylor Creek. Gage heights are published as elevations for Lake Poinsett (station 02232300) in the section of this report entitled LAKE ELEVATIONS.

AVERAGE DISCHARGE.--32 years, 991 ft³/s, 10.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 10,700 ft³/s, Oct. 11, 1953; maximum gage height observed, 16.96 ft, present site and datum, Oct. 11, 1953; minimum daily discharge, 5.6 ft³/s, July 17, 1981; minimum gage height, 7.77 ft, Mar. 6, 1962, affected by wind.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,700 ft³/s, Sept. 30; maximum gage height, 15.42 ft, stage rising, peak on Oct. 10, 1985; maximum independent daily discharge, 1,100 ft³/s, Dec. 2,3, gage height 13.10 ft; minimum daily discharge, 56 ft³/s, June 13; minimum gage height, 9.52 ft, June 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1100	879	1080	818	422	253	248	247	88	175	287	995	
2	1070	859	1100	801	409	246	238	236	85	188	285	1080	
3	1060	884	1100	785	388	243	225	221	81	199	291	1160	
4	1070	874	1090	744	370	250	229	212	80	209	301	1240	
5	1060	852	1090	720	373	237	226	209	77	212	314	1340	
6	1040	809	1050	725	362	222	204	196	73	210	326	1380	
7	1040	778	1010	723	351	226	203	192	70	209	346	1420	
8	1030	773	1020	699	333	217	194	185	67	204	370	1470	
9	1020	769	1020	692	338	212	178	177	63	198	390	1490	
10	1000	769	1010	674	348	205	187	165	59	197	410	1530	
11	996	752	1000	666	359	205	194	155	57	191	427	1560	
12	1010	721	997	616	301	196	179	144	57	190	439	1580	
13	1010	696	986	612	317	197	192	138	56	196	448	1580	
14	1010	697	981	616	324	189	235	132	57	198	477	1610	
15	1010	697	971	601	320	186	283	126	60	201	494	1630	
16	1010	686	960	595	315	185	320	123	60	203	524	1650	
17	998	665	955	593	315	174	349	101	62	203	538	1730	
18	993	665	941	568	310	161	367	104	62	207	544	1910	
19	988	648	937	560	304	171	370	105	62	207	553	2100	
20	989	620	929	545	294	179	363	107	80	213	577	2380	
21	990	625	921	496	305	203	366	115	94	220	618	2760	
22	983	630	913	500	302	259	369	116	109	237	646	3030	
23	971	710	900	498	294	292	350	113	114	261	675	3240	
24	957	840	892	499	293	313	337	111	116	253	690	3360	
25	940	936	879	485	280	324	325	111	127	279	720	3410	
26	951	995	872	463	272	324	313	111	134	286	730	3400	
27	953	1030	867	460	264	322	297	110	142	287	781	3490	
28	939	1040	857	454	255	308	274	109	148	288	815	3560	
29	923	1050	845	437	---	302	259	106	156	290	853	3630	
30	905	1060	833	437	---	290	259	101	161	288	859	3700	
31	890	---	825	431	---	267	---	97	---	289	924	---	
TOTAL	30906	24009	29831	18513	9118	7358	8133	4475	2657	6988	16652	64415	
MEAN	997	800	962	597	326	237	271	144	88.6	225	537	2147	
MAX	1100	1060	1100	818	422	324	370	247	161	290	924	3700	
MIN	890	620	825	431	255	161	178	97	56	175	285	995	
CFSM	.75	.60	.72	.45	.24	.18	.20	.11	.07	.17	.40	1.61	
IN.	.86	.67	.83	.52	.25	.21	.23	.13	.07	.20	.47	1.80	
CAL YR 1984	TOTAL	345957		MEAN	945	MAX	1630	MIN	340	CFSM	.71	IN.	9.67
WTR YR 1985	TOTAL	223055		MEAN	611	MAX	3700	MIN	56	CFSM	.46	IN.	6.23

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232400 ST. JOHNS RIVER NEAR COCOA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to 1985 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1953 to September 1975.

WATER TEMPERATURE: October 1959 to September 1960, October 1964 to September 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 3,500 microsiemens June 7,27,30, July 2, 1962; minimum observed, 102 microsiemens Oct. 26, 1953.

WATER TEMPERATURES: Maximum observed, 34.0°C June 25, July 8, 1969; minimum observed, 8.0°C, Feb. 5, 1966.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM STAGE (FT ABOVE DATUM) (00065)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
------	------	--	--	--	---	--	---	--	---

DEC 05...	0830	13.07	1080	595	7.6	20.5	160	7.0	45
SEP 04...	1340	13.57	1250	975	6.9	28.0	--	4.3	--

DATE	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)	ALKA- LINITY LAB AS CAC03) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
DEC 05...	11	68	3.9	66	36	150	.30	7.6	412

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
DEC 05...	.010	.14	.090	1.4	.100	.090	1600	29

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
SEP 04...	1340	30	1	1	2	200	110

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
SEP 04...	3	1	30	16	<.1	1	26

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232500 ST. JOHNS RIVER NEAR CHRISTMAS, FL

LOCATION.--Lat 28°32'34", long 80°56'37", in SW¼ sec.29, T.22 S., R.34 E., Orange County, Hydrologic Unit 03080101, on downstream side of bridge on State Highway 50, 0.3 mi upstream from Tootoosahatchee Creek, 2 mi upstream from Lake Cone, 4.5 mi east of Christmas, and 209 mi upstream from mouth.

DRAINAGE AREA.--1,539 mi², includes that of Tootoosahatchee Creek.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year. Prior to January 1934, monthly discharge only, published in WSP 1304.

GAGE.--Water-stage recorder and electromagnetic flowmeter recorder. Datum of gage is 1.62 ft above National Geodetic Vertical Datum of 1929. Prior to July 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Records fair except for estimated daily discharges, Nov. 21-29, which are poor.

AVERAGE DISCHARGE.--52 years, 1,300 ft³/s, 11.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s, Oct. 12, 1953; maximum gage height, 10.81 ft, Sept. 28, 1960; no flow Mar. 22-27, Apr. 19, June 12,13, 1939; minimum gage height, 0.48 ft, June 19, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,940 ft³/s, Sept. 25; maximum gage height, 7.58 ft, Sept. 25,28-30; minimum daily discharge, 125 ft³/s, May 19,20, June 11; minimum gage height, 3.48 ft, May 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1880	1090	1040	953	700	371	304	298	176	261	205	1610
2	1800	1080	1040	950	685	357	286	281	170	249	195	2180
3	1750	1070	1040	948	674	348	265	269	164	232	192	2470
4	1710	1060	1030	942	664	340	249	274	160	220	212	2500
5	1670	1040	1030	930	653	326	232	265	153	211	210	2550
6	1620	1010	1020	933	644	317	220	251	147	205	191	2620
7	1580	987	1010	927	647	310	224	235	142	201	174	2640
8	1550	966	1010	915	631	296	216	223	139	194	164	2560
9	1520	946	995	909	618	287	200	213	134	186	162	2430
10	1480	925	986	904	601	276	187	203	130	178	177	2300
11	1450	901	982	895	588	270	176	193	129	165	224	2180
12	1420	870	982	875	556	258	166	185	140	157	225	2070
13	1380	851	982	870	554	252	160	176	193	154	270	1980
14	1360	834	982	867	542	243	157	168	218	146	695	2000
15	1330	816	983	854	526	236	148	158	223	141	1100	1970
16	1300	796	981	847	512	230	142	152	220	141	1220	1910
17	1280	776	980	839	499	224	135	142	217	144	1210	2000
18	1270	759	978	827	489	217	129	135	207	161	1140	2110
19	1260	741	978	830	479	209	129	129	197	182	1060	2190
20	1240	720	976	819	465	200	129	129	189	192	980	2560
21	1230	702	973	802	457	219	129	156	204	209	1030	3070
22	1210	720	970	796	444	219	129	159	266	244	1200	3520
23	1200	840	967	786	432	219	129	184	303	298	1270	3800
24	1190	960	967	776	422	219	129	200	320	312	1240	3910
25	1170	1000	962	761	412	219	129	208	320	324	1170	3940
26	1180	1010	963	751	404	219	129	211	307	312	1070	3910
27	1170	1030	964	746	393	219	129	205	309	289	1030	3920
28	1160	1030	964	735	382	219	129	199	294	269	1060	3900
29	1140	1040	960	725	366	219	129	193	281	245	1080	3880
30	1130	1040	957	720	346	219	129	187	273	225	1130	3860
31	1110	---	955	711	323	219	129	182	---	216	1280	---
TOTAL	42740	27610	30607	26143	15073	10092	11337	6163	6325	6663	22566	82540
MEAN	1379	920	987	843	538	326	378	199	211	215	728	2751
MAX	1880	1090	1040	953	700	543	648	298	320	324	1280	3940
MIN	1110	702	955	711	382	200	166	129	129	141	162	1610
CFSM	.90	.60	.64	.55	.35	.21	.25	.13	.14	.14	.47	1.79
IN.	1.03	.67	.74	.63	.36	.24	.27	.15	.15	.16	.55	2.00
CAL YR 1984	TOTAL	488068	MEAN	1334	MAX	2360	MIN	445	CFSM	.87	IN.	11.80
WTR YR 1985	TOTAL	287859	MEAN	789	MAX	3940	MIN	129	CFSM	.51	IN.	6.96

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232500 ST. JOHNS RIVER NEAR CHRISTMAS, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.11	6.34	6.28	5.92	5.19	4.28	4.20	4.33	3.69	3.85	3.58	6.01
2	7.06	6.33	6.28	5.90	5.16	4.23	4.14	4.27	3.66	3.80	3.53	6.48
3	7.02	6.32	6.28	5.89	5.13	4.20	4.08	4.24	3.62	3.72	3.52	6.68
4	6.99	6.31	6.27	5.87	5.11	4.17	4.02	4.26	3.59	3.67	3.61	6.70
5	6.94	6.28	6.27	5.84	5.08	4.12	3.96	4.23	3.54	3.62	3.60	6.73
6	6.90	6.25	6.26	5.84	5.06	4.08	3.91	4.18	3.50	3.59	3.51	6.78
7	6.87	6.21	6.24	5.82	5.05	4.05	3.93	4.13	3.47	3.56	3.43	6.80
8	6.84	6.19	6.24	5.79	5.02	4.00	3.90	4.08	3.44	3.52	3.38	6.75
9	6.81	6.16	6.22	5.77	4.99	3.96	3.84	4.03	3.40	3.48	3.37	6.67
10	6.77	6.13	6.21	5.75	4.95	3.92	3.78	3.97	3.37	3.43	3.45	6.58
11	6.74	6.09	6.19	5.73	4.91	3.88	3.73	3.92	3.36	3.36	3.66	6.49
12	6.71	6.05	6.18	5.69	4.85	3.84	3.68	3.87	3.42	3.32	3.68	6.41
13	6.67	6.02	6.17	5.67	4.83	3.81	4.05	3.82	3.69	3.31	3.84	6.34
14	6.65	6.00	6.16	5.65	4.80	3.76	4.95	3.78	3.80	3.26	4.85	6.36
15	6.62	5.97	6.15	5.62	4.76	3.73	5.11	3.72	3.81	3.23	5.48	6.35
16	6.59	5.94	6.13	5.60	4.72	3.70	5.11	3.67	3.80	3.23	5.62	6.31
17	6.57	5.90	6.12	5.58	4.69	3.66	5.06	3.61	3.77	3.26	5.61	6.39
18	6.56	5.88	6.11	5.55	4.66	3.63	5.02	3.56	3.72	3.35	5.52	6.48
19	6.54	5.85	6.10	5.54	4.62	3.59	4.97	3.51	3.67	3.46	5.42	6.54
20	6.52	5.81	6.08	5.52	4.59	3.54	4.92	3.51	3.63	3.51	5.32	6.79
21	6.51	5.78	6.07	5.48	4.56	3.63	4.88	3.66	3.68	3.59	5.39	7.10
22	6.49	5.82	6.05	5.46	4.52	4.49	4.84	3.67	3.93	3.73	5.60	7.35
23	6.48	6.01	6.04	5.43	4.48	4.66	4.79	3.79	4.06	3.93	5.68	7.49
24	6.46	6.18	6.03	5.40	4.45	4.63	4.73	3.87	4.10	3.98	5.64	7.55
25	6.44	6.23	6.01	5.37	4.42	4.58	4.67	3.89	4.10	4.02	5.57	7.57
26	6.44	6.24	6.00	5.34	4.39	4.53	4.61	3.90	4.05	3.98	5.46	7.56
27	6.44	6.27	5.99	5.32	4.35	4.48	4.56	3.87	4.05	3.90	5.40	7.57
28	6.43	6.27	5.98	5.29	4.32	4.42	4.48	3.83	3.99	3.83	5.44	7.57
29	6.41	6.28	5.96	5.26	---	4.38	4.43	3.80	3.94	3.74	5.47	7.57
30	6.39	6.28	5.95	5.25	---	4.32	4.38	3.76	3.90	3.67	5.52	7.56
31	6.37	---	5.93	5.22	---	4.26	---	3.73	---	3.63	5.69	---
MEAN	6.66	6.11	6.13	5.59	4.77	4.08	4.42	3.89	3.72	3.60	4.67	6.85
MAX	7.11	6.34	6.28	5.92	5.19	4.66	5.11	4.33	4.10	4.02	5.69	7.57
MIN	6.37	5.78	5.93	5.22	4.32	3.54	3.68	3.51	3.36	3.23	3.37	6.01
CAL YR 1984	MEAN	6.32	MAX	7.47	MIN	5.11						
WTR YR 1985	MEAN	5.04	MAX	7.57	MIN	3.23						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232500 ST. JOHNS RIVER NEAR CHRISTMAS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-58, 1962, 1965-72, 1974, 1976, 1980-82, 1984, 1985 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM STAGE (FT ABOVE DATUM) (00065)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
DEC 05...	0930	6.27	1030	790	6.9	20.5	140	2.7	50

DATE	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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
DEC 05...	15	100	5.7	72	49	210	.40	6.3	542

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
DEC 05...	.010	.03	.070	1.2	.040	.030	1600	24

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233001 ECONLOCKHATCHEE RIVER AT MAGNOLIA RANCH NEAR BITHLO, FL

LOCATION.--Lat 28°25'27", long 81°07'10", in SE¼ sec.4, T.24 S., R.32 E., Orange County, Hydrologic Unit 03080101, near center of span on downstream side of bridge on Wewahootee Road, 250 ft downstream from Disston Canal, and 7 mi south of Bithlo.

DRAINAGE AREA.--32.9 mi².

PERIOD OF RECORD.--1960, 1964-67 (one discharge measurement each year), October 1972 to current year.

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

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

AVERAGE DISCHARGE.--13 years, 23.6 ft³/s, 17,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 474 ft³/s June 21,22, 1982, gage height, 62.58 ft; maximum gage height 62.78 ft, Sept. 21,22, 1985; no flow for many days in most years; river dry at gage for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 304 ft³/s, Sept. 21,22, gage height, 62.78 ft; no flow for many days, river dry at gage many days..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	.30	4.7	.15	.04	.01	.37	.05	.00	8.9	4.1	64
2	12	.40	4.3	.14	.04	.01	.28	.05	.00	8.5	3.1	81
3	9.6	.48	3.9	.14	.04	.00	.22	.03	.00	7.7	3.1	83
4	8.2	.48	3.5	.17	.03	.00	.17	.04	.00	6.3	4.9	78
5	7.0	.42	3.1	.14	.03	.00	.13	.03	.00	4.5	3.7	83
6	6.0	.31	2.7	.13	.04	.00	.12	.02	.00	4.3	2.8	120
7	5.2	.24	2.2	.14	.05	.00	.14	.01	.00	4.1	2.9	121
8	4.7	.19	1.8	.15	.08	.00	.12	.00	.00	2.7	6.7	115
9	4.1	.16	1.4	.14	.08	.00	.09	.00	.00	1.7	14	103
10	3.5	.13	1.2	.12	.07	.00	.07	.00	.52	1.1	18	93
11	3.1	.11	1.0	.10	.06	.00	.05	.00	.60	.70	18	83
12	2.8	.10	.93	.09	.07	.00	.05	.00	.08	.56	29	76
13	2.3	.07	.83	.08	.06	.00	.08	.00	2.2	.62	37	70
14	2.1	.06	.75	.08	.05	.00	.14	.00	5.3	.50	53	71
15	1.7	.05	.69	.07	.05	.00	.14	.00	10	.47	74	68
16	1.5	.05	.65	.06	.05	.00	.15	.00	11	.50	84	64
17	1.3	.04	.64	.06	.05	.00	.12	.00	12	.48	81	64
18	1.1	.04	.60	.05	.04	.00	.08	.00	31	2.9	72	73
19	.98	.04	.57	.06	.04	.00	.06	.00	36	6.8	62	91
20	.91	.03	.50	.07	.04	.00	.05	.00	24	6.1	54	138
21	.79	.03	.45	.07	.04	2.1	.04	.00	17	6.8	51	275
22	.69	.12	.38	.07	.03	12	.04	.00	21	6.9	47	294
23	.59	3.9	.34	.06	.03	8.6	.03	.00	23	6.2	43	264
24	.53	11	.30	.06	.03	5.3	.01	.00	18	6.5	39	237
25	.47	8.8	.26	.06	.03	3.5	.03	.00	12	11	37	207
26	.51	7.5	.24	.05	.03	2.5	.02	.00	8.0	16	34	180
27	.54	7.8	.23	.05	.02	1.9	.00	.00	6.0	14	37	154
28	.51	7.3	.21	.05	.02	1.4	.00	.00	5.0	11	50	132
29	.45	6.4	.19	.05	---	1.0	.01	.00	6.1	8.9	51	115
30	.39	5.3	.17	.04	---	.73	.04	.00	6.6	7.1	49	104
31	.34	---	.15	.04	---	.51	---	.00	---	5.4	51	---
TOTAL	97.90	61.85	38.88	2.74	1.24	39.56	2.85	.23	255.40	169.23	1116.3	3701
MEAN	3.16	2.06	1.25	.09	.04	1.28	.09	.01	8.51	5.46	36.0	123
MAX	14	11	4.7	.17	.08	12	.37	.05	36	16	84	294
MIN	.34	.03	.15	.04	.02	.00	.00	.00	.00	.47	2.8	64
AC-FT	194	123	77	5.4	2.5	78	5.7	.5	507	336	2210	7340
CAL YR 1984	TOTAL	10003.63		MEAN	27.3	MAX	255	MIN	.03	AC-FT	19840	
WTR YR 1985	TOTAL	5487.18		MEAN	15.0	MAX	294	MIN	.00	AC-FT	10880	

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233102 ECONLOCKHATCHEE RIVER TRIBUTARY NEAR BITHLO, FL

LOCATION.--Lat 28°33'55", long 81°11'19", in NW¼ sec.23, T.22 S., R.31 E., Orange County, Hydrologic Unit 03080101, on right bank 15 ft upstream from culvert on State Highway 50, 3.5 mi east of Union Park, 5.1 mi west of Bithlo, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--1.83 mi².

PERIOD OF RECORD.--Annual maximum, water years 1969-82. January 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 51.35 ft National Geodetic Vertical Datum of 1929.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft³/s, Sept. 22, 1969, gage height, 4.83 ft, from rating curve extended above 120 ft³/s; minimum daily discharge, 0.01 ft³/s, May 18,19, 1985, minimum gage height, 2.12 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 287 ft³/s, Sept. 20, gage height, 4.42 ft; minimum daily discharge, 0.01 ft³/s, May 18,19; minimum gage height, 2.12 ft, May 17-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	.17	.60	.15	.12	.08	.12	.06	.15	4.1	4.5	18
2	1.1	.17	.56	.15	.12	.08	.12	.04	.12	2.7	2.5	17
3	.89	.17	.56	.16	.12	.08	.11	.04	.11	2.1	6.3	12
4	.74	.17	.56	.17	.12	.06	.09	.14	.13	1.8	19	10
5	.65	.17	.54	.17	.12	.05	.08	.09	.15	1.5	15	8.5
6	.56	.17	.52	.17	.19	.04	.11	.05	.12	1.6	8.7	7.7
7	.52	.17	.52	.17	.14	.04	.09	.04	.13	1.5	7.6	6.0
8	.48	.17	.52	.17	.16	.04	.09	.04	.11	1.7	9.0	5.1
9	.44	.17	.50	.27	.17	.04	.07	.04	1.1	1.5	16	4.4
10	.43	.17	.48	.27	.16	.04	.06	.04	1.8	1.2	20	3.8
11	.38	.17	.43	.23	.16	.04	.07	.04	.95	1.3	20	3.1
12	.38	.16	.42	.20	.15	.03	.06	.04	1.1	2.9	11	15
13	.35	.15	.38	.18	.15	.03	.12	.03	5.9	3.0	16	27
14	.34	.15	.38	.17	.15	.03	.12	.03	4.1	1.9	21	55
15	.30	.15	.38	.17	.15	.03	.12	.03	2.4	1.6	15	27
16	.28	.15	.38	.16	.15	.03	.11	.03	1.9	1.5	19	13
17	.27	.15	.35	.16	.15	.03	.10	.02	1.5	1.4	18	59
18	.25	.15	.34	.19	.13	.03	.09	.01	1.3	4.1	20	35
19	.24	.15	.34	.20	.13	.03	.08	.01	1.2	5.3	23	20
20	.23	.15	.34	.18	.11	.03	.07	.02	1.1	4.3	20	119
21	.21	.13	.31	.17	.10	.66	.06	.09	3.9	3.1	26	103
22	.21	.24	.30	.17	.09	1.2	.05	.03	4.3	3.1	15	31
23	.21	1.3	.30	.16	.09	.71	.04	.11	2.2	2.7	11	19
24	.19	2.9	.30	.17	.09	.38	.04	.11	1.7	2.5	8.7	10
25	.19	1.9	.27	.15	.09	.24	.04	.06	1.5	2.7	7.3	7.3
26	.19	1.3	.20	.14	.09	.18	.04	.04	7.7	2.3	5.9	5.7
27	.19	.98	.18	.14	.08	.16	.04	.04	6.9	1.9	19	4.6
28	.19	.80	.18	.14	.08	.15	.04	.13	3.6	1.9	28	3.9
29	.19	.73	.17	.14	---	.14	.06	.10	2.8	1.7	18	3.3
30	.19	.63	.17	.14	---	.14	.08	.08	3.2	1.7	11	3.3
31	.19	---	.15	.13	---	.12	---	.12	---	2.0	13	---
TOTAL	12.28	14.14	11.63	5.34	3.56	4.94	2.37	1.75	63.17	72.6	454.5	656.7
MEAN	.40	.47	.38	.17	.13	.16	.08	.06	2.11	2.34	14.7	21.9
MAX	1.3	2.9	.60	.27	.19	1.2	.12	.14	7.7	5.3	28	119
MIN	.19	.13	.15	.13	.08	.03	.04	.01	.11	1.2	2.5	3.1
CAL YR 1984	TOTAL	747.74		MEAN	2.04	MAX	85	MIN	.13			
WTR YR 1985	TOTAL	1302.98		MEAN	3.57	MAX	119	MIN	.01			

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233200 LITTLE ECONLOCKHATCHEE RIVER NEAR UNION PARK, FL

LOCATION.--Lat 28°31'29", long 81°14'39", in SW¼ sec.32, T.22 S., R.31 E., Orange County, Hydrologic Unit 03080101, near right bank at Berry-Deese Road, 3,300 ft upstream from a tributary, 3 mi south of Union Park, 8.5 mi east of Orlando, and 13 mi upstream from mouth.

DRAINAGE AREA.--27.1 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 56.19 ft above National Geodetic Vertical Datum of 1929. Prior to Jan 12, 1960, and Oct. 21, 1972 to Nov. 14, 1983, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records fair. About 3.8 ft³/s average mean daily inflow from effluent of sewage disposal plants above station.

AVERAGE DISCHARGE.--26 years, 25.4 ft³/s, 18,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft³/s, Mar. 17, 1960, gage height, 11.64 ft; minimum discharge, 0.10 ft³/s June 6,7, 1961; minimum gage height, 4.83 ft, May 14, 1967, May 6, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 22	0600	171	8.06	Sep. 21	0600	*325	*8.60
Sept. 14	2200	175	8.08				

Minimum daily discharge, 2.5 ft³/s, June 9; minimum gage height, 5.01 ft, June 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	8.4	12	6.9	5.7	4.9	9.7	8.6	4.1	15	28	83
2	18	8.4	11	6.9	5.8	4.8	9.2	6.6	3.7	12	23	97
3	17	8.6	11	7.6	6.1	5.0	8.5	6.0	3.5	9.9	30	78
4	15	9.2	11	11	5.8	4.6	8.5	6.6	3.3	8.5	41	58
5	14	9.4	10	8.4	5.7	4.5	8.9	9.3	2.9	7.8	31	67
6	14	8.4	12	7.3	6.7	4.4	9.8	8.8	2.9	12	23	70
7	13	7.7	15	6.8	15	4.5	17	6.1	2.7	11	22	71
8	13	7.3	11	6.7	11	4.6	11	5.1	2.6	8.5	26	71
9	12	7.0	10	7.7	8.3	4.2	8.8	4.6	2.5	7.2	44	57
10	13	6.8	9.5	6.5	6.9	4.0	8.0	4.3	2.8	6.4	52	45
11	13	6.7	9.3	6.2	6.9	3.9	7.7	4.1	8.9	5.9	80	38
12	12	6.4	9.1	6.0	9.5	3.8	7.3	3.9	6.7	7.2	53	33
13	12	6.1	8.9	5.8	8.6	3.8	11	3.7	15	49	37	41
14	10	5.6	8.8	5.9	7.7	3.7	16	3.5	20	27	29	125
15	10	5.2	8.6	6.1	8.8	3.7	11	3.3	12	22	28	150
16	9.9	5.2	8.5	5.8	7.4	3.8	9.6	3.2	12	21	30	99
17	9.9	6.7	8.5	6.7	6.4	4.0	8.7	3.0	11	19	37	71
18	10	6.6	8.9	6.8	6.3	4.0	7.9	2.8	9.7	18	50	58
19	10	6.2	10	6.8	6.8	3.6	7.5	2.7	8.0	21	114	51
20	8.7	6.5	9.8	6.4	6.5	3.4	7.3	2.7	7.2	43	77	101
21	8.2	6.2	9.7	6.1	5.8	9.3	8.2	3.1	7.9	34	113	298
22	8.1	12	8.6	5.8	5.8	109	7.5	5.9	18	23	83	209
23	7.9	23	8.1	6.0	5.4	35	6.9	5.3	12	19	54	142
24	7.5	25	8.0	6.7	5.2	21	6.5	13	9.2	16	44	103
25	10	16	7.7	6.5	5.1	18	5.9	13	8.1	18	43	78
26	10	13	7.6	5.7	5.7	15	5.5	12	8.1	17	40	63
27	13	12	8.0	5.4	5.2	13	5.2	8.3	12	14	36	52
28	11	12	7.5	5.5	5.0	12	4.9	6.4	9.7	13	39	48
29	9.8	12	7.3	6.7	---	12	5.0	5.5	9.0	12	42	43
30	9.4	12	7.2	7.6	---	11	12	4.9	8.7	11	41	40
31	8.8	---	7.0	6.1	---	10	---	4.5	---	11	43	---
TOTAL	358.2	285.6	289.6	206.4	195.1	348.5	261.0	180.8	244.2	519.4	1433	2540
MEAN	11.6	9.52	9.34	6.66	6.97	11.2	8.70	5.83	8.14	16.8	46.2	84.7
MAX	20	25	15	11	15	109	17	13	20	49	114	298
MIN	7.5	5.2	7.0	5.4	5.0	3.4	4.9	2.7	2.5	5.9	22	33
CAL YR 1984	TOTAL	10589.0	MEAN	28.9	MAX	289	MIN	5.2				
WTR YR 1985	TOTAL	6861.8	MEAN	18.8	MAX	298	MIN	2.5				

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233500 ECONLOCKHATCHEE RIVER NEAR CHULUOTA, FL

LOCATION.--Lat 28°40'40", long 81°06'51", in SW¼ sec.10, T.21 S., R.32 E., Seminole County, Hydrologic Unit 03080101, near right bank on downstream side of bridge on State Highway 13, 2.6 mi northeast of Chuluota, and 10 mi upstream from mouth.

DRAINAGE AREA.--241 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for October 1935, published in WSP 1304.

GAGE.--Water-stage recorder. Datum of gage is 2.14 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Nov. 6, 1935, to May 17, 1939, and June 17, 1969, to July 21, 1971, nonrecording gage at same site and datum. May 18, 1939, to June 16, 1969, water-stage recorder at same site and datum. Since Sept. 3, 1943, water-stage recorder for St. Johns River above Lake Harney near Geneva (station 02234000) used as auxiliary gage for this station.

REMARKS.--Estimated daily discharges, Feb. 2 to Mar. 19, June 21 to July 8. Records fair. Records include some flow diverted from Lake Mary Jane in the Kissimmee River Basin through Disston Canal.

AVERAGE DISCHARGE.--50 years, 264 ft³/s, 14.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s, Mar. 18, 1960, gage height, 18.69 ft; minimum, 6.7 ft³/s, June 11-13, 1945; minimum gage height, 0.08 ft, May 10, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,120 ft³/s, Sept. 22, gage height, 12.84 ft; minimum discharge, 42 ft³/s, May 20, gage height, 0.81 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	565	92	137	76	65	58	76	58	71	349	290	1090	
2	467	90	128	75	65	57	76	62	67	263	347	1180	
3	354	92	122	75	64	57	74	60	64	181	333	1310	
4	277	93	118	77	63	56	70	57	61	168	310	1420	
5	225	96	115	79	62	56	65	58	62	164	414	1470	
6	192	96	113	80	62	55	59	69	61	162	406	1290	
7	168	91	111	78	64	55	60	70	60	160	369	1200	
8	150	87	113	75	69	54	62	69	59	158	371	1180	
9	138	86	110	71	75	54	63	65	58	156	483	1120	
10	131	85	104	69	76	53	59	59	63	148	570	1040	
11	127	82	101	68	75	53	52	57	85	133	598	946	
12	122	80	97	67	74	52	51	54	111	163	756	756	
13	117	81	94	66	74	52	55	52	128	238	924	765	
14	109	83	91	65	73	51	60	50	232	283	887	988	
15	103	80	112	68	73	50	79	52	333	314	757	1160	
16	99	77	142	68	72	51	84	50	361	312	713	1390	
17	95	77	116	69	69	53	80	50	345	303	869	1470	
18	93	77	99	69	67	54	73	50	282	341	1240	1450	
19	92	78	90	70	65	55	69	48	229	387	1390	1400	
20	93	82	87	73	63	54	66	49	212	503	1380	1370	
21	91	85	85	71	62	54	64	57	202	620	1300	1780	
22	87	90	87	70	62	72	61	67	193	689	1160	2880	
23	87	118	86	70	61	161	59	77	189	635	1050	2920	
24	86	185	83	70	60	243	58	95	187	509	987	2310	
25	86	232	82	69	60	264	56	128	185	395	962	1760	
26	87	233	80	68	59	205	55	139	192	317	824	1440	
27	89	215	79	67	59	149	53	117	210	271	678	1210	
28	98	184	79	67	58	119	51	97	275	264	753	1010	
29	102	158	79	67	---	101	49	87	363	253	953	887	
30	98	146	79	67	---	91	51	82	418	237	1060	776	
31	95	---	77	66	---	83	---	76	---	227	1070	---	
TOTAL	4723	3351	3096	2190	1851	2622	1890	2161	5358	9303	24204	40968	
MEAN	152	112	99.9	70.6	66.1	84.6	63.0	69.7	179	300	781	1366	
MAX	565	233	142	80	76	264	84	139	418	689	1390	2920	
MIN	86	77	77	65	58	50	49	48	58	133	290	756	
CFSM	.63	.46	.41	.29	.27	.35	.26	.29	.74	1.24	3.24	5.67	
IN.	.73	.52	.48	.34	.29	.40	.29	.33	.83	1.44	3.74	6.32	
CAL YR 1984	TOTAL	113480		MEAN	310	MAX	3240	MIN	71	CFSM	1.29	IN.	17.52
WTR YR 1985	TOTAL	101717		MEAN	279	MAX	2920	MIN	48	CFSM	1.16	IN.	15.70

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233500 ECONLOCKHATCHEE RIVER NEAR CHULUOTA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-58, 1966-78, 1982 to 1985 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
SEP 04...	1600	1420	122	6.4	26.0	4.7	360	1	1	3

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
SEP 04...	730	570	4	4	10	7	<.1	1	15

P

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234000 ST. JOHNS RIVER ABOVE LAKE HARNEY, NEAR GENEVA, FL

LOCATION.--Lat 28°42'50", long 81°02'08", in NE¼ sec.32, T.20 S., R.33 E., Seminole County, Hydrologic Unit 03080101, near left bank on downstream side of bridge on State Highway 46, 0.9 mi downstream from Econlockhatchee River, 1 mi upstream from Lake Harney, 5.5 mi southeast of Geneva, and 190 mi upstream from mouth.

DRAINAGE AREA.--2,043 mi².

PERIOD OF RECORD.--July 1941 to September 1981 (gage heights and miscellaneous discharge measurements only). October 1981 to current year. Records of gage heights prior to October 1962 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WRD FL 1966: Drainage area.

GAGE.--Water-stage electromagnetic current meter recorders. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Sept. 3, 1943, nonrecording gage, and Sept. 3, 1943, to Oct. 8, 1959, water-stage recorder at site 50 ft downstream at same datum.

REMARKS.--Records fair except for estimated discharge May 10-20, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 13,800 ft³/s, Oct. 7, 1953, gage height, 10.05 ft; maximum gage height, 10.62 ft, Oct. 13, 1953; minimum discharge measured, 70 ft³/s, Nov. 6, 1980, gage height, 0.88 ft; minimum gage height, -0.42 ft, June 18, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1924 reached a stage of 10.1 ft, from floodmark.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,590 ft³/s, Sept. 20; maximum gage height, 7.34 ft, Sept. 25; minimum daily discharge, 176 ft³/s, June 8; minimum gage height, 0.37 ft, June 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3040	1400	1740	1070	714	450	505	421	243	500	780	3420
2	3020	1390	1710	1050	697	439	479	430	252	487	778	3800
3	2980	1380	1680	1040	683	436	456	445	251	470	786	4050
4	2930	1370	1650	1040	667	426	423	471	273	448	801	4260
5	2860	1360	1610	1040	654	422	388	481	268	418	844	4630
6	2790	1370	1600	1020	659	432	370	506	230	402	897	4890
7	2710	1370	1570	998	682	429	371	539	178	392	937	5060
8	2640	1380	1540	984	715	448	365	548	176	396	1000	5170
9	2560	1390	1510	966	740	483	370	533	200	374	1070	5210
10	2480	1390	1480	948	746	511	365	505	202	353	1140	5200
11	2410	1380	1450	936	742	518	352	460	186	346	1190	5140
12	2360	1390	1420	942	790	524	336	430	230	423	1220	5050
13	2290	1380	1390	950	805	533	379	400	324	562	1300	4960
14	2230	1350	1360	964	775	514	434	370	348	532	1470	4960
15	2170	1330	1330	980	743	500	478	350	392	501	1670	5090
16	2110	1310	1320	976	711	473	525	320	407	490	1990	5070
17	2050	1280	1300	963	678	469	566	300	382	481	2210	5070
18	1990	1260	1280	964	648	503	573	280	364	512	2330	5200
19	1930	1230	1260	955	622	314	577	265	323	615	2480	5250
20	1870	1220	1240	939	602	298	579	250	334	696	2660	5530
21	1810	1200	1220	930	578	293	576	258	323	708	2950	6530
22	1760	1270	1200	921	556	555	564	302	316	747	3010	6990
23	1700	1420	1190	906	540	602	547	311	314	792	2980	7330
24	1650	1570	1170	888	525	631	528	333	313	798	2960	7540
25	1590	1650	1160	870	509	662	509	322	324	794	2940	7590
26	1560	1710	1140	855	495	655	489	364	335	778	2910	7490
27	1530	1740	1130	825	483	635	468	340	396	780	2890	7380
28	1500	1760	1120	802	470	611	453	357	448	809	2990	7230
29	1480	1770	1120	786	---	588	446	354	490	781	3080	7090
30	1460	1750	1110	758	---	558	432	343	507	753	3130	6960
31	1430	---	1090	735	---	526	---	278	---	739	3190	---
TOTAL	66890	42770	42090	29001	18229	15438	13903	11866	9329	17877	60583	169140
MEAN	2158	1426	1358	936	651	498	463	383	311	577	1954	5638
MAX	3040	1770	1740	1070	805	662	579	548	507	809	3190	7590
MIN	1430	1200	1090	735	470	293	336	250	176	346	778	3420
CFSM	1.06	.70	.66	.46	.32	.24	.23	.19	.15	.28	.96	2.76
IN.	1.22	.78	.77	.53	.33	.28	.25	.22	.17	.33	1.10	3.08
CAL YR 1984	TOTAL	606345	MEAN	1657	MAX	3050	MIN	605	CFSM	.81	IN.	11.04
WTR YR 1985	TOTAL	497116	MEAN	1362	MAX	7590	MIN	176	CFSM	.67	IN.	9.05

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234000 ST. JOHNS RIVER ABOVE LAKE HARNEY, NEAR GENEVA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.56	2.66	3.16	2.02	1.28	.69	.81	.62	.68	1.08	1.50	4.51
2	4.54	2.64	3.13	1.98	1.24	.66	.75	.64	.69	1.05	1.48	4.80
3	4.50	2.62	3.09	1.95	1.21	.66	.70	.68	.67	1.01	1.48	4.98
4	4.45	2.60	3.05	1.96	1.17	.64	.63	.74	.62	.96	1.50	5.12
5	4.38	2.59	3.00	1.95	1.14	.63	.55	.76	.55	.90	1.58	5.35
6	4.31	2.60	2.99	1.92	1.15	.65	.51	.81	.49	.86	1.67	5.51
7	4.23	2.60	2.94	1.87	1.20	.64	.51	.89	.44	.84	1.74	5.60
8	4.16	2.62	2.88	1.85	1.28	.68	.50	.91	.41	.85	1.85	5.66
9	4.08	2.63	2.83	1.81	1.33	.76	.51	.87	.40	.80	1.98	5.67
10	4.00	2.63	2.78	1.78	1.35	.82	.50	.83	.43	.75	2.10	5.65
11	3.93	2.63	2.74	1.75	1.34	.84	.47	.81	.44	.74	2.19	5.59
12	3.87	2.63	2.69	1.76	1.44	.85	.43	.83	.49	.91	2.22	5.53
13	3.80	2.61	2.64	1.78	1.48	.87	.53	.86	.62	1.22	2.36	5.47
14	3.73	2.57	2.59	1.81	1.41	.83	.65	.88	.69	1.15	2.65	5.47
15	3.67	2.53	2.54	1.84	1.34	.80	.75	.89	.78	1.08	2.94	5.55
16	3.60	2.48	2.51	1.83	1.27	.74	.85	.88	.84	1.06	3.31	5.56
17	3.53	2.44	2.47	1.81	1.19	.73	.95	.93	.86	1.04	3.54	5.59
18	3.47	2.39	2.43	1.81	1.13	.81	.96	.96	.86	1.11	3.66	5.71
19	3.40	2.34	2.38	1.79	1.07	.83	.97	.90	.80	1.33	3.81	5.77
20	3.32	2.31	2.35	1.76	1.03	.80	.98	.84	.73	1.49	3.97	5.98
21	3.25	2.28	2.31	1.74	.97	.79	.97	.91	.69	1.50	4.25	6.61
22	3.19	2.41	2.28	1.72	.93	.93	.94	.89	.67	1.57	4.29	6.90
23	3.12	2.68	2.25	1.69	.89	1.03	.90	.89	.67	1.66	4.25	7.12
24	3.04	2.93	2.22	1.66	.86	1.09	.86	.93	.67	1.66	4.21	7.27
25	2.97	3.05	2.19	1.62	.82	1.16	.82	.91	.69	1.64	4.18	7.33
26	2.91	3.13	2.16	1.59	.79	1.14	.77	.86	.71	1.58	4.13	7.30
27	2.87	3.17	2.14	1.52	.76	1.10	.73	.80	.85	1.57	4.09	7.28
28	2.82	3.19	2.12	1.47	.73	1.05	.69	.78	.96	1.62	4.18	7.23
29	2.78	3.20	2.10	1.43	---	.99	.68	.76	1.06	1.55	4.25	7.19
30	2.74	3.18	2.08	1.37	---	.93	.65	.73	1.09	1.47	4.28	7.15
31	2.70	---	2.06	1.32	---	.86	---	.68	---	1.42	4.32	---
MEAN	3.61	2.68	2.55	1.75	1.14	.84	.72	.83	.68	1.21	3.03	6.01
MAX	4.56	3.20	3.16	2.02	1.48	1.16	.98	.96	1.09	1.66	4.32	7.33
MIN	2.70	2.28	2.06	1.32	.73	.63	.43	.62	.40	.74	1.48	4.51
CAL YR 1984	MEAN	2.89	MAX	4.57	MIN	1.03						
WTR YR 1985	MEAN	2.09	MAX	7.33	MIN	.40						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234100 DEEP CREEK NEAR OSTEEN, FL

LOCATION.--Lat 28°50'45", long 81°04'46", in NW¼ sec.13, T.19 S., R.32 E., Volusia County, Hydrologic Unit 03080101, on right bank 50 ft downstream from bridge on Osteen-Maytown Road, 3.2 mi upstream from Cow Creek, 5.0 mi upstream from mouth, and 4.5 mi east of Osteen.

DRAINAGE AREA.--About 140 mi², includes the total area drained by Deep Creek and Deep Creek diversion canal.

PERIOD OF RECORD.--October 1964 to September 1966, January 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. October 1964 to September 1966 at site 50 ft upstream at same datum.

REMARKS.--Records fair except for periods of estimated daily discharges, Oct. 25-30, Nov. 28 to Feb. 6, and Sept. 21-25, which are poor. Flow affected at times by backwater from St. Johns River. Some flow above station is diverted through Deep Creek diversion canal near Osteen (station 02234180) at high water and by interconnection of drainage canals. Discharge for water years 1965-66 and 1982-85 is a summation of flow of Deep Creek and Deep Creek diversion canal.

EXTREMES FOR PERIOD OF RECORD.--Combined flow, maximum daily discharge, 1,930 ft³/s, Sept. 21, 1985; maximum gage height, 9.99 ft, Sept. 21, 1985; no flow June 1 to Aug. 25, 1981; creek dry at gage for many days in 1981, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 14, 1964, reached a stage of 11.98 ft, from floodmarks, discharge, 2,630 ft³/s.

EXTREMES FOR CURRENT YEAR.--Combined flow, maximum daily discharge, 1,930 ft³/s, Sept. 21; maximum gage height, 9.99 ft, Sept. 21; minimum daily discharge, .06 ft³/s, June 4-8; minimum gage height, 0.74 ft, June 10,11.

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF DEEP CREEK AND DEEP CREEK DIVERSION CANAL
WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

<DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	58	89	25	8.0	2.0	2.1	3.1	.12	1.8	3.9	491
2	416	57	83	26	7.3	2.4	2.4	2.3	.09	1.4	4.3	610
3	391	53	79	25	6.4	2.5	2.4	1.9	.08	1.6	3.7	468
4	364	51	73	25	5.5	2.9	2.6	5.0	.06	1.1	4.5	476
5	336	48	72	23	5.0	2.9	2.0	4.0	.06	.88	3.9	605
6	309	44	68	21	6.3	2.7	3.0	.74	.06	2.0	3.7	601
7	281	41	61	20	8.0	2.7	2.5	.30	.06	1.5	3.7	562
8	256	39	59	18	6.3	3.3	1.1	.22	.06	1.5	7.0	548
9	233	38	56	17	5.9	3.5	.89	.15	.07	1.3	8.9	521
10	210	36	54	16	4.8	3.5	.53	.09	.07	.91	7.6	474
11	194	34	53	15	4.7	3.4	.21	.09	.09	.94	13	420
12	182	32	52	14	4.1	3.4	.19	.09	.19	25	13	373
13	167	30	50	15	3.2	2.8	.80	.08	.30	15	38	328
14	153	28	47	15	3.1	3.2	.91	.58	.91	3.4	70	329
15	139	27	44	16	3.4	3.0	1.2	.19	5.0	2.2	77	311
16	127	26	41	16	3.5	2.7	1.1	.35	3.5	2.1	80	299
17	117	23	40	17	3.5	2.6	.71	.51	1.9	1.9	86	412
18	109	22	38	17	3.5	2.6	.49	.67	1.5	3.4	80	550
19	99	21	38	17	3.7	2.4	.43	.88	1.0	2.6	91	483
20	92	20	36	16	3.6	3.0	.35	1.1	.79	2.8	156	1150
21	90	17	35	15	3.5	3.3	.34	2.1	.97	2.3	243	1930
22	92	23	34	14	3.2	3.2	.28	1.0	1.4	2.0	217	1640
23	84	77	33	13	2.6	2.0	.50	.90	.71	3.1	220	1320
24	76	155	32	12	2.4	2.1	1.6	1.2	.47	3.2	251	1100
25	71	142	32	11	2.1	1.8	1.6	.77	.37	2.5	265	991
26	68	125	30	11	2.1	1.4	1.8	.48	.30	2.0	241	874
27	70	112	29	9.8	2.1	1.3	2.3	.31	1.0	3.1	229	788
28	68	106	29	9.3	2.0	1.2	2.4	.24	.93	4.4	273	716
29	66	98	29	9.0	---	1.4	2.5	.15	1.1	3.1	259	659
30	65	93	27	8.7	---	1.7	2.9	.12	1.7	2.6	256	620
31	61	---	26	8.3	---	2.1	---	.13	---	4.0	299	---
TOTAL	5414	1676	1469	495.1	119.8	79.0	42.13	29.74	24.86	105.63	3508.2	20649
MEAN	175	55.9	47.4	16.0	4.28	2.55	1.40	.96	.83	3.41	113	688
MAX	428	155	89	26	8.0	3.5	3.0	5.0	5.0	25	299	1930
MIN	61	17	26	8.3	2.0	1.2	.19	.08	.06	.88	3.7	299
CAL YR 1984	TOTAL 46114.5			MEAN	126	MAX	1150	MIN	4.9			
WTR YR 1985	TOTAL 33612.46			MEAN	92.1	MAX	1930	MIN	.06			

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234180 DEEP CREEK DIVERSION CANAL NEAR OSTEEN, FL

LOCATION.--Lat 28°50'44", long 81°06'06", in NW¼ sec.14, T.19 S., R.32 E., Volusia County, Hydrologic Unit 03080101, on left bank, 90 ft downstream from bridge on Osteen-Maytown Road, 1.6 mi upstream from mouth, and 3.7 mi east of Osteen.

DRAINAGE AREA.--About 70 mi².

PERIOD OF RECORD.--1935, 1956 (one discharge measurement each year); September 1964 to September 1966 (discharge measurements and gage heights); March to September 1981 (discharge measurements only); October 1981 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. September 1964 to September 1966, nonrecording gage, near present site at same datum.

REMARKS.--Canal diverts flow from Deep Creek to St. Johns River. Flow affected at times by backwater from St. Johns River.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 11.41 ft Apr. 9, 1982, estimated; minimum gage height, 3.53 ft, June 5-11, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 12, 1964, reached a stage of 13.17 ft, from floodmarks, discharge, 878 ft³/s; no flow observed June 24, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 10.60 ft, Sept. 20; minimum, 3.53 ft, June 5-11.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.69	4.74			---	3.95	4.01	4.05	3.58	3.87	3.86	8.03
2	7.65	4.71			---	3.99	4.03	3.98	3.57	3.84	3.85	8.34
3	7.44	4.67			---	4.00	4.04	3.95	3.56	3.87	3.84	8.12
4	7.20	4.63			---	4.03	4.05	4.11	3.54	3.83	3.86	8.27
5	6.94	4.60			---	4.04	4.01	4.08	3.53	3.81	3.84	8.66
6	6.69	4.53			---	4.02	4.08	3.80	3.53	3.93	3.82	8.63
7	6.43	4.46			4.00	4.02	4.04	3.71	3.53	3.88	3.83	8.61
8	6.19	4.41			4.00	4.08	3.90	3.68	3.53	3.89	4.01	8.78
9	6.00	4.38			4.00	4.10	3.86	3.65	3.53	3.87	4.06	8.72
10	5.80	4.35			4.01	4.10	3.81	3.63	3.53	3.83	4.04	8.39
11	5.67	4.33			4.01	4.09	3.73	3.62	3.54	3.83	4.35	7.97
12	5.61	4.30			4.01	4.10	3.71	3.62	3.59	4.54	4.41	7.60
13	5.49	4.25			4.00	4.05	3.82	3.61	3.63	4.48	4.80	7.25
14	5.36	4.25			4.00	4.08	3.86	3.74	3.75	4.05	5.39	7.16
15	5.25	4.25			4.03	4.07	3.89	3.66	4.02	3.95	5.39	7.11
16	5.15	4.24			4.04	4.05	3.88	3.71	3.97	3.96	5.45	7.10
17	5.09	4.21			4.05	4.05	3.82	3.74	3.86	3.95	5.54	7.45
18	5.06	4.21			4.05	4.04	3.79	3.77	3.82	4.05	5.42	7.94
19	4.99	4.21			4.07	4.03	3.77	3.80	3.78	3.99	5.45	7.99
20	4.92	4.19			4.07	4.07	3.75	3.81	3.75	3.98	5.93	9.90
21	4.94	4.14			4.06	4.09	3.75	3.92	3.77	3.96	6.54	10.60
22	5.03	4.22			4.03	4.07	3.72	3.81	3.80	3.92	6.60	10.60
23	4.96	5.04			3.99	3.98	3.77	3.79	3.73	3.91	6.70	10.60
24	4.87	5.96			3.97	4.00	3.94	3.81	3.70	3.89	7.10	10.60
25	4.81	5.81			3.95	3.97	3.93	3.76	3.68	3.87	7.26	10.35
26	---	5.59			3.95	3.93	3.95	3.71	3.67	3.86	7.07	9.67
27	---	5.46			3.95	3.92	3.99	3.67	3.78	3.91	6.93	9.15
28	---	---			3.94	3.92	4.00	3.64	3.79	3.99	7.24	8.72
29	---	---			---	3.94	4.00	3.60	3.82	3.93	7.13	8.37
30	4.80	---			---	3.97	4.04	3.59	3.87	3.90	7.09	8.10
31	4.76	---			---	4.01	---	3.59	---	3.87	7.35	---
MEAN	---	---			---	4.02	3.90	3.76	3.69	3.95	5.42	8.63
MAX	---	---			---	4.10	4.08	4.11	4.02	4.54	7.35	10.60
MIN	---	---			---	3.92	3.71	3.59	3.53	3.81	3.82	7.10

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234324 HOWELL CREEK NEAR SLAVIA, FL

LOCATION.--Lat 28°38'51", long 81°15'53", in SE¼ sec.21, T.21 S., R.30 E., Seminole County, Hydrologic Unit 03080101, at right bank 15 ft upstream of box culvert on Red Bug Road, 0.2 mi east of Tuskawilla Road, 2.1 mi west of Slavia, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--29.2 mi².

PERIOD OF RECORD.--February 1972 to September 1979, October 1980 to January 1981 (discharge measurements only), February 1981 to current year.

GAGE.--Water-stage recorder and culvert control. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Oct. 1, 1980, at site 15 ft downstream at same datum.

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

AVERAGE DISCHARGE.--11 years (water years 1973-79, 1982-85), 33.5 ft³/s, 23,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 412 ft³/s, June 28, 1974, gage height, 36.71 ft; minimum, 0.91 ft³/s, May 18, 19, 1985; gage height, 32.24 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 211 ft³/s, Aug. 22, gage height, 35.06 ft; minimum, 0.91 ft³/s, May 18, 19, gage height, 32.24 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	7.7	12	7.8	9.9	2.8	2.0	2.0	6.0	45	78	93
2	31	7.6	11	7.8	9.7	2.7	2.3	1.8	5.4	44	71	93
3	29	7.4	9.6	7.9	9.4	2.8	2.1	1.7	4.7	45	67	93
4	28	9.6	9.3	8.1	9.0	3.2	1.9	2.1	4.4	43	65	97
5	26	11	9.1	7.7	8.6	2.9	1.9	2.2	4.2	42	63	103
6	25	8.5	9.7	7.3	8.4	2.7	1.8	1.8	3.6	44	61	107
7	23	7.9	9.6	7.3	8.7	2.6	1.9	1.6	3.5	43	60	104
8	22	7.4	10	7.2	8.2	2.5	1.8	1.5	3.2	43	63	101
9	20	7.1	12	6.9	7.7	2.5	1.9	1.4	3.0	41	61	94
10	19	6.7	11	6.7	7.3	2.5	1.6	1.4	3.5	41	62	87
11	18	6.4	11	6.7	7.2	2.5	1.5	1.3	6.4	40	67	81
12	17	6.0	11	6.4	8.1	2.3	1.6	1.3	9.0	48	65	77
13	16	5.8	10	6.1	7.0	2.1	2.3	1.3	17	58	64	92
14	15	5.6	11	6.3	6.5	2.1	1.8	2.5	19	56	63	115
15	14	5.6	11	6.3	6.5	2.0	1.7	2.3	29	60	61	104
16	13	5.5	11	6.4	6.4	2.1	1.7	2.5	33	72	60	97
17	9.2	5.2	9.3	6.7	5.7	2.3	1.5	2.2	32	72	59	104
18	9.0	6.3	8.7	6.7	4.8	2.6	1.9	1.1	30	76	56	101
19	8.9	7.3	8.4	6.9	5.8	2.3	2.5	1.0	29	91	56	97
20	8.9	7.2	8.4	6.7	4.7	2.0	2.3	3.1	27	98	56	115
21	8.7	7.1	8.3	6.4	4.4	2.5	2.0	2.8	26	94	54	132
22	8.6	9.3	8.4	6.3	3.8	3.7	1.8	1.4	27	94	75	125
23	8.5	14	8.4	6.1	3.3	4.5	1.9	5.0	28	94	88	118
24	8.3	15	8.3	6.0	3.6	3.4	1.8	11	27	89	77	111
25	8.1	14	7.6	6.0	3.0	2.4	1.8	11	26	84	70	103
26	8.4	13	7.7	5.9	3.1	2.4	1.8	9.7	29	78	63	96
27	8.8	10	7.9	7.6	3.0	2.2	1.6	8.7	36	77	71	89
28	10	12	8.1	13	2.9	2.1	1.9	8.1	37	76	92	83
29	13	12	7.9	12	---	2.1	2.1	7.2	39	70	90	79
30	11	12	8.0	11	---	2.1	2.1	6.7	45	66	88	75
31	8.3	---	7.9	11	---	1.9	---	6.1	---	65	92	---
TOTAL	487.7	260.2	291.6	231.2	176.7	78.8	56.8	113.8	592.9	1989	2118	2966
MEAN	15.7	8.67	9.41	7.46	6.31	2.54	1.89	3.67	19.8	64.2	68.3	98.9
MAX	34	15	12	13	9.9	4.5	2.5	11	45	98	92	132
MIN	8.1	5.2	7.6	5.9	2.9	1.9	1.5	1.0	3.0	40	54	75
CFSM	.54	.30	.32	.26	.22	.09	.06	.13	.68	2.20	2.34	3.39
IN.	.62	.33	.37	.29	.23	.10	.07	.14	.76	2.53	2.70	3.78
CAL YR 1984	TOTAL	8995.3	MEAN	24.6	MAX	121	MIN	3.8	CFSM	.84	IN.	11.46
WTR YR 1985	TOTAL	9362.7	MEAN	25.7	MAX	132	MIN	1.0	CFSM	.88	IN.	11.93

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234384 SOLDIER CREEK NEAR LONGWOOD, FL

LOCATION.--Lat 28°43'07", long 81°18'32", in SW¼ sec.27, T.20 S., R.30 E., Seminole County, Hydrologic Unit 03080101, on left downstream side of culvert on State Highway 419, 50 ft upstream from Seaboard Coast Line Railroad bridge, 2.5 mi northeast of Longwood, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--21.2 mi².

PERIOD OF RECORD.--

DISCHARGE: February 1972 to September 1975, October 1975 to September 1977 (discharge measurements only), October 1977 to September 1979, October 1980 to current year (discharge measurements only).

WATER TEMPERATURE: October 1980 to current year. Records of miscellaneous temperature observations prior to October 1980 are unpublished and are available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Seminole County Engineer). Feb. 8, 1972 to Nov. 4, 1975, and July 27, 1977 to Sept. 30, 1979, water-stage recorder, and Nov. 5, 1975 to July 26, 1977, nonrecording gage at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum discharge, 429 ft³/s, July 19, 1978; minimum measured discharge, 0.15 ft³/s, June 25, 1981.

WATER TEMPERATURE: (1980-85); maximum observed, 29.5°C Aug. 11, 1981; minimum observed, 12.0°C Jan. 6, 1981.

DISCHARGE MEASUREMENTS AND WATER TEMPERATURE, WATER YEAR OCTOBER 1984 to SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)
OCT				MAY			
10...	1035	2.3	--	08...	1047	1.2	--
NOV				JUN			
20...	1125	4.3	19.0	18...	0838	3.5	--
JAN				AUG			
15...	1220	2.3	13.0	21...	1253	24	--
MAR							
11...	1140	.84	22.0				

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234400 GEE CREEK NEAR LONGWOOD, FL

LOCATION.--Lat 28°42'14", long 81°17'27", in SE¼ sec.38, T.20 S., R.30 E., Seminole County, Hydrologic Unit 03080101, on left downstream side of box culvert on State Highway 419, 700 ft upstream from Seaboard Coast Line Railroad bridge, 1.0 mi upstream from mouth, and 3.5 mi east of Longwood.

DRAINAGE AREA.--12.8 mi².

PERIOD OF RECORD.--February 1972 to September 1979, October 1980 to July 1985 (discharge measurements only), August to September 1985.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Seminole County Engineer). Apr. 11, 1978 to Sept. 30, 1979 at site 400 ft upstream at same datum, Oct. 1, 1980 to July 31, 1984, nonrecording gage at present site and datum.

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

AVERAGE DISCHARGE.--7 years (water years 1973-79), 17.0 ft³/s; 12,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 310 ft³/s, July 19, 1978, maximum gage height, 14.69 ft, June 30, 1974; minimum discharge, 1.2 ft³/s, May 1, 1975, minimum gage height, 5.56 ft³/s, Dec. 5, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s and maximum (*) during period August to September.:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 27	2000	101	11.39	Sept. 20	2000	*222	*13.60
Aug. 31	1600	82	10.95				

Minimum discharge, 18 ft³/s, Sept. 12, gage height 8.76 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, PERIOD AUGUST TO SEPTEMBER 1985
MEAN VALUES

[illegible]

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234990 LITTLE WEKIVA RIVER NEAR ALTAMONTE SPRINGS, FL

LOCATION.--Lat 28°41'14", long 81°23'50", in SE¼ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, on right bank 125 ft downstream from bridge on State Highway 434, 125 ft upstream from Sanlando Springs outlet, 2.9 mi northwest of Post Office in Altamonte Springs, and 5.5 mi upstream from mouth.

DRAINAGE AREA.--90.7 mi².

PERIOD OF RECORD.--February 1972 to September 1979, February 1981 to September 1982 (gage heights and discharge measurements only), October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Seminole County Engineer). Prior to Oct. 1, 1980, at site 75 ft upstream at same datum.

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

AVERAGE DISCHARGE.--10 years (water years 1973-79, 1983-85), 34.1 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 592 ft³/s, July 22, 1984, gage height, 27.34 ft; minimum, 1.9 ft³/s May 7, 1973; minimum gage height, 23.14 ft, Jan. 1, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 258 ft³/s, June 15, gage height, 26.42 ft; minimum discharge, 11 ft³/s, Jan. 17; minimum gage height, 23.14 ft, Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	20	19	14	17	22	22	22	29	44	62	105
2	41	20	18	15	17	24	23	22	26	43	70	101
3	39	18	20	18	17	20	24	22	27	41	88	97
4	37	18	21	17	17	21	22	27	28	35	100	96
5	36	19	21	15	18	22	21	20	27	34	88	94
6	32	19	21	14	18	22	22	21	27	32	80	94
7	30	19	20	15	18	22	21	20	26	31	81	90
8	30	19	18	15	19	22	22	20	27	31	75	82
9	30	19	17	16	19	23	21	19	24	31	67	75
10	30	18	19	15	19	20	21	19	34	29	75	68
11	29	17	19	15	20	21	21	18	39	30	69	60
12	29	18	19	15	19	23	23	18	34	56	80	55
13	27	19	18	15	19	23	25	18	64	40	92	60
14	26	19	18	15	19	22	21	18	42	41	88	55
15	27	19	17	15	20	23	25	19	85	53	78	47
16	27	19	16	14	20	23	28	18	58	52	71	47
17	26	18	17	14	19	21	27	18	62	45	76	50
18	25	17	18	15	20	22	26	19	60	47	98	51
19	25	18	18	16	20	22	25	17	57	61	93	48
20	22	19	18	15	21	22	23	21	53	60	92	106
21	21	20	18	16	20	27	20	24	50	57	81	113
22	21	23	16	18	20	25	21	23	52	63	75	138
23	21	22	16	17	20	22	22	38	49	60	67	156
24	20	21	15	17	18	21	22	35	48	55	55	142
25	20	21	15	16	20	22	21	29	45	51	52	125
26	21	21	16	16	21	23	22	25	55	47	56	108
27	19	22	18	16	22	23	21	27	44	44	70	95
28	19	22	17	16	21	24	18	30	44	40	85	80
29	19	20	16	17	---	24	27	31	50	39	76	69
30	20	19	15	17	---	23	22	31	45	59	69	66
31	20	---	15	17	---	21	---	30	---	65	86	---
TOTAL	832	583	549	486	538	695	679	719	1311	1416	2395	2573
MEAN	26.8	19.4	17.7	15.7	19.2	22.4	22.6	23.2	43.7	45.7	77.3	85.8
MAX	43	23	21	18	22	27	28	38	85	65	100	156
MIN	19	17	15	14	17	20	18	17	24	29	52	47
CAL YR 1984	TOTAL	15015	MEAN	41.0	MAX	270	MIN	14				
WTR YR 1985	TOTAL	12776	MEAN	35.0	MAX	156	MIN	14				

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235000 WEKIVA RIVER NEAR SANFORD, FL

LOCATION.--Lat 28°48'54", long 81°25'10", in SE¼ sec.21, T.19 S., R.29 E., Seminole County, Hydrologic Unit 03080101, near right bank at downstream side of bridge on State Highway 46, 4.5 mi downstream from Little Wekiva River, 6.7 mi upstream from mouth, and 8.9 mi west of Sanford.

DRAINAGE AREA.--189 mi².

PERIOD OF RECORD.--October 1931 to September 1935 (discharge measurements only), October 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4.96 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 19, 1960, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records fair. Flow includes large ground-water inflow.

AVERAGE DISCHARGE.--50 years, 287 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,060 ft³/s, Sept. 17, 1945; maximum gage height, 6.09 ft, Sept. 12, 1960; minimum discharge observed, 105 ft³/s, June 5-13, 1939; minimum gage height, 1.75 ft, Mar. 13-16, 18, 19, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 734 ft³/s, Sept. 21; maximum gage height, 3.42 ft, Sept. 21; minimum daily discharge, 217 ft³/s, Jan. 22, 24, 26-31, Feb. 1-4, 25; minimum gage height, 1.88 ft, Jan. 14, 17, 21 to Feb. 6, Feb. 23-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	257	235	222	217	221	221	251	232	256	291	598
2	274	257	234	222	217	221	223	242	230	254	287	600
3	271	256	233	229	217	221	224	239	228	250	288	540
4	269	257	233	239	217	220	224	237	228	248	323	480
5	268	255	234	233	219	220	222	240	228	248	337	435
6	265	253	233	226	219	221	228	237	227	251	320	403
7	262	249	232	223	221	221	237	235	226	252	308	374
8	261	248	230	222	222	220	233	234	225	250	319	353
9	261	247	228	222	222	222	227	234	225	249	327	333
10	260	247	227	222	221	222	226	232	228	249	329	319
11	261	247	228	221	221	220	225	230	230	249	340	304
12	262	244	228	219	222	221	223	229	240	251	339	307
13	260	244	227	219	221	222	232	227	250	270	349	339
14	259	243	227	218	220	222	236	228	258	276	362	388
15	259	243	225	219	221	223	235	227	275	273	361	373
16	259	243	223	219	220	223	236	227	286	274	344	345
17	259	241	224	218	220	223	234	224	269	277	330	345
18	259	239	225	220	220	223	231	223	260	289	399	373
19	258	239	226	222	220	223	231	223	255	290	391	366
20	257	239	226	221	220	223	230	225	253	314	367	552
21	256	239	225	218	220	226	230	242	266	306	384	734
22	257	247	224	217	219	242	228	238	260	299	363	720
23	257	259	223	218	219	234	228	230	254	292	400	643
24	257	256	222	217	218	226	231	242	249	284	399	551
25	256	247	222	218	217	225	231	247	247	274	358	480
26	259	243	222	217	219	225	231	240	245	270	329	430
27	260	240	224	217	220	225	231	235	249	268	398	396
28	258	239	225	217	221	225	229	236	247	269	426	372
29	257	239	224	217	---	225	234	235	250	268	430	351
30	257	236	222	217	---	224	268	235	259	272	413	336
31	257	---	222	217	---	222	---	233	---	284	494	---
TOTAL	8094	7393	7033	6846	6150	6931	6919	7257	7379	8356	11105	13140
MEAN	261	246	227	221	220	224	231	234	246	270	358	438
MAX	279	259	235	239	222	242	268	251	286	314	494	734
MIN	256	236	222	217	217	220	221	223	225	248	287	304
CAL YR 1984	TOTAL	109205	MEAN	298	MAX	570	MIN	222				
WTR YR 1985	TOTAL	96603	MEAN	265	MAX	734	MIN	217				

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235192 TRACY CANAL NEAR PAISLEY, FL

LOCATION.--Lat 28°56'56", long 81°30'42", in SEk sec.4, T.18 S., R.28 E., Lake County, Hydrologic Unit 03080101, on left bank at downstream side of culverts on county road, 0.5 mi upstream from Lake Norris, 2.1 mi downstream from Lake Tracy, and 3.1 mi southeast of Paisley.

DRAINAGE AREA.--29.1 mi².

PERIOD OF RECORD.--August 1982 to current year (discharge measurements only).

REMARKS.--Discharge affected by backwater from Lake Norris.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured, 40 ft³/s, Apr. 11, 1984; minimum measured, 0.25 ft³/s, Apr. 9, 1985.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT			APR		
02...	1450	30	09...	1135	.25
DEC			AUG		
11...	1220	2.9	07...	1145	7.7
FEB					
05...	1200	1.6			

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235200 BLACK WATER CREEK NEAR CASSIA, FL

LOCATION.--Lat 28°52'28", long 81°29'23", in SW¼ sec.35, T.18 S., R.28 E., Lake County, Hydrologic Unit 03080101, at bridge on State Highway 44, 1.5 mi southwest of Cassia, and 13 mi upstream from mouth. Prior to June 10, 1985 at site 1,000 ft upstream.

DRAINAGE AREA.--126 mi².

PERIOD OF RECORD.--Annual maximum, water years 1962-67, 1970-80; August 1967 to September 1969, March 1981 to current year (fragmentary).

GAGE.--Water-stage recorder. Datum of gage is 18.55 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Sept. 20, 1962 to Aug. 7, 1967, and Oct. 1, 1969 to Mar. 23, 1981, crest-stage gage, Mar. 23, 1981 to June 10, 1983, water-stage recorder and June 10, 1983 to June 10, 1985, nonrecording gage at site 1,000 ft upstream at same datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 749 ft³/s, Sept. 1, 1968, gage height, 9.93 ft; minimum recorded, 3.2 ft³/s, June 11,12, 1985, gage height, 4.53 ft, but may have been less during period of no gage-height record Apr. 10 to June 9, 1985..

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 393 ft³/s, Sept. 21, gage height, 8.50 ft; minimum discharge recorded, 3.2 ft³/s, June 11,12, gage height, 4.53 ft, but may have been less during period of no gage-height record Apr. 10 to June 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	22	---	---	---	---	---	12	13	160
2	97	---	---	22	---	---	---	---	---	12	12	208
3	---	---	---	33	---	---	---	---	---	10	11	208
4	---	---	---	31	---	---	---	---	---	9.6	16	196
5	---	---	---	29	20	---	---	---	---	9.5	16	186
6	---	---	---	28	---	---	---	---	---	12	15	189
7	---	---	---	28	---	---	---	---	---	11	24	194
8	---	---	---	27	---	---	---	---	---	10	53	190
9	---	---	---	27	---	---	13	---	---	9.2	74	180
10	---	---	---	26	---	---	---	---	3.3	8.5	101	170
11	---	---	27	26	---	---	---	---	3.3	9.0	136	158
12	---	---	---	25	---	---	---	---	3.9	8.6	138	145
13	---	---	---	24	---	---	---	---	5.4	8.7	167	157
14	---	---	---	23	---	---	---	---	7.4	8.9	154	322
15	---	---	---	22	---	---	---	---	15	10	127	357
16	---	---	---	22	---	---	---	---	14	11	105	323
17	---	---	---	22	---	---	---	---	13	11	90	286
18	---	---	---	22	---	---	---	---	11	11	80	272
19	---	---	---	24	---	---	---	---	9.7	12	71	260
20	---	---	---	---	---	---	---	---	9.1	13	68	303
21	---	---	---	---	---	---	---	---	9.4	12	71	385
22	---	---	---	---	---	---	---	---	11	12	74	382
23	---	---	---	---	---	---	---	---	11	13	74	354
24	---	---	---	---	---	---	---	---	9.8	13	71	327
25	---	---	---	---	---	---	---	---	8.9	12	69	304
26	---	---	---	---	---	---	---	---	8.4	11	64	284
27	---	---	---	---	---	---	---	---	8.1	11	65	266
28	---	---	---	---	---	---	---	---	8.2	10	88	250
29	---	---	---	---	---	---	---	---	9.6	9.8	99	234
30	---	---	---	---	---	---	---	---	13	9.3	100	218
31	---	---	---	---	---	---	---	---	---	10	108	---
TOTAL	---	---	---	---	---	---	---	---	---	330.1	2354	7468
MEAN	---	---	---	---	---	---	---	---	---	10.6	75.9	249
MAX	---	---	---	---	---	---	---	---	---	13	167	385
MIN	---	---	---	---	---	---	---	---	---	8.5	11	145
CFSM	---	---	---	---	---	---	---	---	---	.08	.60	1.98
IN.	---	---	---	---	---	---	---	---	---	.10	.69	2.20

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235500 BLUE SPRINGS NEAR ORANGE CITY, FL

LOCATION.--Lat 28°56'38", long 81°20'24", in NE¼ sec.8, T.18 S., R.30 E., Volusia County, Hydrologic Unit 03080101, on left bank of Blue Springs Run, 800 ft upstream from St. Johns River, 0.2 mi downstream from head of springs, and 2.5 mi west of Orange City.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--March 1932 to current year (discharge measurements only).

REMARKS.--Discharge affected by backwater from St. Johns River.

AVERAGE DISCHARGE.--427 measurements, 161 ft³/s, 104 mgd.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 214 ft³/s, Nov. 1, 1960; minimum measured, 63 ft³/s, Nov. 6, 1935, but may be in error due to abnormal amount of backwater from St. Johns River causing adverse measuring conditions.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1964 to current year.

WATER TEMPERATURE: October 1975 to current year. Records of miscellaneous temperature observations prior to October 1975 are unpublished and are available in files of the Orlando Subdistrict Office.

DISCHARGE MEASUREMENTS AND WATER TEMPERATURE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	TEMPER- ATURE (DEG C) (00010)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
DEC					
12...	1230	169	1300	23.0	330
FEB					
05...	1030	170	1480	23.0	350
13...	1200	172	1400	22.5	350
APR					
16...	1030	141	--	23.0	310
JUN					
10...	1130	164	--	23.5	360
SEP					
27...	1450	122	1750	23.0	460

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DE LAND, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°00'29", long 81°22'58", in land grant 38, T.17 S., R.29 E., Lake County, Hydrologic Unit 03080101, near left bank on downstream side of Francis P. Whitehair Bridge on State Highway 44, 5 mi west of De Land, and 142 mi upstream from mouth.

DRAINAGE AREA.--3,066 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only prior to February 1934, published in WSP 1304.

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 28, 1936, nonrecording gage at site of former Crows Bluff Bridge about 1,000 ft downstream and May 28, 1936 to July 21, 1970, water-stage recorder at site 0.4 mi downstream at datum 1.11 ft lower. Oct. 1, 1959 to Sept. 30, 1975, and Oct. 1, 1984 to Sept. 30, 1985, water-stage recorder for Lake Monroe near Sanford (station 02234499) used as auxiliary gage for this station.

REMARKS.--No estimated daily discharges. Records poor. Flow occasionally reversed as a result of tide and wind effect.

AVERAGE DISCHARGE.--52 years, 3,111 ft³/s, 13.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,100 ft³/s, Oct. 15, 1953; maximum gage height, 6.06 ft, present datum, Oct. 11, 12, 1953; minimum daily, -3,030 ft³/s, Aug. 23, 1957; minimum gage height since at least May 28, 1936, -0.59 ft, present datum, Apr. 2, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,490 ft³/s, Sept. 28; maximum gage height, 3.43 ft, Sept 30; maximum daily reverse flow, 1,130 ft³/s, May 6; minimum gage height, 0.00 ft, Apr. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	3240	2430	3260	2770	1760	1620	1730	367	2090	1110	1500	4550	
2	3240	2170	3440	2700	1990	786	1430	367	2020	1230	1620	4310	
3	3370	2110	3550	2700	1810	364	1080	794	2140	1410	1130	4130	
4	3570	1850	3480	2320	1210	365	1200	0	2140	1470	448	4140	
5	3760	1330	3210	2130	181	366	1260	-1120	2080	1530	516	4490	
6	3950	868	2880	2440	62	-61	1200	-1130	2250	1220	713	4830	
7	3940	1200	2430	2440	1250	-555	841	-437	2370	1280	909	5100	
8	3930	1210	2880	2310	1440	-869	723	497	2250	1220	1430	5430	
9	3730	1410	3120	2240	1690	-435	364	992	2070	1220	1630	5690	
10	3330	1740	3290	1820	2010	434	546	868	2010	1270	1950	5870	
11	2870	2000	3470	1510	2430	621	849	746	1940	1210	2020	5930	
12	2530	1860	3460	765	2420	989	850	746	2060	1210	1950	5920	
13	2530	2120	3320	1150	2710	1350	427	499	2350	1280	1890	5800	
14	2800	2310	3130	1720	3280	1530	-62	437	2230	1220	1960	5780	
15	3000	2430	2940	1910	3090	1400	851	623	3030	1280	2100	5280	
16	3050	2420	2750	2330	2550	978	988	809	3470	1400	2360	4900	
17	3110	2410	2560	2510	2300	492	1110	994	3150	1280	2620	4390	
18	3170	2540	2440	2500	2060	-187	1230	871	3080	1110	2870	4630	
19	3290	2530	2370	2610	1820	871	1290	995	3180	1120	3010	4580	
20	3540	2390	2370	2540	1640	1120	1530	995	3230	881	3140	5050	
21	3590	1690	2370	1750	1220	1480	1770	1990	3050	1260	3210	6320	
22	3580	728	2370	2120	978	1230	1950	1990	2710	1390	3340	6690	
23	3440	67	2300	2600	1220	988	2130	2160	2290	1770	3470	6920	
24	3230	408	2300	2830	1580	804	2240	2100	1820	1390	3540	7130	
25	3040	1090	2110	2870	1820	1240	2420	2280	1460	1700	3670	7410	
26	2650	1770	2170	2500	2050	1230	2350	2040	1400	1880	3740	7410	
27	2450	2110	1730	2670	2160	1230	2410	1610	1520	2060	3940	7480	
28	2320	2500	1930	2540	2150	1470	2400	1610	1830	2180	4290	7490	
29	2380	2690	2180	2060	---	1760	2160	2030	2090	2110	4360	7360	
30	2440	2940	2480	1700	---	1990	1330	2150	1110	1860	4370	7360	
31	2570	---	2660	1580	---	2040	---	2210	---	1620	4330	---	
TOTAL	97640	55321	84950	68635	50881	26641	40597	31083	68420	44171	78026	172370	
MEAN	3150	1844	2740	2214	1817	859	1353	1003	2281	1425	2517	5746	
MAX	3950	2940	3550	2870	3280	2040	2420	2280	3470	2180	4370	7490	
MIN	2320	67	1730	765	62	-869	-62	-1130	1110	881	448	4130	
CFSM	1.03	.60	.89	.72	.59	.28	.44	.33	.74	.46	.82	1.87	
IN.	1.18	.67	1.03	.83	.62	.32	.49	.38	.83	.54	.95	2.09	
CAL YR 1984	TOTAL	1153851		MEAN	3153	MAX	5360	MIN	67	CFSM	1.03	IN.	14.00
WTR YR 1985	TOTAL	818735		MEAN	2243	MAX	7490	MIN	-1130	CFSM	.73	IN.	9.93

NOTE.--Negative figures indicate reverse flow.

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DE LAND, FL
(National stream-quality accounting network station)

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.52	1.67	1.87	.93	.33	.12	.03	.45	.49	.59	.78	1.98
2	2.53	1.70	1.77	.88	.22	.25	.03	.46	.48	.56	.79	2.09
3	2.51	1.72	1.68	.86	.18	.33	.09	.41	.44	.49	.89	2.20
4	2.46	1.76	1.63	.86	.28	.36	.09	.53	.42	.45	1.19	2.27
5	2.40	1.85	1.61	.85	.47	.38	.07	.73	.42	.41	1.35	2.31
6	2.33	1.95	1.61	.80	.63	.45	.06	.81	.37	.43	1.42	2.30
7	2.27	1.99	1.67	.78	.77	.57	.14	.78	.33	.39	1.46	2.28
8	2.24	2.02	1.58	.77	.84	.68	.19	.71	.32	.35	1.50	2.24
9	2.23	2.02	1.48	.76	.86	.69	.29	.66	.35	.33	1.50	2.20
10	2.27	1.98	1.37	.85	.84	.66	.31	.67	.35	.30	1.46	2.15
11	2.36	1.90	1.28	.94	.76	.68	.29	.70	.33	.27	1.49	2.11
12	2.43	1.85	1.21	1.13	.66	.62	.31	.70	.29	.27	1.51	2.10
13	2.43	1.78	1.18	1.20	.53	.53	.41	.75	.21	.33	1.53	2.15
14	2.37	1.72	1.18	1.15	.35	.42	.55	.77	.22	.40	1.60	2.30
15	2.31	1.66	1.18	1.07	.28	.38	.60	.75	.30	.41	1.61	2.46
16	2.25	1.60	1.20	.96	.29	.43	.59	.73	.34	.42	1.60	2.58
17	2.19	1.55	1.23	.86	.28	.54	.56	.70	.29	.45	1.58	2.74
18	2.13	1.50	1.23	.78	.29	.73	.55	.72	.22	.56	1.56	2.85
19	2.05	1.44	1.24	.71	.31	.72	.54	.71	.13	.73	1.57	2.95
20	1.95	1.40	1.22	.68	.32	.67	.50	.72	.06	.91	1.58	3.14
21	1.87	1.52	1.21	.81	.38	.61	.45	.74	.08	.93	1.60	3.31
22	1.80	1.79	1.19	.75	.44	.59	.40	.68	.16	.94	1.60	3.36
23	1.76	2.08	1.18	.62	.41	.59	.34	.60	.21	.95	1.60	3.39
24	1.74	2.31	1.17	.51	.34	.63	.30	.59	.28	.95	1.62	3.39
25	1.74	2.40	1.19	.42	.26	.60	.24	.56	.35	.93	1.63	3.37
26	1.78	2.36	1.19	.40	.18	.58	.22	.60	.36	.87	1.63	3.36
27	1.82	2.29	1.27	.30	.11	.56	.18	.66	.34	.78	1.64	3.36
28	1.83	2.19	1.27	.24	.06	.48	.15	.66	.40	.71	1.73	3.39
29	1.79	2.10	1.21	.26	---	.35	.14	.57	.51	.68	1.77	3.41
30	1.74	1.99	1.11	.33	---	.21	.29	.52	.60	.69	1.80	3.41
31	1.69	---	1.02	.36	---	.08	---	.49	---	.73	1.89	---
MEAN	2.12	1.87	1.34	.74	.42	.50	.30	.65	.32	.59	1.50	2.70
MAX	2.53	2.40	1.87	1.20	.86	.73	.60	.81	.60	.95	1.89	3.41
MIN	1.69	1.40	1.02	.24	.06	.08	.03	.41	.06	.27	.78	1.98
CAL YR 1984	MEAN	1.36	MAX	2.53	MIN	.35						
WTR YR 1985	MEAN	1.09	MAX	3.41	MIN	.03						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DE LAND, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-49, 1954, 1962, 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	DIS- CHARGE (CFS) (00060)	STREAM STAGE (FT ABOVE DATUM) (00065)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 27...	0936	2110	2.30	890	7.3	18.0	2.5	5.9	43
JAN 22...	1228	2120	.78	1140	8.1	10.5	4.0	9.2	49
FEB 25...	1545	1820	.26	1080	8.2	21.0	1.5	8.6	53
MAY 02...	1636	367	.42	1310	8.6	26.5	3.0	7.9	59
JUL 03...	1415	1410	.51	1110	8.2	29.0	2.7	13.2	60
AUG 13...	1020	1890	1.52	1300	7.8	29.0	2.0	5.5	61

DATE	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)	ALKA- LINEITY FIELD (MG/L AS CACO3) (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
NOV 27...	17	110	4.1	100	51	230	<.10	4.7	504
JAN 22...	20	140	5.2	75	60	260	.10	2.0	673
FEB 25...	21	130	6.1	92	66	270	.20	2.1	647
MAY 02...	22	150	6.7	100	70	300	.20	3.4	775
JUL 03...	22	140	--	114	100	280	.20	6.3	689
AUG 13...	24	160	6.7	60	130	320	.20	7.3	820

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 27...	.26	.020	2.4	.100	.070	.070	3	67
JAN 22...	.13	.020	1.2	.080	.030	.020	5	60
FEB 25...	.18	.050	1.8	.090	.080	.060	8	38
MAY 02...	.30	.060	1.2	.090	.040	.020	9	11
JUL 03...	<.10	<.010	.90	.070	.050	.030	9	33
AUG 13...	<.10	.040	1.2	.100	.050	.050	--	1

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER
(National stream-quality accounting network station)

02236000 ST. JOHNS RIVER NEAR DE LAND, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
NOV 27...	0936	30	<1	25	<.0	<1	<1	<3	2	61	3
FEB 25...	1545	20	<1	33	<.5	<1	<1	<3	2	25	<1
MAY 02...	1636	40	<1	37	<.5	<1	<1	<3	2	8	5
AUG 13...	1020	30	1	37	1.3	<1	2	<3	5	56	<1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	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)
NOV 27...	5	3	<.1	<10	2	<1	<1	860	<6	9
FEB 25...	9	2	.2	<10	<1	<1	1	1200	<6	20
MAY 02...	9	<1	.3	<10	1	<1	<1	1300	<6	10
AUG 13...	9	9	.1	<10	3	<1	<1	1400	<6	6

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAHAHA RIVER

02236120 DEEP CREEK NEAR BARBERVILLE, FL

LOCATION.--Lat 29°09'47", long 81°23'27", in SW¼ sec.27, T.15 S., R.29 E., Volusia County, Hydrologic Unit 03080101, on downstream side of bridge on U.S. Highway 17, 2.1 mi upstream from mouth, and 2.5 mi southeast of Barberville.

DRAINAGE AREA.--23 mi², approximately.

PERIOD OF RECORD.--October 1964 to September 1970, October 1982 to current year (annual peak discharge and periodic discharge measurements). Annual peak discharge water years 1971-82.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 2.49 ft below National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s Aug. 29, 1968, gage height 11.23 ft; maximum discharge measured, 837 ft³/s Oct. 19, 1968; no flow observed in 1967, 1968, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 129 ft³/s, Nov. 24, gage height 8.26 ft.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT			APR		
03...	1350	84	08...	1350	.70
DEC			JUN		
17...	1145	9.8	04...	1635	.07
FEB			AUG		
05...	1550	3.8	07...	1615	64

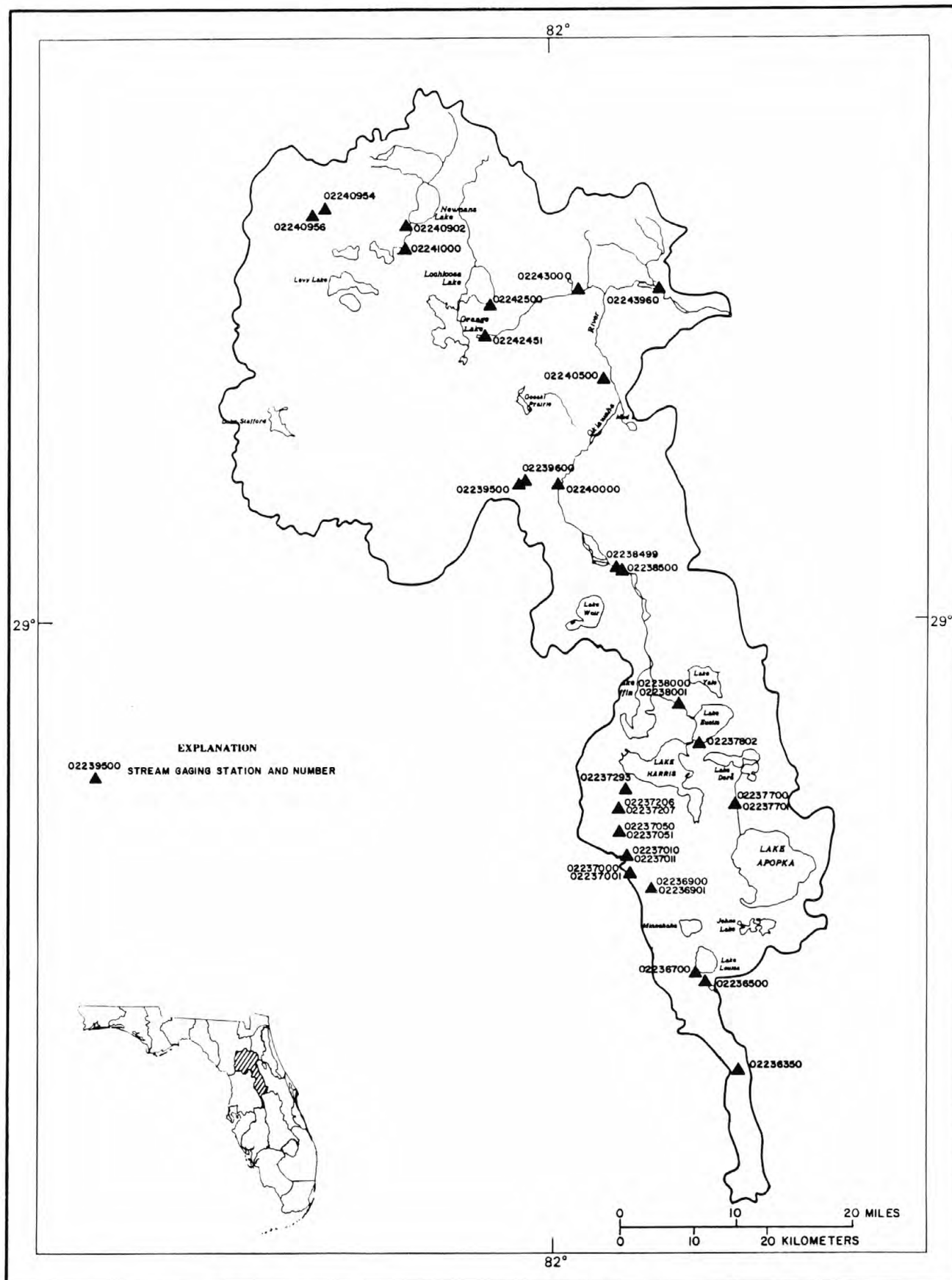


Figure 10. Location of stream gaging stations in the Oklawaha River basin.

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02236350 GREEN SWAMP RUN NEAR EVA, FL

LOCATION.--Lat 28°18'39", long 81°41'08", in NW¼ sec.14, T.25 S., R.26 E., Polk County, Hydrologic Unit 03080102, on left bank, 20 ft downstream from culverts on Sand Mine Road, 1.1 mi west of U.S. Highway 27, 9.1 mi east of Eva, and 12.8 mi upstream from mouth.

DRAINAGE AREA.--43 mi², approximately.

PERIOD OF RECORD.--July 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 116.16 ft above National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--6 years, 14.7 ft³/s, 4.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 85 ft³/s, Aug. 4, 1982; maximum gage height, 5.78 ft, Apr. 9, 1984; no flow for many days most years; creek dry at gage for many days during 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 33 ft³/s, Sept. 22,23; maximum gage height, 4.72 ft, Sept. 22,23; no flow Oct. 11 to Aug. 13, Aug. 18-20, 23-30; minimum gage height, 0.85 ft, June 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	13
2	.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	22
3	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	23
4	.17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	24
5	.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	25
6	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	25
7	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	25
8	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	24
9	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	23
10	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	21
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	20
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	19
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	20
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	24
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	23
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	22
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	21
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	20
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	19
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	22
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	30
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	33
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	33
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	32
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	31
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	29
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	28
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	27
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	25
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	24
31	.00	---	.00	.00	---	.00	---	.00	---	.00	1.7	---
TOTAL	1.48	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.94	727
MEAN	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	24.2
MAX	.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.7	33
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	13
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.56
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.63
CAL YR 1984	TOTAL	7032.31	MEAN	19.2	MAX	76	MIN	.00	CFSM	.45	IN.	6.08
WTR YR 1985	TOTAL	730.42	MEAN	2.00	MAX	33	MIN	.00	CFSM	.05	IN.	.63

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL

LOCATION.--Lat 28°26'51", long 81°44'25", in NE¼ sec.31, T.23 S., R.26 E., Lake County, Hydrologic Unit 03080102, near left bank 40 ft downstream from log bridge, 1 mi upstream from mouth at Lake Louisa, and 7.5 mi southeast of Clermont.

DRAINAGE AREA.--68 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 98.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Some interconnection at high stages with Little Creek and Withlacoochee River basin.

AVERAGE DISCHARGE.--27 years (water years 1959-85), 27.0 ft³/s, 5.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 691 ft³/s, Sept. 13, 1960, gage height, 6.23 ft; no flow for many days in some years; creek dry at gage for many days in 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33 ft³/s, Sept. 6, gage height, 3.36 ft; minimum, no flow for many days; minimum gage height, 0.16 ft, July 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	27	5.6	5.2	1.9	1.1	1.1	3.7	.16	.00	.78	6.3	14		
2	25	5.4	5.1	1.9	1.1	1.0	3.4	.14	.00	.73	7.1	16		
3	23	5.2	4.9	2.0	1.1	.96	3.1	.13	.00	.57	6.5	18		
4	22	5.1	4.7	2.3	1.1	.93	2.7	.12	.00	.49	5.5	24		
5	20	4.9	4.8	2.2	1.0	.90	2.4	.10	.00	.42	4.6	30		
6	19	4.7	4.8	2.0	1.5	.88	2.3	.07	.00	.47	3.9	32		
7	18	4.5	4.6	1.9	1.5	.83	2.4	.05	.00	.57	3.6	30		
8	17	4.4	4.4	1.9	1.5	.77	2.5	.04	.00	.39	3.6	27		
9	16	4.2	4.2	1.8	1.5	.69	2.2	.02	.00	.29	6.2	25		
10	15	4.1	4.0	1.8	1.5	.65	2.0	.01	.00	.24	7.1	22		
11	14	4.0	3.9	1.7	1.8	.59	1.9	.01	.00	.21	6.6	19		
12	13	3.9	3.8	1.6	1.8	.56	1.7	.20	.00	.19	6.2	16		
13	12	3.7	3.6	1.5	1.7	.50	1.8	.17	.00	.26	6.2	14		
14	12	3.6	3.5	1.5	1.7	.47	2.0	.10	.15	.41	6.5	13		
15	11	3.5	3.4	1.5	1.7	.39	1.8	.05	.89	.28	6.2	11		
16	9.9	3.4	3.3	1.4	1.7	.70	1.6	.06	1.1	.27	6.0	9.6		
17	9.6	3.4	3.2	1.4	1.7	.78	1.4	.04	.67	.37	5.9	8.2		
18	9.0	3.3	3.1	1.7	1.7	.75	1.3	.01	.48	.47	5.9	7.3		
19	8.5	3.2	2.9	1.7	1.7	.62	1.1	.00	.35	.59	8.6	7.3		
20	8.0	3.1	2.8	1.6	1.6	.53	1.0	.00	.31	1.6	11	11		
21	7.6	3.1	2.8	1.6	1.5	.51	.89	.00	.61	2.1	16	19		
22	7.3	4.1	2.7	1.5	1.5	3.3	.77	.00	1.9	2.4	14	20		
23	7.0	5.1	2.6	1.4	1.4	4.5	.67	.00	2.4	2.1	12	18		
24	6.6	5.4	2.5	1.3	1.3	5.1	.56	.00	1.6	3.4	9.7	16		
25	6.3	5.8	2.4	1.4	1.3	5.5	.45	.00	1.2	12	8.3	14		
26	6.2	6.0	2.4	1.3	1.3	5.7	.36	.00	.94	11	7.0	12		
27	6.5	6.0	2.3	1.2	1.2	5.6	.26	.00	.93	8.8	8.6	12		
28	6.4	6.0	2.3	1.2	1.1	5.5	.22	.00	1.0	6.6	12	13		
29	6.2	5.9	2.2	1.2	---	5.1	.20	.00	1.0	4.7	10	11		
30	6.0	5.5	2.1	1.2	---	4.6	.20	.00	.79	3.7	9.4	10		
31	5.8	---	2.0	1.2	---	4.1	---	.00	---	3.7	11	---		
TOTAL	380.9	136.1	106.5	49.8	40.6	64.11	46.88	1.48	16.32	70.10	241.5	499.4		
MEAN	12.3	4.54	3.44	1.61	1.45	2.07	1.56	.05	.54	2.26	7.79	16.6		
MAX	27	6.0	5.2	2.3	1.8	5.7	3.7	.20	2.4	12	16	32		
MIN	5.8	3.1	2.0	1.2	1.0	.39	.20	.00	.00	.19	3.6	7.3		
CFSM	.18	.07	.05	.02	.02	.03	.02	.00	.01	.03	.11	.24		
IN.	.21	.07	.06	.03	.02	.04	.03	.00	.01	.04	.13	.27		
CAL YR 1984	TOTAL	12597.9		MEAN	34.4		MAX	147	MIN	2.0	CFSM	.51	IN.	6.89
WTR YR 1985	TOTAL	1653.69		MEAN	4.53		MAX	32	MIN	.00	CFSM	.07	IN.	.90

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1958-61, 1963, 1966-77, 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1982 to current year.

WATER TEMPERATURE: January 1982 to current year.

DISSOLVED OXYGEN: January 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1982. Digital recorder--60-minute interval.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 225 microsiemens, Jan. 6,7, 1982; minimum daily mean, 42 microsiemens, Sept. 26,27, 1984.

WATER TEMPERATURE: Maximum daily mean, 27.5°C, July 25, 1983; minimum daily mean, 5.5°C, Jan. 22, 1985.

DISSOLVED OXYGEN: Maximum daily mean, 8.9 mg/L, Jan. 9, 1985; minimum daily mean, 1.6 mg/L, May 23, 1982, July 12, 1985.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 190 microsiemens, June 1; minimum daily mean, 54 microsiemens Oct. 24,25, Nov. 6.

WATER TEMPERATURE: Minimum daily mean, 5.5°C, Jan. 22.

DISSOLVED OXYGEN: Maximum daily mean, 8.9 mg/L, Jan 9; minimum daily mean, 1.6 mg/L, July 12.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	58	63	79	125	72	81	74	190	107	105	---
2	64	56	67	82	172	72	82	73	166	105	103	---
3	65	58	67	75	132	72	83	73	154	104	103	97
4	65	56	66	76	97	72	74	73	151	104	104	96
5	65	55	70	78	92	72	75	72	---	101	104	93
6	64	54	76	77	82	75	74	73	---	96	103	91
7	64	66	77	76	73	99	75	75	---	94	103	91
8	62	80	76	75	80	111	75	78	---	94	102	91
9	64	78	74	75	78	113	74	90	---	94	107	91
10	65	73	76	75	77	117	74	97	---	95	105	91
11	63	78	76	74	75	115	74	98	---	95	104	91
12	61	72	74	74	75	111	74	101	---	94	102	90
13	60	73	76	74	77	105	74	101	---	91	104	90
14	62	71	74	74	75	102	75	98	---	89	---	90
15	61	71	75	74	74	90	75	97	---	92	---	90
16	59	73	75	74	74	86	74	103	---	92	---	91
17	64	74	74	74	73	83	74	103	---	91	---	90
18	56	73	77	74	73	84	75	107	---	91	---	91
19	56	74	74	76	72	82	75	112	---	92	---	91
20	56	73	74	77	72	80	77	112	---	99	---	90
21	55	72	72	76	72	79	76	113	---	112	---	91
22	56	72	76	76	72	81	76	114	---	105	---	90
23	55	76	72	75	72	81	75	117	---	102	---	90
24	54	78	74	75	72	79	75	125	---	96	---	91
25	54	76	83	72	72	78	75	134	---	106	---	91
26	57	72	89	71	72	78	75	147	128	103	---	91
27	61	69	82	71	72	78	75	155	106	108	---	91
28	61	68	79	71	72	78	75	157	102	108	---	92
29	59	70	79	70	---	79	75	158	104	106	---	91
30	60	68	81	70	---	80	74	164	107	104	---	91
31	57	---	81	91	---	80	---	180	---	103	---	---
MEAN	60	70	75	75	83	87	76	109	---	99	---	---
MAX	65	80	89	91	172	117	83	180	---	112	---	---
MIN	54	54	63	70	72	72	74	72	---	89	---	---

CAL YR 1984 MEAN 66 MAX 123 MIN 42

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	23.0	16.0	18.5	16.0	20.0	21.5	21.0	24.0	24.0	25.0	---
2	22.0	22.5	17.0	19.0	18.0	20.0	19.5	21.0	24.5	24.5	25.0	---
3	21.0	22.5	18.0	19.0	18.0	19.5	17.5	21.5	25.5	24.5	25.0	25.5
4	21.0	22.5	18.0	17.5	17.0	20.0	17.5	22.0	25.0	24.5	25.5	24.5
5	21.5	22.5	19.0	14.0	17.5	21.0	18.5	21.5	---	25.0	25.5	24.5
6	21.5	20.5	19.0	12.5	17.5	20.5	19.0	21.0	---	24.5	25.5	25.0
7	21.5	18.0	14.5	11.5	16.0	20.0	19.5	21.0	---	24.5	25.5	25.0
8	22.0	17.5	12.0	12.5	13.5	19.5	20.5	21.5	---	25.5	25.0	25.0
9	22.0	18.0	12.0	11.5	12.0	20.0	19.0	22.0	---	25.5	24.0	25.5
10	22.0	18.0	12.0	12.0	13.0	20.0	17.5	21.5	---	25.5	24.5	25.5
11	22.0	18.5	13.5	13.5	14.0	20.5	18.0	22.0	---	25.5	25.0	25.5
12	22.0	16.5	14.5	12.0	13.0	20.5	18.0	22.0	---	25.0	25.5	25.5
13	22.0	14.5	14.5	10.5	11.0	20.5	19.0	23.0	---	24.0	25.0	25.0
14	21.5	14.0	16.0	10.5	10.5	20.5	20.0	23.5	---	24.0	---	24.0
15	21.5	15.0	16.5	11.5	11.0	20.5	20.0	23.5	---	24.0	---	23.5
16	22.0	16.0	16.5	10.5	10.5	21.0	20.0	23.5	---	24.0	---	23.5
17	22.5	16.5	17.0	12.5	11.0	20.5	20.0	22.5	---	24.0	---	23.5
18	22.5	17.0	17.0	14.0	12.5	17.0	20.5	22.0	---	24.0	---	23.5
19	22.5	18.5	16.5	12.5	14.5	15.5	20.5	21.5	---	23.5	---	23.0
20	22.5	19.0	16.5	11.5	16.0	16.5	21.0	23.0	---	24.0	---	22.5
21	23.0	18.5	16.5	8.0	16.0	17.0	20.5	23.5	---	24.5	---	22.5
22	23.0	16.5	17.0	5.5	17.0	18.5	20.5	24.5	---	24.5	---	23.5
23	22.5	15.0	16.5	6.5	18.0	19.0	20.5	24.0	---	24.5	---	24.5
24	22.5	16.0	17.0	8.5	19.0	19.0	21.5	23.5	---	23.5	---	24.5
25	22.5	17.0	17.5	11.5	19.0	19.5	21.5	23.5	---	23.5	---	24.5
26	23.0	17.0	18.5	11.0	19.5	19.0	21.5	23.0	25.0	25.0	---	25.0
27	23.5	17.5	19.0	9.0	19.5	19.0	21.5	22.0	24.5	25.0	---	24.5
28	24.0	18.0	19.5	11.0	19.5	19.5	21.5	22.0	24.0	25.5	---	24.0
29	24.0	16.5	18.5	12.0	---	20.0	22.0	22.5	24.5	26.0	---	24.0
30	23.5	14.5	18.0	11.5	---	21.0	22.0	23.0	24.5	25.5	---	24.0
31	23.0	---	18.0	14.0	---	21.0	---	23.5	---	25.0	---	---
MEAN	22.5	18.0	16.5	12.0	15.5	19.5	20.0	22.5	---	24.5	---	---
MAX	24.0	23.0	19.5	19.0	19.5	21.0	22.0	24.5	---	26.0	---	---
MIN	21.0	14.0	12.0	5.5	10.5	15.5	17.5	21.0	---	23.5	---	---
CAL YR 1984	MEAN	20.5	MAX	27.0	MIN	10.0						

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.8	7.0	6.7	7.5	6.1	5.7	3.4	---	2.8	3.9	---
2	3.6	4.8	6.8	6.5	6.6	6.0	6.3	3.4	---	3.0	3.4	---
3	3.6	4.7	6.5	6.2	6.2	6.3	7.0	3.0	---	2.6	3.6	3.7
4	3.7	4.8	6.4	6.4	6.3	6.2	7.0	3.1	---	2.6	3.7	3.6
5	3.8	4.8	6.3	7.6	6.3	5.6	6.7	3.1	---	2.5	3.8	3.4
6	3.9	5.4	6.3	8.4	5.7	5.6	6.1	---	---	2.3	3.9	3.3
7	3.9	6.0	7.3	8.8	6.4	5.6	6.2	---	---	3.1	3.7	3.2
8	3.8	6.4	8.3	8.7	7.5	5.6	6.0	---	---	2.6	3.5	3.2
9	3.8	6.3	8.5	8.9	8.4	5.4	6.2	---	---	2.0	3.7	3.2
10	3.8	6.3	8.5	---	8.3	5.3	6.7	---	---	2.0	3.8	3.2
11	3.8	6.2	8.2	---	8.0	5.1	6.7	---	---	1.8	4.0	3.3
12	3.8	6.7	7.8	---	8.2	4.9	6.3	---	---	1.6	3.8	3.4
13	3.9	7.3	7.8	---	---	4.7	6.1	---	---	2.1	3.4	3.5
14	4.1	7.7	7.5	---	---	4.6	6.0	---	---	2.5	---	3.8
15	4.1	7.5	7.3	---	---	4.4	5.7	---	---	2.1	---	4.0
16	4.1	7.3	7.2	---	---	4.4	5.9	---	---	2.1	---	4.1
17	4.2	7.2	7.1	---	---	4.2	5.9	---	---	2.2	---	4.2
18	4.3	6.9	7.1	---	---	5.8	5.7	---	---	2.7	---	4.3
19	4.4	6.6	7.1	---	8.7	6.7	5.4	---	---	2.9	---	4.4
20	4.4	6.3	7.2	---	8.2	6.6	5.2	---	---	4.3	---	4.6
21	4.5	6.4	7.3	---	8.1	6.0	5.2	---	---	4.4	---	4.3
22	4.5	6.5	7.1	---	7.8	6.2	5.1	---	---	4.0	---	4.2
23	4.6	6.7	7.2	---	7.5	6.2	4.9	---	---	4.1	---	4.2
24	4.7	6.9	7.2	---	6.9	6.2	4.6	---	---	4.3	---	4.1
25	4.7	6.7	7.0	---	6.6	6.2	4.4	---	---	3.8	---	4.2
26	4.6	6.6	6.8	---	6.5	6.3	4.3	---	3.3	3.4	---	4.2
27	4.4	6.5	6.5	---	6.2	6.4	4.1	---	2.7	3.3	---	4.3
28	4.4	6.3	6.3	---	6.2	6.3	3.9	---	2.6	3.6	---	4.3
29	4.4	6.6	6.5	---	---	6.2	3.6	---	2.7	3.3	---	4.2
30	4.5	7.2	6.6	8.6	---	6.0	3.2	---	2.6	3.2	---	4.3
31	4.7	---	6.8	8.2	---	5.8	---	---	---	3.6	---	---
MEAN	4.1	6.3	7.1	---	---	5.7	5.5	---	---	2.9	---	---
MAX	4.7	7.7	8.5	---	---	6.7	7.0	---	---	4.4	---	---
MIN	3.2	4.7	6.3	---	---	4.2	3.2	---	---	1.6	---	---

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02236700 LITTLE CREEK NEAR CLERMONT, FL

LOCATION.--Lat 28°27'39", long 81°45'26", in NE¼ sec.25, T.23 S., R.25 E., Lake County, Hydrologic Unit 03080102, on downstream side of culverts on Lake Nellie Road, 0.6 mi upstream from Lake Louisa, 2.3 mi east of State Highway 561, and 6.1 mi south of Clermont.

DRAINAGE AREA.--14.7 mi².

PERIOD OF RECORD.--Occasional discharge measurements, water years 1945-47, 1952-56, 1966, 1967; periodic discharge measurements and gage heights, water years 1958-60. July 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 90.08 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records poor. Some interconnection at high stages with Big Creek is possible.

AVERAGE DISCHARGE.--6 years, 16.3 ft³/s, 15.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 850 ft³/s, Mar. 18, 1960, gage height, 10.85 ft, from flood mark; no flow for many days in most years; creek dry at gage for many days in 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42 ft³/s, Sept. 6, gage height, 8.17 ft; no flow for many days; minimum gage height, 4.76 ft, June 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	.90	.46	.03	.05	.00	.00	.00	.00	.11	34	9.7
2	22	.82	.43	.01	.02	.00	.00	.00	.00	.06	36	13
3	19	.78	.39	.10	.02	.00	.00	.00	.00	.00	30	15
4	17	.86	.37	.51	.00	.00	.00	.00	.00	.00	18	24
5	15	.86	.43	.43	.00	.00	.00	.00	.00	.00	11	36
6	14	.82	.59	.33	.02	.00	.00	.00	.00	.00	7.8	40
7	11	.65	.59	.25	.16	.00	.00	.00	.00	.00	6.2	38
8	10	.53	.51	.22	.17	.00	.00	.00	.00	.00	5.3	37
9	8.8	.48	.43	.19	.16	.00	.00	.00	.00	.00	6.9	31
10	8.1	.43	.39	.16	.11	.00	.00	.00	.00	.00	8.3	25
11	7.6	.41	.33	.13	.16	.00	.00	.00	.00	.00	8.6	19
12	7.6	.37	.33	.10	.27	.00	.00	.00	.00	.00	7.8	15
13	6.7	.31	.29	.06	.23	.00	.00	.00	.00	.00	7.3	15
14	6.2	.27	.27	.05	.19	.00	.00	.00	.00	.00	6.3	10
15	5.6	.23	.23	.03	.16	.00	.00	.00	.00	.00	6.9	10
16	4.9	.22	.23	.02	.14	.00	.00	.00	.00	.00	10	8.9
17	4.2	.20	.23	.05	.10	.00	.00	.00	.00	.00	11	8.1
18	3.9	.19	.22	.19	.06	.00	.00	.00	.00	.00	8.6	7.6
19	3.4	.16	.20	.31	.02	.00	.00	.00	.00	.00	11	7.1
20	3.0	.14	.19	.29	.00	.00	.00	.00	.00	.16	20	10
21	2.8	.16	.16	.27	.00	.08	.00	.00	.00	1.8	23	20
22	2.6	.56	.16	.25	.00	1.1	.00	.00	.00	6.0	25	19
23	2.3	1.6	.14	.22	.00	1.2	.00	.00	.00	5.1	24	20
24	2.1	1.4	.13	.19	.00	1.1	.00	.00	.00	4.7	19	17
25	1.8	1.1	.11	.19	.00	.78	.00	.00	.00	14	15	14
26	1.7	.90	.10	.19	.00	.53	.00	.00	.00	22	12	13
27	1.7	.78	.08	.14	.00	.35	.00	.00	.00	17	12	12
28	1.6	.71	.08	.11	.00	.23	.00	.00	.04	10	11	12
29	1.3	.62	.08	.08	---	.17	.00	.00	.27	8.1	8.1	11
30	1.2	.51	.06	.08	---	.08	.00	.00	.22	6.7	7.3	11
31	1.0	---	.05	.11	---	.02	---	.00	---	7.3	8.3	---
TOTAL	223.1	17.97	8.26	5.29	2.04	5.64	.00	.00	.53	103.03	425.7	528.4
MEAN	7.20	.60	.27	.17	.07	.18	.00	.00	.02	3.32	13.7	17.6
MAX	25	1.6	.59	.51	.27	1.2	.00	.00	.27	22	36	40
MIN	1.0	.14	.05	.01	.00	.00	.00	.00	.00	.00	5.3	7.1
CFSM	.49	.04	.02	.01	.00	.01	.00	.00	.00	.23	.93	1.20
IN.	.56	.05	.02	.01	.01	.01	.00	.00	.00	.26	1.08	1.34
CAL YR 1984	TOTAL	9932.33	MEAN	27.1	MAX	147	MIN	.05	CFSM	1.84	IN.	25.13
WTR YR 1985	TOTAL	1319.96	MEAN	3.62	MAX	40	MIN	.00	CFSM	.25	IN.	3.34

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236900 PALATLAKAHA RIVER AT CHERRY LAKE OUTLET, NEAR GROVELAND, FL

LOCATION.--Lat 28°35'33", long 81°49'21", in NE¼ sec.8, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, near left bank 21 ft upstream from spillway at outlet of Cherry Lake, and 3 mi northeast of Groveland.

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--September 1956 to February 1957 (gage heights and discharge measurements only), March 1957 to current year.

REVISED RECORDS.--WDR FL-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Gee and Jenson, Inc. bench mark). Auxiliary gage at downstream side of spillway structure.

REMARKS.--Estimated discharge Feb. 18 to Mar. 5, Apr. 30, May 1, Aug 14 to Sept. 30. Records good above 10 ft³/s and poor below. Since 1956, flow regulated by earthen dam and concrete spillway with radial lift gates at outlet. An undetermined amount of water is diverted at times through a gated culvert in dam for irrigation of citrus groves. Gage heights are published as elevations for Cherry Lake (station 02236880) in the section of this report entitled LAKE ELEVATIONS.

COOPERATION.--Gate-opening record was provided by Oklawaha Basin Recreation and Water Conservation and Control Authority.

AVERAGE DISCHARGE.--28 years (water years 1958-85), 39.7 ft³/s, 3.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 584 ft³/s, Apr. 5, 1960; maximum gage height, 98.15 ft, Apr. 22, 1959; maximum daily reverse flow, 5.1 ft³/s, July 14, 1971; no flow for many days in most years; minimum gage height, 92.58 ft, Jan. 23, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3.6 ft³/s, Oct. 1-6; maximum gage height, 96.33 ft, Oct. 1; gates closed and no flow for many days; minimum gage height, 93.95 ft, June 11,12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	3.6	3.2	2.7	2.4	1.7	1.0	.33	.00	.00	.00	.00	1.1	
2	3.6	3.2	2.7	2.4	1.7	.97	.29	.00	.00	.00	.00	1.0	
3	3.6	3.2	2.7	2.4	1.7	.94	.23	.00	.00	.00	.00	.97	
4	3.6	3.1	2.7	2.4	1.6	.91	.21	.00	.00	.00	.00	.97	
5	3.6	3.1	2.7	2.3	1.6	.85	.19	.00	.00	.00	.00	1.0	
6	3.6	3.1	2.7	2.3	1.6	.82	.23	.00	.00	.00	.00	1.0	
7	3.5	3.0	2.7	2.3	1.7	.82	.29	.00	.00	.00	.00	1.1	
8	3.5	2.9	2.6	2.2	1.6	.73	.27	.00	.00	.00	.02	1.1	
9	3.5	2.9	2.6	2.2	1.6	.70	.21	.00	.00	.00	.11	1.2	
10	3.5	2.9	2.6	2.2	1.6	.68	.17	.00	.00	.00	.12	1.2	
11	3.5	2.9	2.6	2.2	1.5	.65	.14	.00	.00	.00	.11	1.2	
12	3.5	2.8	2.6	2.1	1.5	.59	.12	.00	.00	.00	.09	1.2	
13	3.5	2.8	2.6	2.0	1.4	.54	.12	.00	.00	.00	.09	1.6	
14	3.4	2.8	2.6	2.0	1.3	.52	.12	.00	.00	.00	.08	1.6	
15	3.4	2.8	2.6	2.0	1.3	.52	.12	.00	.00	.00	.25	1.4	
16	3.4	2.8	2.6	2.0	1.3	.52	.08	.00	.00	.00	.59	1.3	
17	3.4	2.8	2.5	2.0	1.3	.47	.06	.00	.00	.00	.52	1.3	
18	3.4	2.8	2.5	2.1	1.3	.37	.06	.00	.00	.00	.44	1.3	
19	3.4	2.7	2.5	2.1	1.3	.35	.06	.00	.00	.00	.40	1.2	
20	3.4	2.7	2.5	2.1	1.3	.37	.04	.00	.00	.00	.47	1.3	
21	3.4	2.7	2.5	1.9	1.2	.52	.02	.00	.00	.00	.49	1.7	
22	3.4	2.7	2.5	1.8	1.2	.68	.01	.00	.00	.00	.49	1.8	
23	3.4	2.7	2.5	1.8	1.2	.59	.00	.00	.00	.00	.52	1.8	
24	3.3	2.6	2.5	1.8	1.2	.57	.00	.00	.00	.00	.54	1.8	
25	3.3	2.7	2.4	1.8	1.1	.54	.00	.00	.00	.00	.54	1.8	
26	3.2	2.7	2.4	1.7	1.1	.52	.00	.00	.00	.00	.57	1.8	
27	3.3	2.7	2.4	1.6	1.1	.49	.00	.00	.00	.00	.57	1.7	
28	3.3	2.7	2.4	1.7	1.0	.47	.00	.00	.00	.00	.70	1.7	
29	3.3	2.7	2.4	1.7	---	.44	.00	.00	.00	.00	.73	1.7	
30	3.2	2.7	2.4	1.7	---	.42	.00	.00	.00	.00	.79	1.8	
31	3.2	---	2.4	1.7	---	.40	---	.00	---	.00	.88	---	
TOTAL	106.2	85.4	79.1	62.9	39.0	18.96	3.37	.00	.00	.00	10.11	41.64	
MEAN	3.43	2.85	2.55	2.03	1.39	.61	.11	.00	.00	.00	.33	1.39	
MAX	3.6	3.2	2.7	2.4	1.7	1.0	.33	.00	.00	.00	.88	1.8	
MIN	3.2	2.6	2.4	1.6	1.0	.35	.00	.00	.00	.00	.00	.97	
CFSM	.02	.02	.02	.01	.01	.00	.00	.00	.00	.00	.00	.01	
IN.	.02	.02	.02	.01	.01	.00	.00	.00	.00	.00	.00	.01	
CAL YR 1984	TOTAL	23417.80		MEAN	64.0	MAX	331	MIN	.00	CFSM	.39	IN.	5.28
WTR YR 1985	TOTAL	446.68		MEAN	1.22	MAX	3.6	MIN	.00	CFSM	.01	IN.	.10

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02236901 PALATLAKAHA RIVER BELOW SPILLWAY AT CHERRY LAKE OUTLET, NEAR GROVELAND, FL

LOCATION.--Lat 28°35'32", long 81°49'22", in NE¼ sec.8, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, near left bank 20 ft downstream from spillway at outlet of Cherry Lake, and 3 mi northeast of Groveland.

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--September 1956 to July 1957 (fragmentary), August 1957 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and are available in files of the Orlando Subdistrict Office. Prior to October 1968, published as Palatlahaha Creek at Cherry Lake Outlet, near Groveland (auxiliary).

REVISED RECORDS.--WDR FL-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Gee and Jenson, Inc. bench mark). Prior to Aug. 20, 1957, nonrecording gage at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 97.73 ft, Apr. 5, 1960; minimum, 90.65 ft, June 1, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 94.00 ft, Oct. 1; minimum, 91.94 ft, June 12.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94.00	93.70	93.53	93.44	93.32	93.15	92.88	92.43	92.15	92.81	92.25	92.86
2	93.98	93.69	93.53	93.43	93.34	93.14	92.86	92.40	92.12	92.82	92.24	92.90
3	93.96	93.69	93.53	93.46	93.34	93.11	92.84	92.38	92.10	92.80	92.29	92.93
4	93.95	93.70	93.52	93.48	93.33	93.10	92.81	92.36	92.07	92.79	92.30	92.98
5	93.94	93.70	93.54	93.46	93.32	93.10	92.79	92.32	92.04	92.77	92.30	93.01
6	93.93	93.68	93.57	93.44	93.33	93.08	92.81	92.29	92.02	92.75	92.29	93.03
7	93.92	93.65	93.54	93.44	93.33	93.06	92.85	92.28	91.99	92.75	92.30	93.06
8	93.91	93.64	93.52	93.43	93.34	93.05	92.84	92.26	91.98	92.76	92.31	93.10
9	93.90	93.62	93.51	93.43	93.31	93.04	92.82	92.24	91.99	92.74	92.37	92.96
10	93.90	93.61	93.50	93.42	93.30	93.03	92.78	92.21	91.99	92.72	92.42	92.92
11	93.90	93.61	93.50	93.41	93.29	93.01	92.75	92.21	91.96	92.70	92.43	92.92
12	93.89	93.60	93.50	93.40	93.33	93.01	92.75	92.19	91.96	92.68	92.42	92.94
13	93.88	93.58	93.50	93.38	93.29	92.99	92.76	92.19	92.06	92.67	92.41	93.00
14	93.87	93.56	93.49	93.36	93.26	92.98	92.76	92.16	92.13	92.65	92.48	93.08
15	93.86	93.55	93.48	93.38	93.25	92.96	92.75	92.19	92.32	92.64	92.56	93.06
16	93.85	93.55	93.48	93.37	93.25	92.94	92.75	92.28	92.42	92.65	92.62	93.05
17	93.85	93.55	93.48	93.37	93.24	92.95	92.72	92.27	92.44	92.67	92.66	93.03
18	93.83	93.54	93.47	93.40	93.22	92.93	92.69	92.23	92.44	92.64	92.66	93.03
19	93.82	93.54	93.47	93.42	93.22	92.89	92.67	92.20	92.48	92.37	92.66	93.02
20	93.80	93.54	93.47	93.41	93.22	92.86	92.65	92.19	92.54	92.25	92.67	93.09
21	93.79	93.55	93.46	93.40	93.20	92.93	92.62	92.24	92.54	92.25	92.67	93.19
22	93.78	93.58	93.46	93.38	93.19	93.04	92.60	92.26	92.57	92.25	92.67	93.21
23	93.77	93.60	93.46	93.36	93.18	93.02	92.59	92.30	92.59	92.24	92.67	93.22
24	93.76	93.58	93.45	93.35	93.18	93.01	92.57	92.29	92.58	92.26	92.68	93.23
25	93.75	93.57	93.45	93.36	93.18	92.99	92.55	92.30	92.57	92.32	92.68	93.24
26	93.74	93.56	93.44	93.36	93.18	92.95	92.54	92.26	92.58	92.31	92.67	93.24
27	93.74	93.55	93.45	93.35	93.17	92.94	92.51	92.25	92.66	92.30	92.68	93.24
28	93.74	93.56	93.45	93.35	93.16	92.93	92.50	92.23	92.69	92.30	92.71	93.23
29	93.74	93.55	93.45	93.35	---	92.92	92.46	92.22	92.75	92.29	92.72	93.22
30	93.73	93.54	93.45	93.33	---	92.91	92.46	92.20	92.78	92.27	92.73	93.21
31	93.71	---	93.44	93.33	---	92.89	---	92.17	---	92.26	92.77	---
MEAN	93.84	93.60	93.49	93.40	93.26	93.00	92.70	92.26	92.32	92.54	92.53	93.07
MAX	94.00	93.70	93.57	93.48	93.34	93.15	92.88	92.43	92.78	92.82	92.77	93.24
MIN	93.71	93.54	93.44	93.33	93.16	92.86	92.46	92.16	91.96	92.24	92.24	92.86
CAL YR 1984	MEAN	94.38		MAX	95.34	MIN	93.44					
WTR YR 1985	MEAN	93.00		MAX	94.00	MIN	91.96					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237000 PALATLAKAHA RIVER NEAR MASCOTTE, FL

LOCATION.--Lat 28°36'56", long 81°51'53", in SW¼ sec.36, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on left bank 260 ft upstream from spillway, 0.4 mi downstream from bridge on State Highway 565, 0.7 mi downstream from Lake Emma, and 3.2 mi northeast of Mascotte.

DRAINAGE AREA.--182 mi².

PERIOD OF RECORD.--May 1945 to March 1956, April 1964 to September 1965, October 1965 to current year (gage heights and discharge measurements only).

REVISED RECORDS.--WDR FL-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 21, 1946, nonrecording gage and May 21, 1946, to Mar. 20, 1956, water-stage recorder, at site 0.5 mi upstream at datum 89.54 ft higher. Since Apr. 6, 1964, auxiliary water-stage recorder on left bank 260 ft downstream from spillway.

REMARKS.--Since Dec. 4, 1963, flow regulated at station by manipulation of gates in spillway. From March 1956 to December 1963, flow was regulated through two box culverts with radial lift gates.

AVERAGE DISCHARGE.--10 years (water years 1945-55), 104 ft³/s, 7.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 458 ft³/s, Oct. 4,5, 1945; maximum gage height, 96.66 ft, former site, present datum, Oct. 11,12, 1953; gates closed and no flow or leakage only for many days in 1972-83; minimum gage height, 90.60 ft, July 19, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 93.91 ft, Oct. 1; minimum, 90.60 ft, July 19.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93.89	93.61	93.44	93.34	93.23	93.04	92.77	92.35	92.03	92.72	92.15	92.81
2	93.88	93.60	93.44	93.33	93.23	93.03	92.76	92.33	92.00	92.73	92.14	92.83
3	93.87	93.60	93.44	93.35	93.22	93.02	92.73	92.30	91.98	92.72	92.17	92.86
4	93.86	93.61	93.44	93.37	93.22	93.01	92.71	92.27	91.96	92.71	92.20	92.91
5	93.85	93.60	93.46	93.34	93.21	93.00	92.70	92.25	91.95	92.70	92.20	92.94
6	93.84	93.57	93.46	93.33	93.22	92.99	92.71	92.22	91.91	92.68	92.19	92.95
7	93.83	93.55	93.43	93.33	93.23	92.98	92.74	92.20	91.88	92.68	92.21	92.98
8	93.82	93.53	93.42	93.31	93.21	92.95	92.73	92.18	91.87	92.68	92.22	92.92
9	93.80	93.52	93.42	93.31	93.20	92.94	92.71	92.17	91.89	92.66	92.28	92.70
10	93.79	93.52	93.41	93.30	93.20	92.93	92.69	92.14	91.88	92.64	92.32	92.84
11	93.78	93.51	93.41	93.29	93.21	92.91	92.67	92.12	91.86	92.62	92.34	92.84
12	93.78	93.49	93.41	93.28	93.19	92.89	92.65	92.11	91.87	92.60	92.33	92.85
13	93.77	93.47	93.40	93.26	93.17	92.88	92.64	92.09	91.96	92.59	92.34	92.91
14	93.77	93.47	93.40	93.26	93.16	92.87	92.65	92.07	92.04	92.57	92.38	92.98
15	93.76	93.46	93.40	93.26	93.15	92.85	92.64	92.07	92.23	92.55	92.45	92.97
16	93.75	93.46	93.39	93.26	93.14	92.84	92.63	92.19	92.33	92.55	92.52	92.96
17	93.75	93.46	93.39	93.27	93.13	92.84	92.61	92.16	92.35	92.57	92.57	92.95
18	93.74	93.45	93.39	93.28	93.13	92.81	92.60	92.12	92.34	92.20	92.58	92.94
19	93.73	93.45	93.39	93.30	93.12	92.79	92.58	92.11	92.35	91.65	92.58	92.93
20	93.72	93.44	93.38	93.29	93.12	92.78	92.56	92.10	92.45	92.15	92.58	92.99
21	93.70	93.43	93.38	93.27	93.11	92.82	92.54	92.16	92.46	92.17	92.58	93.09
22	93.69	93.44	93.38	93.25	93.10	92.92	92.52	92.16	92.49	92.16	92.58	93.12
23	93.69	93.45	93.37	93.24	93.10	92.91	92.49	92.18	92.51	92.15	92.58	93.14
24	93.67	93.46	93.37	93.24	93.10	92.90	92.48	92.19	92.50	92.15	92.60	93.15
25	93.65	93.47	93.37	93.24	93.08	92.88	92.45	92.19	92.49	92.23	92.59	93.15
26	93.64	93.47	93.37	93.23	93.08	92.87	92.43	92.17	92.51	92.23	92.59	93.14
27	93.65	93.47	93.36	93.23	93.06	92.85	92.41	92.15	92.57	92.22	92.59	93.14
28	93.65	93.46	93.36	93.23	93.05	92.84	92.38	92.13	92.61	92.21	92.63	93.14
29	93.64	93.45	93.35	93.22	---	92.82	92.36	92.10	92.66	92.19	92.64	93.13
30	93.63	93.44	93.35	93.22	---	92.81	92.37	92.08	92.70	92.18	92.66	93.13
31	93.62	---	93.35	93.23	---	92.79	---	92.05	---	92.16	92.73	---
MEAN	93.75	93.50	93.40	93.28	93.16	92.90	92.60	92.16	92.22	92.42	92.44	92.98
MAX	93.89	93.61	93.46	93.37	93.23	93.04	92.77	92.35	92.70	92.73	92.73	93.15
MIN	93.62	93.43	93.35	93.22	93.05	92.78	92.36	92.05	91.86	91.65	92.14	92.70
CAL YR 1984	MEAN	93.77	MAX	94.78	MIN	91.97						
WTR YR 1985	MEAN	92.90	MAX	93.89	MIN	91.65						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237001 PALATLAKAHA RIVER BELOW SPILLWAY, NEAR MASCOTTE, FL

LOCATION.--Lat 28°36'57", long 81°51'58", in SW¼ sec.36, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on left bank 260 ft downstream from spillway, 0.4 mi downstream from bridge on State Highway 565, 0.7 mi downstream from Lake Emma, and 3.2 mi northeast of Mascotte.

DRAINAGE AREA.--182 mi².

PERIOD OF RECORD.--April 1964 to current year (gage heights only).

REVISED RECORDS.--WDR FL-72-1: Drainage area.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 93.00 ft, Oct. 1, 1979; minimum, 86.79 ft, May 27, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 91.55 ft, Sept. 9; minimum, 88.17 ft, June 11,12.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91.06	90.63	90.41	90.23	90.06	89.82	89.53	89.12	88.53	89.23	90.39	90.93
2	91.05	90.61	90.40	90.23	90.06	89.81	89.52	89.10	88.48	89.23	90.41	90.96
3	91.03	90.61	90.40	90.24	90.05	89.79	89.50	89.07	88.44	89.22	90.48	90.97
4	91.02	90.60	90.40	90.28	90.05	89.77	89.48	89.06	88.40	89.21	90.48	91.02
5	91.00	90.59	90.40	90.26	90.03	89.76	89.45	89.03	88.36	89.18	90.39	91.03
6	90.98	90.57	90.41	90.25	90.03	89.75	89.48	89.00	88.31	89.19	89.99	91.03
7	90.97	90.55	90.40	90.24	90.05	89.73	89.53	88.97	88.26	89.25	90.37	91.02
8	90.95	90.53	90.39	90.23	90.04	89.71	89.53	88.95	88.24	89.24	90.39	91.07
9	90.94	90.51	90.38	90.22	90.03	89.69	89.51	88.92	88.27	89.22	90.46	91.48
10	90.93	90.49	90.37	90.21	90.01	89.68	89.48	88.89	88.24	89.21	90.51	91.44
11	90.92	90.48	90.37	90.20	90.01	89.66	89.46	88.86	88.21	89.19	90.53	91.40
12	90.90	90.47	90.36	90.19	90.03	89.65	89.45	88.85	88.19	89.19	90.51	91.38
13	90.89	90.46	90.36	90.18	90.01	89.64	89.45	88.82	88.32	89.23	90.49	91.38
14	90.87	90.44	90.35	90.17	90.00	89.62	89.44	88.79	88.49	89.21	90.51	91.39
15	90.86	90.43	90.35	90.17	89.99	89.61	89.43	88.77	88.80	89.19	90.58	91.37
16	90.85	90.41	90.34	90.16	89.98	89.60	89.41	88.80	88.96	89.19	90.65	91.34
17	90.83	90.41	90.34	90.15	89.97	89.60	89.39	88.76	88.99	89.18	90.73	91.32
18	90.82	90.39	90.33	90.17	89.96	89.59	89.37	88.71	88.98	89.49	90.72	91.30
19	90.80	90.38	90.33	90.19	89.95	89.56	89.35	88.68	88.97	90.36	90.70	91.28
20	90.79	90.38	90.32	90.18	89.94	89.54	89.33	88.64	88.98	90.41	90.69	91.32
21	90.77	90.38	90.31	90.17	89.92	89.58	89.31	88.81	88.97	90.38	90.68	91.37
22	90.76	90.43	90.31	90.15	89.90	89.70	89.28	88.81	89.00	90.37	90.67	91.36
23	90.75	90.47	90.30	90.14	89.89	89.69	89.26	88.82	89.00	90.36	90.66	91.35
24	90.74	90.46	90.29	90.13	89.88	89.67	89.24	88.81	88.98	90.35	90.80	91.34
25	90.72	90.45	90.29	90.12	89.87	89.66	89.23	88.80	88.96	90.40	90.79	91.33
26	90.71	90.44	90.28	90.12	89.86	89.64	89.21	88.77	88.95	90.39	90.77	91.32
27	90.70	90.43	90.28	90.10	89.85	89.62	89.18	88.73	89.01	90.37	90.77	91.31
28	90.69	90.43	90.27	90.10	89.84	89.60	89.16	88.69	89.07	90.36	90.79	91.30
29	90.68	90.43	90.26	90.09	---	89.58	89.14	88.65	89.17	90.42	90.78	91.28
30	90.67	90.42	90.26	90.09	---	89.56	89.15	88.62	89.21	90.39	90.77	91.28
31	90.65	---	90.25	90.07	---	89.54	---	88.58	---	90.38	90.82	---
MEAN	90.85	90.48	90.34	90.18	89.97	89.66	89.37	88.83	88.69	89.71	90.59	91.26
MAX	91.06	90.63	90.41	90.28	90.06	89.82	89.53	89.12	89.21	90.42	90.82	91.48
MIN	90.65	90.38	90.25	90.07	89.84	89.54	89.14	88.58	88.19	89.18	89.99	90.93
CAL YR 1984	MEAN	91.26	MAX	92.55	MIN	90.11						
WTR YR 1985	MEAN	89.99	MAX	91.48	MIN	88.19						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237010 PALATLAHA RIVER AT STRUCTURE M-6, NEAR MASCOTTE, FL

LOCATION.--Lat 28°38'35", long 81°52'21", in SE¼ sec.23, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 50 ft upstream from control structure M-6, 1.5 mi west of State Highway 565, and 4.6 mi north of Mascotte.

DRAINAGE AREA.--186 mi².

PERIOD OF RECORD.--May 1981 to current year (gage heights only), incomplete.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 150 ft downstream from spillway.

REMARKS.--Flow regulated at station by manipulation of gates in spillway.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 92.97 ft, Aug. 11, 1983; minimum unknown, below lowest recordable stage.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 91.72 ft, Sept. 9; minimum, 88.37 ft, June 12.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91.30	90.87	90.64	90.46	90.28	90.03	89.77	89.35	88.73	89.45	90.60	91.11
2	91.29	90.86	90.63	90.46	90.27	90.01	89.76	89.33	88.68	89.46	90.59	91.15
3	91.27	90.85	90.62	90.47	90.25	90.00	89.74	89.31	88.64	89.44	90.60	91.16
4	91.26	90.84	90.62	90.49	90.24	89.99	89.71	89.29	88.60	89.43	90.59	91.21
5	91.24	90.83	90.63	90.47	90.23	89.99	89.69	89.26	88.56	89.41	90.57	91.23
6	91.23	90.81	90.63	90.46	90.23	89.98	89.72	89.24	88.51	89.42	90.56	91.22
7	91.22	90.78	90.62	90.46	90.25	89.96	89.77	89.21	88.48	89.47	90.58	91.21
8	91.20	90.74	90.61	90.44	90.24	89.94	89.76	89.19	88.46	89.46	90.59	91.27
9	91.18	90.73	90.61	90.43	90.23	89.93	89.73	89.17	88.47	89.44	90.66	91.66
10	91.18	90.73	90.60	90.42	90.22	89.91	89.71	89.14	88.44	89.42	90.70	91.61
11	91.15	90.72	90.60	90.41	90.23	89.90	89.70	89.12	88.40	89.39	90.71	91.59
12	91.14	90.70	90.60	90.39	90.24	89.89	89.68	89.11	88.39	89.40	90.70	91.56
13	91.12	90.67	90.60	90.37	90.21	89.87	89.69	89.08	88.52	89.44	90.69	91.55
14	91.12	90.67	90.59	90.37	90.20	89.85	89.68	89.03	88.70	89.42	90.73	91.66
15	91.10	90.65	90.59	90.37	90.20	89.83	89.67	88.99	88.97	89.40	90.80	91.53
16	91.09	90.64	90.59	90.36	90.19	89.83	89.65	89.03	89.19	89.40	90.87	91.50
17	91.07	90.63	90.58	90.36	90.17	89.82	89.63	88.99	89.20	89.39	90.92	91.48
18	91.06	90.62	90.57	90.37	90.17	89.81	89.61	88.93	89.20	89.73	90.90	91.45
19	91.04	90.62	90.57	90.39	90.15	89.80	89.59	88.80	89.20	90.52	90.89	91.44
20	91.03	90.61	90.56	90.38	90.14	89.79	89.58	88.86	89.20	90.60	90.88	91.49
21	91.02	90.61	90.55	90.36	90.13	89.84	89.55	89.05	89.19	90.59	90.88	91.53
22	91.01	90.64	90.54	90.35	90.11	89.93	89.53	89.06	89.21	90.58	90.86	91.52
23	91.00	90.68	90.53	90.34	90.09	89.92	89.51	89.08	89.21	90.57	90.87	91.00
24	90.99	90.68	90.53	90.34	90.09	89.91	89.48	89.06	89.19	90.57	90.99	91.50
25	90.97	90.68	90.52	90.33	90.07	89.89	89.46	89.05	89.18	90.61	90.98	91.49
26	90.95	90.68	90.51	90.31	90.06	89.88	89.43	89.01	89.18	90.60	90.95	91.48
27	90.96	90.67	90.49	90.31	90.05	89.86	89.42	88.96	89.23	90.58	90.96	91.48
28	90.95	90.67	90.49	90.30	90.04	89.84	89.39	88.91	89.30	90.57	90.98	91.46
29	90.93	90.66	90.49	90.30	---	89.82	89.37	88.87	89.45	90.63	90.97	91.46
30	90.92	90.65	90.48	90.29	---	89.81	89.38	88.82	89.43	90.61	90.98	91.45
31	90.90	---	90.48	90.29	---	89.79	---	88.78	---	90.60	91.04	---
MEAN	91.09	90.71	90.57	90.38	90.18	89.89	89.61	89.07	88.90	89.92	90.79	91.41
MAX	91.30	90.87	90.64	90.49	90.28	90.03	89.77	89.35	89.45	90.63	91.04	91.66
MIN	90.90	90.61	90.48	90.29	90.04	89.79	89.37	88.78	88.39	89.39	90.56	91.00
CAL YR 1984	MEAN	91.48		MAX	92.74	MIN	90.36					
WTR YR 1985	MEAN	90.21		MAX	91.66	MIN	88.39					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237011 PALATLAKAHA RIVER BELOW STRUCTURE M-6, NEAR MASCOTTE, FL

LOCATION.--Lat 28°38'38", long 81°52'21", in SE¼ sec.23, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 150 ft downstream from control structure M-6, 1.5 mi west of State Highway 565, and 4.6 mi north of Mascotte.

DRAINAGE AREA.--186 mi².

PERIOD OF RECORD.--May 1981 to current year (gage heights only).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 91.78 ft July 27, 1984; minimum, 85.85 ft May 31, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 88.92 ft, Sept. 22,23; minimum, 86.07 ft, June 8.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88.37	88.25	87.99	87.71	87.69	87.52	87.33	86.89	83.33	87.75	87.91	88.49
2	88.36	88.24	87.98	87.70	87.68	87.51	87.31	86.86	86.30	87.75	87.92	88.51
3	88.35	88.23	87.97	87.73	87.68	87.49	87.29	86.82	86.26	87.72	87.99	88.53
4	88.35	88.23	87.94	87.75	87.66	87.48	87.26	86.79	86.23	87.70	87.96	88.61
5	88.35	88.22	87.95	87.72	87.66	87.56	87.23	86.75	86.19	87.67	87.94	88.59
6	88.35	88.21	87.94	87.72	87.67	87.44	87.29	86.72	86.16	87.69	87.93	88.57
7	88.34	88.19	87.91	87.71	87.69	87.41	87.36	86.69	86.12	87.74	87.96	88.59
8	88.34	88.18	87.90	87.71	87.69	87.39	87.38	86.65	86.11	87.72	87.97	88.68
9	88.34	88.17	87.88	87.71	87.68	87.38	87.36	86.62	86.13	87.69	88.03	88.70
10	88.34	88.16	87.88	87.71	87.67	87.36	87.35	86.59	86.12	87.67	88.06	88.70
11	88.34	88.15	87.87	87.71	87.68	87.35	87.31	86.56	86.10	87.63	88.07	88.70
12	88.33	88.14	87.87	87.71	87.69	87.33	87.31	86.54	86.10	87.65	88.05	88.69
13	88.32	88.13	87.83	87.69	87.68	87.32	87.32	86.51	86.24	87.68	88.04	88.70
14	88.32	88.13	87.82	87.69	87.66	87.30	87.33	86.48	86.43	87.67	88.08	88.75
15	88.32	88.12	87.80	87.70	87.66	87.28	87.32	86.46	86.65	87.65	88.14	88.75
16	88.32	88.10	87.79	87.69	87.65	87.26	87.31	86.48	86.86	87.65	88.17	88.76
17	88.31	88.09	87.79	87.69	87.64	87.26	87.28	86.44	86.99	87.65	88.23	88.75
18	88.31	88.06	87.77	87.75	87.63	87.25	87.24	86.45	87.08	87.70	88.21	88.75
19	88.30	88.01	88.77	87.73	87.63	87.22	87.21	86.40	87.16	87.80	88.20	88.75
20	88.29	87.93	87.77	87.72	87.63	87.21	87.19	86.36	87.22	87.85	88.19	88.82
21	88.29	87.89	87.76	87.71	87.62	87.28	87.16	86.48	87.26	87.84	88.19	88.90
22	88.29	87.94	87.76	87.70	87.62	87.42	87.13	86.49	87.29	87.80	88.19	88.91
23	88.29	88.02	87.76	87.70	87.59	87.45	87.10	86.51	87.31	87.78	88.19	88.92
24	88.28	88.02	87.76	87.70	87.58	87.44	87.07	86.52	87.31	87.78	88.41	88.90
25	88.27	88.01	87.76	87.70	87.56	87.43	87.04	86.52	87.31	87.81	88.37	88.89
26	88.27	87.97	87.75	87.70	87.56	87.41	87.01	86.49	87.31	87.80	88.32	88.88
27	88.27	87.93	87.74	87.69	87.55	87.40	86.98	86.46	87.33	87.79	88.32	88.87
28	88.27	87.93	87.74	87.70	87.54	87.39	86.96	86.44	87.43	87.79	88.33	88.85
29	88.27	87.98	87.73	87.69	---	87.38	86.92	86.44	87.66	88.01	88.31	88.85
30	88.27	87.98	87.72	87.69	---	87.36	86.91	86.40	87.76	87.95	88.30	88.85
31	88.26	---	87.72	87.69	---	87.34	---	86.37	---	87.91	88.36	---
MEAN	88.31	88.09	87.86	87.71	87.64	87.37	87.21	86.55	86.66	87.75	88.14	88.74
MAX	88.37	88.25	88.77	87.75	87.69	87.56	87.38	86.89	87.76	88.01	88.41	88.92
MIN	88.26	87.89	87.72	87.69	87.54	87.21	86.91	86.36	83.33	87.63	87.91	88.49
CAL YR 1984	MEAN	89.27	MAX	91.76	MIN	87.72						
WTR YR 1985	MEAN	87.67	MAX	88.92	MIN	83.33						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237050 PALATLAKAHA RIVER AT STRUCTURE M-5, NEAR OKAHUMPKA, FL

LOCATION.--Lat 28°40'43", long 81°53'05", in NW¼ sec.11, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 50 ft upstream from control structure M-5, 325 ft upstream from Bridges Road, 1.9 mi west of U.S. Highway 27, and 4.8 mi south of Okahumpka.

DRAINAGE AREA.--193 mi².

PERIOD OF RECORD.--May 1981 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 150 ft downstream from spillway.

REMARKS.--Flow regulated at station by manipulation of gates in spillway.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 90.59 ft, Aug. 14, 1983; minimum, 82.96 ft, May 31, 1981, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 88.86 ft, Sept. 24,25; minimum daily, 84.88 ft, June 10-11, estimated.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87.90	87.57	87.43	87.16	86.95	86.64	86.31	85.79	85.16	85.72	86.40	87.91
2	87.90	87.56	87.42	87.15	86.94	86.62	86.29	85.76	85.14	85.73	86.44	88.01
3	87.90	87.55	87.41	87.16	86.92	86.61	86.26	85.74	85.10	85.72	86.48	88.02
4	87.90	87.54	87.41	87.20	86.91	86.60	86.24	85.70	85.06	85.74	86.50	88.11
5	87.91	87.54	87.43	87.17	86.90	86.58	86.22	85.68	85.02	85.75	86.55	88.19
6	87.92	87.52	87.43	87.17	86.90	86.56	86.24	85.65	84.98	85.75	86.60	88.22
7	87.92	87.50	87.41	87.16	86.91	86.54	86.32	85.62	84.94	85.74	86.64	88.32
8	87.92	87.50	87.40	87.15	86.90	86.52	86.30	85.59	84.90	85.71	86.70	88.43
9	87.92	87.50	87.40	87.14	86.89	86.50	86.29	85.55	84.89	85.68	86.80	88.47
10	87.92	87.50	87.39	87.13	86.88	86.48	86.26	85.52	84.88	85.66	86.92	88.48
11	87.92	87.49	87.38	87.12	86.87	86.46	86.24	85.48	84.88	85.62	87.05	88.49
12	87.91	87.48	87.38	87.10	86.88	86.45	86.22	85.47	84.98	85.61	87.12	88.51
13	87.92	87.47	87.37	87.07	86.87	86.43	86.22	85.44	85.14	85.63	87.21	88.55
14	87.92	87.46	87.35	87.07	86.85	86.41	86.22	85.40	85.26	85.63	87.23	88.61
15	87.93	87.46	87.35	87.07	86.84	86.38	86.21	85.39	85.52	85.60	87.31	88.64
16	87.93	87.45	87.34	87.06	86.84	86.38	86.17	85.40	85.66	85.61	87.40	88.64
17	87.93	87.45	87.34	87.05	86.83	86.37	86.15	85.36	85.67	85.63	87.51	88.64
18	87.91	87.44	87.32	87.06	86.81	86.35	86.13	85.31	85.68	85.72	87.53	88.64
19	87.84	87.44	87.32	87.06	86.80	86.34	86.10	85.27	85.68	85.75	87.53	88.66
20	87.78	87.43	87.30	87.06	86.79	86.31	86.08	85.25	85.65	85.80	87.51	88.73
21	87.74	87.41	87.30	87.03	86.77	86.37	86.05	85.32	85.61	85.85	87.50	88.81
22	87.70	87.42	87.28	87.02	86.76	86.49	86.02	85.33	85.59	85.90	87.48	88.84
23	87.68	87.44	87.27	87.01	86.74	86.48	85.98	85.36	85.58	85.95	87.47	88.85
24	87.65	87.45	87.26	87.00	86.73	86.47	85.97	85.39	85.56	86.00	87.63	88.86
25	87.64	87.46	87.25	87.00	86.71	86.44	85.93	85.41	85.53	86.05	87.68	88.86
26	87.63	87.46	87.23	86.98	86.70	86.43	85.91	85.38	85.52	86.10	87.68	88.85
27	87.63	87.47	87.22	86.97	86.68	86.41	85.87	85.35	85.53	86.15	87.68	88.84
28	87.62	87.46	87.21	86.97	86.66	86.39	85.83	85.32	85.58	86.20	87.71	88.83
29	87.60	87.45	87.20	86.96	---	86.37	85.82	85.27	85.64	86.26	87.71	88.82
30	87.59	87.44	87.19	86.96	---	86.35	85.81	85.24	85.69	86.30	87.70	88.82
31	87.58	---	87.17	86.95	---	86.34	---	85.20	---	86.35	87.78	---
MEAN	87.81	87.48	87.33	87.07	86.83	86.45	86.12	85.45	85.33	85.84	87.21	88.55
MAX	87.93	87.57	87.43	87.20	86.95	86.64	86.32	85.79	85.69	86.35	87.78	88.86
MIN	87.58	87.41	87.17	86.95	86.66	86.31	85.81	85.20	84.88	85.60	86.40	87.91
CAL YR 1984	MEAN	87.91	MAX	89.54	MIN	86.11						
WTR YR 1985	MEAN	86.79	MAX	88.86	MIN	84.88						

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02237051 PALATLAKAHA RIVER BELOW STRUCTURE M-5, NEAR OKAHUMPKA, FL

LOCATION.--Lat 28°40'45", long 81°53'05", in NW¼ sec.11, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 150 ft downstream from control structure M-5, 125 ft upstream from Bridges Road, 1.9 mi west of U.S. Highway 27, and 4.8 mi south of Okahumpka.

DRAINAGE AREA.--193 mi².

PERIOD OF RECORD.--May 1981 to current year (gage heights only).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 87.50 ft Feb. 23, 1983; minimum, 81.18 ft May 31, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 84.46 ft, Sept. 20; minimum, 81.86 ft, June 8.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.34	84.00	83.84	83.65	83.54	83.38	83.23	82.74	82.07	83.59	83.62	84.38
2	84.32	83.99	83.84	83.65	83.54	83.37	83.21	82.70	82.06	83.64	83.60	84.36
3	84.31	83.99	83.84	83.69	83.55	83.36	83.19	82.65	82.00	83.64	83.63	84.34
4	84.30	83.99	83.84	83.78	83.55	83.35	83.17	82.59	81.91	83.64	83.62	84.36
5	84.29	83.99	83.87	83.76	83.55	83.34	83.15	82.57	81.92	83.62	83.60	84.35
6	84.28	83.98	83.89	83.74	83.56	83.34	83.13	82.51	81.90	83.61	83.57	84.34
7	84.27	83.96	83.87	83.72	83.58	83.32	83.31	82.43	81.88	83.58	83.85	84.34
8	84.26	83.95	83.84	83.70	83.58	83.27	83.33	82.37	81.91	83.57	83.93	84.37
9	84.24	83.94	83.82	83.69	83.55	83.16	83.32	82.35	81.99	83.53	84.01	84.36
10	84.25	83.94	83.80	83.68	83.53	83.19	83.30	82.28	82.02	83.49	84.05	84.35
11	84.24	83.94	83.79	83.66	83.54	83.19	83.28	82.22	82.03	83.41	84.06	84.34
12	84.25	83.93	83.79	83.65	83.56	83.18	83.26	82.25	82.04	83.42	84.02	84.34
13	84.24	83.91	83.79	83.64	83.54	83.16	83.28	82.24	82.21	83.43	83.99	84.35
14	84.23	83.90	83.78	83.63	83.53	83.15	83.28	82.22	82.41	83.42	84.00	84.38
15	84.22	83.89	83.78	83.65	83.52	83.13	83.26	82.22	82.78	83.40	84.05	84.37
16	84.23	83.85	83.77	83.64	83.50	83.08	83.25	82.28	83.04	83.46	84.18	84.36
17	84.24	83.82	83.77	83.63	83.48	83.11	83.23	82.26	83.14	83.47	84.26	84.36
18	84.24	83.81	83.78	83.65	83.47	83.10	83.19	82.23	83.20	83.52	84.16	84.36
19	84.23	83.80	83.77	83.68	83.46	83.09	83.15	82.20	83.22	83.57	84.11	84.37
20	84.20	83.79	83.77	83.68	83.45	83.07	83.12	82.18	83.25	83.57	84.09	84.42
21	84.16	83.78	83.76	83.66	83.46	83.16	83.10	82.27	83.27	83.59	84.10	84.44
22	84.13	83.83	83.74	83.63	83.46	83.33	83.07	82.29	83.28	83.60	84.09	84.41
23	84.14	83.89	83.74	83.61	83.46	83.36	83.04	82.34	83.29	83.58	84.06	84.39
24	84.11	83.87	83.73	83.60	83.45	83.36	83.02	82.40	83.29	83.56	84.30	84.39
25	84.10	83.87	83.71	83.60	83.43	83.35	83.00	82.45	83.27	83.57	84.24	84.39
26	84.10	83.86	83.70	83.59	83.42	83.34	82.93	82.44	83.27	83.57	84.19	84.39
27	84.10	83.86	83.69	83.58	83.40	83.32	82.86	82.42	83.29	83.55	84.19	84.38
28	84.09	83.86	83.69	83.58	83.39	83.29	82.82	82.38	83.38	83.52	84.21	84.38
29	84.08	83.86	83.68	83.57	---	83.27	82.80	82.31	83.48	83.66	84.22	84.38
30	84.05	83.84	83.68	83.56	---	83.26	82.78	82.20	83.54	83.66	84.27	84.38
31	84.04	---	83.67	83.55	---	83.24	---	82.12	---	83.65	84.32	---
MEAN	84.20	83.90	83.78	83.65	83.50	83.25	83.14	82.36	82.68	83.55	84.02	84.37
MAX	84.34	84.00	83.89	83.78	83.58	83.38	83.33	82.74	83.54	83.66	84.32	84.44
MIN	84.04	83.78	83.67	83.55	83.39	83.07	82.78	82.12	81.88	83.40	83.57	84.34
CAL YR 1984	MEAN	85.15	MAX	87.35	MIN	83.67						
WTR YR 1985	MEAN	83.53	MAX	84.44	MIN	81.88						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237206 PALATLAKAHA RIVER AT STRUCTURE M-4, NEAR OKAHUMPKA, FL

LOCATION.--Lat 28°42'53", long 81°53'04", in SW¼ sec.26, T.20 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 50 ft upstream from control structure M-4, 1.4 mi west of U.S. Highway 27, and 2.3 mi south of Okahumpka.

DRAINAGE AREA.--208 mi².

PERIOD OF RECORD.--May 1981 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 150 ft downstream from spillway.

REMARKS.--Flow regulated at station by manipulation of gates in spillway.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 86.81 ft, Feb. 23, 1983; minimum unknown, below lowest recordable stage May 28 to June 19, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 84.20 ft, Oct. 1; minimum, 80.11 ft, June 12.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.20	83.68	83.23	82.90	82.73	82.41	82.09	81.48	80.63	81.14	80.99	83.73
2	84.18	83.67	83.21	82.89	82.71	82.39	82.07	81.45	80.59	81.16	81.04	83.81
3	84.18	83.66	83.20	82.93	82.69	82.38	82.04	81.40	80.50	81.17	81.10	83.85
4	84.16	83.64	83.18	82.96	82.68	82.36	82.03	81.38	80.39	81.16	81.09	83.91
5	84.14	83.61	83.21	82.95	82.68	82.34	82.01	81.35	80.71	81.14	81.08	83.94
6	84.13	83.57	83.20	82.93	82.68	82.32	82.03	81.29	80.26	81.13	81.06	83.94
7	84.11	83.55	83.18	82.93	82.67	82.30	82.08	81.24	80.23	81.10	81.23	83.95
8	84.10	83.53	83.17	82.92	82.67	82.28	82.07	81.20	80.19	81.06	81.37	83.98
9	84.08	83.51	83.15	82.91	82.66	82.26	82.05	81.15	80.18	81.03	81.54	83.98
10	84.06	83.49	83.14	82.90	82.66	82.24	82.03	81.12	80.19	81.00	81.73	83.98
11	84.03	83.48	83.13	82.89	82.68	82.22	82.01	81.08	80.18	81.00	81.92	83.97
12	84.03	83.46	83.12	82.87	82.66	82.20	81.98	81.05	80.16	81.05	81.99	83.96
13	84.01	83.43	83.11	82.86	82.65	82.18	81.99	81.00	80.28	81.05	82.05	83.96
14	84.00	83.41	83.09	82.86	82.64	82.17	81.99	80.96	80.45	81.03	82.17	83.97
15	83.98	83.39	83.08	82.86	82.63	82.15	81.98	80.95	80.87	81.03	82.27	83.99
16	83.97	83.38	83.07	82.85	82.61	82.18	81.95	81.03	81.02	81.08	82.39	83.98
17	83.96	83.36	83.06	82.86	82.60	82.19	81.93	80.98	81.08	81.09	82.68	83.95
18	83.94	83.35	83.05	82.86	82.58	82.16	81.91	80.93	81.10	81.10	82.79	83.95
19	83.93	83.33	83.03	82.87	82.57	82.16	81.88	80.85	81.10	81.10	82.85	83.95
20	83.91	83.31	83.01	82.86	82.55	82.14	81.86	80.78	81.09	81.09	82.87	84.01
21	83.89	83.29	83.01	82.83	82.53	82.19	81.83	80.88	81.08	81.12	82.89	84.08
22	83.87	83.30	83.00	82.82	82.52	82.30	81.80	80.91	81.07	81.17	82.91	84.09
23	83.85	83.31	82.99	82.81	82.51	82.29	81.76	80.99	81.06	81.15	82.94	84.10
24	83.82	83.31	82.99	82.81	82.51	82.26	81.73	81.00	81.01	81.13	83.14	84.10
25	83.80	83.31	82.98	82.79	82.48	82.25	81.70	81.00	80.99	81.13	83.25	84.10
26	83.78	83.30	82.96	82.77	82.46	82.22	81.66	80.96	80.98	81.12	83.28	84.09
27	83.78	83.29	82.93	82.77	82.44	82.20	81.61	80.93	80.99	81.09	83.29	84.08
28	83.78	83.27	82.94	82.76	82.43	82.18	81.55	80.89	81.03	81.07	83.35	84.07
29	83.76	83.26	82.93	82.75	---	82.17	81.53	80.83	81.07	81.07	83.36	84.06
30	83.73	83.24	82.91	82.74	---	82.14	81.51	80.75	81.10	81.04	83.37	84.06
31	83.71	---	82.91	82.74	---	82.12	---	80.68	---	81.02	83.51	---
MEAN	83.96	83.42	83.07	82.85	82.60	82.24	81.89	81.05	80.72	81.09	82.31	83.99
MAX	84.20	83.68	83.23	82.96	82.73	82.41	82.09	81.48	81.10	81.17	83.51	84.10
MIN	83.71	83.24	82.91	82.74	82.43	82.12	81.51	80.68	80.16	81.00	80.99	83.73
CAL YR 1984	MEAN	83.89	MAX	85.87	MIN	82.11						
WTR YR 1985	MEAN	82.43	MAX	84.20	MIN	80.16						

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02237207 PALATLAKAHA RIVER BELOW STRUCTURE M-4, NEAR OKAHUMPKA, FL

LOCATION.--Lat 28°42'56", long 81°53'03", in SW¼ sec.26, T.20 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 150 ft downstream from control structure M-4, 1.4 mi west of U.S. Highway 27, and 2.3 mi south of Okahumpka.

DRAINAGE AREA.--208 mi².

PERIOD OF RECORD.--May 1981 to current year (gage heights only).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 84.59 ft Mar. 22, 1983; minimum, 76.35 ft June 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 79.95 ft, Sept. 30; minimum, 78.84 ft, June 12.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.80	79.77	79.57	79.31	79.20	79.18	79.17	79.18	79.08	79.28	79.22	79.78
2	79.80	79.77	79.56	79.30	79.20	79.20	79.17	79.18	79.06	79.28	79.26	79.76
3	79.81	79.77	79.56	79.33	79.19	79.21	79.17	79.18	79.04	79.27	79.30	79.78
4	79.81	79.76	79.55	79.33	79.18	79.20	79.17	79.17	79.01	79.27	79.28	79.78
5	79.81	79.76	79.57	79.32	79.18	79.19	79.17	79.16	79.00	79.26	79.27	79.79
6	79.82	79.74	79.57	79.32	79.19	79.18	79.20	79.16	78.97	79.26	79.27	79.81
7	79.82	79.73	79.54	79.31	79.18	79.18	79.19	79.15	78.94	79.26	79.31	79.83
8	79.83	79.73	79.54	79.29	79.18	79.17	79.18	79.15	78.91	79.26	79.30	79.85
9	79.83	79.73	79.54	79.28	79.18	79.18	79.17	79.14	78.90	79.24	79.33	79.86
10	79.83	79.72	79.53	79.28	79.19	79.20	79.17	79.13	78.88	79.24	79.34	79.87
11	79.83	79.72	79.53	79.27	79.19	79.20	79.18	79.13	78.87	79.26	79.35	79.88
12	79.83	79.71	79.52	79.24	79.17	79.20	79.17	79.12	78.85	79.26	79.34	79.88
13	79.82	79.71	79.52	79.23	79.18	79.20	79.18	79.12	78.90	79.26	79.34	79.88
14	79.81	79.70	79.52	79.22	79.18	79.20	79.18	79.11	79.02	79.25	79.39	79.89
15	79.81	79.69	79.51	79.21	79.18	79.21	79.17	79.10	79.27	79.25	79.38	79.90
16	79.81	79.68	79.51	79.21	79.18	79.21	79.17	79.14	79.25	79.28	79.44	79.90
17	79.80	79.67	79.48	79.21	79.18	79.22	79.17	79.13	79.24	79.27	79.43	79.90
18	79.80	79.66	79.46	79.20	79.18	79.20	79.16	79.10	79.23	79.27	79.39	79.90
19	79.80	79.65	79.43	79.21	79.18	79.20	79.16	79.08	79.23	79.27	79.39	79.89
20	79.80	79.63	79.38	79.20	79.18	79.20	79.16	79.06	79.23	79.27	79.38	79.91
21	79.79	79.62	79.37	79.20	79.18	79.24	79.16	79.14	79.23	79.29	79.36	79.93
22	79.78	79.63	79.36	79.20	79.18	79.23	79.16	79.16	79.23	79.30	79.36	79.93
23	79.78	79.63	79.34	79.20	79.18	79.20	79.16	79.18	79.23	79.28	79.37	79.93
24	79.78	79.63	79.33	79.20	79.18	79.19	79.16	79.18	79.23	79.27	79.46	79.93
25	79.78	79.62	79.33	79.21	79.18	79.19	79.17	79.18	79.23	79.26	79.53	79.93
26	79.77	79.61	79.33	79.20	79.18	79.18	79.18	79.17	79.23	79.25	79.61	79.94
27	79.78	79.60	79.32	79.20	79.18	79.18	79.18	79.15	79.25	79.24	79.69	79.94
28	79.78	79.58	79.32	79.21	79.18	79.18	79.18	79.14	79.26	79.23	79.73	79.94
29	79.78	79.58	79.32	79.20	---	79.18	79.18	79.13	79.26	79.23	79.73	79.94
30	79.78	79.58	79.31	79.20	---	79.18	79.19	79.11	79.27	79.23	79.74	79.95
31	79.78	---	79.31	79.20	---	79.17	---	79.08	---	79.23	79.76	---
MEAN	79.80	79.68	79.45	79.24	79.18	79.20	79.17	79.14	79.11	79.26	79.42	79.88
MAX	79.83	79.77	79.57	79.33	79.20	79.24	79.20	79.18	79.27	79.30	79.76	79.95
MIN	79.77	79.58	79.31	79.20	79.17	79.17	79.16	79.06	78.85	79.23	79.22	79.76
CAL YR 1984 MEAN	80.80			MAX	83.93	MIN	79.31					
WTR YR 1985 MEAN	79.38			MAX	79.95	MIN	78.85					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237293 PALATLAKAHA RIVER AT STRUCTURE M-1, NEAR OKAHUMPKA, FL

LOCATION.--Lat 28°44'39", long 81°52'22", in SE¼ sec.14, T.20 S., R.24 E., Lake County, Hydrologic Unit 03080102, on left bank 150 ft upstream from structure M-1, 270 ft downstream from Seaboard Coast Line Railroad bridge, 0.3 mi upstream from bridge on State Highway 48, and 1.4 mi east of Okahumpka.

DRAINAGE AREA.--221 mi².

PERIOD OF RECORD.--January 1970 to July 1976, October 1976 to current year.

REVISED RECORDS.--WDR FL-72-1: Drainage area.

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

REMARKS.--No estimated daily discharges. Records poor. Flow regulated by manipulation of gates in spillway.

COOPERATION.--Gate-opening record was provided by Oklawaha Basin Recreation and Water Conservation and Control Authority.

AVERAGE DISCHARGE.--14 years (water years 1971-75, 1977-85), 19.2 ft³/s, 1.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 486 ft³/s, Mar. 12, 1970; maximum gage height, 74.18 ft, Apr. 3, 1970; no flow for many days in most years; minimum gage height, 66.26 ft, June 24,25, 1985, gates opened for structure repairs.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 23 ft³/s, Oct. 1; maximum gage height, 71.46 ft, Aug. 31; no flow for many days; minimum gage height, 66.26 ft, June 24,25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	23	3.3	1.3	1.8	.00	.00	.00	.00	.00	.00	.00	8.9	
2	21	3.0	1.3	1.8	.00	.00	.00	.00	.00	19 .00	.00	8.3	
3	21	2.8	1.3	3.3	.00	.00	.00	.00	.00	.00	.00	7.8	
4	19	2.5	1.3	4.3	.00	.00	.00	.00	.00	.00	.00	7.8	
5	19	2.3	1.5	2.5	.00	.00	.00	.00	.00	.00	.00	7.4	
6	18	1.5	1.5	1.8	.00	.00	.00	.00	.00	.00	.00	7.4	
7	17	1.3	1.3	1.3	.00	.00	.00	.00	.00	.00	.00	7.2	
8	16	1.3	1.3	1.0	.00	.00	.00	.00	.00	.00	.00	7.2	
9	16	1.3	1.3	.75	.00	.50	.00	.00	.00	.00	.00	5.9	
10	15	1.3	1.3	.75	.00	.50	.00	.00	.00	.00	.00	3.9	
11	15	1.5	1.3	.50	.00	.25	.00	.00	.00	12 .00	.00	3.5	
12	14	1.5	1.3	.50	.00	.50	.00	.00	.00	8.6	.00	3.3	
13	13	1.3	1.3	.25	.00	.75	.00	.00	.00	8.2	.00	3.3	
14	13	1.3	1.3	.25	.00	.75	.00	.00	.00	7.8	.00	3.3	
15	11	1.3	1.0	.50	.00	1.3	.00	.00	.00	5.2	.00	3.2	
16	9.6	1.3	.75	.25	.00	.25	.00	.00	.00	.00	.06	3.1	
17	9.0	1.0	.75	.50	.00	.25	.00	.00	.00	.00	1.7	3.1	
18	8.6	1.3	.75	.75	.00	.00	.00	.00	.00	.00	2.8	3.0	
19	8.2	1.3	.50	.75	.00	.00	.00	.00	.00	.00	3.1	3.0	
20	7.8	1.3	.25	.00	.00	.25	.00	.00	17 .00	.00	3.2	3.2	
21	7.4	1.0	.25	.00	.00	1.5	.00	.00	10 .00	.00	3.1	3.4	
22	6.6	1.5	.00	.00	.00	2.3	.00	.00	9.0	.00	3.0	3.3	
23	6.2	1.5	.00	.00	.00	1.8	.00	.00	7.8	.00	2.9	3.2	
24	6.2	1.0	.00	.00	.00	.83	.00	.00	8.6	1.7	3.2	3.1	
25	5.8	1.5	.00	.00	.00	.00	.00	.00	.50	.00	3.4	3.0	
26	5.4	1.5	.00	.00	.00	.00	.00	.00	.00	.00	3.4	3.0	
27	4.8	1.5	.25	.00	.00	.00	.00	.00	.00	.00	3.5	3.0	
28	4.5	1.5	.25	.00	.00	.00	.00	.00	.00	.00	3.7	2.9	
29	4.0	1.5	.75	.00	---	.00	.00	.00	.00	.00	4.0	2.9	
30	4.0	1.3	1.5	.00	---	.00	.00	.00	.00	.00	4.7	2.9	
31	3.8	---	1.8	.00	---	.00	---	.00	---	.00	7.0	---	
TOTAL	352.9	47.5	27.40	23.55	.00	11.73	.00	.00	52.90	62.50	52.76	134.5	
MEAN	11.4	1.58	.88	.76	.00	.38	.00	.00	1.76	2.02	1.70	4.48	
MAX	23	3.3	1.8	4.3	.00	2.3	.00	.00	17	19	7.0	8.9	
MIN	3.8	1.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.9	
CFSM	.05	.01	.00	.00	.00	.00	.00	.00	.01	.01	.01	.02	
IN.	.06	.01	.00	.00	.00	.00	.00	.00	.01	.01	.01	.02	
CAL YR 1984	TOTAL	29494.72		MEAN	80.6	MAX	345	MIN	.00	CFSM	.36	IN.	4.96
WTR YR 1985	TOTAL	765.74		MEAN	2.10	MAX	23	MIN	.00	CFSM	.01	IN.	.13

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237293 PALATLAKAHA RIVER AT STRUCTURE M-1, NEAR OKAHUMPKA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.51	66.42	66.37	66.40	66.29	66.28	67.30	67.81	67.96	67.53	67.40	71.40
2	66.50	66.42	66.37	66.40	66.29	66.28	67.35	67.80	67.93	66.98	67.46	71.38
3	66.50	66.42	66.37	66.46	66.29	66.28	67.40	67.79	67.91	66.94	67.55	71.36
4	66.49	66.42	66.37	66.50	66.29	66.27	67.44	67.78	67.90	67.14	67.57	71.36
5	66.50	66.42	66.38	66.43	66.29	66.27	67.48	67.77	67.88	67.25	67.58	71.35
6	66.50	66.40	66.38	66.40	66.30	66.27	67.50	67.75	67.86	67.34	67.63	71.35
7	66.49	66.40	66.37	66.38	66.30	66.27	67.56	67.74	67.83	67.41	67.94	71.34
8	66.49	66.40	66.37	66.37	66.29	66.27	67.61	67.75	67.81	67.43	68.06	71.34
9	66.49	66.40	66.37	66.36	66.28	66.30	67.64	67.74	67.82	67.39	68.22	71.29
10	66.49	66.40	66.37	66.36	66.28	66.30	67.65	67.72	67.80	67.38	68.42	71.15
11	66.49	66.40	66.37	66.35	66.30	66.29	67.66	67.71	67.80	66.91	68.63	71.06
12	66.48	66.40	66.37	66.35	66.29	66.30	67.67	67.70	67.79	66.29	68.78	70.98
13	66.48	66.39	66.37	66.34	66.29	66.31	67.69	67.70	67.89	66.28	68.93	70.97
14	66.48	66.39	66.37	66.34	66.28	66.31	67.72	67.69	68.04	66.27	69.17	70.96
15	66.46	66.39	66.36	66.35	66.29	66.33	67.74	67.68	68.40	66.31	69.55	70.94
16	66.45	66.39	66.35	66.34	66.28	66.29	67.76	67.67	68.60	66.56	69.87	70.91
17	66.45	66.38	66.35	66.34	66.28	66.29	67.77	67.65	68.65	66.76	70.59	70.89
18	66.45	66.38	66.35	66.35	66.29	66.27	67.78	67.62	68.70	66.95	70.82	70.88
19	66.45	66.38	66.34	66.35	66.29	66.27	67.79	67.60	68.73	67.13	70.89	70.88
20	66.45	66.38	66.34	66.30	66.29	66.28	67.80	67.59	67.48	67.23	70.92	70.93
21	66.45	66.37	66.34	66.29	66.29	66.33	67.80	67.83	66.32	67.32	70.90	71.00
22	66.44	66.39	66.33	66.29	66.29	66.36	67.80	67.92	66.30	67.40	70.88	70.96
23	66.44	66.39	66.32	66.29	66.29	66.34	67.80	67.98	66.27	67.47	70.85	70.92
24	66.45	66.37	66.32	66.29	66.29	66.34	67.80	68.03	66.29	67.28	70.93	70.90
25	66.45	66.38	66.33	66.29	66.28	66.59	67.80	68.05	66.42	67.19	71.02	70.88
26	66.45	66.38	66.33	66.29	66.28	66.77	67.80	68.05	66.77	67.28	71.02	70.87
27	66.44	66.38	66.34	66.29	66.28	66.90	67.80	68.05	66.90	67.34	71.03	70.86
28	66.44	66.38	66.34	66.29	66.28	67.00	67.80	68.04	67.07	67.37	71.10	70.84
29	66.42	66.38	66.36	66.29	---	67.08	67.80	68.02	67.23	67.34	71.18	70.84
30	66.43	66.37	66.39	66.29	---	67.15	67.81	68.00	67.38	67.30	71.22	70.85
31	66.43	---	66.40	66.29	---	67.22	---	67.98	---	67.34	71.33	---
MEAN	66.47	66.39	66.36	66.34	66.29	66.45	67.68	67.81	67.59	67.10	69.59	71.05
MAX	66.51	66.42	66.40	66.50	66.30	67.22	67.81	68.05	68.73	67.53	71.33	71.40
MIN	66.42	66.37	66.32	66.29	66.28	66.27	67.30	67.59	66.27	66.27	67.40	70.84
CAL YR 1984	MEAN	69.14	MAX	73.09	MIN	66.32						
WTR YR 1985	MEAN	67.43	MAX	71.40	MIN	66.27						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237700 APOPKA-BEAUCLAIR CANAL NEAR ASTATULA, FL

LOCATION.--Lat 28°43'20", long 81°41'06", in NW¼ sec.26, T.20 S., R.26 E., Lake County, Hydrologic Unit 03080102, near left bank 80 ft upstream from lock and dam, 500 ft upstream from bridge on county road, and 2.5 mi east of Astatula.

DRAINAGE AREA.--184 mi².

PERIOD OF RECORD.--July 1942 to June 1948, discharge measurements only at site 1.5 mi downstream, July 1958 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to June 1948, nonrecording gage at site 1.5 mi downstream at datum 60.68 ft higher. March to June 1958, nonrecording gage at present site and datum. Since July 1958, auxiliary water-stage recorder at downstream side of lock and dam at same datum.

REMARKS.--Records fair. Since May 1956, flow regulated at station by manipulation of gates in spillway.

AVERAGE DISCHARGE.--27 years (water years 1959-85), 80.0 ft³/s, 57,960 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 754 ft³/s, Mar. 19, 1960; maximum gage height, 68.48 ft, Oct. 6, 1960; no flow for many days in 1964-66, 1968-69, 1971-72, 1974; minimum gage height, 63.70 ft, May 13, 1971, affected by wind.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 149 ft³/s, Sept. 1; maximum gage height, 67.49 ft, Sept. 29, affected by wind; minimum daily discharge, 30 ft³/s, entire year except Sept. 1,2; minimum gage height, 64.09 ft, July 31, affected by wind.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	30	30	30	30	30	30	30	30	30	30	149
2	30	30	30	30	30	30	30	30	30	30	30	106
3	30	30	30	30	30	30	30	30	30	30	30	30
4	30	30	30	30	30	30	30	30	30	30	30	30
5	30	30	30	30	30	30	30	30	30	30	30	30
6	30	30	30	30	30	30	30	30	30	30	30	30
7	30	30	30	30	30	30	30	30	30	30	30	30
8	30	30	30	30	30	30	30	30	30	30	30	30
9	30	30	30	30	30	30	30	30	30	30	30	30
10	30	30	30	30	30	30	30	30	30	30	30	30
11	30	30	30	30	30	30	30	30	30	30	30	30
12	30	30	30	30	30	30	30	30	30	30	30	30
13	30	30	30	30	30	30	30	30	30	30	30	30
14	30	30	30	30	30	30	30	30	30	30	30	30
15	30	30	30	30	30	30	30	30	30	30	30	30
16	30	30	30	30	30	30	30	30	30	30	30	30
17	30	30	30	30	30	30	30	30	30	30	30	30
18	30	30	30	30	30	30	30	30	30	30	30	30
19	30	30	30	30	30	30	30	30	30	30	30	30
20	30	30	30	30	30	30	30	30	30	30	30	30
21	30	30	30	30	30	30	30	30	30	30	30	30
22	30	30	30	30	30	30	30	30	30	30	30	30
23	30	30	30	30	30	30	30	30	30	30	30	30
24	30	30	30	30	30	30	30	30	30	30	30	30
25	30	30	30	30	30	30	30	30	30	30	30	30
26	30	30	30	30	30	30	30	30	30	30	30	30
27	30	30	30	30	30	30	30	30	30	30	30	30
28	30	30	30	30	30	30	30	30	30	30	30	30
29	30	30	30	30	---	30	30	30	30	30	30	30
30	30	30	30	30	---	30	30	30	30	30	30	30
31	30	---	30	30	---	30	---	30	---	30	30	---
TOTAL	930	900	930	930	840	930	900	930	900	930	930	1095
MEAN	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	36.5
MAX	30	30	30	30	30	30	30	30	30	30	30	149
MIN	30	30	30	30	30	30	30	30	30	30	30	30
AC-FT	1840	1790	1840	1840	1670	1840	1790	1840	1790	1840	1840	2170
CAL YR 1984	TOTAL	22684	MEAN	62.0	MAX	564	MIN	10	AC-FT	44990		
WTR YR 1985	TOTAL	11145	MEAN	30.5	MAX	149	MIN	30	AC-FT	22110		

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02237700 APOPKA-BEAUCLAIR CANAL NEAR ASTATULA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.70	66.55	66.46	66.41	66.46	66.10	65.87	65.47	65.03	65.62	64.73	66.86
2	66.70	66.53	66.46	66.40	66.17	66.06	65.86	65.46	65.02	65.55	64.73	66.80
3	66.71	66.56	66.46	66.46	66.37	65.98	65.76	65.39	65.01	65.57	64.78	66.92
4	66.71	66.54	66.46	66.30	66.19	66.10	65.58	65.34	65.02	65.53	65.10	66.79
5	66.70	66.51	66.48	66.13	66.20	66.11	65.82	65.42	65.07	65.46	65.35	66.67
6	66.68	66.38	66.43	66.31	66.15	66.06	65.90	65.39	65.03	65.39	65.38	66.68
7	66.67	66.37	66.32	66.39	66.18	66.08	65.78	65.37	65.03	65.31	65.47	66.74
8	66.66	66.40	66.44	66.38	65.84	65.92	65.83	65.36	65.03	65.48	65.57	66.81
9	66.63	66.42	66.42	66.37	66.10	65.95	65.57	65.37	64.99	65.42	65.53	66.88
10	66.58	66.43	66.43	66.25	66.21	65.91	65.59	65.30	64.98	65.62	65.49	66.66
11	66.58	66.40	66.43	66.38	66.21	65.94	65.78	65.28	65.00	65.55	65.49	66.74
12	66.60	66.33	66.43	65.98	66.08	65.94	65.70	65.23	65.01	65.62	65.52	66.83
13	66.62	66.34	66.44	66.20	66.16	65.89	65.84	65.23	65.07	65.55	65.65	66.72
14	66.62	66.37	66.43	66.24	66.21	65.84	65.79	65.19	65.09	65.14	65.84	66.71
15	66.62	66.38	66.43	66.28	65.90	65.94	65.80	65.18	65.24	65.28	66.36	66.72
16	66.62	66.37	66.43	66.26	66.16	65.94	65.68	65.10	65.30	65.28	66.87	66.64
17	66.62	66.36	66.44	66.41	66.08	65.98	65.70	64.98	65.32	65.22	66.34	66.67
18	66.61	66.37	66.44	66.36	66.11	65.66	65.70	64.97	65.26	65.23	66.47	66.63
19	66.61	66.39	66.43	66.28	66.13	65.80	65.64	65.05	65.29	65.25	66.46	66.95
20	66.62	66.32	66.45	66.29	66.12	65.85	65.70	65.09	65.39	65.32	66.40	66.84
21	66.61	66.26	66.44	65.86	66.08	66.01	65.66	65.11	65.41	65.37	66.57	66.83
22	66.57	66.18	66.48	66.12	66.08	66.00	65.58	65.16	65.45	65.40	66.57	66.69
23	66.56	66.11	66.43	66.20	66.16	65.90	65.68	65.19	65.47	65.36	66.53	66.94
24	66.54	66.33	66.41	66.27	66.14	66.00	65.60	65.20	65.42	65.30	66.59	66.91
25	66.50	66.45	66.40	66.28	66.10	65.90	65.69	65.22	65.44	65.31	66.54	66.83
26	66.47	66.48	66.40	65.90	66.09	65.89	65.50	65.21	65.55	65.25	66.25	66.89
27	66.57	66.50	66.44	66.20	66.16	65.88	65.52	65.22	65.58	65.28	66.29	66.74
28	66.61	66.46	66.44	66.24	66.18	65.94	65.54	65.20	65.62	65.31	66.33	66.82
29	66.61	66.42	66.36	66.11	---	65.90	65.43	65.15	65.62	65.28	66.39	67.00
30	66.59	66.46	66.37	66.20	---	65.89	65.45	65.13	65.69	65.28	66.60	67.25
31	66.58	---	66.35	66.28	---	65.94	---	65.08	---	65.24	66.86	---
MEAN	66.62	66.40	66.43	66.25	66.14	65.95	65.68	65.23	65.25	65.38	65.97	66.81
MAX	66.71	66.56	66.48	66.46	66.46	66.11	65.90	65.47	65.69	65.62	66.87	67.25
MIN	66.47	66.11	66.32	65.86	65.84	65.66	65.43	64.97	64.98	65.14	64.73	66.63
CAL YR 1984	MEAN	66.51	MAX	66.94	MIN	65.84						
WTR YR 1985	MEAN	66.01	MAX	67.25	MIN	64.73						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237701 APOPKA-BEAUCLAIR CANAL BELOW DAM, NEAR ASTATULA, FL

LOCATION.--Lat 28°43'22", long 81°41'06", in NW¼ sec.26, T.20 S., R.26 E., Lake County, Hydrologic Unit 03080102, near left bank at downstream end of lock, 300 ft upstream from bridge on county road, and 2.5 mi east of Astatula.

DRAINAGE AREA.--184 mi²

PERIOD OF RECORD.--January 1957 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and are available in files of the Orlando Subdistrict Office. Prior to October 1967, published as Apopka-Beauclair Canal near Astatula (auxiliary).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 14, 1958, nonrecording gage at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 65.93 ft, Mar. 14, 1958; minimum, 60.59 ft, Feb. 19, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 63.67 ft, Sept. 1; minimum, 61.31 ft, June 11.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.51	62.28	62.15	62.22	62.17	62.13	62.01	61.81	61.51	61.73	61.69	62.99
2	62.48	62.27	62.16	62.22	62.19	62.14	62.00	61.78	61.49	61.74	61.69	63.09
3	62.44	62.26	62.17	62.24	62.23	62.14	61.98	61.76	61.47	61.74	61.69	62.63
4	62.43	62.26	62.18	62.29	62.24	62.10	61.94	61.80	61.47	61.73	61.68	62.37
5	62.40	62.27	62.17	62.30	62.19	62.10	61.92	61.74	61.46	61.71	61.65	62.36
6	62.40	62.29	62.22	62.27	62.22	62.13	61.93	61.70	61.42	61.70	61.64	62.36
7	62.39	62.26	62.24	62.25	62.25	62.09	61.94	61.67	61.40	61.71	61.98	62.36
8	62.39	62.21	62.20	62.25	62.26	62.06	61.95	61.66	61.40	61.73	62.24	62.35
9	62.39	62.18	62.19	62.24	62.22	62.05	61.95	61.65	61.38	61.71	62.59	62.33
10	62.38	62.16	62.18	62.23	62.20	62.06	61.91	61.63	61.38	61.69	62.61	62.32
11	62.38	62.17	62.19	62.23	62.16	62.04	61.88	61.62	61.36	61.68	62.40	62.31
12	62.39	62.18	62.19	62.27	62.22	62.04	61.87	61.61	61.37	61.69	62.35	62.31
13	62.37	62.16	62.19	62.23	62.23	62.05	61.89	61.60	61.45	61.70	62.64	62.32
14	62.36	62.14	62.19	62.20	62.21	62.04	61.87	61.60	61.51	61.72	62.58	62.37
15	62.35	62.12	62.20	62.22	62.19	62.04	61.88	61.59	61.66	61.70	62.52	62.33
16	62.36	62.12	62.20	62.20	62.17	62.02	61.89	61.57	61.70	61.69	62.37	62.32
17	62.34	62.12	62.21	62.18	62.16	62.03	61.91	61.55	61.71	61.69	62.30	62.31
18	62.34	62.11	62.21	62.24	62.16	62.05	61.88	61.54	61.70	61.70	62.24	62.29
19	62.32	62.11	62.21	62.25	62.15	62.00	61.86	61.50	61.71	61.69	62.25	62.29
20	62.30	62.14	62.22	62.26	62.17	61.96	61.85	61.48	61.76	61.67	62.26	62.37
21	62.30	62.14	62.21	62.27	62.15	61.98	61.84	61.59	61.74	61.68	62.36	62.43
22	62.30	62.21	62.23	62.23	62.13	62.06	61.81	61.58	61.72	61.70	62.29	62.43
23	62.30	62.25	62.23	62.22	62.12	62.08	61.79	61.59	61.71	61.68	62.29	62.42
24	62.29	62.21	62.23	62.21	62.12	62.08	61.79	61.64	61.68	61.65	62.25	62.42
25	62.29	62.18	62.24	62.21	62.12	62.08	61.79	61.67	61.65	61.65	62.23	62.43
26	62.30	62.17	62.24	62.24	62.13	62.05	61.79	61.65	61.64	61.67	62.24	62.42
27	62.27	62.15	62.25	62.20	62.14	62.01	61.78	61.61	61.66	61.69	62.28	62.42
28	62.29	62.16	62.23	62.19	62.15	62.00	61.78	61.58	61.65	61.66	62.34	62.43
29	62.30	62.18	62.23	62.21	---	61.99	61.82	61.56	61.67	61.65	62.33	62.39
30	62.30	62.16	62.24	62.19	---	61.99	61.87	61.55	61.71	61.66	62.31	62.38
31	62.29	---	62.23	62.17	---	61.98	---	61.53	---	61.70	62.36	---
MEAN	62.35	62.19	62.21	62.23	62.18	62.05	61.88	61.63	61.57	61.69	62.21	62.42
MAX	62.51	62.29	62.25	62.30	62.26	62.14	62.01	61.81	61.76	61.74	62.64	63.09
MIN	62.27	62.11	62.15	62.17	62.12	61.96	61.78	61.48	61.36	61.65	61.64	62.29
CAL YR 1984	MEAN	62.75	MAX	64.71	MIN	62.11						
WTR YR 1985	MEAN	62.05	MAX	63.09	MIN	61.36						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237802 DORA CANAL AT TAVARES, FL

LOCATION.--Lat 28°48'39", long 81°44'33", in NE¼ sec.30, T.19 S., R.26 E., Lake County, Hydrologic Unit 03080102, at bridge on U.S. Highway 441 just upstream from Lake Eustis, 0.9 mi northwest of Tavares, and 1.1 mi downstream from Lake Dora.

DRAINAGE AREA.--238 mi².

PERIOD OF RECORD.--1958-59 (two or three discharge measurements each water year), October 1963 to current year (discharge measurements only).

REVISED RECORDS.--WDR FL-72-1: Drainage area.

REMARKS.--Flow occasionally reversed as a result of wind effect.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 610 ft³/s Mar. 25, 1958; minimum discharge measured, -74 ft³/s, June 22, 1981.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1984 to SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
AUG 15...	1120	43

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238000 HAINES CREEK AT LISBON, FL

LOCATION.--Lat 28°52'14", long 81°47'02", in NW¼ sec.2, T.19 S., R.25 E., Lake County, Hydrologic Unit 03080102, on left bank at upstream side of Burrell lock and dam, 900 ft upstream from bridge on State Highway 44, 0.2 mi south of Lisbon, and 7 mi northeast of Leesburg.

DRAINAGE AREA.--648 mi².

PERIOD OF RECORD.--July 1942 to September 1978, October 1978 to current year (gage heights only).

REVISED RECORDS.--WDR FL-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Aug. 22, 1956, nonrecording gage at site 1,000 ft downstream at datum 58.93 ft higher and Aug. 22, 1956, to Mar. 5, 1957, at present datum. Mar. 6 to Oct. 8, 1957, nonrecording gage at present site and datum. Mar. 6 to Oct. 8, 1957, auxiliary nonrecording gage and since Oct. 9, 1957, auxiliary water-stage recorder at downstream side of lock and dam at present datum.

REMARKS.--Since Dec. 23, 1956, flow regulated at station by manipulation of gates in spillway.

AVERAGE DISCHARGE.--14 years (water years 1943-56), 292 ft³/s, 6.20 in/yr; 22 years (water years 1957-78), 251 ft³/s, 181,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,350 ft³/s, Jan. 14,15, 1970; maximum gage height, 64.50 ft, Apr. 5,7,8, 1960; no flow Sept. 21 to Dec. 22, 1956, result of temporary coffer dam upstream; minimum gage height, 56.84 ft, Jan. 20, 1957, former site and present datum; minimum discharge prior to closure of coffer dam, 66 ft³/s, Sept. 18, 1956, gage height, 58.54 ft, former site and present datum. Minimum daily discharge after closure of lock and dam, gates closed and no flow for many days in 1975; minimum gage height, 60.30 ft, Mar. 12, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1926 reached a stage of about 65.3 ft, former site and present datum, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 62.42 ft, Oct. 1, occurred on general recession following peak on Aug. 26 of previous water year; minimum, 61.10 ft, June 11, affected by wind.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.40	62.20	62.10	62.18	62.13	62.06	61.90	61.67	61.40	61.63	61.56	62.27
2	62.36	62.19	62.10	62.18	62.14	62.05	61.89	61.67	61.38	61.64	61.59	62.22
3	62.36	62.19	62.10	62.21	62.12	62.04	61.86	61.66	61.37	61.64	61.57	62.22
4	62.35	62.20	62.10	62.22	62.09	62.04	61.87	61.62	61.35	61.62	61.55	62.24
5	62.34	62.19	62.14	62.17	62.12	62.04	61.87	61.62	61.38	61.61	61.54	62.26
6	62.34	62.13	62.16	62.17	62.13	61.99	61.87	61.60	61.37	61.61	61.54	62.26
7	62.33	62.10	62.13	62.16	62.12	61.97	61.88	61.59	61.36	61.61	61.65	62.26
8	62.30	62.08	62.13	62.16	62.08	61.98	61.86	61.59	61.33	61.59	61.69	62.25
9	62.30	62.09	62.12	62.14	62.07	61.98	61.84	61.58	61.30	61.58	61.75	62.26
10	62.27	62.11	62.13	62.14	62.08	61.97	61.84	61.55	61.30	61.58	61.80	62.25
11	62.27	62.11	62.14	62.14	62.14	61.96	61.83	61.55	61.29	61.57	61.80	62.25
12	62.27	62.08	62.13	62.09	62.10	61.95	61.80	61.53	61.33	61.62	61.80	62.23
13	62.27	62.05	62.13	62.07	62.08	61.95	61.80	61.51	61.35	61.61	61.85	62.24
14	62.29	62.06	62.13	62.11	62.07	61.95	61.84	61.51	61.43	61.63	61.89	62.21
15	62.29	62.05	62.13	62.09	62.06	61.95	61.85	61.51	61.56	61.63	61.92	62.21
16	62.29	62.06	62.13	62.10	62.07	61.94	61.84	61.48	61.61	61.62	61.98	62.21
17	62.29	62.05	62.14	62.14	62.07	61.96	61.82	61.44	61.60	61.62	62.02	62.18
18	62.27	62.06	62.14	62.14	62.06	61.90	61.79	61.40	61.60	61.61	62.04	62.21
19	62.26	62.08	62.15	62.16	62.07	61.90	61.80	61.37	61.60	61.59	62.05	62.22
20	62.26	62.04	62.15	62.14	62.05	61.90	61.79	61.39	61.59	61.60	62.05	62.27
21	62.25	61.99	62.16	62.10	62.05	61.93	61.76	61.47	61.58	61.60	62.06	62.35
22	62.24	61.94	62.16	62.08	62.06	62.01	61.76	61.48	61.58	61.60	62.07	62.35
23	62.24	61.98	62.16	62.07	62.06	61.99	61.75	61.51	61.58	61.58	62.07	62.34
24	62.23	62.03	62.16	62.10	62.07	61.98	61.75	61.54	61.57	61.55	62.09	62.32
25	62.20	62.07	62.16	62.13	62.06	61.97	61.72	61.52	61.55	61.57	62.10	62.32
26	62.20	62.09	62.16	62.12	62.06	61.95	61.71	61.48	61.57	61.55	62.09	62.30
27	62.22	62.10	62.14	62.11	62.07	61.95	61.71	61.48	61.56	61.56	62.11	62.30
28	62.25	62.11	62.16	62.11	62.07	61.96	61.68	61.47	61.57	61.55	62.14	62.28
29	62.24	62.09	62.17	62.11	---	61.95	61.68	61.45	61.60	61.58	62.15	62.27
30	62.22	62.10	62.18	62.10	---	61.93	61.68	61.43	61.62	61.57	62.16	62.26
31	62.20	---	62.18	62.13	---	61.94	---	61.42	---	61.56	62.26	---
MEAN	62.28	62.09	62.14	62.13	62.08	61.97	61.80	61.52	61.48	61.60	61.90	62.26
MAX	62.40	62.20	62.18	62.22	62.14	62.06	61.90	61.67	61.62	61.64	62.26	62.35
MIN	62.20	61.94	62.10	62.07	62.05	61.90	61.68	61.37	61.29	61.55	61.54	62.18
CAL YR 1984	MEAN	62.45	MAX	62.97	MIN	61.94						
WTR YR 1985	MEAN	61.94	MAX	62.40	MIN	61.29						

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02238001 HAINES CREEK BELOW BURRELL DAM, AT LISBON, FL

LOCATION.--Lat 28°52'16", long 81°47'04", in NW¼ sec.2, T.19 S., R.25 E., Lake County, Hydrologic Unit 03080102, on left bank at downstream side of Burrell lock and dam, 750 ft upstream from bridge on State Highway 44, 0.2 mi south of Lisbon, and 7 mi northeast of Leesburg.

DRAINAGE AREA.--648 mi².

PERIOD OF RECORD.--March 1957 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and are available in files of the Orlando Subdistrict Office. Prior to October 1967, published as Haines Creek at Lisbon (auxiliary).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 61.48 ft, Oct. 9, 1960; minimum observed, 52.90 ft, June 26, 28, 1984, result of drawdown of Lake Griffin.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 58.57 ft, Sept. 26; minimum observed, 56.92 ft, June 10, affected by wind.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.40	58.12	57.82	57.75	57.84	57.96	57.83	57.53	57.24	57.56	57.50	58.28
2	58.37	58.12	57.80	57.75	57.86	57.98	57.83	57.52	57.20	57.54	57.49	58.34
3	58.36	58.12	57.81	57.78	57.87	57.94	57.81	57.51	57.18	57.54	57.58	58.35
4	58.35	58.12	57.80	57.85	57.85	57.94	57.77	57.46	57.16	57.52	57.59	58.37
5	58.36	58.11	57.82	57.82	57.87	57.96	57.76	57.44	57.16	57.52	57.59	58.40
6	58.35	58.09	57.86	57.80	57.90	57.93	57.77	57.43	57.14	57.56	57.57	58.43
7	58.36	58.05	57.81	57.78	57.93	57.91	57.79	57.42	57.12	57.52	57.75	58.42
8	58.35	58.02	57.80	57.77	57.91	57.90	57.80	57.40	57.10	57.53	57.79	58.42
9	58.34	58.01	57.79	57.76	57.91	57.90	57.76	57.37	57.07	57.52	57.83	58.42
10	58.33	58.00	57.79	57.76	57.90	57.88	57.74	57.34	57.11	57.50	57.84	58.41
11	58.33	58.00	57.79	57.78	57.94	57.89	57.70	57.32	57.13	57.48	57.85	58.39
12	58.33	57.98	57.80	57.75	58.04	57.88	57.71	57.32	57.12	57.49	57.84	58.41
13	58.33	57.94	57.78	57.73	57.97	57.87	57.73	57.30	57.18	57.52	57.89	58.39
14	58.32	57.92	57.79	57.74	57.94	57.88	57.78	57.33	57.24	57.51	57.92	58.38
15	58.31	57.89	57.79	57.73	57.94	57.84	57.78	57.32	57.34	57.52	57.95	58.37
16	58.30	57.88	57.79	57.71	57.93	57.85	57.79	57.33	57.39	57.53	57.98	58.36
17	58.29	57.86	57.79	57.74	57.93	57.87	57.74	57.35	57.40	57.57	58.01	58.34
18	58.29	57.85	57.79	57.77	57.93	57.85	57.72	57.25	57.40	57.59	58.02	58.36
19	58.28	57.84	57.79	57.80	57.94	57.82	57.72	57.21	57.40	57.57	58.02	58.36
20	58.26	57.84	57.79	57.82	57.93	57.79	57.70	57.23	57.40	57.49	58.01	58.43
21	58.24	57.80	57.79	57.81	57.92	57.83	57.67	57.30	57.44	57.56	58.00	58.50
22	58.23	57.79	57.80	57.81	57.94	57.92	57.66	57.30	57.47	57.57	57.96	58.52
23	58.21	57.84	57.79	57.81	57.94	57.93	57.65	57.33	57.45	57.58	57.93	58.52
24	58.19	57.85	57.78	57.80	57.95	57.93	57.62	57.34	57.44	57.59	57.92	58.54
25	58.18	57.84	57.78	57.83	57.96	57.87	57.59	57.31	57.43	57.56	57.91	58.54
26	58.16	57.85	57.78	57.82	57.96	57.86	57.58	57.29	57.44	57.56	57.90	58.54
27	58.16	57.84	57.77	57.81	57.97	57.86	57.57	57.28	57.43	57.56	57.95	58.53
28	58.17	57.85	57.78	57.83	57.96	57.85	57.56	57.28	57.46	57.54	58.00	58.50
29	58.16	57.84	57.77	57.83	---	57.86	57.55	57.26	57.52	57.53	58.03	58.51
30	58.16	57.82	57.77	57.81	---	57.84	57.54	57.25	57.54	57.51	58.05	58.50
31	58.14	---	57.75	57.83	---	57.83	---	57.22	---	57.51	58.12	---
MEAN	58.28	57.94	57.79	57.79	57.93	57.88	57.71	57.34	57.30	57.54	57.86	58.43
MAX	58.40	58.12	57.86	57.85	58.04	57.98	57.83	57.53	57.54	57.59	58.12	58.54
MIN	58.14	57.79	57.75	57.71	57.84	57.79	57.54	57.21	57.07	57.48	57.49	58.28
CAL YR 1984	MEAN	57.01	MAX	60.34	MIN	52.90						
WTR YR 1985	MEAN	57.81	MAX	58.54	MIN	57.07						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238499 OKLAWAHA RIVER ABOVE MOSS BLUFF DAM, AT MOSS BLUFF, FL

LOCATION.--Lat 29°04'52", long 81°52'51", in SW¼ sec.23, T.16 S., R.24 E., Marion County, Hydrologic Unit 03080102, at upstream side of spillway structure of Moss Bluff Dam, 0.3 mi upstream from bridge on State Highway 464, 0.4 mi southwest of Moss Bluff, 3.9 mi northeast of Oklawaha, and 64.3 mi upstream from mouth.

DRAINAGE AREA.--879 mi².

PERIOD OF RECORD.--October 1965 to June 1967 and October 1969 to current year (gage heights only).

REVISED RECORDS.--WDR FL-74-1: Drainage area.

GAGE.--Dual water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 20, 1965, to June 8, 1967, at datum 0.12 ft lower and Oct. 1, 1969, to Mar. 5, 1971, at datum 0.30 ft higher. This is the auxiliary gage for station 02238500 located at downstream side of spillway structure.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 59.80 ft, Dec. 10, 1969; minimum, 45.45 ft, Mar. 6, 1973, result of dike failure.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 58.59 ft, Aug. 31; minimum, 56.67 ft, June 12.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.26	58.04	57.78	57.74	57.83	57.86	57.65	57.42	57.08	57.43	57.38	58.32
2	58.23	58.02	57.75	57.72	57.83	57.85	57.67	57.42	57.04	57.42	57.38	58.24
3	58.25	58.02	57.75	57.74	57.75	57.82	57.67	57.43	57.02	57.42	57.41	58.25
4	58.25	58.04	57.71	57.71	57.71	57.87	57.70	57.22	57.01	57.41	57.41	58.26
5	58.25	58.02	57.78	57.64	57.82	57.85	57.72	57.29	57.02	57.43	57.42	58.31
6	58.24	57.91	57.76	57.67	57.81	57.73	57.69	57.29	57.01	57.43	57.46	58.30
7	58.22	57.88	57.69	57.72	57.74	57.77	57.68	57.28	57.00	57.40	57.63	58.31
8	58.40	57.89	57.73	57.67	57.72	57.80	57.65	57.28	56.98	57.37	57.70	58.29
9	58.18	57.93	57.73	57.67	57.77	57.81	57.61	57.26	56.93	57.36	57.75	58.32
10	58.17	57.93	57.76	57.67	57.81	57.78	57.62	57.22	56.95	57.38	57.72	58.29
11	58.16	57.93	57.73	57.67	57.95	57.80	57.64	57.19	57.03	57.37	57.72	58.28
12	58.19	57.86	57.73	57.53	57.83	57.80	57.56	57.15	57.03	57.36	57.71	58.26
13	58.21	57.84	57.73	57.58	57.81	57.77	57.57	57.13	57.09	57.35	57.73	58.23
14	58.22	57.84	57.72	57.65	57.82	57.77	57.66	57.17	57.14	57.38	57.82	58.15
15	58.22	57.85	57.72	57.61	57.81	57.72	57.69	57.18	57.22	57.38	57.87	58.20
16	58.20	57.83	57.72	57.64	57.82	57.76	57.68	57.18	57.28	57.40	57.91	58.19
17	58.20	57.81	57.72	57.72	57.82	57.77	57.60	57.19	57.27	57.42	57.92	58.20
18	58.20	57.82	57.71	57.68	57.81	57.63	57.62	57.10	57.27	57.43	57.92	58.18
19	58.18	57.83	57.72	57.71	57.83	57.72	57.62	57.10	57.26	57.40	57.95	58.21
20	58.17	57.71	57.72	57.64	57.78	57.75	57.58	57.14	57.24	57.44	57.95	58.29
21	58.18	57.58	57.74	57.62	57.83	57.77	57.56	57.18	57.27	57.43	57.92	58.37
22	58.15	57.44	57.70	57.66	57.85	57.83	57.56	57.20	57.29	57.46	57.93	58.39
23	58.13	57.46	57.70	57.67	57.88	57.78	57.55	57.22	57.28	57.42	57.89	58.40
24	58.09	57.66	57.71	57.70	57.91	57.80	57.55	57.22	57.26	57.46	57.91	58.42
25	58.06	57.76	57.70	57.71	57.88	57.76	57.53	57.17	57.26	57.45	57.92	58.42
26	58.03	57.78	57.68	57.62	57.87	57.73	57.52	57.12	57.30	57.41	57.91	58.38
27	58.12	57.80	57.63	57.71	57.87	57.74	57.50	57.14	57.30	57.44	57.88	58.41
28	58.12	57.79	57.70	57.74	57.83	57.81	57.48	57.13	57.33	57.42	57.92	58.33
29	58.11	57.75	57.72	57.69	---	57.75	57.43	57.13	57.39	57.39	57.96	58.36
30	58.08	57.77	57.72	57.73	---	57.71	57.38	57.09	57.40	57.37	57.97	58.38
31	58.06	---	57.73	57.78	---	57.77	---	57.08	---	57.38	58.24	---
MEAN	58.18	57.83	57.72	57.68	57.82	57.78	57.60	57.20	57.16	57.41	57.78	58.30
MAX	58.40	58.04	57.78	57.78	57.95	57.87	57.72	57.43	57.40	57.46	58.24	58.42
MIN	58.03	57.44	57.63	57.53	57.71	57.63	57.38	57.08	56.93	57.35	57.38	58.15
CAL YR 1984	MEAN	55.23	MAX	58.58	MIN	46.70						
WTR YR 1985	MEAN	57.70	MAX	58.42	MIN	56.93						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238500 OKLAWAHA RIVER AT MOSS BLUFF, FL

LOCATION.--Lat 29°04'52", long 81°52'51", in SW¼ sec.23, T.16 S., R.24 E., Marion County, Hydrologic Unit 03080102, at downstream side of spillway structure of Moss Bluff Dam, 0.3 mi upstream from bridge on State Highway 464, 0.4 mi southwest of Moss Bluff, 3.9 mi northeast of Oklawaha, and 64.3 mi upstream from mouth.

DRAINAGE AREA.--879 mi².

PERIOD OF RECORD.--February to September 1943 (discharge measurements only), October 1943 to September 1955, April 1956 and March 1958 to July 1967 (discharge measurements only), August 1967 to current year.

REVISED RECORDS.--WDR FL-74-1: Drainage area.

GAGE.--Dual water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1943, nonrecording gage and Aug. 12, 1943, to Sept. 30, 1955, water-stage recorder at site 0.3 mi downstream at datum 0.12 ft lower; Aug. 11, 1967, to Sept. 30, 1969, water-stage recorder at site 0.3 mi downstream at present datum. Auxiliary gage at upstream side of spillway structure.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by manipulation of gates in spillway.

COOPERATION.--Gate-opening record furnished by St. Johns River Water Management District.

AVERAGE DISCHARGE.--30 years (water years 1944-55, 1968-85), 293 ft³/s, 212,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,340 ft³/s, Feb. 20, 1983; maximum gage height, 50.71 ft, present datum, Sept. 12, 1960, from U.S. Army Corps of Engineers records; gates closed and no flow for many days in 1973-74; minimum gage height, 34.04 ft, Dec. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 55 ft³/s, Apr. 28; maximum daily gage height, 38.10 ft, Aug. 17; minimum daily discharge, 24 ft³/s, many days; minimum daily gage height, 34.63 ft, June 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	25	26	35	26	24	28	29	41	24	28	24
2	24	26	36	26	34	40	24	25	43	24	25	38
3	24	40	24	24	28	43	33	26	29	24	37	24
4	24	42	24	24	24	29	34	34	29	45	52	24
5	24	26	24	24	24	28	37	48	24	36	24	29
6	44	24	24	29	24	28	25	29	25	50	33	26
7	46	24	24	24	24	24	48	33	24	45	25	34
8	24	26	28	24	24	24	32	26	43	24	26	48
9	24	26	25	24	29	35	29	25	40	25	24	24
10	26	31	24	25	35	32	26	26	26	28	37	24
11	26	36	24	26	24	29	30	36	26	26	39	26
12	26	26	26	24	24	33	25	45	26	26	24	24
13	41	24	29	24	24	29	24	24	24	45	34	25
14	45	26	24	24	24	30	30	26	24	46	26	41
15	26	24	29	24	26	29	26	24	25	24	25	38
16	29	24	29	24	29	40	29	24	29	24	26	26
17	26	29	24	26	36	26	28	29	26	28	43	24
18	26	39	26	24	24	25	24	46	28	31	42	24
19	31	24	26	24	24	32	26	43	26	30	29	24
20	39	24	24	24	24	35	50	26	27	41	26	24
21	46	25	24	24	26	24	48	29	30	44	27	30
22	29	24	26	24	30	26	26	29	36	26	24	40
23	26	25	41	24	32	34	29	25	36	26	26	24
24	26	36	30	24	39	42	29	26	29	24	38	24
25	29	36	26	25	24	29	26	44	29	24	46	28
26	24	29	26	24	29	27	31	50	28	24	24	30
27	33	24	24	24	29	29	43	49	26	36	25	26
28	42	24	26	24	28	34	55	24	24	42	25	45
29	26	24	33	24	---	29	31	24	28	28	26	41
30	26	24	35	24	---	45	29	24	35	29	24	24
31	24	---	34	24	---	50	---	24	---	29	24	---
TOTAL	930	837	845	768	768	984	955	972	886	978	934	883
MEAN	30.0	27.9	27.3	24.8	27.4	31.7	31.8	31.4	29.5	31.5	30.1	29.4
MAX	46	42	41	35	39	50	55	50	43	50	52	48
MIN	24	24	24	24	24	24	24	24	24	24	24	24
AC-FT	1840	1660	1680	1520	1520	1950	1890	1930	1760	1940	1850	1750
CAL YR 1984	TOTAL	137498.8	MEAN	376	MAX	1900	MIN	6.4	AC-FT	272700		
WTR YR 1985	TOTAL	10740	MEAN	29.4	MAX	55	MIN	24	AC-FT	21300		

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238500 OKLAWAHA RIVER AT MOSS BLUFF, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.45	35.97	35.79	35.44	35.36	35.07	35.12	35.06	34.73	35.23	35.24	36.97
2	36.34	35.96	35.81	35.43	35.33	35.11	35.13	34.98	34.77	35.16	35.20	37.56
3	36.31	36.02	35.81	35.44	35.32	35.12	35.19	34.92	34.75	35.08	35.27	37.42
4	36.28	36.08	35.80	35.44	35.30	35.07	35.11	34.90	34.69	35.03	35.44	37.22
5	36.21	36.05	35.80	35.47	35.26	35.07	35.10	34.91	34.67	35.00	35.32	37.15
6	36.23	36.00	35.81	35.43	35.28	35.02	35.09	34.86	34.63	35.04	35.24	37.44
7	36.26	35.96	35.78	35.40	35.30	35.00	35.11	34.82	34.64	35.05	35.49	37.26
8	36.35	35.95	35.77	35.40	35.28	35.00	35.11	34.78	34.73	34.97	36.20	37.02
9	36.18	35.93	35.75	35.39	35.27	35.05	35.07	34.73	34.77	35.00	36.05	36.79
10	36.18	35.91	35.73	35.43	35.27	35.12	35.04	34.73	34.72	34.92	36.11	36.62
11	36.20	35.93	35.73	35.46	35.23	35.08	35.02	34.76	34.69	34.92	36.58	36.54
12	36.16	35.92	35.72	35.47	35.37	35.08	35.02	34.80	34.73	34.92	36.32	36.50
13	36.23	35.88	35.70	35.43	35.31	35.07	35.18	34.77	34.77	34.97	36.12	36.52
14	36.21	35.85	35.69	35.40	35.25	35.07	35.14	34.75	34.83	35.03	36.61	36.62
15	36.12	35.82	35.68	35.40	35.25	35.08	35.12	34.73	34.94	35.12	37.32	36.56
16	36.13	35.80	35.68	35.37	35.23	35.07	35.08	34.73	34.96	35.08	37.15	36.46
17	36.08	35.79	35.67	35.38	35.23	35.16	35.02	34.76	34.92	35.05	38.10	36.42
18	36.10	35.81	35.66	35.39	35.22	35.15	34.98	34.80	34.86	35.14	37.71	36.38
19	36.09	35.80	35.65	35.36	35.20	35.12	34.97	34.81	34.80	35.14	37.23	36.35
20	36.10	35.79	35.64	35.37	35.21	35.09	35.07	34.80	34.77	35.16	36.92	36.47
21	36.15	35.81	35.58	35.37	35.19	35.10	35.14	34.82	34.82	35.18	36.69	36.62
22	36.08	35.86	35.59	35.34	35.14	35.16	35.13	34.78	34.90	35.22	36.48	36.67
23	36.04	35.91	35.60	35.33	35.12	35.17	35.12	34.79	34.92	35.17	36.31	36.62
24	36.02	35.91	35.60	35.32	35.11	35.17	35.12	34.79	34.84	35.13	36.23	36.65
25	36.02	35.89	35.56	35.35	35.12	35.13	35.11	34.82	34.80	35.06	36.19	36.61
26	36.01	35.87	35.55	35.33	35.13	35.11	35.12	34.84	34.78	35.07	36.05	36.61
27	36.04	35.84	35.52	35.28	35.13	35.07	35.15	34.84	34.83	35.13	35.95	36.56
28	36.06	35.83	35.48	35.37	35.10	35.05	35.17	34.77	34.89	35.21	35.96	36.51
29	36.04	35.83	35.47	35.53	---	35.07	35.12	34.71	35.10	35.17	35.92	36.49
30	36.00	35.80	35.47	35.40	---	35.05	35.08	34.69	35.21	35.21	35.87	36.45
31	35.98	---	35.46	35.33	---	35.08	---	34.69	---	35.27	36.12	---
MEAN	36.15	35.89	35.66	35.40	35.23	35.09	35.10	34.80	34.82	35.09	36.24	36.74
MAX	36.45	36.08	35.81	35.53	35.37	35.17	35.19	35.06	35.21	35.27	38.10	37.56
MIN	35.98	35.79	35.46	35.28	35.10	35.00	34.97	34.69	34.63	34.92	35.20	36.35
CAL YR 1984	MEAN	37.79	MAX	42.56	MIN	35.46						
WTR YR 1985	MEAN	35.52	MAX	38.10	MIN	34.63						

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02239500 SILVER SPRINGS NEAR OCALA, FL

LOCATION.--Lat 29°12'44", long 82°03'15", in SE¼ sec.1, T.15 S., R.23 E., Marion County, Hydrologic Unit 03080102, in canal at glass bottom boat docking shed, 1,400 ft downstream from head of springs, and 5.3 mi northeast of Ocala.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1906 to December 1907 (gage heights only), October 1932 to September 1947 (monthly discharge only, prior to January 1933, published in WSP 1304), October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 38.96 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 20, 1947, nonrecording gage at same site and datum. Feb. 20, 1947, to May 23, 1974, at site 800 ft north at same datum.

REMARKS.--No estimated daily discharges. Records good. Discharge measurements made 4 to 5 mi downstream from head of springs; surface inflow between head of springs and measuring site is subtracted when measureable. Prior to Nov. 20, 1959, measurements made at site 0.7 mi downstream from head of springs. Discharge computed from relation between artesian pressure at Sharpes Ferry Well and discharge at measuring site. Artesian pressures are published as water levels for Sharpes Ferry Well (291115081592501) in Volume 1B: Northeast Florida, Ground Water.

AVERAGE DISCHARGE.--53 years (water years 1933-85), 811 ft³/s, 524 mgd.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,290 ft³/s, Oct. 7, 13-17, 20, 1960; maximum gage height observed, 5.50 ft, Sept. 6, 1933; minimum daily discharge, 539 ft³/s, May 7, 1957; minimum gage height, -0.99 ft, June 22,23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 911 ft³/s, Oct. 1, occurred on recession following peak of Sept. 28, 1984; maximum gage height, 1.40 ft, Oct. 1; minimum daily discharge, 646 ft³/s, July 14,25; minimum gage height, -0.63 ft, June 11,12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	911	882	850	818	785	756	718	681	662	660	657	720
2	908	883	848	819	782	755	713	681	661	661	662	721
3	909	885	847	821	776	751	713	680	660	662	666	725
4	909	886	845	820	774	750	711	679	660	662	667	730
5	908	883	849	811	781	747	710	680	657	661	667	736
6	907	875	847	807	782	743	707	679	655	660	668	740
7	907	869	835	811	775	739	720	679	655	659	672	743
8	909	869	836	810	770	741	718	680	657	660	676	748
9	910	871	839	806	769	742	710	680	654	661	677	753
10	908	874	841	805	772	743	705	680	652	661	679	767
11	906	876	844	807	780	742	704	679	652	657	681	769
12	904	870	842	801	778	742	698	678	654	655	680	770
13	906	864	837	800	769	740	697	678	655	653	681	770
14	907	861	831	804	767	739	697	677	653	646	686	770
15	904	862	831	801	769	736	694	675	653	650	691	776
16	899	865	832	798	766	737	689	678	653	652	687	778
17	895	865	832	806	763	743	691	681	656	651	687	780
18	895	867	831	805	761	733	692	674	657	649	690	779
19	895	867	830	800	765	727	691	668	657	647	691	782
20	895	860	829	797	766	731	688	667	655	650	693	788
21	893	855	828	784	760	738	687	670	656	652	696	791
22	891	857	826	784	760	739	688	672	654	653	698	791
23	890	863	825	788	762	732	687	673	653	655	699	792
24	889	860	825	791	761	730	689	674	654	653	702	795
25	887	857	821	793	759	725	691	674	656	646	702	799
26	888	855	818	783	759	719	689	671	658	648	702	801
27	887	855	817	784	757	723	683	668	658	653	706	795
28	885	858	818	792	756	725	680	666	658	654	710	791
29	885	855	820	784	---	730	679	665	656	652	713	796
30	885	853	818	782	---	722	679	664	658	653	719	802
31	883	---	818	785	---	721	---	664	---	654	726	---
TOTAL	27855	26002	25810	24797	21524	22841	20918	20915	19679	20290	21331	23098
MEAN	899	867	833	800	769	737	697	675	656	655	688	770
MAX	911	886	850	821	785	756	720	681	662	662	726	802
MIN	883	853	817	782	756	719	679	664	652	646	657	720
CAL YR 1984	TOTAL	341020	MEAN	932	MAX	986	MIN	817				
WTR YR 1985	TOTAL	275060	MEAN	754	MAX	911	MIN	646				

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02239500 SILVER SPRINGS NEAR OCALA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.38	1.12	.85	.54	.30	.06	-0.13	-0.32	-0.57	-0.45	-0.31	.71
2	1.37	1.11	.85	.53	.29	.05	-0.14	-0.33	-0.56	-0.46	-0.31	.99
3	1.35	1.13	.84	.53	.28	.05	-0.14	-0.35	-0.58	-0.47	-0.29	.98
4	1.34	1.13	.83	.52	.27	.05	-0.15	-0.36	-0.59	-0.47	-0.24	.91
5	1.34	1.12	.82	.50	.26	.03	-0.17	-0.36	-0.60	-0.46	-0.24	.92
6	1.33	1.09	.82	.48	.26	.02	-0.16	-0.38	-0.61	-0.45	-0.25	1.02
7	1.33	1.08	.80	.48	.25	.01	-0.17	-0.40	-0.61	-0.44	-0.21	.97
8	1.33	1.07	.79	.46	.23	.00	-0.18	-0.41	-0.60	-0.45	-0.09	.92
9	1.31	1.06	.78	.45	.22	-0.01	-0.19	-0.42	-0.60	-0.46	-0.04	.88
10	1.31	1.05	.77	.45	.22	.00	-0.20	-0.43	-0.61	-0.47	.01	.83
11	1.30	1.04	.76	.44	.21	-0.01	-0.22	-0.43	-0.61	-0.47	.13	.80
12	1.29	1.03	.75	.43	.20	-0.03	-0.22	-0.44	-0.60	-0.47	.13	.81
13	1.29	1.02	.74	.42	.19	-0.04	-0.17	-0.45	-0.59	-0.45	.14	.82
14	1.28	1.00	.72	.41	.18	-0.05	-0.18	-0.46	-0.56	-0.44	.23	.85
15	1.27	.99	.71	.40	.17	-0.06	-0.20	-0.47	-0.52	-0.42	.42	.85
16	1.26	.98	.71	.39	.16	-0.05	-0.22	-0.48	-0.50	-0.41	.39	.83
17	1.25	.97	.70	.39	.15	-0.02	-0.23	-0.49	-0.51	-0.42	.52	.83
18	1.24	.96	.69	.38	.15	-0.05	-0.25	-0.49	-0.53	-0.40	.60	.82
19	1.23	.96	.68	.38	.14	-0.06	-0.26	-0.48	-0.54	-0.40	.52	.83
20	1.22	.94	.67	.36	.13	-0.07	-0.26	-0.48	-0.56	-0.38	.45	.86
21	1.22	.93	.66	.35	.13	-0.06	-0.26	-0.48	-0.56	-0.37	.42	.89
22	1.21	.94	.65	.33	.12	-0.07	-0.26	-0.49	-0.56	-0.36	.38	.91
23	1.20	.94	.64	.32	.11	-0.07	-0.27	-0.50	-0.55	-0.37	.34	.92
24	1.19	.93	.63	.32	.11	-0.08	-0.28	-0.50	-0.56	-0.38	.33	.94
25	1.17	.92	.62	.33	.10	-0.09	-0.29	-0.50	-0.58	-0.38	.33	.94
26	1.17	.91	.61	.32	.09	-0.11	-0.30	-0.50	-0.57	-0.37	.32	.93
27	1.17	.90	.59	.31	.08	-0.12	-0.30	-0.50	-0.58	-0.36	.31	.93
28	1.16	.89	.58	.32	.07	-0.12	-0.30	-0.52	-0.55	-0.34	.32	.92
29	1.15	.88	.57	.33	---	-0.13	-0.30	-0.54	-0.51	-0.34	.32	.93
30	1.14	.86	.56	.32	---	-0.13	-0.31	-0.55	-0.48	-0.33	.32	.94
31	1.13	---	.55	.30	---	-0.13	---	-0.56	---	-0.32	.42	---
MEAN	1.26	1.00	.71	.40	.18	-0.04	-0.22	-0.45	-0.57	-0.41	.17	.89
MAX	1.38	1.13	.85	.54	.30	.06	-0.13	-0.32	-0.48	-0.32	.60	1.02
MIN	1.13	.86	.55	.30	.07	-0.13	-0.31	-0.56	-0.61	-0.47	-0.31	.71
CAL YR 1984	MEAN	1.62	MAX	2.47	MIN	.55						
WTR YR 1985	MEAN	.24	MAX	1.38	MIN	-0.61						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02239600 TRIBUTARY TO SILVER RIVER AT STATE HIGHWAY 40, NEAR OCALA, FL

LOCATION.--Lat 29°13'09", long 82°02'34", in NE¼ sec.6, T.15 S., R.23 E., Marion County, Hydrologic Unit 03080102, at upstream side of culverts on State Highway 40, 0.3 mi upstream from Silver River, and 6.1 mi northwest of Ocala.

DRAINAGE AREA.--13.2 mi² of which about 4 mi² is noncontributing except at extremely high flows.

PERIOD OF RECORD.--January 1983 to current year (discharge measurements only).

REMARKS.--When measureable, flow subtracted from Silver Springs measured discharge.

EXTREMES FOR PERIOD OF RECORD.--No flow observed.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT			MAR		
05...	0700	.00	26...	0700	.00
DEC			JUL		
14...	0700	.00	09...	1600	.00
JAN			SEP		
29...	0700	.00	16...	1710	.00

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240000 OKLAWAHA RIVER NEAR CONNER, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°12'52", long 81°59'10", in SW¼ sec. 2, T.15 S., R.23 E., Marion County, Hydrologic Unit 03080102, on right bank 75 ft upstream from bridge on State Highway 40, 0.2 mi downstream from Silver River, 1.5 mi southwest of Conner, 8 mi east of Ocala, and 51.0 mi upstream from mouth.

DRAINAGE AREA.--1,196 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to September 1946, March 1963 to September 1977 (gage heights only), October 1977 to current year.

REVISED RECORDS.--WDR FL-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 31.79 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Sept. 24-30. Records good. Some effect from Moss Bluff Dam 13.3 mi upstream.

AVERAGE DISCHARGE.--23 years (water years 1931-36, 1978-85), 1,170 ft³/s, 13.28 in/yr, 847,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,430 ft³/s, Apr. 9, 1982; maximum gage height, 9.14 ft, Sept. 6, 1933; minimum discharge, 622 ft³/s, Jan. 11, 1982; minimum gage height, 2.26 ft, Nov. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,250 ft³/s, Aug. 17; maximum gage height, 5.53 ft, Aug. 17; minimum daily discharge, 685 ft³/s, June 7; minimum gage height, 2.90 ft, June 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	966	879	844	804	790	744	747	736	692	750	755	1020
2	946	878	847	801	783	746	747	728	697	743	751	1200
3	939	884	848	802	779	748	754	718	696	735	756	1180
4	934	895	846	802	776	747	748	712	692	727	778	1130
5	926	889	845	799	774	742	746	714	688	726	770	1110
6	925	880	843	797	775	737	745	710	686	729	759	1200
7	930	875	841	796	775	736	745	704	685	729	787	1150
8	926	873	840	792	773	736	743	700	692	722	879	1090
9	919	871	839	793	771	739	739	696	696	713	862	1030
10	917	869	836	798	770	746	737	695	694	714	861	988
11	917	869	833	799	772	746	736	697	690	714	944	972
12	914	865	832	797	774	743	734	701	692	714	910	963
13	914	858	831	795	773	743	755	699	699	719	881	966
14	916	852	828	793	768	743	751	695	707	727	957	984
15	912	849	826	791	766	742	746	693	722	740	1110	976
16	904	846	827	790	765	745	740	692	723	736	1050	959
17	900	845	827	791	764	757	734	692	719	732	1250	954
18	897	847	825	791	765	751	729	698	709	740	1220	944
19	895	846	825	787	763	749	729	702	702	742	1110	940
20	897	842	822	785	762	749	736	701	697	744	1030	961
21	900	842	818	783	761	751	744	705	701	748	979	988
22	896	848	815	782	758	756	745	702	707	753	943	995
23	891	856	816	780	754	755	743	702	711	746	915	993
24	888	858	816	781	754	754	742	698	706	739	897	999
25	886	858	813	783	753	751	741	700	699	735	890	990
26	887	855	809	780	752	746	740	705	697	734	873	985
27	891	852	807	779	750	744	742	707	702	742	856	979
28	894	850	805	786	746	745	745	701	709	751	860	967
29	891	849	805	803	---	744	741	693	733	749	853	955
30	883	846	805	791	---	745	738	691	746	752	846	943
31	882	---	805	785	---	749	---	690	---	756	881	---
TOTAL	28183	25826	25619	24536	21466	23129	22262	21777	21089	22801	28213	30511
MEAN	909	861	826	791	767	746	742	702	703	736	910	1017
MAX	966	895	848	804	790	757	755	736	746	756	1250	1200
MIN	882	842	805	779	746	736	729	690	685	713	751	940
AC-FT	55900	51230	50820	48670	42580	45880	44160	43190	41830	45230	55960	60520
CAL YR 1984	TOTAL	502897		MEAN	1374	MAX	2960	MIN	805	AC-FT	997500	
WTR YR 1985	TOTAL	295412		MEAN	809	MAX	1250	MIN	685	AC-FT	585900	

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02240000 OKLAWAHA RIVER NEAR CONNER, FL
(National stream-quality accounting network station)

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.67	4.25	4.06	3.78	3.68	3.35	3.37	3.29	2.98	3.39	3.43	4.86
2	4.58	4.24	4.08	3.76	3.63	3.36	3.37	3.23	3.01	3.34	3.40	5.35
3	4.55	4.27	4.08	3.77	3.60	3.38	3.42	3.16	3.01	3.29	3.44	5.31
4	4.52	4.32	4.07	3.77	3.58	3.37	3.38	3.12	2.98	3.23	3.60	5.17
5	4.48	4.30	4.07	3.74	3.57	3.34	3.36	3.13	2.95	3.22	3.54	5.12
6	4.48	4.25	4.05	3.73	3.57	3.30	3.36	3.11	2.93	3.24	3.46	5.34
7	4.50	4.22	4.04	3.72	3.57	3.29	3.36	3.07	2.93	3.24	3.65	5.23
8	4.48	4.21	4.03	3.70	3.56	3.29	3.35	3.04	2.98	3.19	4.24	5.07
9	4.44	4.20	4.02	3.70	3.54	3.31	3.32	3.00	3.01	3.13	4.16	4.92
10	4.44	4.19	4.00	3.74	3.54	3.37	3.30	3.00	3.00	3.13	4.15	4.76
11	4.43	4.19	3.99	3.74	3.55	3.37	3.29	3.02	2.97	3.13	4.57	4.69
12	4.42	4.18	3.98	3.73	3.57	3.34	3.28	3.04	2.98	3.14	4.40	4.65
13	4.42	4.14	3.97	3.71	3.56	3.34	3.43	3.03	3.03	3.17	4.25	4.66
14	4.43	4.11	3.95	3.70	3.52	3.34	3.40	3.00	3.09	3.23	4.58	4.74
15	4.41	4.09	3.94	3.68	3.51	3.34	3.37	2.98	3.19	3.32	5.12	4.71
16	4.37	4.07	3.94	3.68	3.50	3.36	3.32	2.98	3.20	3.29	4.95	4.64
17	4.35	4.06	3.94	3.69	3.49	3.44	3.28	2.98	3.17	3.26	5.49	4.61
18	4.33	4.08	3.93	3.68	3.50	3.40	3.25	3.02	3.10	3.32	5.39	4.57
19	4.33	4.07	3.92	3.66	3.49	3.38	3.24	3.05	3.05	3.33	5.12	4.55
20	4.34	4.05	3.91	3.64	3.48	3.38	3.29	3.05	3.02	3.35	4.89	4.65
21	4.35	4.04	3.88	3.63	3.47	3.40	3.35	3.07	3.04	3.38	4.72	4.75
22	4.33	4.09	3.86	3.62	3.45	3.44	3.36	3.05	3.09	3.42	4.56	4.78
23	4.31	4.13	3.87	3.61	3.42	3.43	3.34	3.05	3.12	3.36	4.42	4.77
24	4.29	4.14	3.86	3.61	3.42	3.42	3.34	3.02	3.08	3.32	4.34	4.80
25	4.28	4.14	3.84	3.63	3.42	3.40	3.33	3.04	3.03	3.29	4.30	4.76
26	4.28	4.12	3.82	3.61	3.41	3.36	3.33	3.07	3.02	3.28	4.22	4.74
27	4.30	4.11	3.80	3.60	3.39	3.35	3.34	3.08	3.05	3.33	4.13	4.72
28	4.32	4.10	3.79	3.65	3.37	3.35	3.36	3.04	3.10	3.40	4.15	4.67
29	4.30	4.09	3.78	3.77	---	3.35	3.33	2.99	3.27	3.38	4.12	4.62
30	4.27	4.07	3.79	3.69	---	3.36	3.31	2.97	3.36	3.41	4.07	4.56
31	4.26	---	3.78	3.64	---	3.38	---	2.96	---	3.44	4.25	---
MEAN	4.40	4.15	3.94	3.69	3.51	3.36	3.34	3.05	3.06	3.29	4.29	4.83
MAX	4.67	4.32	4.08	3.78	3.68	3.44	3.43	3.29	3.36	3.44	5.49	5.35
MIN	4.26	4.04	3.78	3.60	3.37	3.29	3.24	2.96	2.93	3.13	3.40	4.55
CAL YR 1984	MEAN	5.35	MAX	7.31	MIN	3.78						
WTR YR 1985	MEAN	3.74	MAX	5.49	MIN	2.93						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240000 OKLAWAHA RIVER NEAR CONNER, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-77, 1982 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1972 to September 1973, October 1983 to current year.

WATER TEMPERATURE: January 1983 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 442 microsiemens, Feb. 18,19,20, 1984; minimum daily mean, 297 microsiemens, July 26, 1984.

WATER TEMPERATURE: Maximum daily mean, 27.5°C, Aug. 21-24, 1983; minimum daily mean, 11.0°C, Jan. 1, 1984.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 427 microsiemens, Aug. 14; minimum daily mean, 330 microsiemens, Aug. 18.

WATER TEMPERATURE: Maximum daily mean, 25.0°C, Aug. 8,12, 15-20; minimum daily mean, 20.5°C, Jan. 21.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	413	398	---	401	399	406	407	405	409	400	410	---
2	414	398	---	402	401	406	406	407	409	404	412	---
3	417	396	---	402	401	405	404	407	410	406	410	---
4	419	395	---	402	402	405	406	408	410	406	408	---
5	411	397	---	402	402	405	406	408	410	407	411	---
6	394	397	---	402	402	406	406	409	410	408	410	---
7	393	398	---	402	403	405	406	410	410	411	407	---
8	394	398	---	403	402	406	406	411	409	411	410	---
9	394	398	---	402	402	405	406	412	409	411	397	---
10	393	398	---	400	402	403	407	411	410	410	396	---
11	393	398	---	400	402	404	407	411	410	410	421	---
12	394	398	---	400	401	404	408	410	409	410	417	---
13	393	398	---	400	400	405	402	410	408	409	417	---
14	392	399	---	401	401	404	406	410	405	408	427	---
15	394	400	---	401	401	404	406	410	404	407	410	---
16	395	400	---	400	401	403	406	410	405	406	392	---
17	395	400	---	400	402	402	406	409	407	407	345	406
18	395	399	---	401	402	405	407	409	408	406	330	405
19	395	400	---	401	402	404	407	408	409	408	367	398
20	394	401	---	401	402	404	407	408	409	410	389	394
21	393	401	---	400	402	404	406	408	408	408	396	390
22	395	400	---	400	403	404	406	408	407	406	401	382
23	396	399	---	400	404	404	405	409	407	407	403	384
24	397	399	---	400	404	404	403	408	407	406	405	391
25	397	399	---	401	405	404	403	408	407	406	---	388
26	397	400	---	401	405	405	402	408	408	405	---	389
27	397	401	402	401	406	406	402	408	407	406	---	396
28	395	401	403	399	406	406	403	409	404	405	---	391
29	396	400	402	395	---	407	404	410	400	407	---	391
30	398	---	401	399	---	407	405	410	400	405	---	398
31	398	---	402	400	---	406	---	410	---	405	---	---
MEAN	398	---	---	401	402	405	405	409	408	407	---	---
MAX	419	---	---	403	406	407	408	412	410	411	---	---
MIN	392	---	---	395	399	402	402	405	400	400	---	---

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02240000 OKLAWAHA RIVER NEAR CONNER, FL--Continued
 (National stream-quality accounting network station)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.5	23.5	---	23.0	22.5	23.0	23.0	23.5	24.0	24.0	24.5	---
2	23.0	23.5	---	23.0	23.0	23.0	22.5	23.5	24.5	24.5	24.5	---
3	23.0	23.5	---	23.0	22.5	23.0	22.5	23.5	24.5	24.5	24.5	---
4	23.0	23.5	---	22.5	22.0	23.0	23.0	23.5	24.5	24.5	24.5	---
5	23.0	23.5	---	22.0	22.5	23.5	23.0	23.5	24.5	24.5	24.5	---
6	23.0	23.0	---	22.0	22.5	23.0	23.0	23.5	24.0	24.5	24.5	---
7	23.5	22.5	---	22.0	22.0	23.0	23.0	23.5	24.0	24.5	24.5	---
8	23.5	22.5	---	22.0	22.0	23.0	23.5	23.5	24.5	24.5	25.0	---
9	23.5	22.5	---	22.0	21.5	23.0	23.0	23.5	24.5	24.5	24.5	---
10	23.5	23.0	---	22.0	22.0	23.0	22.5	23.5	24.0	24.5	24.5	---
11	23.5	22.5	---	22.5	22.0	23.0	22.5	24.0	24.0	24.5	24.5	---
12	23.5	22.0	---	21.5	21.5	23.0	22.5	24.0	24.0	24.0	25.0	---
13	23.0	22.0	---	21.5	21.5	23.5	22.5	24.0	24.0	24.0	24.5	---
14	23.5	22.0	---	21.5	21.5	23.0	23.0	24.0	23.5	24.5	24.5	---
15	23.5	22.5	---	21.5	22.0	23.0	23.0	24.0	23.5	24.5	25.0	---
16	23.5	22.5	---	21.5	21.5	23.0	23.0	24.0	24.0	24.5	25.0	---
17	23.5	22.5	---	22.0	22.0	23.0	23.5	23.5	24.5	24.0	25.0	24.0
18	23.5	22.5	---	22.0	22.0	22.5	23.0	23.5	24.5	24.5	25.0	24.0
19	23.5	23.0	---	22.0	22.5	22.5	23.5	23.5	24.5	24.0	25.0	23.5
20	23.5	23.0	---	21.5	22.5	22.5	23.5	24.0	24.5	24.5	25.0	23.5
21	23.5	22.5	---	20.5	22.0	22.5	23.5	24.0	24.0	24.5	24.5	24.0
22	23.5	21.5	---	21.0	22.5	23.0	23.5	24.0	24.5	24.5	24.5	24.0
23	23.5	21.5	---	21.0	23.0	23.0	23.5	24.0	24.5	24.5	24.5	24.0
24	23.5	22.0	---	21.5	23.0	23.0	23.5	24.0	24.5	24.5	24.5	24.0
25	23.5	22.5	---	22.0	23.0	23.0	23.5	24.0	24.0	24.5	---	24.0
26	23.5	22.5	---	21.5	23.0	22.5	23.5	24.0	24.5	24.0	---	24.0
27	23.5	22.5	23.0	21.5	23.0	23.0	24.0	24.0	24.5	24.5	---	24.0
28	23.5	22.5	23.0	22.0	23.0	23.0	24.0	24.0	24.0	24.5	---	24.0
29	23.5	22.0	23.0	21.5	---	23.0	24.0	24.0	24.0	24.5	---	24.0
30	23.5	---	23.0	21.5	---	23.5	24.0	24.0	24.0	24.0	---	24.0
31	23.5	---	23.0	22.5	---	23.5	---	24.0	---	24.5	---	---
MEAN	23.5	---	---	22.0	22.5	23.0	23.0	24.0	24.0	24.5	---	---
MAX	23.5	---	---	23.0	23.0	23.5	24.0	24.0	24.5	24.5	---	---
MIN	23.0	---	---	20.5	21.5	22.5	22.5	23.5	23.5	24.0	---	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240000 OKLAWAHA RIVER NEAR CONNER, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM STAGE (FT ABOVE DATUM) (00065)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 28...	1203	4.09	860	390	7.8	23.0	1.0	5.0	65
JAN 22...	1608	3.62	780	420	8.1	21.5	6.0	8.1	64
FEB 25...	1220	3.43	760	400	8.0	23.0	.50	6.7	65
MAY 02...	1247	3.24	710	398	7.8	24.0	1.5	5.6	65
JUL 03...	1032	3.31	720	395	7.7	24.0	1.0	4.3	64
AUG 12...	1422	4.40	900	420	7.7	25.0	1.5	3.3	67

DATE	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)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
NOV 28...	8.9	6.5	.50	151	49	9.4	.10	10	224
JAN 22...	9.4	5.9	.70	157	47	9.7	.20	9.2	265
FEB 25...	9.4	6.1	.80	155	50	11	.20	9.0	263
MAY 02...	9.2	6.1	1.5	165	48	12	.20	9.1	254
JUL 03...	9.5	6.1	.80	160	48	12	.20	9.9	295
AUG 12...	10	7.3	1.2	160	65	12	.30	11	307

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 28...	.88	<.010	2.5	.040	.030	.030	4	25
JAN 22...	.83	.040	.60	.050	.060	.050	--	--
FEB 25...	.75	.030	.50	.050	.040	.050	3	33
MAY 02...	.17	<.010	.70	.090	.080	<.010	2	50
JUL 03...	.62	.070	.60	.080	.090	.070	3	33
AUG 12...	1.0	.100	.60	.060	.060	.050	7	43

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02240000 OKLAWAHA RIVER NEAR CONNER, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
NOV 28...	1203	30	1	13	<.0	<1	<1	<3	<1	4	4
FEB 25...	1220	10	<1	15	<.5	<1	<1	<3	<1	4	<1
MAY 02...	1247	10	1	16	<.5	<1	<1	<3	1	40	3
AUG 12...	1422	50	1	25	<.5	1	2	<3	4	100	<1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	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)
NOV 28...	5	<1	.3	<10	<1	<1	<1	580	<6	4
FEB 25...	<4	1	<.1	<10	<1	<1	1	600	<6	19
MAY 02...	<4	7	<.1	<10	3	<1	<1	560	<6	14
AUG 12...	6	13	<.1	<10	5	<1	<1	540	<6	10

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02240500 OKLAWAHA RIVER AT EUREKA, FL

LOCATION.--Lat 29°22'18", long 81°54'07", in SW¼ sec.9, T.13 S., R.24 E., Marion County, Hydrologic Unit 03080102, near right bank on upstream end of pier of bridge on county road 316 in Eureka, 3.1 mi downstream from Eaton Creek, and 33.1 mi upstream from mouth.

DRAINAGE AREA.--1,367 mi².

PERIOD OF RECORD.--February 1930 to June 1934, September 1943 to December 1952, January 1981 to current year.

REVISED RECORDS.--WDR FL-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Feb. 13, 1930, to June 30, 1934, nonrecording gage, and Sept. 16, 1943, to Dec. 31, 1952, water-stage recorder near present site at datum 15.44 ft higher.

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

AVERAGE DISCHARGE.--17 years (water years 1931-34, 1944-52, 1982-85), 1,388 ft³/s, 13.79 in/yr, 1,006,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,230 ft³/s, Sept. 7, 1933; maximum gage height, 26.52 ft, Apr. 11, 1982; minimum discharge, 626 ft³/s, Feb. 2, 1933, gage height, 18.08 ft, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,520 ft³/s, Sept. 5, gage height, 21.47 ft; minimum, 628 ft³/s, May 17,18, June 6,7,12, gage height, 19.24 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	878	817	794	766	712	680	662	639	734	730	1180
2	1020	869	817	795	760	708	684	660	637	735	718	1310
3	985	878	824	814	756	709	677	652	638	700	715	1410
4	958	907	831	842	767	709	676	655	637	677	738	1490
5	938	900	836	827	759	704	668	657	635	664	743	1510
6	924	894	840	819	769	700	675	654	632	671	740	1460
7	913	880	839	813	794	698	683	649	630	671	799	1380
8	911	871	828	813	784	689	682	646	637	669	856	1310
9	908	865	821	812	768	681	678	648	636	657	919	1250
10	908	857	817	815	755	680	673	648	637	643	963	1200
11	912	853	814	821	744	680	671	647	635	643	1010	1160
12	906	850	816	828	736	675	672	648	636	652	1030	1120
13	895	845	821	824	729	673	723	648	644	664	1050	1100
14	887	839	826	815	724	672	748	645	673	689	1060	1130
15	883	834	830	812	724	678	730	642	704	689	1050	1120
16	882	830	827	806	722	689	705	640	735	724	1040	1100
17	878	825	819	800	720	748	690	636	705	744	1090	1100
18	873	821	811	802	722	769	683	632	674	730	1210	1090
19	872	819	804	796	725	748	678	636	654	751	1290	1080
20	879	832	798	789	726	734	674	646	643	760	1330	1080
21	877	842	794	785	731	738	676	662	641	740	1290	1080
22	878	867	792	775	729	761	679	659	644	750	1210	1080
23	883	913	793	771	724	737	678	657	652	788	1130	1070
24	879	901	797	770	719	715	672	659	651	762	1070	1070
25	873	869	800	785	720	702	669	657	648	740	1030	1050
26	877	847	803	785	718	694	666	659	664	717	1000	1040
27	893	835	804	773	720	689	665	659	655	705	974	1020
28	889	829	800	768	717	682	663	657	660	712	983	1010
29	906	827	798	775	---	680	662	647	691	735	978	1000
30	888	822	796	786	---	677	666	641	720	745	975	1010
31	883	---	796	777	---	675	---	641	---	741	1040	---
TOTAL	28118	25699	25209	24787	20728	21806	20446	20149	19687	22002	30761	35010
MEAN	907	857	813	800	740	703	682	650	656	710	992	1167
MAX	1060	913	840	842	794	769	748	662	735	788	1330	1510
MIN	872	819	792	768	717	672	662	632	630	643	715	1000
AC-FT	55770	50970	50000	49170	41110	43250	40550	39970	39050	43640	61010	69440
CAL YR 1984	TOTAL	517761	MEAN	1415	MAX	2930	MIN	792	AC-FT	1027000		
WTR YR 1985	TOTAL	294402	MEAN	807	MAX	1510	MIN	630	AC-FT	583900		

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ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240902 PRAIRIE CREEK NEAR GAINESVILLE, FL

LOCATION.--Lat. 29°36'41", long 82°14'56", in NW¼ sec.19, T.10 S., R.21 E., Alachua County, Hydrologic Unit 03080102, on upstream side of bridge on State Highway 20, 50 ft downstream from control at outlet of Newnans Lake, 7 mi southeast of Gainesville, and 8.4 mi upstream from mouth (at Orange Lake).

DRAINAGE AREA.--114 mi².

PERIOD OF RECORD.--1947-48, 1956, 1965-67 (miscellaneous discharge measurements and gage heights only), August 1978 to current year.

REVISED RECORDS.--WDR FL-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 61.79 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Aug. 24, 1978, nonrecording gage at same site at datum 0.50 ft higher.

REMARKS.--Estimated daily discharges: May 30 to June 13 and Sept. 21-26. Records good except for estimated daily discharges, which are fair. Some regulation by stoplogs in control 50 ft upstream.

AVERAGE DISCHARGE.--7 years, 66.8 ft³/s, 7.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 812 ft³/s, Mar. 15, 1948; maximum gage height observed, 8.02 ft, present datum, Mar. 15, 1948; minimum discharge measured, 0.37 ft³/s, Apr. 23, 1956; minimum gage height, 1.65 ft, present datum, Apr. 23, 1956, June 15, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 475 ft³/s, Sept. 6, gage height, 7.41 ft; minimum, 0.57 ft³/s, June 15, gage height, 1.65 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	20	3.1	4.0	1.3	.98	1.7	2.2	2.8	.82	.71	1.3	315	
2	19	2.9	3.5	1.3	1.1	2.1	2.1	4.3	.79	.74	1.0	388	
3	16	3.2	2.7	1.4	1.1	3.9	2.0	3.3	.76	.73	1.6	433	
4	14	3.3	2.8	1.3	1.4	7.0	2.0	2.8	.74	.74	2.4	456	
5	14	3.5	2.4	1.4	1.3	5.0	1.9	2.7	.72	.71	1.8	463	
6	13	3.9	2.5	1.2	1.9	3.3	1.9	2.6	.70	.70	1.8	464	
7	13	3.8	2.7	1.2	1.6	2.1	1.8	2.0	.68	.67	2.0	456	
8	12	3.1	2.2	1.2	1.6	1.4	1.7	1.9	.67	.66	2.7	444	
9	12	2.7	2.0	1.2	1.2	1.1	1.7	1.8	.66	.65	3.9	429	
10	11	3.6	2.0	1.2	1.2	1.1	1.6	1.6	.65	.62	7.5	414	
11	9.8	4.8	2.0	1.2	1.1	1.3	1.5	1.5	.64	.67	19	397	
12	7.5	2.7	1.9	1.4	1.2	2.0	1.5	1.3	.62	.61	31	386	
13	6.1	2.4	2.0	1.1	1.3	2.2	1.7	1.1	.61	.64	40	378	
14	5.7	2.2	2.0	1.1	1.3	1.6	1.6	1.3	.60	.70	58	379	
15	5.4	2.1	2.2	1.1	1.4	1.8	1.6	1.4	.60	.71	73	357	
16	5.3	1.9	1.9	1.0	1.2	2.5	1.7	1.2	.67	.70	85	347	
17	5.1	1.9	2.0	1.0	1.3	1.9	1.7	1.0	.85	1.6	91	337	
18	5.0	1.8	2.0	1.0	1.4	1.6	1.7	.97	.76	.70	97	337	
19	4.7	1.8	1.8	1.0	1.3	1.3	1.6	.97	.65	.72	103	333	
20	4.6	2.3	1.4	1.1	1.4	1.2	1.6	1.0	.65	.73	117	329	
21	4.5	2.8	1.4	1.0	1.6	1.2	1.7	1.0	.66	.71	133	320	
22	4.4	3.6	1.4	.98	1.3	1.3	1.7	.98	.97	.69	139	310	
23	4.2	3.5	1.4	.95	1.2	2.3	1.7	.92	.67	.71	142	300	
24	4.3	2.5	1.3	.94	1.3	2.5	1.7	.86	.65	.74	143	290	
25	4.2	5.7	1.3	.94	1.3	2.1	1.7	.90	.65	.73	143	280	
26	4.3	10	1.8	.97	1.3	1.7	1.6	.91	.65	.74	149	275	
27	3.7	5.9	1.8	.95	1.2	1.7	1.4	.91	.63	.75	153	272	
28	3.6	5.5	1.6	.95	1.3	2.2	.98	.92	.66	.71	158	268	
29	3.5	4.7	1.4	.95	---	3.8	1.0	.91	.66	.74	161	256	
30	3.4	4.2	1.3	.94	---	3.0	1.3	.88	.69	.86	170	249	
31	3.6	---	1.3	.94	---	2.4	---	.84	---	.84	223	---	
TOTAL	246.9	105.4	62.0	34.21	36.78	70.3	49.88	47.57	20.73	22.93	2454.0	10662	
MEAN	7.96	3.51	2.00	1.10	1.31	2.27	1.66	1.53	.69	.74	79.2	355	
MAX	20	10	4.0	1.4	1.9	7.0	2.2	4.3	.97	1.6	223	464	
MIN	3.4	1.8	1.3	.94	.98	1.1	.98	.84	.60	.61	1.0	249	
CFSM	.07	.03	.02	.01	.01	.02	.01	.01	.01	.01	.69	3.11	
IN.	.08	.03	.02	.01	.01	.02	.02	.02	.01	.01	.80	3.48	
CAL YR 1984	TOTAL	30290.3		MEAN	82.8	MAX	216	MIN	1.3	CFSM	.73	IN.	9.88
WTR YR 1985	TOTAL	13812.70		MEAN	37.8	MAX	464	MIN	.60	CFSM	.33	IN.	4.51

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02240902 PRAIRIE CREEK NEAR GAINESVILLE, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.82	2.08	2.16	1.86	1.79	1.91	1.98	2.03	1.74	1.70	1.83	6.64
2	2.77	2.06	2.12	1.86	1.82	1.97	1.97	2.18	1.73	1.71	1.80	7.03
3	2.68	2.09	2.04	1.89	1.82	2.09	1.96	2.09	1.72	1.71	1.90	7.24
4	2.62	2.10	2.05	1.87	1.88	2.35	1.96	2.05	1.71	1.71	2.00	7.33
5	2.60	2.12	2.01	1.88	1.87	2.23	1.95	2.03	1.70	1.70	1.94	7.36
6	2.60	2.15	2.02	1.84	1.95	2.09	1.95	2.03	1.69	1.69	1.94	7.36
7	2.58	2.14	2.04	1.84	1.91	1.97	1.93	1.96	1.69	1.68	1.96	7.33
8	2.56	2.08	1.98	1.84	1.92	1.88	1.92	1.95	1.68	1.68	2.04	7.28
9	2.56	2.04	1.96	1.84	1.85	1.83	1.92	1.94	1.68	1.68	2.15	7.22
10	2.53	2.10	1.96	1.84	1.84	1.83	1.91	1.92	1.67	1.67	2.37	7.15
11	2.47	2.21	1.96	1.84	1.82	1.86	1.90	1.90	1.67	1.68	2.79	7.08
12	2.38	2.04	1.95	1.89	1.84	1.95	1.90	1.86	1.67	1.66	3.16	7.03
13	2.31	2.00	1.96	1.84	1.86	1.99	1.92	1.82	1.66	1.68	3.41	6.99
14	2.28	1.98	1.96	1.82	1.86	1.91	1.91	1.87	1.66	1.69	3.83	7.00
15	2.26	1.97	1.98	1.82	1.88	1.94	1.92	1.88	1.66	1.70	4.17	6.88
16	2.25	1.95	1.95	1.81	1.86	2.01	1.92	1.84	1.69	1.70	4.41	6.83
17	2.24	1.95	1.96	1.81	1.86	1.95	1.92	1.80	1.74	1.81	4.52	6.78
18	2.23	1.95	1.96	1.80	1.88	1.90	1.92	1.79	1.72	1.69	4.62	6.77
19	2.22	1.94	1.94	1.80	1.86	1.87	1.91	1.79	1.68	1.70	4.73	6.75
20	2.21	1.99	1.89	1.82	1.88	1.86	1.91	1.80	1.68	1.71	4.96	6.73
21	2.20	2.04	1.88	1.80	1.91	1.84	1.92	1.81	1.68	1.70	5.16	6.71
22	2.19	2.12	1.87	1.79	1.86	1.87	1.92	1.80	1.78	1.69	5.23	6.62
23	2.18	2.11	1.88	1.78	1.85	1.99	1.92	1.77	1.68	1.70	5.26	6.56
24	2.19	2.02	1.86	1.78	1.86	2.01	1.92	1.75	1.68	1.71	5.28	6.50
25	2.18	2.19	1.87	1.78	1.88	1.97	1.92	1.77	1.68	1.71	5.27	6.44
26	2.18	2.47	1.93	1.79	1.87	1.92	1.91	1.77	1.68	1.71	5.35	6.41
27	2.14	2.30	1.94	1.78	1.85	1.92	1.88	1.77	1.67	1.71	5.39	6.39
28	2.13	2.27	1.91	1.78	1.86	1.98	1.79	1.77	1.68	1.70	5.45	6.36
29	2.12	2.22	1.88	1.78	---	2.14	1.81	1.77	1.68	1.71	5.47	6.29
30	2.11	2.18	1.87	1.78	---	2.06	1.86	1.76	1.69	1.75	5.57	6.24
31	2.12	---	1.87	1.78	---	2.01	---	1.75	---	1.74	6.04	---
MEAN	2.35	2.10	1.96	1.82	1.86	1.97	1.91	1.87	1.69	1.70	3.87	6.84
MAX	2.82	2.47	2.16	1.89	1.95	2.35	1.98	2.18	1.78	1.81	6.04	7.36
MIN	2.11	1.94	1.86	1.78	1.79	1.83	1.79	1.75	1.66	1.66	1.80	6.24
CAL YR 1984	MEAN	4.15	MAX	6.44	MIN	1.86						
WTR YR 1985	MEAN	2.49	MAX	7.36	MIN	1.66						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240954 HOGTOWN CREEK NEAR ARREDONDO, FL

LOCATION.--Lat 29°38'17", long 82°23'33", in NE¼ sec.10, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080102, near right bank at downstream side of bridge on county road 30, 2.5 mi northeast of Arredondo, and 4.2 mi west of Gainesville.

DRAINAGE AREA.--41.2 mi².

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

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

REMARKS.--No estimated daily discharges. Records fair. Flow affected at times by backwater from Haile Sink.

AVERAGE DISCHARGE.--13 years (water years 1973-85), 19.5 ft³/s, 14,130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 671 ft³/s, Aug. 26, 1972, gage height, 60.11 ft; minimum, 1.2 ft³/s, May 23, 1981; minimum gage height, 55.95 ft, June 14,15, July 28, 1977, May 23,24, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 656 ft³/s, Aug. 31, gage height, 59.81 ft; minimum, 1.5 ft³/s, June 9-11, gage height, 55.99 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	9.3	7.4	5.8	4.4	5.6	4.7	3.0	3.0	2.4	52	94	543		
2	6.4	6.4	5.2	4.4	5.4	5.2	3.9	2.9	2.4	32	67	295		
3	5.4	6.6	5.1	5.8	7.4	5.1	3.6	3.0	2.3	17	41	152		
4	4.9	28	4.9	9.9	9.9	4.6	3.0	9.6	2.0	11	25	90		
5	4.6	26	5.1	7.4	13	4.6	2.9	6.6	1.8	8.6	16	114		
6	4.4	17	7.6	6.2	13	4.4	4.2	4.2	1.7	13	12	105		
7	4.0	11	7.4	5.8	19	4.0	7.9	3.6	1.9	11	17	74		
8	5.2	7.9	6.4	5.8	15	4.0	5.1	3.0	1.8	7.4	21	53		
9	4.7	6.6	6.0	5.4	10	4.0	3.6	2.9	1.6	5.6	25	39		
10	4.0	6.2	5.6	5.4	8.3	3.9	3.0	2.7	1.6	4.7	24	31		
11	4.0	6.4	5.4	5.4	7.9	3.6	3.0	2.5	1.6	4.4	42	26		
12	3.7	8.3	5.2	5.2	10	3.4	3.3	2.3	2.2	4.0	44	25		
13	3.6	6.4	5.2	5.2	8.6	3.6	29	2.2	6.2	6.8	35	32		
14	3.6	5.4	5.1	5.2	7.4	3.7	119	2.3	5.1	14	64	37		
15	3.6	4.9	5.1	5.1	6.8	3.6	66	2.3	7.2	36	115	30		
16	3.7	4.7	4.9	4.9	6.4	3.6	38	1.9	23	34	105	25		
17	3.7	4.6	4.9	5.2	6.2	9.3	27	1.8	32	21	66	34		
18	3.7	4.6	4.9	6.8	5.8	14	18	1.8	16	14	52	45		
19	3.6	4.4	4.9	5.6	5.8	7.4	12	1.9	8.6	17	48	39		
20	3.4	5.2	4.9	5.4	5.8	5.4	9.9	5.4	5.8	30	48	33		
21	3.3	4.6	4.7	5.8	5.4	5.8	7.9	51	4.7	32	42	34		
22	3.4	7.9	4.7	5.2	5.4	7.4	6.6	30	4.6	30	39	41		
23	3.3	19	4.7	5.6	5.4	5.4	6.0	17	5.2	19	29	38		
24	3.3	14	4.9	5.6	5.2	4.6	5.4	11	3.7	14	27	32		
25	3.2	9.3	4.9	7.6	5.1	4.0	5.1	8.6	5.4	12	95	26		
26	3.0	7.0	4.6	6.8	4.9	3.6	4.4	5.6	7.0	10	122	23		
27	5.1	6.2	4.6	5.8	4.9	3.4	4.0	4.6	4.2	8.3	81	20		
28	6.2	6.0	4.6	6.4	4.9	3.4	3.6	3.6	7.4	6.8	56	17		
29	16	7.9	4.6	7.2	---	3.6	3.6	3.2	25	6.4	43	16		
30	18	6.4	4.6	6.0	---	3.2	3.3	2.9	38	27	52	18		
31	11	---	4.4	6.0	---	3.0	---	2.8	---	39	280	---		
TOTAL	165.3	266.3	160.9	182.5	218.5	149.5	415.3	206.2	232.4	548.0	1827	2087		
MEAN	5.33	8.88	5.19	5.89	7.80	4.82	13.8	6.65	7.75	17.7	58.9	69.6		
MAX	18	28	7.6	9.9	19	14	119	51	38	52	280	543		
MIN	3.0	4.4	4.4	4.4	4.9	3.0	2.9	1.8	1.6	4.0	12	16		
CFSM	.13	.22	.13	.14	.19	.12	.33	.16	.19	.43	1.43	1.69		
IN.	.15	.24	.15	.16	.20	.13	.37	.19	.21	.49	1.65	1.88		
AC-FT	328	528	319	362	433	297	824	409	461	1090	3620	4140		
WTR YR 1985	TOTAL	6458.9	MEAN	17.7	MAX	543	MIN	1.6	CFSM	.43	IN.	5.83	AC-FT	12810

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02240956 HAILE SINK NEAR ARREDONDO, FL

LOCATION.--Lat 29°37'41", long 82°24'40", in NE¼ sec.16, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080102, on northwest rim of sink, 1.6 mi north of Arredondo, and 5.2 mi west of Gainesville.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1971 to September 1977 and February 1978 to current year (gage heights only).

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

REMARKS.--Sink has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 58.41 ft, Aug. 29, 1972; minimum, unknown, water level below lowest recordable gage height for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 56.18 ft, Sept. 6; minimum, 44.32 ft, July 29.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.34	48.80	48.29	47.83	46.91	46.42	45.55	45.38	44.78	46.99	48.54	54.97
2	50.47	48.72	48.26	47.80	46.92	46.42	45.55	45.36	44.75	46.98	50.11	55.62
3	50.36	48.70	48.25	47.82	47.00	46.37	45.50	45.35	44.73	45.95	48.55	56.01
4	50.25	49.00	48.24	47.92	47.12	46.34	45.45	45.52	44.72	45.24	46.89	56.09
5	50.20	48.90	48.25	47.80	47.30	46.32	45.42	45.48	44.68	44.93	45.92	56.12
6	50.17	48.75	48.38	47.63	47.50	46.27	45.39	45.30	44.65	44.98	45.48	56.18
7	50.12	48.62	48.37	47.58	47.62	46.23	45.57	45.24	44.64	45.00	45.64	56.14
8	50.32	48.49	48.32	47.52	47.47	46.21	45.50	45.20	44.62	44.77	45.77	56.02
9	50.29	48.40	48.30	47.47	47.10	46.18	45.40	45.17	44.59	44.62	45.92	55.83
10	50.25	48.36	48.28	47.43	46.92	46.15	45.34	45.14	44.56	44.52	45.98	55.62
11	50.25	48.38	48.27	47.42	46.92	46.12	45.30	45.12	44.54	44.45	46.28	55.40
12	50.23	48.44	48.26	47.37	46.95	46.08	45.27	45.10	44.52	44.40	47.48	55.17
13	50.22	48.37	48.26	47.33	46.83	46.07	46.23	45.07	44.63	44.43	47.46	54.95
14	50.22	48.33	48.25	47.30	46.73	46.04	49.08	45.05	44.67	44.58	48.54	54.77
15	50.22	48.30	48.25	47.26	46.68	46.01	50.37	45.04	44.65	45.69	50.70	54.57
16	50.23	48.30	48.24	47.22	46.62	46.00	49.13	45.03	45.01	45.92	52.27	54.35
17	50.23	48.28	48.24	47.22	46.57	46.23	47.64	45.01	46.13	45.45	52.00	54.16
18	50.20	48.28	48.24	47.25	46.55	46.40	47.08	44.96	45.66	45.10	51.03	54.02
19	50.09	48.27	48.24	47.21	46.54	46.07	46.58	44.93	45.11	44.97	49.68	53.93
20	49.95	48.30	48.24	47.17	46.52	45.89	46.33	44.98	44.78	45.60	49.23	53.78
21	49.86	48.28	48.22	47.10	46.50	45.90	46.13	46.18	44.63	45.94	48.86	53.62
22	49.72	48.42	48.20	47.03	46.50	45.98	45.97	47.17	44.55	46.14	48.60	53.58
23	49.58	48.75	48.15	47.02	46.50	45.87	45.87	46.34	44.53	45.66	48.13	53.42
24	49.47	48.60	48.08	47.00	46.49	45.82	45.79	45.72	44.47	45.17	47.62	53.22
25	49.34	48.45	48.01	46.96	46.49	45.76	45.71	45.40	44.46	44.90	49.20	52.99
26	49.18	48.35	47.95	46.95	46.48	45.70	45.63	45.19	44.58	44.78	52.20	52.73
27	49.00	48.30	47.92	47.00	46.47	45.68	45.56	45.05	44.46	44.60	52.48	52.43
28	48.87	48.33	47.92	47.00	46.45	45.65	45.51	44.96	44.52	44.46	52.02	51.99
29	49.11	48.39	47.91	47.00	---	45.63	45.47	44.89	45.27	44.36	51.18	51.37
30	49.14	48.32	47.88	46.95	---	45.60	45.43	44.85	46.08	44.88	50.32	50.68
31	48.93	---	47.86	46.92	---	45.57	---	44.81	---	46.23	52.32	---
MEAN	49.90	48.47	48.18	47.31	46.81	46.03	46.16	45.29	44.80	45.22	48.92	54.32
MAX	50.47	49.00	48.38	47.92	47.62	46.42	50.37	47.17	46.13	46.99	52.48	56.18
MIN	48.87	48.27	47.86	46.92	46.45	45.57	45.27	44.81	44.46	44.36	45.48	50.68
CAL YR 1984	MEAN	51.72	MAX	54.35	MIN	47.86						
WTR YR 1985	MEAN	47.61	MAX	56.18	MIN	44.36						

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02241000 CAMPS CANAL NEAR ROCHELLE, FL

LOCATION.--Lat 29°34'33", long 82°15'00", in SW¼ sec.31, Moses Levy Land Grant, Alachua County, Hydrologic Unit 03080102, near left bank on downstream side of bridge on county road 234, 2.2 mi southwest of Rochelle, and 5.0 mi upstream from Orange Lake.

DRAINAGE AREA.--775 mi², includes Paynes Prairie, a diked sinkhole area of 650 mi², approximately, which is noncontributing except by pumpage.

PERIOD OF RECORD.--March 1948 to November 1952 (discharge measurements only), August 1957 to September 1960, March 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 53.44 ft above National Geodetic Vertical Datum of 1929. Mar. 16, 1948 to Nov. 14, 1952, reference point at datum 15.27 ft higher. Aug. 8, 1957, to Oct. 28, 1960, water-stage recorder at datum 5.00 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Seasonal diversion out of or into canal above station by drainage and/or pumpage for irrigation of pastures in Paynes Prairie.

AVERAGE DISCHARGE.--10 years (water years 1958-60, 1979-85), 87.0 ft³/s, 1.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft³/s, Mar. 24, 1959, gage height, 13.21 ft, present datum; no flow June 8-13, July 11, 12, 1985; minimum gage height, 6.15 ft, June 12, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 474 ft³/s, Sept. 7; gage height, 11.22 ft; no flow June 8-13, July 11, 12; minimum gage height, 6.15 ft, June 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	16	1.2	2.6	1.9	1.1	1.8	3.4	1.0	.67	.46	1.1	230	
2	14	.99	2.3	1.8	1.1	1.8	3.1	2.0	.57	.50	1.1	280	
3	11	1.4	2.0	2.0	1.2	2.1	2.7	3.6	.45	.41	1.3	343	
4	8.7	2.0	1.7	2.2	1.4	6.6	2.4	3.3	.32	.35	1.7	400	
5	7.2	2.1	1.6	1.9	1.6	10	2.3	2.8	.20	.21	2.2	441	
6	6.6	1.8	1.7	1.7	2.3	7.5	2.4	2.5	.12	.25	2.4	462	
7	6.6	1.5	1.6	1.5	3.1	4.5	2.5	2.4	.03	.21	2.5	472	
8	5.9	1.3	1.5	1.4	2.7	2.8	2.3	1.9	.00	.14	3.1	461	
9	5.0	1.1	1.3	1.3	2.4	2.0	2.0	1.7	.00	.08	3.7	454	
10	5.0	.92	1.2	1.3	2.1	1.6	1.8	1.6	.00	.01	3.7	438	
11	4.0	1.4	1.2	1.2	2.0	1.4	1.8	1.6	.00	.00	6.9	420	
12	2.9	1.4	1.2	1.2	2.1	1.4	1.8	1.5	.00	.00	16	402	
13	1.9	1.0	1.1	1.2	2.0	1.8	4.9	1.2	.00	.26	29	387	
14	1.6	.85	1.2	1.2	2.0	2.2	5.6	1.1	.05	.86	39	378	
15	1.4	.79	1.2	1.2	2.0	1.9	3.5	1.1	.18	.82	49	366	
16	1.4	.74	1.2	1.1	1.9	2.0	2.8	1.1	.76	.71	59	351	
17	1.4	.71	1.2	1.1	2.0	4.6	2.5	1.0	.93	.68	64	340	
18	1.3	.71	1.3	1.2	1.9	3.7	2.1	.89	.70	.72	70	331	
19	1.3	.79	1.3	1.2	1.9	2.6	2.0	.76	.67	.86	78	322	
20	1.2	.90	1.2	1.1	2.0	2.0	1.9	.87	.54	1.1	88	316	
21	1.2	.99	1.2	1.1	2.0	2.0	1.8	1.7	.40	1.2	99	313	
22	1.2	1.7	1.2	1.1	2.1	2.0	1.8	1.5	.32	.96	110	315	
23	1.1	2.2	1.1	1.1	2.0	1.8	1.7	1.2	.29	.80	117	305	
24	1.1	1.9	1.1	1.1	2.0	2.4	1.7	1.0	.24	.71	123	296	
25	1.1	1.5	1.2	1.1	1.8	2.9	1.6	.85	.21	.81	131	286	
26	1.2	6.0	1.2	1.1	1.7	2.7	1.6	.72	.14	.89	136	278	
27	1.2	6.8	1.4	1.1	1.8	2.2	1.5	.69	.11	.85	137	270	
28	1.2	4.9	1.7	1.1	1.8	2.0	1.4	.66	.06	.78	141	260	
29	1.1	4.1	1.9	1.1	---	3.0	1.1	.61	.09	.72	145	254	
30	1.0	3.0	1.9	1.1	---	4.8	.99	.63	.23	.84	150	248	
31	1.1	---	1.9	1.1	---	4.1	---	.68	---	.94	185	---	
TOTAL	116.9	56.69	45.4	40.8	54.0	94.2	68.99	44.16	8.28	18.13	1995.7	1419	
MEAN	3.77	1.89	1.46	1.32	1.93	3.04	2.30	1.42	.28	.58	64.4	347	
MAX	16	6.8	2.6	2.2	3.1	10	5.6	3.6	.93	1.2	185	472	
MIN	1.0	.71	1.1	1.1	1.1	1.4	.99	.61	.00	.00	1.1	230	
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.45	
IN.	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10	.50	
CAL YR 1984	TOTAL	28749.89		MEAN	78.6	MAX	199	MIN	.71	CFSM	.10	IN.	1.38
WTR YR 1985	TOTAL	12962.25		MEAN	35.5	MAX	472	MIN	.00	CFSM	.05	IN.	.62

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02241000 CAMPS CANAL NEAR ROCHELLE, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.79	7.13	7.22	7.08	6.88	6.90	6.94	6.69	6.60	6.53	6.70	9.87
2	7.75	7.10	7.20	7.07	6.87	6.91	6.92	6.82	6.57	6.54	6.71	10.23
3	7.68	7.15	7.18	7.09	6.88	6.94	6.89	6.94	6.53	6.52	6.74	10.61
4	7.61	7.25	7.13	7.10	6.91	7.12	6.87	6.93	6.49	6.50	6.80	10.89
5	7.56	7.26	7.12	7.06	6.94	7.22	6.86	6.90	6.44	6.45	6.85	11.08
6	7.54	7.22	7.13	7.04	7.01	7.15	6.87	6.88	6.40	6.46	6.87	11.17
7	7.53	7.19	7.10	7.01	7.07	7.05	6.88	6.87	6.36	6.45	6.88	11.21
8	7.51	7.15	7.09	6.99	7.04	6.97	6.87	6.83	6.31	6.41	6.92	11.16
9	7.49	7.10	7.07	6.98	7.02	6.91	6.84	6.80	6.27	6.38	6.95	11.14
10	7.48	7.07	7.04	6.97	6.99	6.85	6.82	6.79	6.22	6.34	6.95	11.07
11	7.44	7.15	7.03	6.96	6.98	6.81	6.81	6.78	6.19	6.30	7.06	10.99
12	7.39	7.15	7.03	6.95	6.99	6.81	6.81	6.76	6.18	6.27	7.33	10.90
13	7.30	7.08	7.02	6.95	6.97	6.88	6.98	6.73	6.21	6.37	7.59	10.83
14	7.26	7.04	7.02	6.95	6.97	6.91	7.01	6.70	6.36	6.65	7.77	10.79
15	7.24	7.02	7.02	6.94	6.97	6.88	6.94	6.70	6.43	6.64	7.95	10.73
16	7.22	7.00	7.03	6.92	6.96	6.89	6.90	6.71	6.62	6.61	8.10	10.66
17	7.22	6.99	7.03	6.92	6.96	7.03	6.88	6.69	6.67	6.60	8.19	10.59
18	7.20	6.99	7.03	6.93	6.95	6.99	6.85	6.66	6.61	6.61	8.29	10.54
19	7.20	7.01	7.03	6.92	6.95	6.92	6.84	6.63	6.60	6.65	8.41	10.49
20	7.18	7.03	7.02	6.91	6.96	6.88	6.83	6.65	6.56	6.70	8.55	10.46
21	7.18	7.05	7.01	6.91	6.96	6.87	6.82	6.81	6.51	6.71	8.69	10.44
22	7.17	7.16	7.00	6.90	6.96	6.87	6.81	6.76	6.49	6.68	8.81	10.45
23	7.16	7.22	6.99	6.89	6.95	6.85	6.80	6.72	6.48	6.64	8.88	10.39
24	7.15	7.19	6.99	6.89	6.94	6.90	6.80	6.69	6.46	6.61	8.94	10.33
25	7.15	7.13	6.99	6.90	6.92	6.92	6.79	6.65	6.45	6.64	9.01	10.28
26	7.16	7.36	6.99	6.89	6.91	6.91	6.78	6.62	6.41	6.66	9.06	10.22
27	7.17	7.40	7.03	6.88	6.91	6.88	6.77	6.61	6.40	6.65	9.07	10.16
28	7.15	7.34	7.07	6.89	6.90	6.86	6.76	6.60	6.37	6.63	9.11	10.10
29	7.13	7.31	7.09	6.89	---	6.91	6.71	6.58	6.38	6.61	9.15	10.05
30	7.12	7.25	7.09	6.88	---	7.00	6.68	6.59	6.45	6.65	9.20	10.01
31	7.13	---	7.09	6.88	---	6.98	---	6.60	---	6.67	9.50	---
MEAN	7.33	7.15	7.06	6.95	6.95	6.93	6.84	6.73	6.43	6.55	7.97	10.59
MAX	7.79	7.40	7.22	7.10	7.07	7.22	7.01	6.94	6.67	6.71	9.50	11.21
MIN	7.12	6.99	6.99	6.88	6.87	6.81	6.68	6.58	6.18	6.27	6.70	9.87
CAL YR 1984	MEAN	8.48	MAX	9.77	MIN	6.99						
WTR YR 1985	MEAN	7.29	MAX	11.21	MIN	6.18						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02242451 ORANGE LAKE OUTLET NEAR CITRA, FL

LOCATION.--Lat 29°26'30", long 82°06'33", in SE¼ sec.16, T.12 S., R.22 E., Alachua County, Hydrologic Unit 03080102, near left bank on upstream side of northbound bridge on U.S. Highway 301, 0.8 mi south of Island Grove, and 1.8 mi north of Citra.

DRAINAGE AREA.--1,012 mi².

PERIOD OF RECORD.--1941, 1957, 1960 (miscellaneous discharge measurements only); January 1947 to September 1955; April 1982 to current year.

GAGE.--Water-stage recorder and concrete weir with notch. Datum of gage is 53.41 ft above National Geodetic Vertical Datum of 1929. Prior to September 1955, near present site at same datum.

REMARKS.--Estimated daily discharges: Mar. 22-27, May 23 to June 18, Aug. 21 to Sept. 1. Records poor. Orange and Lochloosa Lakes are connected by Cross Creek through which there is a natural diversion from one lake to the other. Notch partially filled with sandbags Dec. 22, 1981 to Aug. 20, 1985.

AVERAGE DISCHARGE.--12 years (water years 1946-55, 1983-85), 115 ft³/s, 83,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 976 ft³/s, Nov. 10, 1941; maximum gage height, 7.81 ft, Mar. 17, 1948; no flow for many days in some years; outlet dry at gage for many days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55 ft³/s, Sept. 30, gage height, 4.50 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	35	7.7	5.9	2.9	1.3	.95	.23	.12	.00	.00	.00	3.2	
2	29	7.5	5.7	2.8	1.3	.95	.23	.10	.00	.00	.00	6.4	
3	25	7.9	5.8	2.9	1.4	.81	.23	.10	.00	.00	.00	7.9	
4	22	9.1	5.4	3.6	1.4	.61	.23	.10	.00	.00	.00	8.8	
5	19	9.1	5.6	3.2	1.4	.63	.21	.09	.00	.00	.00	9.9	
6	16	9.7	6.2	2.7	1.7	.65	.20	.07	.00	.00	.00	11	
7	16	8.6	5.6	2.5	2.1	.46	.20	.07	.00	.00	.00	12	
8	14	8.0	4.9	2.6	2.1	.42	.20	.03	.00	.00	.00	14	
9	14	7.5	4.7	2.4	1.9	.44	.20	.03	.00	.00	.00	15	
10	14	7.4	4.5	2.4	1.8	.42	.19	.03	.00	.00	.00	16	
11	13	7.7	4.3	2.3	1.6	.34	.17	.03	.00	.00	.00	18	
12	13	7.6	4.3	2.5	2.6	.34	.17	.00	.00	.00	.00	19	
13	12	6.9	4.2	2.2	2.2	.32	.22	.00	.00	.00	.00	20	
14	12	6.3	4.0	2.2	1.6	.30	.23	.00	.00	.00	.00	21	
15	12	6.1	3.9	2.2	1.5	.30	.23	.00	.00	.00	.00	22	
16	11	6.0	3.9	1.9	1.5	.27	.23	.00	.00	.00	.00	23	
17	11	5.8	3.8	1.9	1.5	.40	.23	.00	.00	.00	.00	24	
18	11	5.6	3.7	2.1	1.4	.47	.22	.00	.00	.00	.00	25	
19	10	5.5	3.6	2.0	1.4	.29	.20	.00	.00	.00	.00	26	
20	9.6	5.6	3.5	1.8	1.3	.27	.20	.00	.00	.00	.53	27	
21	9.2	5.5	3.4	2.1	1.2	.27	.20	.00	.00	.00	.50	28	
22	9.0	7.2	3.4	1.9	1.1	.27	.19	.00	.00	.00	.50	37	
23	8.7	7.9	3.4	1.7	1.1	.27	.17	.00	.00	.00	.50	39	
24	8.4	7.2	3.3	1.5	1.1	.27	.17	.00	.00	.00	.50	42	
25	8.0	6.7	3.3	1.6	1.1	.27	.17	.00	.00	.00	.50	42	
26	8.1	6.3	3.2	1.6	1.1	.27	.17	.00	.00	.00	.50	48	
27	8.1	6.1	3.2	1.4	1.1	.27	.15	.00	.00	.00	.50	47	
28	8.0	6.4	3.1	1.4	1.0	.27	.13	.00	.00	.00	.50	42	
29	7.8	6.6	3.1	1.5	---	.27	.13	.00	.00	.00	.50	43	
30	7.6	6.1	3.0	1.3	---	.25	.13	.00	.00	.00	.80	47	
31	8.0	---	3.0	1.3	---	.23	---	.00	---	.00	1.6	---	
TOTAL	409.5	211.6	128.9	66.4	41.8	12.55	5.83	.77	.00	.00	7.43	744.2	
MEAN	13.2	7.05	4.16	2.14	1.49	.40	.19	.02	.00	.00	.24	24.8	
MAX	35	9.7	6.2	3.6	2.6	.95	.23	.12	.00	.00	1.6	48	
MIN	7.6	5.5	3.0	1.3	1.0	.23	.13	.00	.00	.00	.00	3.2	
CFSM	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	
IN.	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	
CAL YR 1984	TOTAL	42620.0		MEAN	116	MAX	351	MIN	3.0	CFSM	.11	IN.	1.57
WTR YR 1985	TOTAL	1628.98		MEAN	4.46	MAX	48	MIN	.00	CFSM	.00	IN.	.06

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02242500 LOCHLOOSA SLOUGH NEAR LOCHLOOSA, FL

LOCATION.--Lat 29°29'17", long 82°06'07", in SW¼ sec.34, T.11 S., R.22 E., Alachua County, Hydrologic Unit 03080102, near left bank at upstream side of culverts on U.S. Highway 301, 1.2 mi south of Lochloosa, and 2.4 mi north of Island Grove.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1947 to September 1955; April 1982 to current year. Prior to April 1982, published as Lochloosa Lake Outlet near Lochloosa.

GAGE.--Water-stage recorder. Datum of gage is 53.41 ft above National Geodetic Vertical Datum of 1929. Prior to September 1955, near present site at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 23 to May 6, May 22 to June 19, Sept. 20-30. Records poor. Station does not represent the entire outflow of Lochloosa Lake as there is a natural diversion through Cross Creek into Orange Lake.

AVERAGE DISCHARGE.--12 years (water years 1947-55, 1983-85), 25.8 ft³/s, 18,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 341 ft³/s, Mar. 12,13, 1948, gage height, 6.04 ft, site and datum then in use; no flow for many days in most years; slough dry at times in 1955, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.5 ft³/s, Aug. 31, gage height, 5.89 ft; no flow for many days, slough dry.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.1
2	.32	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9
3	.29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3
4	.21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.91
5	.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.71
6	.08	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.68
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.62
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.43
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.27
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.34
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.27
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.21
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.28	.20
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.15
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.51	.05
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.71	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.69	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.54	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.58	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	2.0	---
TOTAL	1.55	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.29	11.42
MEAN	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30	.38
MAX	.53	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.0	2.1
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CAL YR 1984	TOTAL	1488.50	MEAN	4.07	MAX	21	MIN	.00				
WTR YR 1985	TOTAL	22.26	MEAN	.06	MAX	2.1	MIN	.00				

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02243000 ORANGE CREEK AT ORANGE SPRINGS, FL

LOCATION.--Lat 29°30'34", long 81°56'47", in NE¼ sec.25, T.11 S., R.23 E., Marion County, Hydrologic Unit 03080102, near right bank at downstream side of bridge on State Highway 21, 0.2 mi northwest of Orange Springs, and 1.2 mi upstream from Little Orange Creek.

DRAINAGE AREA.--1,119 mi², includes Paynes prairie, a diked sinkhole area of 650 mi², approximately, which is noncontributing except by pumpage.

PERIOD OF RECORD.--November 1941 to June 1942 (discharge measurements only), July 1942 to December 1952, October 1955 to September 1971, October 1971 to April 1975 (discharge measurements only), May 1975 to current year.

REVISED RECORDS.--WDR FL-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 19.81 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 18, 1955, and Oct. 13, 1971, to May 6, 1975, nonrecording gage at same site and datum. Feb. 4, 1980, to May 7, 1981, temporary gage 125 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Records include some flow diverted, during periods of high stages, from Santa Fe Lake in Suwannee River basin through Lochloosa Creek. Since April 1963, concrete dam at outlet of Orange Lake, 11 mi upstream from station.

AVERAGE DISCHARGE.--36 years (water years 1943-52, 1956-71, 1976-85), 164 ft³/s, 2.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft³/s, Sept. 13, 1964, gage height, 9.86 ft; minimum daily, 2.0 ft³/s, May 31, June 1, 3-5, 9-14, 1956; minimum gage height, 0.94 ft, June 1-7, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1941 reached a stage of 10.6 ft, from information by local resident, discharge, 2,400 ft³/s, from rating curve extended above 1,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 303 ft³/s, Sept. 1, gage height, 5.84 ft, no peak above base of 500 ft³/s; minimum daily discharge, 3.0 ft³/s, June 1-7; gage height, 0.94 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	24	22	13	12	9.3	6.4	4.3	3.2	15	8.4	278
2	69	23	20	13	12	9.1	6.6	4.3	3.2	8.5	8.9	228
3	59	21	19	15	11	8.8	6.3	4.1	3.2	6.1	34	185
4	49	27	21	21	13	8.4	6.0	4.2	3.1	5.1	43	148
5	44	40	20	18	14	8.2	5.8	4.2	3.1	4.9	22	123
6	41	42	21	16	25	7.9	6.3	4.1	3.1	6.8	26	127
7	36	28	20	16	36	7.7	6.9	4.0	4.0	6.2	123	109
8	33	23	18	15	28	7.5	6.4	3.9	4.9	5.0	124	89
9	31	21	18	14	25	7.4	6.0	3.9	3.8	4.4	64	74
10	30	24	17	15	20	7.3	5.7	3.9	3.9	4.1	50	65
11	28	22	17	15	20	7.1	5.6	3.9	3.6	4.0	42	56
12	27	20	19	14	23	7.0	5.9	3.8	3.5	3.9	34	121
13	24	19	18	13	19	6.8	18	3.8	4.9	4.0	24	85
14	23	17	16	13	16	6.8	23	3.7	8.8	3.9	25	75
15	22	17	16	15	16	6.5	18	3.6	9.7	3.9	34	63
16	21	16	16	13	15	7.9	13	3.6	17	3.9	29	54
17	22	16	16	13	13	26	11	3.5	11	4.1	77	52
18	24	15	16	13	13	20	9.0	3.6	6.7	4.8	36	62
19	23	15	15	13	12	13	7.7	3.6	5.4	5.6	23	69
20	19	22	15	12	12	11	6.9	4.1	4.8	5.5	24	67
21	18	19	15	12	12	13	6.4	4.7	4.4	4.7	26	74
22	17	36	15	12	12	23	6.0	4.0	4.3	5.1	21	72
23	17	48	18	12	11	15	5.7	4.3	4.1	5.9	19	64
24	18	46	16	11	11	12	5.4	4.3	3.9	6.1	93	63
25	17	37	15	12	10	9.7	5.2	4.0	3.9	8.6	85	58
26	17	28	14	12	10	8.7	4.9	3.8	4.0	6.3	120	60
27	18	29	14	11	9.7	8.0	4.7	3.6	3.8	6.0	104	62
28	18	24	14	11	9.5	7.5	4.6	3.5	3.9	15	93	56
29	17	25	14	12	---	7.2	4.5	3.4	4.5	7.4	79	54
30	17	25	14	11	---	6.8	4.4	3.3	9.5	8.0	65	58
31	24	---	13	12	---	6.5	---	3.3	---	8.4	167	---
TOTAL	901	769	522	418	440.2	311.1	232.3	120.3	157.2	191.2	1723.3	2751
MEAN	29.1	25.6	16.8	13.5	15.7	10.0	7.74	3.88	5.24	6.17	55.6	91.7
MAX	78	48	22	21	36	26	23	4.7	17	15	167	278
MIN	17	15	13	11	9.5	6.5	4.4	3.3	3.1	3.9	8.4	52
CFSM	.03	.02	.02	.01	.01	.01	.01	.00	.00	.01	.05	.09
IN.	.03	.03	.02	.01	.02	.01	.01	.00	.01	.01	.06	.10
CAL YR 1984	TOTAL	63514	MEAN	174	MAX	519	MIN	13	CFSM	.16	IN.	2.21
WTR YR 1985	TOTAL	8536.6	MEAN	23.4	MAX	278	MIN	3.1	CFSM	.02	IN.	.30

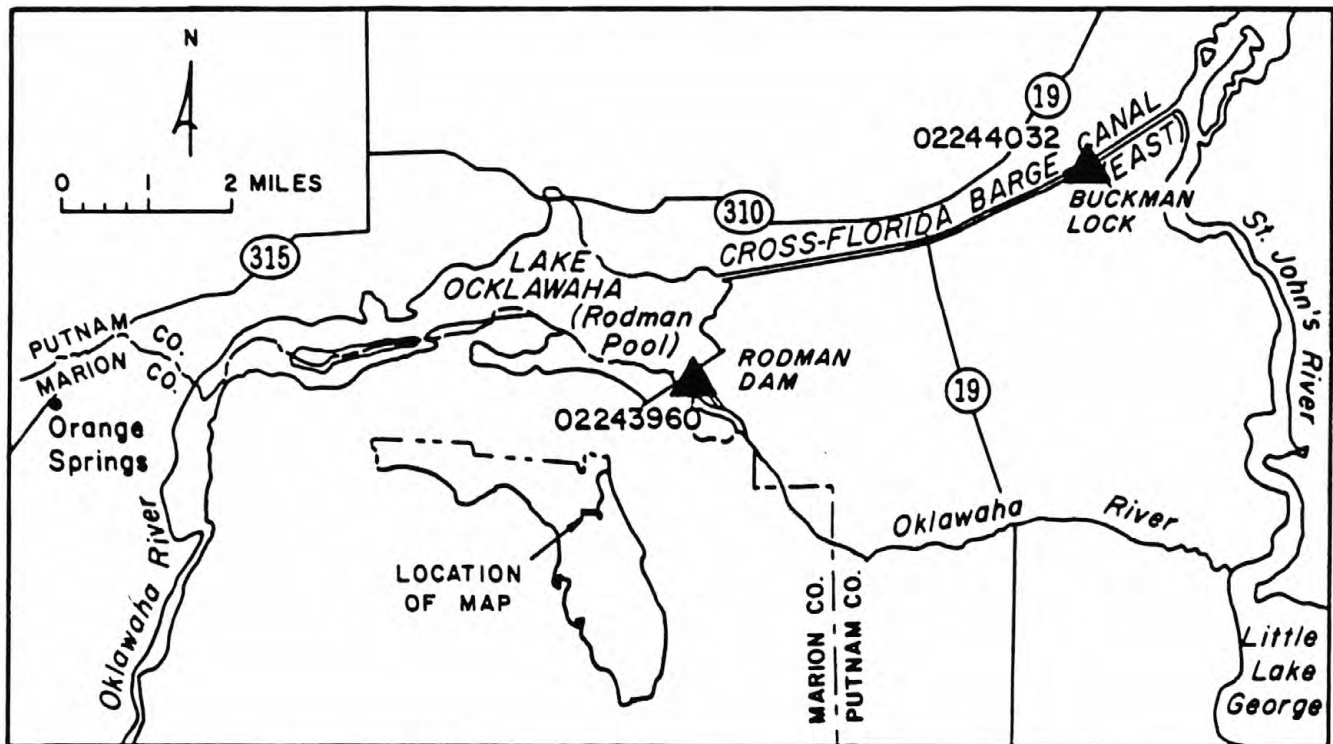


Figure 11. Location of stream gaging stations in the lower Oklawaha River basin.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1390	966	561	592	713	615	478	357	357	1380	1230	2860
2	1230	955	540	585	713	622	478	353	357	834	929	2630
3	1230	955	585	592	705	622	478	357	357	713	705	1770
4	1060	966	592	592	705	604	478	357	357	642	1080	1410
5	955	966	662	592	705	585	478	357	357	473	921	1490
6	955	966	938	592	713	585	478	353	357	473	585	1640
7	806	966	945	592	858	585	478	357	357	473	585	1840
8	705	966	835	592	966	585	478	357	357	473	1020	1180
9	705	966	826	592	955	585	478	357	357	473	1840	1080
10	855	966	754	592	955	585	478	357	357	473	1640	1220
11	955	966	566	665	807	518	478	357	357	473	1460	1100
12	955	955	539	713	713	473	478	357	357	473	1860	1270
13	955	955	585	713	705	461	478	357	357	473	1770	1270
14	955	811	666	713	568	473	884	357	361	473	2140	1270
15	814	705	851	713	473	478	966	357	564	473	2290	1270
16	705	705	966	713	473	478	937	357	1280	478	2070	1270
17	637	705	955	713	473	694	713	357	1630	478	1640	1270
18	585	562	955	713	473	924	665	357	786	478	1600	1270
19	585	478	878	713	473	966	478	357	592	478	1240	1270
20	592	619	684	713	473	966	478	357	592	478	1320	1270
21	592	713	585	641	473	966	448	357	614	478	1840	1270
22	665	713	585	592	473	966	478	357	357	478	1680	1270
23	869	1260	585	592	473	819	478	357	357	713	880	1270
24	966	1640	585	498	473	578	478	357	357	1090	803	1270
25	955	1220	585	814	544	478	478	357	357	1370	1530	1270
26	966	877	585	821	592	478	478	357	357	967	1650	1100
27	966	826	585	713	661	478	478	357	357	592	1500	988
28	966	826	585	695	652	478	478	357	443	853	1070	752
29	966	745	585	713	---	478	478	357	614	875	854	605
30	966	705	592	705	---	478	466	357	713	993	854	679
31	966	---	585	713	---	478	---	357	---	1290	1850	---
TOTAL	27472	26624	21325	20492	17960	19079	16073	11059	14972	20861	42436	40124
MEAN	886	887	688	661	641	615	536	357	499	673	1369	1337
MAX	1390	1640	966	821	966	966	966	357	1630	1380	2290	2860
MIN	585	478	539	498	473	461	448	353	357	473	585	605
CFSM	.32	.32	.25	.24	.23	.22	.20	.13	.18	.24	.50	.49
IN.	.37	.36	.29	.28	.24	.26	.22	.15	.20	.28	.57	.54
AC-FT	54490	52810	42300	40650	35620	37840	31880	21940	29700	41380	84170	79590
CAL YR 1984	TOTAL	606241	MEAN	1656	MAX	5110	MIN	473	CFSM	.60	IN.	8.21
WTR YR 1985	TOTAL	278477	MEAN	763	MAX	2860	MIN	353	CFSM	.28	IN.	3.77
											AC-FT	1202000
											AC-FT	552400

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02243960 OKLAWAHA RIVER AT RODMAN DAM, NEAR ORANGE SPRINGS, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.52	4.53	4.26	3.94	4.09	3.54	3.27	3.12	2.97	4.28	4.62	6.19
2	5.25	4.53	3.87	3.93	4.07	3.54	3.27	3.07	2.94	4.72	4.35	6.38
3	5.20	4.54	3.85	3.94	4.05	3.53	3.26	3.02	2.92	4.16	4.04	5.94
4	5.10	4.57	3.85	3.85	4.06	3.60	3.26	3.07	2.91	3.80	4.26	5.42
5	4.90	4.60	3.92	3.77	4.08	3.65	3.27	3.03	2.90	3.36	4.23	5.37
6	4.88	4.60	4.44	3.92	4.13	3.64	3.28	3.03	2.89	3.36	3.88	5.43
7	4.72	4.59	4.87	3.93	4.27	3.66	3.28	3.02	2.88	3.33	3.87	5.56
8	4.45	4.60	4.80	3.92	4.46	3.68	3.35	3.07	2.87	3.29	4.18	5.66
9	4.44	4.62	4.77	3.92	4.49	3.65	3.37	3.07	2.87	3.27	4.98	5.32
10	4.50	4.62	4.66	3.94	4.49	3.63	3.35	3.07	2.96	3.25	5.32	4.98
11	4.59	4.62	4.22	3.96	4.43	3.53	3.34	3.09	2.95	3.25	5.06	4.97
12	4.60	4.60	3.93	3.96	4.26	3.37	3.33	3.06	2.95	3.32	5.30	5.10
13	4.60	4.58	3.81	3.98	4.16	3.34	3.38	3.02	2.99	3.31	5.63	5.15
14	4.60	4.51	3.88	4.14	3.89	2.78	3.75	2.98	2.97	3.33	5.69	5.14
15	4.55	4.42	4.24	4.36	3.55	2.69	4.20	2.96	3.50	3.30	5.71	5.14
16	4.45	4.40	4.66	4.34	3.52	2.72	4.07	2.93	4.59	3.28	5.68	5.17
17	4.33	4.38	4.70	4.38	3.49	3.32	3.82	2.91	4.80	3.38	5.58	5.20
18	4.15	3.92	4.72	4.33	3.50	4.17	3.65	2.81	3.91	3.35	5.30	5.21
19	4.12	3.43	4.69	4.29	3.50	4.36	3.38	2.82	3.03	3.37	4.90	5.20
20	4.10	3.64	4.46	4.27	3.49	4.38	3.36	2.83	3.31	3.40	4.87	5.20
21	4.08	3.91	4.13	4.15	3.49	4.42	3.33	2.77	3.36	3.41	5.25	5.21
22	4.06	4.02	4.08	4.00	3.50	4.41	3.31	2.74	2.98	3.40	5.45	5.18
23	4.24	4.75	4.06	3.97	3.50	4.30	3.30	2.80	2.96	3.48	4.60	5.17
24	4.45	5.48	4.05	3.57	3.49	3.92	3.30	2.94	2.95	3.96	4.05	5.15
25	4.50	5.40	4.05	3.83	3.48	3.45	3.27	2.93	2.96	4.52	4.71	5.14
26	4.50	5.04	4.03	4.38	3.48	3.41	3.26	2.92	2.96	4.32	5.29	5.08
27	4.55	4.87	4.03	4.29	3.61	3.39	3.24	2.92	3.07	3.79	5.25	5.00
28	4.55	4.83	4.04	4.16	3.75	3.35	3.22	2.90	3.17	3.85	4.92	4.76
29	4.54	4.74	4.02	4.06	---	3.33	3.21	2.87	3.36	3.95	4.68	4.39
30	4.53	4.59	3.98	4.08	---	3.30	3.13	2.83	3.59	4.02	4.67	4.34
31	4.55	---	3.95	4.10	---	3.28	---	2.94	---	4.35	5.18	---
MEAN	4.57	4.53	4.23	4.05	3.87	3.59	3.39	2.95	3.18	3.65	4.89	5.24
MAX	5.52	5.48	4.87	4.38	4.49	4.42	4.20	3.12	4.80	4.72	5.71	6.38
MIN	4.06	3.43	3.81	3.57	3.48	2.69	3.13	2.74	2.87	3.25	3.87	4.34
CAL YR 1984	MEAN	5.36	MAX	7.65	MIN	3.43						
WTR YR 1985	MEAN	4.01	MAX	6.38	MIN	2.69						

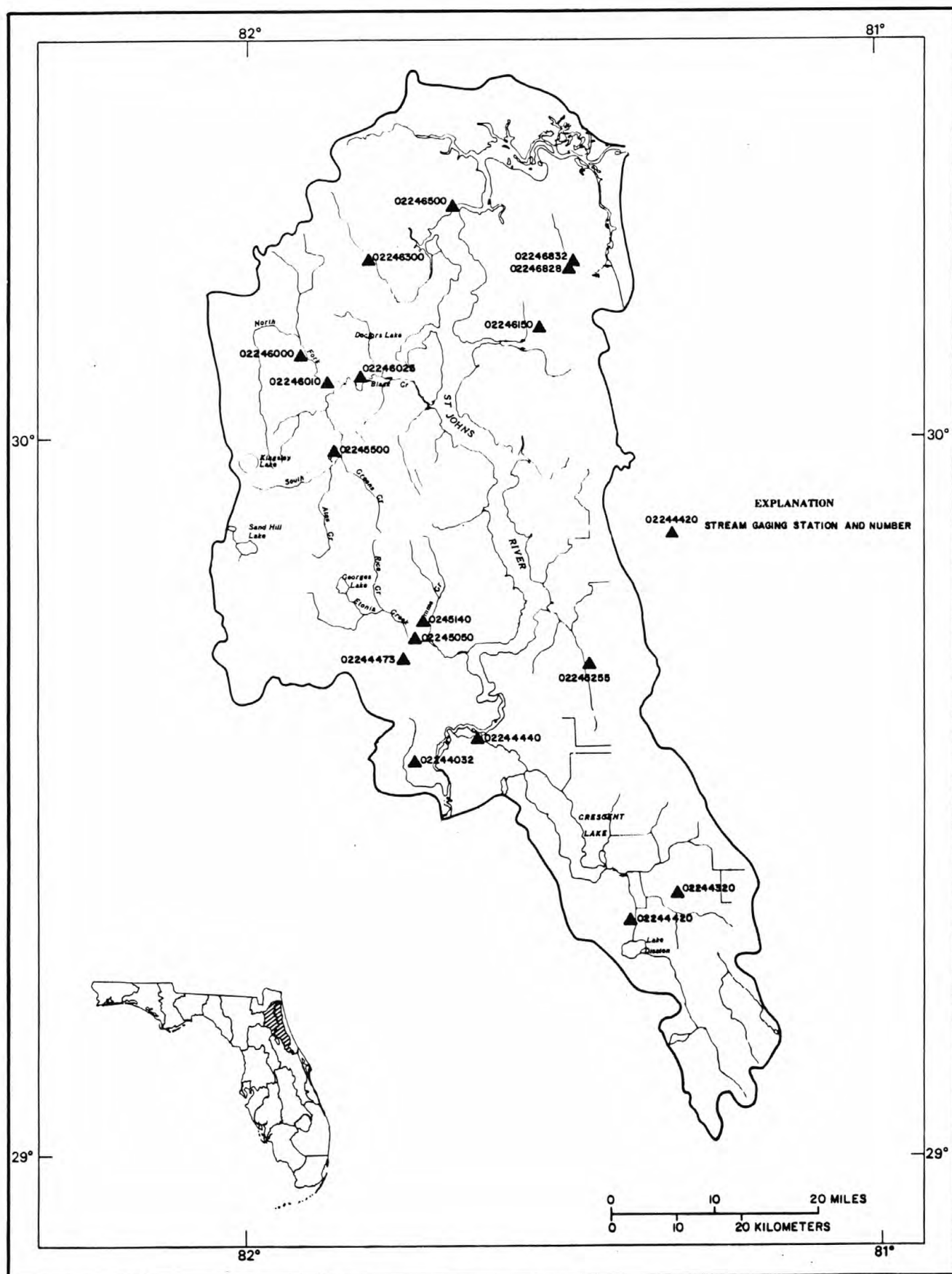


Figure 12. Location of stream gaging stations in the St. Johns River basin below the Oklawaha River basin.

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244032 CROSS-FLORIDA BARGE CANAL AT BUCKMAN LOCK, NEAR PALATKA, FL

LOCATION.--Lat 29°32'45", long 81°43'35", in land grant 37, T.11 S., R.26 E., Putnam County, Hydrologic Unit 03080103, at downstream side of Buckman Lock, 1.7 mi upstream from mouth, and 9.0 mi southwest of Palatka.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1969 to current year. Prior to October 1974, published as "at St. Johns Lock."

GAGE.--Nonrecording gage.

REMARKS.--Discharge at station is a diversion of flow, for boat lockages, from Lake Ocklawaha and Oklawaha River into St. Johns River and is computed using daily volume of water used for lockage.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 199 ft³/s, May 27, 1978; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 154 ft³/s, Nov. 4; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	67	71	71	63	63	134	16	109	23	.00	.00
2	15	66	70	93	79	83	141	16	73	28	.00	.00
3	45	92	37	16	87	118	120	16	29	39	.00	.00
4	35	154	47	.00	39	61	136	60	50	38	.00	.00
5	41	119	69	39	59	73	134	91	39	39	.00	.00
6	75	103	16	51	74	96	132	70	62	108	.00	.00
7	45	77	37	62	38	95	50	39	61	34	.00	.00
8	10	66	60	17	60	61	61	28	97	16	.00	.00
9	14	87	37	39	104	124	73	49	51	51	.00	.00
10	13	88	60	49	94	139	62	61	51	24	.00	.00
11	63	57	49	61	104	83	73	92	63	50	.00	.00
12	55	25	22	60	.00	72	84	59	39	84	.00	.00
13	91	32	71	39	6.0	96	49	71	17	106	.00	.00
14	94	21	38	27	51	94	93	49	17	44	.00	.00
15	34	31	82	38	84	73	73	27	18	22	.00	.00
16	85	65	59	50	118	88	84	.00	52	16	.00	.00
17	45	90	59	16	107	33	102	39	40	38	.00	.00
18	35	74	26	39	119	83	38	94	75	39	.00	.00
19	69	22	48	95	96	96	104	71	29	61	.00	.00
20	68	38	37	29	61	106	129	50	28	50	.00	.00
21	26	.00	58	.00	59	61	84	49	17	71	.00	.00
22	69	14	90	.00	62	49	62	95	63	16	.00	.00
23	58	34	38	.00	120	95	119	73	62	17	.00	.00
24	36	23	16	16	63	107	51	85	16	.00	.00	.00
25	42	23	27	30	98	95	109	96	.00	38	.00	.00
26	45	14	81	46	52	94	102	119	27	.00	.00	.00
27	87	15	69	53	117	95	109	107	40	50	.00	.00
28	46	25	70	39	64	89	86	28	38	61	.00	.00
29	46	36	104	40	---	115	40	22	93	16	.00	.00
30	40	37	104	27	---	132	81	61	28	16	.00	.00
31	25	---	115	62	---	111	---	38	---	28	.00	---
TOTAL	1465	1595.00	1767	1204.00	2078.00	2780	2715	1771.00	1384.00	1223.00	.00	.00
MEAN	47.3	53.2	57.0	38.8	74.2	89.7	90.5	57.1	46.1	39.5	.00	.00
MAX	94	154	115	95	120	139	141	119	109	108	.00	.00
MIN	10	.00	16	.00	.00	33	38	.00	.00	.00	.00	.00
AC-FT	2910	3160	3500	2390	4120	5510	5390	3510	2750	2430	.00	.00
CAL YR 1984	TOTAL	16376.00	MEAN	44.7	MAX	161	MIN	.00	AC-FT	32480		
WTR YR 1985	TOTAL	17982.00	MEAN	49.3	MAX	154	MIN	.00	AC-FT	35670		

ST JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244320 MIDDLE HAW CREEK NEAR KORONA, FL

LOCATION.--Lat 29°21'35", long 81°18'42", in NW¼ sec.19, T.13 S., R.30 E., Flagler County, Hydrologic Unit 03080103, near center of span on downstream side of bridge on State Highway 11, 1.2 mi north of Codys Corner, and 7.7 mi southwest of Korona.

DRAINAGE AREA.--78.3 mi².

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

REVISED RECORDS.--WDR FL-78-1: 1977.

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

REMARKS.--Estimated daily discharges Feb. 6-12, June 4 to Aug. 5. Records good, except periods of estimated discharge which are poor.

AVERAGE DISCHARGE.--10 years, 81.6 ft³/s, 14.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s, Sept. 30, 1979, gage height, 12.72 ft; no flow for many days in most years; minimum gage height, 4.12 ft, July 3, 1981, but may have been lower during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 547 ft³/s, Sept. 22, gage height, 10.32 ft; no flow many days in April, May, and June; minimum gage height, 4.40 ft, May 18-20,22,23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	399	19	28	5.9	.53	.10	.03	.00	.00	.86	83	344
2	342	17	27	5.4	.57	.09	.04	.00	.00	.82	75	424
3	302	18	25	5.1	.60	.08	.03	.00	.00	.76	78	423
4	276	17	23	5.4	.58	.06	.02	.00	.00	.70	258	407
5	257	15	23	5.0	.59	.05	.01	.00	.00	.67	243	439
6	240	14	27	4.5	.64	.05	.02	.00	.00	.98	221	489
7	222	12	27	4.0	.71	.05	.05	.00	.00	1.4	179	499
8	205	10	28	3.6	.72	.05	.05	.00	.00	1.1	168	464
9	188	9.1	30	3.3	.68	.04	.04	.00	.00	.90	192	408
10	172	8.0	29	3.0	.65	.04	.03	.00	.00	.76	194	349
11	160	7.2	28	2.8	.75	.03	.03	.00	.00	.70	196	298
12	147	6.3	26	2.5	.70	.03	.02	.00	.00	.69	215	258
13	134	5.4	24	2.1	.65	.03	.25	.00	.23	1.6	281	229
14	120	4.7	22	1.9	.56	.03	.65	.00	.40	2.4	319	239
15	107	4.1	20	1.7	.55	.03	.57	.00	.52	2.9	357	249
16	95	3.7	19	1.5	.50	.02	.39	.00	.55	2.1	358	242
17	84	3.3	18	1.3	.43	.07	.27	.00	.42	1.9	326	243
18	74	2.8	16	1.3	.37	.06	.18	.00	.35	1.6	305	304
19	65	2.4	15	1.2	.30	.05	.13	.00	.31	1.4	270	337
20	58	2.1	14	1.1	.28	.05	.10	.00	.30	1.2	251	375
21	52	2.2	13	1.0	.23	.08	.07	.00	.36	1.1	248	482
22	47	8.7	12	.86	.20	.17	.05	.00	.45	1.0	221	539
23	43	18	11	.85	.18	.14	.05	.01	.34	.95	192	490
24	39	24	9.8	.81	.18	.12	.04	.04	.30	.95	175	412
25	35	28	9.1	.80	.15	.09	.03	.03	.29	2.9	160	352
26	32	31	8.6	.75	.13	.07	.02	.02	.28	3.1	142	312
27	29	31	8.3	.66	.12	.05	.01	.01	.35	2.8	141	282
28	26	31	8.1	.62	.11	.05	.01	.01	.47	2.4	182	257
29	24	30	7.7	.58	---	.03	.00	.00	.45	4.9	203	236
30	22	30	7.1	.57	---	.03	.00	.00	.75	4.5	228	219
31	22	---	6.5	.55	---	.02	---	.00	---	7.0	262	---
TOTAL	4018	415.0	570.2	70.65	12.66	1.86	3.19	.12	7.12	57.04	6723	10601
MEAN	130	13.8	18.4	2.28	.45	.06	.11	.00	.24	1.84	217	353
MAX	399	31	30	5.9	.75	.17	.65	.04	.75	7.0	358	539
MIN	22	2.1	6.5	.55	.11	.02	.00	.00	.00	.67	75	219
CFSM	1.66	.18	.23	.03	.01	.00	.00	.00	.00	.02	2.77	4.51
IN.	1.91	.20	.27	.03	.01	.00	.00	.00	.00	.03	3.19	5.04
CAL YR 1984	TOTAL	34966.5	MEAN	95.5	MAX	1470	MIN	2.1	CFSM	1.22	IN.	16.61
WTR YR 1985	TOTAL	22479.84	MEAN	61.6	MAX	539	MIN	.00	CFSM	.79	IN.	10.68

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244420 LITTLE HAW CREEK NEAR SEVILLE, FL

LOCATION.--Lat 29°19'20", long 81°23'10", in SE¼ sec.32, T.13 S., R.29 E., Flagler County, Hydrologic Unit 03080103, on right bank 600 ft downstream from bridge on State Highway 305, 1.4 mi downstream from Lake Disston, and 6.4 mi east of Seville.

DRAINAGE AREA.--93.0 mi².

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5.74 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 5, 1953, at site 600 ft upstream at same datum.

REMARKS.--Estimated discharge Dec. 1-17, Jan. 22 to Feb. 11, Mar. 24 to Apr. 7, May 15 to June 3, July 1 to Aug. 4, Sept. 12-22. Records fair.

AVERAGE DISCHARGE.--34 years (water years 1952-85), 86.7 ft³/s, 12.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,630 ft³/s, Oct. 19, 20, 1968, gage height, 9.18 ft; no flow for many days in some years; minimum gage height, 0.14 ft, July 7, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 446 ft³/s, Sept. 22; maximum gage height recorded, 6.50 ft, Sept. 4; no flow May 30 to June 1, June 5-11; minimum gage height, 0.40 ft, June 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	326	49	26	19	5.7	4.4	1.9	.75	.00	.77	22	358
2	294	45	25	19	6.4	4.4	1.7	.76	.02	.71	20	387
3	277	44	23	19	6.8	4.2	1.6	.71	.10	.66	25	383
4	259	44	22	22	6.8	4.0	1.5	.61	.05	.61	39	381
5	245	42	21	18	7.0	3.9	1.6	.59	.00	.59	28	395
6	233	39	22	16	7.5	3.7	1.8	.57	.00	.58	27	389
7	225	34	24	15	8.0	3.4	1.6	.52	.00	.65	57	374
8	217	30	25	14	8.0	3.4	1.5	.46	.00	1.2	82	355
9	208	28	28	14	7.6	3.3	1.3	.41	.00	.95	115	338
10	198	27	31	13	8.2	3.2	1.2	.40	.00	.80	124	323
11	194	27	33	13	8.7	3.0	1.2	.37	.00	.67	175	310
12	186	25	34	13	7.5	2.9	1.2	.30	.03	.64	158	289
13	175	24	32	12	6.8	2.8	2.7	.25	.13	.63	138	263
14	163	24	29	11	6.1	2.6	2.9	.24	.64	1.2	149	242
15	153	24	28	11	5.8	2.4	2.4	.23	.66	2.3	157	253
16	143	24	27	10	5.6	2.5	2.0	.21	.73	2.0	155	195
17	132	24	26	10	5.4	3.8	1.6	.19	.57	1.7	174	190
18	122	25	26	10	5.4	3.5	1.6	.17	.44	1.5	168	259
19	112	27	26	10	5.4	2.7	1.5	.15	.37	1.3	159	282
20	104	25	26	9.9	5.3	2.3	1.4	.14	.29	1.1	167	315
21	96	24	26	9.9	5.2	3.1	1.3	.13	.25	.94	167	360
22	90	24	26	9.4	5.1	4.1	1.2	.12	.38	.89	162	446
23	84	24	25	8.5	5.0	3.3	1.1	.10	.52	.86	160	360
24	80	24	24	8.3	5.0	2.8	1.1	.08	.23	1.1	162	338
25	72	25	24	8.1	4.9	2.5	.99	.06	.19	2.2	160	315
26	66	25	23	8.0	4.9	2.3	.98	.04	.51	2.7	153	298
27	64	26	22	7.6	4.7	2.1	.98	.03	.55	1.9	186	285
28	62	26	22	7.3	4.5	1.9	.94	.02	.27	2.4	314	277
29	60	26	21	6.6	---	1.8	.88	.01	.28	4.5	321	267
30	56	26	21	6.3	---	1.9	.82	.00	.70	4.0	312	259
31	53	---	20	6.0	---	2.0	---	.00	---	8.0	307	---
TOTAL	4749	881	788	364.9	173.3	94.2	44.49	8.62	7.91	50.05	4543	9486
MEAN	153	29.4	25.4	11.8	6.19	3.04	1.48	.28	.26	1.61	147	316
MAX	326	49	34	22	8.7	4.4	2.9	.76	.73	8.0	321	446
MIN	53	24	20	6.0	4.5	1.8	.82	.00	.00	.58	20	190
CFSM	1.65	.32	.27	.13	.07	.03	.02	.00	.00	.02	1.58	3.40
IN.	1.90	.35	.32	.15	.07	.04	.02	.00	.00	.02	1.82	3.79
CAL YR 1984	TOTAL	44746	MEAN	122	MAX	758	MIN	14	CFSM	1.31	IN.	17.90
WTR YR 1985	TOTAL	21190.47	MEAN	58.1	MAX	446	MIN	.00	CFSM	.62	IN.	8.48

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244440 DUNNS CREEK NEAR SATSUMA, FL

LOCATION.--Lat 29°34'39", long 81°37'35", in NE¼ sec.1, T.11 S., R.27 E., Putnam County, Hydrologic Unit 03080103, on bridge fender against the swing-span of the U.S. Highway 17 bridge, 0.3 mi upstream from Murphy Creek, 0.8 mi upstream from mouth, 2.4 mi northeast of Satsuma, and 3.1 mi southwest of San Mateo.

DRAINAGE AREA.--492 mi².

PERIOD OF RECORD.--January 1978 to current year (incomplete).

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,650 ft³/s, Feb. 19, 1983; maximum gage height, 13.13 ft, Nov. 23, 1984; minimum daily discharge, -3,800 ft³/s, Feb. 18, 1979; minimum gage height, 8.84 ft, June 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,850 ft³/s, Nov. 27; maximum gage height, 13.13 ft, Nov. 23; minimum daily discharge, -2,970 ft³/s, Nov. 22; minimum gage height, 9.24 ft, Feb. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	1100	351	817	-1230	93	-580	-127	---		
2		---	788	59	696	-705	-361	257	207	---		
3		---	500	406	69	-26	-485	198	13	---		
4		---	221	216	-1450	-132	-141	-1730	-411	---		
5		---	-149	236	-1230	88	75	-1170	-1770	---		
6		---	-276	-192	-500	-547	-316	-294	---	---		
7		---	323	-257	-167	-1090	-346	569	---	---		
8		---	819	---	-198	-445	-637	462	---	-127		
9		---	927	---	-33	259	-613	-608	---	-269		
10		---	806	-998	---	94	-165	-675	---	-323		
11		---	599	-549	---	60	-165	-394	---	-102		
12		---	117	-1110	---	609	109	-633	---	41		
13		116	-118	-179	---	827	-412	-388	---	-388		
14		386	32	588	---	569	-762	-133	---	-267		
15		453	-81	1290	-170	-133	68	92	---	-270		
16		612	-177	658	-78	-924	421	-306	---	-609		
17		482	23	861	-176	-608	320	-367	---	-696		
18		209	58	642	-192	-734	40	-417	---	-1190		
19		828	198	470	-271	280	150	-223	---	-1340		
20		7	194	-294	-298	617	322	-135	---	-804		
21		-2130	152	-186	-806	981	324	224	---	-219		
22		-2970	33	518	-105	-52	137	295	---	-100		
23		---	185	679	332	-435	67	165	---	-115		
24		-1030	-181	556	448	188	162	626	---	-479		
25		666	-110	687	611	193	53	-353	---	375		
26		1560	-117	192	576	-295	-64	-1210	---	464		
27		1850	-449	210	516	158	-190	-666	---	227		
28		1820	409	258	-151	684	24	165	---	31		
29		1520	650	-870	---	914	-504	584	---	-228		
30		1450	736	-632	---	749	-1730	301	---	-974		
31		---	619	-6	---	582	---	-375	---	---		
TOTAL		---	7831	---	---	496	-4526	-6719	---	---		
MEAN		---	253	---	---	16.0	-151	-217	---	---		
MAX		---	1100	---	---	981	421	626	---	---		
MIN		---	-449	---	---	-1230	-1730	-1730	---	---		

NOTE.--Negative figures indicate flow upstream.

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244440 DUNNS CREEK NEAR SATSUMA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.11	11.62	11.12	10.79	10.91	10.56	9.96	10.79	10.60	---		
2	12.04	11.67	11.11	10.72	10.96	10.59	10.07	10.59	10.50	---		
3	11.94	11.73	11.12	10.62	10.96	10.57	10.22	10.51	10.49	---		
4	11.78	12.02	11.20	10.54	10.88	10.60	10.24	11.05	10.60	---		
5	11.64	12.00	11.35	10.69	10.78	10.52	10.14	11.19	10.87	---		
6	11.62	11.91	11.31	10.63	10.78	10.72	10.28	11.06	---	---		
7	11.73	11.92	11.04	10.56	10.66	11.01	10.34	10.82	---	---		
8	11.86	11.99	10.97	---	10.28	10.88	10.44	10.68	---	10.33		
9	12.02	11.92	10.76	10.87	9.76	10.68	10.53	10.86	---	10.37		
10	12.17	11.75	10.69	11.07	---	10.73	10.37	10.89	---	10.41		
11	12.34	11.55	10.75	11.07	---	10.74	10.43	10.84	---	10.35		
12	12.29	11.42	10.87	11.17	---	10.50	10.36	10.90	---	10.38		
13	12.08	11.41	10.89	11.14	---	10.31	10.57	10.92	---	10.53		
14	11.92	11.33	10.91	10.81	10.04	10.25	10.84	10.88	---	10.51		
15	11.88	11.35	11.04	10.56	10.16	10.34	10.73	10.81	---	10.48		
16	11.88	11.26	11.07	10.63	10.13	10.66	10.56	10.85	---	10.53		
17	11.78	11.26	11.10	10.45	10.21	10.80	10.52	10.82	---	10.67		
18	11.56	11.32	11.09	10.35	10.27	10.88	10.59	10.84	---	10.94		
19	11.40	11.13	11.08	10.52	10.29	10.78	10.54	10.83	---	11.18		
20	11.36	11.23	11.07	10.39	10.50	10.64	10.43	10.85	---	11.25		
21	11.33	11.85	11.08	10.12	10.62	10.47	10.35	10.76	---	11.08		
22	11.34	12.39	10.99	10.06	10.44	10.64	10.34	10.67	---	10.97		
23	11.41	12.67	11.07	9.89	10.31	10.76	10.33	10.67	---	10.88		
24	11.51	12.53	11.13	10.06	10.19	10.57	10.27	10.55	---	11.00		
25	11.60	12.23	11.06	9.97	10.03	10.57	10.25	10.66	---	10.78		
26	11.82	11.95	11.26	10.45	9.93	10.66	10.24	10.88	---	10.62		
27	11.81	11.71	11.10	10.49	9.90	10.57	10.24	10.88	---	10.59		
28	11.63	11.51	10.92	10.27	10.22	10.31	10.15	10.71	---	10.61		
29	11.48	11.33	10.80	10.08	---	10.07	10.29	10.53	---	10.66		
30	11.40	11.16	10.72	10.03	---	9.97	10.81	10.50	---	10.83		
31	11.46	---	10.76	10.33	---	9.91	---	10.63	---	---		
MEAN	11.75	11.70	11.01	---	---	10.56	10.38	10.79	---	---		
MAX	12.34	12.67	11.35	---	---	11.01	10.84	11.19	---	---		
MIN	11.33	11.13	10.69	---	---	9.91	9.96	10.50	---	---		
CAL YR 1984	MEAN	10.96	MAX	12.67	MIN	9.71						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244473 RICE CREEK NEAR SPRINGSIDE, FL

LOCATION.--Lat 29°41'17", long 81°44'32", in land grant 40, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on State Highway 100, 1.8 mi northwest of Springside, 5.9 mi northwest of Palatka, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--43.2 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.04 ft above National Geodetic Vertical Datum of 1929 (levels by Wardlin Engineering Associates).

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

AVERAGE DISCHARGE.--12 years, 45.4 ft³/s, 14.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft³/s, Aug. 1, 1978, gage height, 9.80 ft, from rating curve extended above 820 ft³/s; minimum daily discharge, 2.2 ft³/s, June 18, 19, July 12,13, 1981; minimum gage height, 2.12 ft, July 12,13, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 4	1300	*826	*7.81	Sept. 1	1100	553	7.38

Minimum daily discharge, 2.4 ft³/s, June 6; minimum gage height, 2.24 ft, June 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	18	23	13	12	10	10	4.1	3.7	9.7	58	462
2	192	15	22	13	12	10	10	4.0	3.1	8.4	35	303
3	146	16	20	14	13	9.6	9.4	4.2	2.9	5.8	68	215
4	111	31	20	20	17	9.3	8.7	4.3	2.7	4.3	601	169
5	83	117	20	19	19	9.0	8.1	4.2	2.5	3.6	287	136
6	59	140	24	17	25	8.5	8.8	3.8	2.4	7.3	130	108
7	42	101	23	16	48	8.0	12	3.7	2.5	7.7	77	83
8	30	75	21	15	48	7.9	12	3.5	4.2	6.1	70	62
9	25	58	20	14	34	7.8	9.4	3.5	3.7	4.2	231	46
10	21	47	19	14	27	7.6	8.3	3.5	3.2	3.4	204	31
11	21	36	18	14	24	7.4	7.6	3.4	3.1	2.9	194	25
12	19	30	18	13	26	7.3	7.7	3.3	3.4	4.3	194	22
13	16	25	18	12	24	7.0	18	3.2	4.9	15	245	34
14	14	21	17	12	21	6.9	37	3.1	5.5	15	263	73
15	12	19	17	12	19	6.7	41	3.0	6.5	8.9	227	65
16	11	17	16	11	17	8.7	26	2.9	10	21	196	50
17	10	16	16	12	16	66	18	2.8	12	15	206	50
18	11	14	16	13	15	135	14	2.7	8.6	12	154	64
19	9.9	13	16	12	15	109	11	2.8	5.7	15	137	67
20	9.3	13	15	12	14	66	9.7	3.3	4.3	28	264	72
21	8.9	13	15	12	14	52	8.6	5.2	3.8	30	184	88
22	8.9	24	14	11	13	58	7.7	4.7	3.6	14	111	84
23	9.0	54	14	12	13	58	7.1	3.9	3.5	9.8	113	70
24	8.6	59	14	12	12	48	6.6	3.7	3.3	9.2	99	56
25	8.0	51	14	13	12	34	6.0	3.4	3.1	15	81	47
26	8.1	42	14	13	11	25	5.4	3.2	3.2	13	76	37
27	14	34	14	12	11	20	5.0	3.1	3.1	10	74	28
28	15	30	15	12	10	17	4.7	2.9	3.1	15	119	22
29	13	28	15	13	---	14	4.5	2.8	4.1	15	112	19
30	11	26	14	12	---	13	4.4	2.9	6.3	23	84	27
31	15	---	14	12	---	11	---	4.4	---	45	135	---
TOTAL	1199.7	1183	536	412	542	857.7	346.7	109.5	132.0	396.6	5029	2615
MEAN	38.7	39.4	17.3	13.3	19.4	27.7	11.6	3.53	4.40	12.8	162	87.2
MAX	238	140	24	20	48	135	41	5.2	12	45	601	462
MIN	8.0	13	14	11	10	6.7	4.4	2.7	2.4	2.9	35	19
CFSM	.90	.91	.40	.31	.45	.64	.27	.08	.10	.30	3.75	2.02
IN.	1.03	1.02	.46	.35	.47	.74	.30	.09	.11	.34	4.33	2.25
CAL YR 1984	TOTAL	21476.7	MEAN	58.7	MAX	903	MIN	4.9	CFSM	1.36	IN.	18.49
WTR YR 1985	TOTAL	13359.2	MEAN	36.6	MAX	601	MIN	2.4	CFSM	.85	IN.	11.50

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245050 ETONIA CREEK AT BARDIN, FL

LOCATION.--Lat 29°43'00", long 81°43'31", in NW¼ sec.17, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on Bardin Road, 0.2 mi north of Bardin, 4.6 mi upstream from mouth, and 6.2 mi northwest of Palatka.

DRAINAGE AREA.--219 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.60 ft above National Geodetic Vertical Datum of 1929 (levels by Wardlin Engineering Associates).

REMARKS.--No estimated daily discharges. Records poor. Records include an appreciable amount of ground-water flow from Hudson Pulp and Paper Corporation production wells.

AVERAGE DISCHARGE.--12 years, 99.1 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,210 ft³/s, May 12, 1979, gage height, 7.74 ft; minimum daily discharge, 35 ft³/s, Apr. 7, 1982, estimated; minimum gage height, 0.70 ft, Apr. 7, 1982, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 832 ft³/s, Aug. 4, gage height, 6.99 ft; minimum, 44 ft³/s, May 30, gage height, 1.20 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	62	67	55	54	52	60	46	50	63	207	497
2	154	65	65	55	54	52	60	47	47	58	118	514
3	119	67	64	56	53	61	60	57	46	56	369	377
4	102	97	63	58	57	63	59	64	46	56	741	283
5	93	114	62	57	65	63	58	68	48	53	492	225
6	85	113	64	56	71	62	59	64	48	59	300	205
7	80	97	66	55	86	62	62	61	47	55	197	186
8	76	87	68	55	83	62	60	58	53	57	152	157
9	73	78	67	55	76	62	59	57	50	53	195	136
10	72	72	65	54	70	62	59	57	49	51	239	117
11	72	68	64	52	66	62	58	56	49	50	244	108
12	70	66	63	53	66	61	58	56	50	51	206	105
13	67	64	62	53	66	61	62	56	58	59	201	195
14	64	62	61	53	64	61	80	56	58	60	227	265
15	63	60	61	55	62	60	77	55	58	57	236	233
16	62	59	60	55	60	62	68	54	75	68	234	172
17	61	58	59	55	59	87	67	54	90	67	181	152
18	60	57	59	56	58	89	67	54	69	167	141	181
19	59	56	59	55	57	80	63	50	54	167	142	261
20	59	56	58	55	56	71	58	47	55	146	287	266
21	58	56	58	54	56	69	54	49	55	90	166	274
22	58	63	57	55	55	72	52	48	53	73	115	238
23	58	90	57	55	55	71	50	50	52	68	110	189
24	57	95	57	55	54	68	49	51	51	66	115	160
25	56	92	56	56	53	66	48	49	51	70	158	136
26	56	82	56	56	53	64	47	47	54	66	159	120
27	60	74	56	55	53	64	46	46	53	60	165	109
28	59	72	57	55	52	63	45	46	52	58	190	99
29	59	70	57	55	---	62	47	45	54	58	223	93
30	58	68	56	55	---	61	47	46	57	110	194	95
31	60	---	56	55	---	61	---	53	---	219	201	---
TOTAL	2347	2220	1880	1704	1714	2016	1739	1647	1632	2391	6905	6148
MEAN	75.7	74.0	60.6	55.0	61.2	65.0	58.0	53.1	54.4	77.1	223	205
MAX	217	114	68	58	86	89	80	68	90	219	741	514
MIN	56	56	56	52	52	52	45	45	46	50	110	93
CFSM	.35	.34	.28	.25	.28	.30	.26	.24	.25	.35	1.02	.94
IN.	.40	.38	.32	.29	.29	.34	.30	.28	.28	.41	1.17	1.04
CAL YR 1984	TOTAL	35713	MEAN	97.6	MAX	621	MIN	46	CFSM	.45	IN.	6.07
WTR YR 1985	TOTAL	32343	MEAN	88.6	MAX	741	MIN	45	CFSM	.40	IN.	5.49

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245140 SIMMS CREEK NEAR BARDIN, FL

LOCATION.--Lat 29°44'07", long 81°42'36", in NE¼ sec.9, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, on right bank 0.4 mi downstream from bridge on Simms Creek Road, 1.7 mi northeast of Bardin, 2.7 mi upstream from Etonia Creek, and 6.7 mi northwest of Palatka.

DRAINAGE AREA.--47.3 mi².

PERIOD OF RECORD.--October 1973 to September 1975, March 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Wardlin Engineering Associates). Prior to Feb. 26, 1976, at bridge 0.4 mi upstream at datum 7.26 ft higher.

REMARKS.--Estimated daily discharges: Nov. 6 to Jan. 15, Mar. 21 to Apr. 16, May 26 to June 17, July 23-24. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--11 years (water years 1974-75, 1977-85), 48.8 ft³/s, 14.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft³/s, Dec. 7, 1979, gage height, 13.78 ft; minimum discharge, 5.7 ft³/s, July 5, 1981; minimum gage height, 6.86 ft, July 27,28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 4	1300	*836	*13.00	No other peak greater than base discharge.			

Minimum daily discharge, 6.5 ft³/s, June 6, estimated; minimum gage height, 7.19 ft, June 6, estimated.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	25	25	12	14	13	13	7.0	9.0	16	23	487
2	173	26	23	12	14	13	12	7.4	8.4	14	23	402
3	134	26	21	19	14	13	12	8.2	7.6	11	133	269
4	91	48	22	26	17	13	12	16	7.2	9.5	659	183
5	69	78	24	24	23	13	11	14	6.8	8.6	422	141
6	57	140	24	22	30	12	13	11	6.5	11	238	139
7	52	110	23	20	55	12	16	9.6	8.0	11	163	121
8	51	80	22	18	45	12	14	9.0	10	11	138	92
9	48	55	21	17	32	12	13	8.7	8.4	9.0	173	66
10	44	49	20	16	26	11	12	8.5	7.5	7.7	223	50
11	43	35	19	16	23	11	11	8.3	6.8	7.0	237	41
12	40	30	19	15	25	11	10	8.1	13	9.1	244	35
13	34	26	18	15	24	11	18	8.1	22	7.1	157	51
14	31	23	17	14	21	11	35	8.0	35	7.3	125	75
15	28	21	17	14	20	10	42	7.9	58	4.9	119	66
16	26	19	16	13	19	11	34	7.8	40	3.3	110	49
17	25	18	16	13	18	42	26	7.5	27	2.5	94	67
18	23	17	15	14	17	57	22	7.4	21	4.5	72	106
19	22	16	15	14	17	37	17	7.6	16	4.2	63	134
20	20	15	15	13	17	25	14	7.9	13	5.9	61	167
21	18	15	14	14	16	20	12	8.4	11	4.3	45	178
22	29	30	14	14	16	25	11	8.1	11	2.8	35	154
23	30	56	14	14	15	23	9.8	8.3	11	2.1	54	132
24	25	65	13	14	15	21	9.2	17	10	1.7	76	105
25	21	56	13	15	14	19	8.7	14	10	2.8	79	78
26	19	45	13	15	14	18	8.3	12	10	2.5	97	58
27	20	38	13	14	14	17	7.9	10	8.9	2.2	96	45
28	22	34	13	14	14	15	7.6	9.2	8.6	1.8	112	34
29	20	30	13	15	---	15	7.3	8.4	9.5	1.6	128	28
30	19	27	13	14	---	14	7.1	8.0	11	2.5	113	37
31	22	---	12	14	---	13	---	10	---	3.2	117	---
TOTAL	1463	1253	537	484	589	550	445.9	291.4	432.2	796.9	4429	3590
MEAN	47.2	41.8	17.3	15.6	21.0	17.7	14.9	9.40	14.4	25.7	143	120
MAX	207	140	25	26	55	57	42	17	58	73	659	487
MIN	18	15	12	12	14	10	7.1	7.0	6.5	7.0	23	28
CFSM	.00	.88	.37	.33	.44	.37	.32	.20	.30	.54	3.02	2.54
IN.	1.15	.99	.42	.38	.46	.43	.35	.23	.34	.63	3.48	2.82

CAL YR 1984	TOTAL	23009.1	MEAN	62.9	MAX	528	MIN	8.8	CFSM	1.33	IN.	18.10
WTR YR 1985	TOTAL	14861.4	MEAN	40.7	MAX	659	MIN	6.5	CFSM	.86	IN.	11.69

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245255 DEEP CREEK NEAR HASTINGS, FL

LOCATION.--Lat 29°40'52", long 81°26'56", in NW¼ sec.35, T.9 S., R.28 E., St. Johns County, Hydrologic Unit 03080103, near right bank at downstream side of bridge on county road, 1.3 mi upstream from Sixteenmile Creek, and 4.2 mi southeast of Hastings.

DRAINAGE AREA.--20.7 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 6.99 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 5-10, Dec. 6-16, Feb. 14 to Apr. 16, July 19-31, and Sept. 26-30. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years, 9.02 ft³/s, 6,539 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 308 ft³/s, Sept. 28, 1984; maximum gage height, 8.03 ft, June 18, 1982; no flow for many days in most years; minimum gage height, 2.89 ft, Aug. 9, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 175 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 3	2000	206	6.79	Sept. 1	2000	*292	*7.14
Aug. 14	1500	230	6.89	Sept. 6	1900	247	6.95

Minimum discharge, 0.09 ft³/s, June 6, gage height, 3.85 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	1.8	.89	1.2	.46	.40	.46	2.1	.20	4.7	8.4	203
2	42	1.6	.82	1.2	.46	.37	.44	1.4	.19	2.5	3.8	207
3	27	9.0	.82	1.3	.46	.34	.42	.52	.20	1.8	132	118
4	20	16	.89	1.4	.60	.30	.40	.56	.20	1.8	109	107
5	15	12	.96	1.2	.64	.28	.36	1.1	.14	9.3	55	140
6	11	9.3	1.5	1.1	.85	.26	.38	1.3	.10	32	26	146
7	8.3	7.0	2.0	.89	1.1	.25	.50	1.6	.10	21	20	160
8	7.7	5.3	1.8	.82	.89	.24	.45	1.3	.10	6.1	78	88
9	8.4	3.9	1.7	.74	.80	.23	.35	.68	.10	3.9	53	53
10	7.3	2.8	1.5	.72	.73	.22	.30	1.2	.10	3.5	54	34
11	11	2.3	1.4	.70	.69	.21	.28	1.4	.10	3.4	84	23
12	9.5	2.3	1.2	.69	.81	.20	1.0	1.7	2.4	2.3	43	18
13	5.7	1.8	1.1	.64	.76	.19	3.0	1.8	3.9	.35	52	38
14	3.5	1.6	1.0	.57	.72	.18	7.0	1.6	3.2	.27	128	120
15	2.2	1.4	.95	.54	.70	.20	6.0	1.4	9.7	.24	93	81
16	1.5	1.3	.90	.83	.68	.40	4.0	1.2	9.4	.56	45	50
17	1.1	1.3	1.0	1.3	.64	1.0	3.3	1.1	1.8	2.4	24	82
18	.82	1.2	1.0	.55	.60	3.0	1.2	1.2	1.0	9.0	15	139
19	.69	.98	1.1	.50	.58	2.5	.93	1.9	.82	5.0	9.7	109
20	.59	.91	1.0	.47	.54	2.0	.87	2.4	.77	25	18	107
21	.51	.85	1.0	.45	.50	1.5	.94	1.3	.79	12	31	118
22	.53	.89	1.0	.44	.48	1.2	2.0	.37	.84	6.0	18	99
23	.53	.92	1.0	.46	.45	1.0	2.7	1.9	.87	3.5	9.9	65
24	.47	1.1	1.1	.46	.42	.90	3.0	1.4	.81	2.5	6.1	43
25	.43	1.2	1.1	.51	.40	.82	1.6	.48	5.1	15	6.0	33
26	.67	1.1	1.1	.49	.38	.74	2.5	.33	2.3	18	5.4	25
27	3.0	.98	1.2	.47	.40	.68	2.4	.24	1.6	17	28	21
28	2.5	.92	1.3	.47	.42	.60	2.2	.19	3.5	16	133	17
29	1.9	.89	1.3	.48	---	.54	2.2	.15	5.8	14	85	16
30	1.5	.89	1.3	.46	---	.50	2.4	.15	8.1	12	77	15
31	1.5	---	1.2	.47	---	.48	---	.22	---	10	160	---
TOTAL	260.84	93.53	36.13	22.52	17.16	21.73	53.58	34.19	64.23	261.12	1610.3	2475
MEAN	8.41	3.12	1.17	.73	.61	.70	1.79	1.10	2.14	8.42	51.9	82.5
MAX	64	16	2.0	1.4	1.1	3.0	7.0	2.4	9.7	32	160	207
MIN	.43	.85	.82	.44	.38	.18	.28	.15	.10	.24	3.8	15
CFSM	.41	.15	.06	.04	.03	.03	.09	.05	.10	.41	2.51	3.99
IN.	.47	.17	.06	.04	.03	.04	.10	.06	.12	.47	2.89	4.45
CAL YR 1984	TOTAL	3819.94	MEAN	10.4	MAX	227	MIN	.07	CFSM	.50	IN.	6.86
WTR YR 1985	TOTAL	4950.33	MEAN	13.6	MAX	207	MIN	.10	CFSM	.66	IN.	8.90

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245500 SOUTH FORK BLACK CREEK NEAR PENNEY FARMS, FL

LOCATION.--Lat 29°58'45", long 81°51'08", in NE¼ sec.13, T.6 S., R.24 E., Clay County, Hydrologic Unit 03080103, on right bank at upstream side of bridge on State Highway 16, 0.7 mi downstream from Greens Creek, 2.5 mi west of Penney Farms, 9.5 mi west of Green Cove Springs, and 24 mi upstream from mouth of Black Creek.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1304.

REVISED RECORDS.--WSP 1234: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 9.82 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 18, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharge: Sept. 29. Records good.

AVERAGE DISCHARGE.--46 years, 157 ft³/s, 15.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft³/s, Oct. 19, 1944, gage height, 26.33 ft, from floodmarks, from rating curve extended above 11,000 ft³/s; minimum, about 9.4 ft³/s, June 24, 1955; minimum gage height, 0.25 ft, June 19, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 1	1100	*2,380	*15.08	No other peak greater than base discharge.			

Minimum discharge, 13 ft³/s, June 6-12, gage height, 0.27 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	423	98	86	62	64	41	32	27	17	113	211	2080
2	270	80	82	62	62	46	32	27	16	72	139	1490
3	193	106	79	76	66	45	31	27	15	71	190	835
4	144	282	77	70	90	43	30	33	15	55	555	461
5	114	246	101	66	108	40	29	30	14	46	626	356
6	97	182	183	65	127	38	32	28	14	67	360	283
7	89	159	134	63	187	37	40	26	13	65	253	264
8	88	132	114	62	151	36	37	24	13	51	291	196
9	81	111	101	61	115	35	33	26	13	41	451	158
10	76	97	95	61	94	35	30	27	13	35	570	133
11	73	93	91	61	85	34	29	25	13	31	790	121
12	68	92	82	59	97	33	29	23	15	30	987	147
13	62	85	83	58	89	33	163	22	28	74	568	353
14	58	79	81	58	78	32	283	25	22	85	325	343
15	54	75	79	57	71	32	178	23	23	54	282	274
16	53	73	76	55	65	38	109	21	106	56	244	217
17	50	70	75	57	61	92	95	20	104	44	188	409
18	48	67	74	63	58	88	82	19	55	78	145	819
19	46	66	73	60	55	67	68	19	35	92	117	786
20	44	66	70	59	54	55	60	22	28	182	148	742
21	46	65	69	65	51	52	53	30	24	171	359	547
22	56	104	67	61	49	58	47	26	24	80	270	362
23	51	194	67	61	48	53	43	24	42	60	193	279
24	46	169	67	60	47	49	40	32	27	54	362	216
25	43	132	66	66	46	44	37	26	28	78	344	171
26	43	112	66	66	44	40	34	22	58	96	442	139
27	46	101	68	61	43	39	33	20	34	91	412	118
28	45	98	67	61	43	37	31	19	51	97	613	101
29	44	97	66	61	---	36	29	18	83	87	549	94
30	44	91	65	59	---	35	28	18	108	108	337	86
31	71	---	64	65	---	33	---	18	---	165	602	---
TOTAL	2666	3422	2568	1921	2148	1376	1797	747	1051	2429	11923	12580
MEAN	86.0	114	82.8	62.0	76.7	44.4	59.9	24.1	35.0	78.4	385	419
MAX	423	282	183	76	187	92	283	33	108	182	987	2080
MIN	43	65	64	55	43	32	28	18	13	30	117	86
CFSM	.64	.85	.62	.46	.57	.33	.45	.18	.26	.59	2.87	3.13
IN.	.74	.95	.71	.53	.60	.38	.50	.21	.29	.67	3.31	3.49
CAL YR 1984	TOTAL	56427	MEAN	154	MAX	1700	MIN	27	CFSM	1.15	IN.	15.66
WTR YR 1985	TOTAL	44628	MEAN	122	MAX	2080	MIN	13	CFSM	.91	IN.	12.39

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246000 NORTH FORK BLACK CREEK NEAR MIDDLEBURG, FL

LOCATION.--Lat 30°06'47", long 81°54'24", in NE¼ sec.33, T.4 S., R.24 E., Clay County, Hydrologic Unit 03080103, on left bank 0.3 mi upstream from Big Branch, 4 mi northwest of Middleburg, and 7.5 mi upstream from confluence with South Fork.

DRAINAGE AREA.--177 mi².

PERIOD OF RECORD.--October 1931 to current year.

REVISED RECORDS.--WSP 852: 1933 (m). WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 0.62 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 31, 1933, nonrecording gage at site 0.4 mi downstream at different datum. Mar. 31, 1933 to Apr. 28, 1955, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records fair. Stage-discharge relation affected by tide on some days.

AVERAGE DISCHARGE.--54 years, 194 ft³/s, 14.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s, May 3, 1964, gage height, 23.91 ft; minimum observed, 3.6 ft³/s, June 8, 1935, gage height, 0.26 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1919 reached a stage of 25.3 ft, from information by local resident, discharge, 15,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 4	1700	2,620	15.51	Sept. 1	1600	*4,470	*17.44

Minimum discharge, 13 ft³/s, June 5, gage height, 0.52 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1600	126	104	52	64	42	35	23	18	60	258	3660	
2	839	105	94	48	65	46	33	23	15	46	225	3440	
3	474	123	87	49	79	47	33	23	14	39	412	2120	
4	309	508	99	62	101	43	33	24	14	43	2030	1240	
5	215	723	115	62	137	39	33	29	13	54	1810	734	
6	160	488	140	58	128	39	32	26	14	74	961	501	
7	135	333	141	53	175	38	34	23	15	100	863	510	
8	125	239	135	51	162	34	35	20	15	89	875	352	
9	115	186	133	49	138	35	35	20	15	77	870	229	
10	109	144	114	49	118	39	34	22	14	66	709	162	
11	109	116	94	48	100	39	33	19	14	41	856	136	
12	100	114	86	48	100	38	33	18	14	46	868	122	
13	85	104	82	48	102	37	93	17	16	53	547	127	
14	75	91	78	45	89	35	242	18	19	125	490	186	
15	70	84	76	44	80	35	249	20	21	95	516	183	
16	68	76	73	44	73	35	334	20	32	175	342	200	
17	62	68	67	44	67	73	232	18	56	112	239	257	
18	55	64	65	53	64	124	160	17	42	177	190	439	
19	52	59	65	54	60	88	116	15	36	170	229	483	
20	51	58	64	50	58	68	93	17	31	117	192	349	
21	50	65	62	52	54	57	74	22	26	88	158	295	
22	66	110	58	51	52	63	58	20	22	71	131	304	
23	68	261	55	48	50	62	47	18	21	58	111	267	
24	60	262	56	48	50	52	41	19	21	45	123	195	
25	57	207	55	53	49	43	39	22	20	56	140	150	
26	63	168	53	59	48	39	39	20	20	77	182	143	
27	73	140	54	55	46	39	37	18	21	89	187	134	
28	67	120	52	50	43	39	28	16	21	94	259	111	
29	92	122	55	50	---	39	26	15	28	89	278	99	
30	130	116	52	49	---	39	25	17	42	114	279	98	
31	155	---	50	56	---	38	---	27	---	258	752	---	
TOTAL	5689	5380	2514	1582	2352	1484	2336	626	670	2798	16082	17226	
MEAN	184	179	81.1	51.0	84.0	47.9	77.9	20.2	22.3	90.3	519	574	
MAX	1600	723	141	62	175	124	334	29	56	258	2030	3660	
MIN	50	58	50	44	43	34	25	15	13	39	111	98	
CFSM	1.04	1.01	.46	.29	.47	.27	.44	.11	.13	.51	2.93	3.24	
IN.	1.20	1.13	.53	.33	.49	.31	.49	.13	.14	.59	3.38	3.62	
CAL YR 1984	TOTAL	88802		MEAN	243	MAX	4480	MIN	23	CFSM	1.37	IN.	18.66
WTR YR 1985	TOTAL	58739		MEAN	161	MAX	3660	MIN	13	CFSM	.91	IN.	12.35

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246010 NORTH FORK BLACK CREEK AT MIDDLEBURG, FL

LOCATION.--Lat 30°04'31", long 81°51'51", in SW¼ sec.12, T.5 S., R.24 E., Clay County, Hydrologic Unit 03080103, at downstream side of bridge on State Highway 21, 0.5 mi north of Middleburg, 1.5 mi upstream from confluence of South Fork, and 14 mi upstream from mouth of Black Creek.

DRAINAGE AREA.--197 mi².

PERIOD OF RECORD.--October 1981 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 9.80 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Stage affected by tide at times.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 14.17 ft, Sept. 29, 1984; minimum, 9.34 ft, Dec. 23, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.15 ft, Sept. 2; minimum, 9.39 ft, Feb. 13.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.46	11.57	10.93	10.81	10.28	10.64	9.95	10.86	10.64	10.68	10.80	13.38
2	11.94	11.57	10.93	10.79	10.22	10.63	10.02	10.69	10.57	10.52	10.81	13.75
3	11.79	11.68	10.98	10.71	10.20	10.55	10.27	10.60	10.56	10.48	11.45	12.60
4	11.62	12.10	10.95	10.59	10.78	10.69	10.44	11.01	10.66	10.52	12.32	11.83
5	11.40	12.04	11.20	10.44	11.06	10.57	10.42	11.20	10.70	10.59	12.32	11.41
6	11.36	11.63	11.18	10.62	10.97	10.57	10.45	11.02	10.65	10.60	11.83	11.18
7	11.55	11.63	10.87	10.69	10.81	10.99	10.49	10.80	10.61	10.50	11.64	11.13
8	11.74	11.75	10.83	10.59	10.75	10.92	10.50	10.67	10.69	10.30	11.49	11.07
9	11.87	11.70	10.75	10.77	10.76	10.74	10.52	10.93	10.66	10.42	11.35	11.05
10	12.02	11.56	10.70	11.03	10.74	10.68	10.50	10.89	10.59	10.53	11.37	11.00
11	12.17	11.29	10.67	11.00	10.77	10.76	10.54	10.80	10.50	10.45	11.49	10.90
12	12.11	11.08	10.77	10.88	10.25	10.58	10.48	10.85	10.31	10.51	11.58	11.01
13	11.91	11.20	10.87	11.00	9.59	10.40	10.64	10.88	10.06	10.58	11.45	11.62
14	11.75	11.19	10.83	10.85	9.69	10.32	10.90	10.83	10.42	10.58	11.27	12.23
15	11.77	11.21	10.86	10.51	10.10	10.25	10.83	10.78	10.50	10.55	11.19	12.34
16	11.78	11.12	11.00	10.63	10.22	10.71	10.64	10.80	10.44	10.59	11.08	12.40
17	11.66	11.05	10.96	10.66	10.23	10.81	10.56	10.76	10.14	10.70	11.04	12.44
18	11.45	11.21	10.99	10.48	10.24	10.70	10.64	10.79	10.08	10.95	11.00	12.46
19	11.30	11.03	10.97	10.41	10.39	10.70	10.59	10.81	9.91	11.18	11.10	12.41
20	11.28	10.94	10.97	10.80	10.43	10.65	10.48	10.84	9.91	11.24	11.28	12.34
21	11.29	11.47	11.00	10.80	10.64	10.71	10.39	10.78	10.14	11.08	11.21	12.22
22	11.24	11.90	10.99	10.80	10.60	10.72	10.38	10.68	10.45	10.97	11.12	12.14
23	11.27	12.28	10.91	10.80	10.46	10.80	10.43	10.70	10.55	10.87	11.22	12.10
24	11.35	12.39	11.04	10.80	10.37	10.62	10.34	10.55	10.58	10.93	11.32	11.93
25	11.47	12.05	11.03	10.80	10.16	10.55	10.29	10.66	10.63	10.75	11.19	11.88
26	11.71	11.72	10.94	10.80	10.02	10.69	10.28	10.88	10.59	10.65	10.99	12.13
27	11.78	11.48	11.11	10.80	9.89	10.68	10.27	10.91	10.53	10.66	11.04	12.26
28	11.54	11.24	10.94	10.80	9.96	10.40	10.20	10.76	10.80	10.68	11.28	12.09
29	11.32	11.03	10.81	10.80	---	10.08	10.32	10.58	10.88	10.69	11.47	12.08
30	11.24	10.95	10.71	10.71	---	9.95	10.90	10.56	10.83	10.69	11.47	12.19
31	11.34	---	10.71	10.58	---	9.96	---	10.71	---	10.76	12.08	---
MEAN	11.63	11.50	10.92	10.73	10.38	10.58	10.46	10.79	10.49	10.68	11.36	11.99
MAX	12.46	12.39	11.20	11.03	11.06	10.99	10.90	11.20	10.88	11.24	12.32	13.75
MIN	11.24	10.94	10.67	10.41	9.59	9.95	9.95	10.55	9.91	10.30	10.80	10.90
CAL YR 1984	MEAN	10.92	MAX	13.56	MIN	9.67						
WTR YR 1985	MEAN	10.96	MAX	13.75	MIN	9.59						

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246025 BLACK CREEK NEAR DOCTORS INLET, FL

LOCATION.--Lat 30°04'57", long 81°48'34", in NW¼ sec. 9, T.5 S., R.25 E., Clay County, Hydrologic Unit 03080103, on downstream side of bridge on State Highway 204, 1.7 mi upstream from Little Black Creek, 3.4 mi southwest of Doctors Inlet, and 8.0 mi upstream from mouth.

DRAINAGE AREA.--403 mi².

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

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Discharge computed using continuous velocity record obtained from recording electromagnetic current meter and represents net of much larger upstream and downstream discharges.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,690 ft³/s, Mar. 29, 1984; maximum gage height, 13.40 ft, Sept. 28, 1984; maximum daily reverse flow, 198 ft³/s, Sept. 29, 1983; minimum gage height, 9.05 ft, Feb. 29, Mar. 1, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,350 ft³/s, Oct. 1; maximum gage height, 13.20 ft, Sept. 1; maximum daily reverse flow, 139 ft³/s, April 29; minimum gage height, 9.17 ft, Jan. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2350	279	166	188	141		---	65	648			
2	1140	303	132	224	136		---	63	558			
3	630	313	160	204	139		---	31	391			
4	418	877	166	277	164		---	-27	369			
5	326	1000	190	290	.00		---	55	584			
6	184	707	333	233	---		---	229	.00			
7	112	386	274	271	---		---	251	372			
8	90	338	264	244	---		---	61	499			
9	62	237	247	200	---		---	2	516			
10	30	168	225	223	---		---	196	477			
11	155	223	130	221	---		---	147	456			
12	122	176	112	175	---		---	233	593			
13	150	119	96	179	---		---	356	326			
14	136	151	101	226	---		---	424	511			
15	11	104	90	163	---		670	432	535			
16	-6.9	91	94	124	---		563	356	588			
17	41	14	83	162	---		401	575	326			
18	93	61	94	170	---		254	463	---			
19	99	109	118	141	---		218	464	---			
20	64	48	137	175	---		177	512	---			
21	25	-4.1	134	223	---		174	655	---			
22	104	157	174	214	---		102	632	---			
23	15	315	159	172	---		202	603	---			
24	129		194	179	---		79	620	---			
25	65	288	193	160	---		86	404	---			
26	69	202	177	137	---		134	397	---			
27	114	153	189	176	---		117	513	---			
28	112	191	191	218	---		164	482	---			
29	179	230	197	113	---		-139	425	---			
30	184	204	188	157	---		-96	392	---			
31	248	---	124	221	---		---	432	---			
TOTAL	7450.1	7439.9	5132	6060	---		---	10443	---			
MEAN	240	248	166	195	---		---	337	---			
MAX	2350	1000	333	290	---		---	655	---			
MIN	-6.9	-4.1	83	113	---		---	-27	---			
CFSM	.60	.62	.41	.48	---		---	.84	---			
IN.	.69	.69	.47	.56	---		---	.96	---			

NOTE.--Negative figures indicate reverse flow.

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246025 BLACK CREEK NEAR DOCTORS INLET, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.06	11.70	11.05	10.89	10.23	10.89	10.21	10.94	10.64	10.66	10.78	12.75
2	11.91	11.70	11.04	10.87	10.13	10.76	10.21	10.70	10.53	10.50	10.81	12.52
3	11.82	11.81	11.10	10.76	10.14	10.64	10.43	10.59	10.52	10.41	11.52	11.99
4	11.66	12.19	11.06	10.58	10.76	10.87	10.45	11.10	10.67	10.46	12.07	11.64
5	11.48	12.08	11.33	10.37	11.15	10.66	10.47	11.31	10.69	10.58	11.98	11.40
6	11.48	11.71	11.29	10.64	11.04	10.48	10.39	11.09	10.61	10.58	11.77	11.22
7	11.66	11.74	10.93	10.70	10.81	11.02	10.45	10.81	10.61	10.43	11.62	11.16
8	11.84	11.87	10.89	10.56	10.76	10.96	10.45	10.70	10.72	10.29	11.45	11.14
9	11.97	11.85	10.77	10.85	10.79	10.73	10.44	11.03	10.67	10.39	11.31	11.14
10	12.14	11.71	10.71	11.16	10.75	10.68	10.60	10.97	10.61	10.52	11.33	11.08
11	12.30	11.42	10.67	11.10	10.84	10.82	10.48	10.91	10.50	10.42	11.42	10.97
12	12.22	11.20	10.83	10.96	10.18	10.58	10.37	10.96	10.25	10.48	11.50	11.08
13	11.99	11.34	10.96	11.11	10.15	10.42	10.73	10.96	10.10	10.57	11.46	11.72
14	11.87	11.32	10.91	10.93	10.23	10.43	10.94	10.90	10.41	10.55	11.31	12.32
15	11.87	11.34	10.95	10.46	10.22	10.40	10.94	10.84	10.45	10.49	11.23	12.44
16	11.90	11.26	11.11	10.65	10.20	10.82	10.59	10.87	10.31	10.55	11.15	12.48
17	11.77	11.18	11.07	10.66	10.29	10.95	10.48	10.82	10.12	10.72	11.10	12.51
18	11.53	11.35	11.09	10.39	10.28	10.74	10.61	10.87	10.05	11.01	11.05	12.50
19	11.39	11.20	11.08	10.32	10.40	10.79	10.53	10.88	9.90	11.29	11.18	12.45
20	11.37	11.04	11.09	10.28	10.43	10.72	10.39	10.90	9.99	11.33	11.38	12.39
21	11.37	11.61	11.11	10.22	10.69	10.85	10.30	10.83	10.21	11.16	11.30	12.29
22	11.37	12.05	11.07	10.07	10.59	10.91	10.35	10.70	10.43	11.03	11.21	12.23
23	11.40	12.40	10.98	10.05	10.43	10.95	10.37	10.73	10.54	10.89	11.33	12.19
24	11.49	12.50	11.14	10.09	10.36	10.70	10.34	10.55	10.58	10.98	11.42	12.02
25	11.60	12.20	11.13	9.90	10.23	10.58	10.31	10.71	10.66	10.76	11.27	11.98
26	11.84	11.84	11.05	9.74	10.15	10.83	10.30	10.96	10.59	10.61	11.06	12.24
27	11.91	11.60	11.24	10.07	10.08	10.80	10.31	10.98	10.52	10.64	11.11	12.37
28	11.66	11.36	11.04	10.17	10.36	10.47	10.23	10.81	10.85	10.64	11.36	12.20
29	11.44	11.15	10.88	10.39	---	10.24	10.41	10.58	10.95	10.67	11.54	12.20
30	11.36	11.07	10.77	10.63	---	10.20	10.98	10.57	10.86	10.71	11.54	12.30
31	11.46	---	10.76	10.56	---	10.28	---	10.73	---	10.76	11.96	---
MEAN	11.71	11.63	11.00	10.52	10.45	10.68	10.47	10.85	10.48	10.68	11.37	11.96
MAX	12.30	12.50	11.33	11.16	11.15	11.02	10.98	11.31	10.95	11.33	12.07	12.75
MIN	11.36	11.04	10.67	9.74	10.08	10.20	10.21	10.55	9.90	10.29	10.78	10.97
CAL YR 1984	MEAN	10.97	MAX	12.73	MIN	9.43						
WTR YR 1985	MEAN	10.99	MAX	12.75	MIN	9.74						

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246150 BIG DAVIS CREEK AT BAYARD, FL

LOCATION.--Lat 30°09'05", long 81°31'35", in land grant 37, T.4 S., R.28 E., Duval County, Hydrologic Unit 03080103, at downstream end of culvert on U. S. Highway 1, 0.8 mi northwest of Bayard, 2.0 mi upstream from mouth, and 14.8 mi southeast of Union Station in Jacksonville.

DRAINAGE AREA.--13.6 mi².

PERIOD OF RECORD.--Annual maximum, water years 1964-66, 1970-74; August 1966 to September 1969 and June 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Feb. 18, 1965, to Aug. 21, 1966, crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1-9, Nov. 15 to Jan. 8, Jan. 21 to Feb. 12. Records poor.

AVERAGE DISCHARGE.--14 years (water years 1967-69, 1975-85), 10.7 ft³/s, 10.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft³/s, Aug. 29, 1968, gage height, 10.47 ft; minimum, 0.05 ft³/s, July 25, 1977, June 19, 1981, gage height, 3.80 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 23	2230	108	7.24	Sept. 19	0115	119	7.35
Sept. 1	0915	*375	*8.67				

Minimum discharge, 0.32 ft³/s, June 7, gage height, 4.14 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	60	7.6	4.3	3.7	2.3	2.2	2.1	.80	5.3	3.6	299
2	45	33	7.1	4.3	3.9	2.3	2.1	1.9	.73	3.5	2.4	227
3	35	67	6.6	4.4	4.5	2.2	2.0	1.7	.59	4.5	49	116
4	28	96	6.4	4.5	6.0	2.0	2.2	1.9	.51	2.9	44	80
5	23	75	7.0	4.4	7.0	2.0	2.4	1.9	.52	2.0	13	66
6	19	60	8.7	4.3	8.4	2.0	2.6	1.6	.46	2.2	6.7	49
7	17	44	9.2	4.1	11	1.9	3.0	1.6	.42	3.0	5.7	38
8	13	28	8.5	3.9	9.2	1.9	2.6	1.6	.40	2.1	8.9	29
9	10	18	7.8	3.8	8.0	1.8	2.3	1.5	.37	1.6	18	22
10	8.4	12	7.2	3.7	6.8	1.8	2.3	1.4	.71	1.3	15	17
11	7.6	10	6.8	3.6	6.0	1.8	2.3	1.4	1.0	1.1	11	15
12	6.2	8.9	6.5	3.5	6.2	1.7	2.4	1.5	.79	1.0	7.4	19
13	4.9	8.1	6.3	3.5	6.0	1.7	20	1.3	.73	1.1	11	23
14	3.9	7.8	6.2	3.5	5.1	1.6	31	1.3	.69	1.9	15	18
15	3.5	6.5	6.0	3.4	4.7	1.7	15	1.1	1.0	1.5	8.6	13
16	3.2	6.0	5.8	3.3	4.3	4.6	9.2	.93	4.1	1.1	6.2	13
17	2.9	5.7	5.6	3.5	3.8	19	6.8	.93	3.4	2.8	5.6	43
18	3.1	5.4	5.5	3.6	3.4	14	5.5	.84	2.2	3.4	6.1	76
19	2.9	5.3	5.4	3.4	3.2	7.0	4.8	.88	1.3	2.0	5.7	107
20	2.6	5.0	5.3	3.3	3.1	5.5	4.5	.95	1.1	1.8	4.8	71
21	2.6	4.8	5.2	3.4	2.9	4.8	3.9	1.1	1.0	1.3	5.4	57
22	2.9	9.0	5.0	3.3	2.8	4.8	3.6	1.1	.90	1.1	4.8	48
23	3.1	16	4.7	3.4	2.6	4.4	2.7	1.0	.85	.91	6.1	39
24	2.6	14	4.5	3.6	2.5	3.9	2.1	1.0	.78	.90	5.7	31
25	2.3	13	4.4	3.9	2.7	3.6	1.8	.97	.76	1.3	5.9	26
26	2.6	11	4.5	3.9	2.5	3.2	1.7	.82	2.1	1.3	11	21
27	3.6	10	4.6	3.7	2.4	3.1	1.7	.69	3.4	1.1	15	17
28	3.1	9.5	4.8	3.4	2.5	2.8	1.5	.63	2.5	1.0	49	14
29	3.0	8.8	4.7	3.4	---	2.9	2.3	.60	3.0	4.0	46	12
30	7.7	8.2	4.5	3.5	---	2.6	2.6	.76	5.4	2.7	43	26
31	33	---	4.4	3.9	---	2.3	---	1.1	---	2.5	111	---
TOTAL	375.7	666.0	186.8	115.7	135.2	117.2	149.1	38.10	42.51	64.21	550.6	1632
MEAN	12.1	22.2	6.03	3.73	4.83	3.78	4.97	1.23	1.42	2.07	17.8	54.4
MAX	70	96	9.2	4.5	11	19	31	2.1	5.4	5.3	111	299
MIN	2.3	4.8	4.4	3.3	2.4	1.6	1.5	.60	.37	.90	2.4	12
CFSM	.89	1.63	.44	.27	.36	.28	.37	.09	.10	.15	1.31	4.00
IN.	1.03	1.82	.51	.32	.37	.32	.41	.10	.12	.18	1.51	4.46
CAL YR 1984	TOTAL	5860.34	MEAN	16.0	MAX	414	MIN	.74	CFSM	1.18	IN.	16.03
WTR YR 1985	TOTAL	4073.12	MEAN	11.2	MAX	299	MIN	.37	CFSM	.82	IN.	11.14

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246300 ORTEGA RIVER AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'50", long 81°47'49", in NW¼ sec.15, T.3 S., R.25 E., Duval County, Hydrologic Unit 03080103, near center of span on downstream side of bridge on 103rd Street in Jacksonville, 15 mi upstream from mouth.

DRAINAGE AREA.--30.9 mi².

PERIOD OF RECORD.--Water years 1928, 1956, 1958-60, occasional low-flow measurements; January 1965 to July 1983, July 1984 to current year. Prior to October 1971, published as "near Jacksonville".

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 0.02 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 21, 1965, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 27 to Feb. 14. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--19 years (water years 1966-83, 1985), 35.7 ft³/s, 15.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,950 ft³/s, Aug. 30, 1968, gage height, 39.32 ft; no flow June 8-11, 1985; minimum gage height, 28.83 ft, June 5, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 1	2215	*1,110	*37.51	No other peak greater than base discharge.			

No flow June 8-11; minimum gage height, 29.91 ft, June 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	301	24	14	13	12	6.1	3.0	3.7	.38	18	18	858	
2	166	21	12	13	12	10	2.9	3.1	.25	14	18	970	
3	103	100	12	14	17	9.9	2.4	3.6	.16	12	57	652	
4	72	310	11	14	25	9.2	2.0	4.1	.11	14	117	371	
5	52	193	11	14	40	7.7	1.7	4.5	.07	8.7	88	249	
6	38	115	15	13	37	7.6	5.9	3.6	.03	17	62	109	
7	29	75	13	13	32	7.6	7.8	2.6	.01	19	63	91	
8	24	49	12	12	28	5.5	7.1	2.4	.00	14	143	70	
9	21	30	11	12	23	4.9	6.0	7.0	.00	7.5	146	54	
10	21	22	10	12	20	4.0	4.6	5.7	.00	3.1	110	39	
11	18	19	10	12	19	3.9	4.1	5.1	.00	2.9	78	30	
12	17	17	10	12	19	4.2	3.8	4.5	2.6	23	55	25	
13	16	15	14	11	18	6.6	16	4.1	6.8	39	42	30	
14	14	13	14	11	16	6.5	23	4.2	5.5	57	49	34	
15	14	11	13	11	14	4.6	20	3.6	4.0	55	55	30	
16	14	11	12	11	13	9.8	16	1.7	17	43	57	43	
17	13	9.5	12	12	11	26	18	.77	17	29	54	111	
18	12	8.4	13	12	9.9	20	20	.78	12	20	40	273	
19	12	7.7	12	12	11	14	16	.24	6.0	19	28	157	
20	10	8.3	13	11	8.7	10	11	4.6	3.3	16	22	103	
21	9.6	8.2	12	11	8.4	9.9	8.7	11	2.0	13	33	89	
22	9.8	24	13	11	8.7	12	7.5	8.2	1.5	10	21	88	
23	10	55	14	11	7.1	9.5	5.9	7.7	1.3	7.7	14	77	
24	11	51	14	12	5.9	7.5	5.2	12	.71	7.4	13	62	
25	8.9	33	15	12	5.3	6.0	4.2	11	.41	11	20	52	
26	11	21	15	12	6.2	5.0	3.7	7.4	.38	21	23	39	
27	13	18	14	11	6.0	4.6	3.5	4.7	.93	19	21	29	
28	12	16	15	11	5.5	4.1	3.0	2.4	1.8	16	25	22	
29	17	17	15	11	---	3.9	2.5	1.2	7.8	14	24	18	
30	22	16	14	11	---	3.4	5.8	1.7	17	18	23	22	
31	23	---	14	12	---	3.2	---	.70	---	22	261	---	
TOTAL	1114.3	1318.1	399	370	438.7	247.2	241.3	137.89	109.04	590.3	1780	4797	
MEAN	35.9	43.9	12.9	11.9	15.7	7.97	8.04	4.45	3.63	19.0	57.4	160	
MAX	301	310	15	14	40	26	23	12	17	57	261	970	
MIN	8.9	7.7	10	11	5.3	3.2	1.7	.24	.00	2.9	13	18	
CFSM	1.16	1.42	.42	.39	.51	.26	.26	.14	.12	.61	1.86	5.18	
IN.	1.34	1.59	.48	.45	.53	.30	.29	.17	.13	.71	2.14	5.78	
WTR YR 1985	TOTAL	11542.83		MEAN	31.6	MAX	970	MIN	.00	CFSM	1.02	IN.	13.90

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL

LOCATION.--Lat 30°19'16", long 81°39'54", in land grant 39, T.2 S., R.26 E., Duval County, Hydrologic Unit 03080103, on downstream side near center of Florida East Coast Railroad bridge at Jacksonville, 0.3 mi upstream from Main Street Bridge, 2.6 mi upstream from Arlington River, and 23 mi upstream from mouth.

DRAINAGE AREA.--8,754 mi², includes Paynes Prairie, a diked sinkhole area of about 650 mi², which is noncontributing except for pumpage.

PERIOD OF RECORD.--February 1954 to September 1970 (volume of flow), October 1970 to September 1971 (gage heights only) October 1971 to September 1974, October 1974 to September 1980 (gage heights only), October 1980 to September 1981, October 1981 to current year (gage heights only).

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage and electromagnetic current meter recorders with deflection meter recorder backup. Datum of gage is 9.99 ft below National Geodetic Vertical Datum of 1929. Feb. 11, 1954 to Apr. 12, 1966, water-stage recorder at site 0.3 mi downstream at same datum. Apr. 13, 1966 to Sept. 30, 1971, water-stage recorder at site 0.6 mi downstream at same datum. October 1971 to September 1980, water-stage and deflection meter recorder at same site and datum.

REMARKS.-- Discharge record not available for this year due to instrument malfunction. The stage record published is the maximum and minimum tide event for each calendar day.

AVERAGE DISCHARGE.--21 years (water years 1955-74, 1981), 5,546 ft³/s, 4,018,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.20 ft, Sept. 10, 1964; minimum gage height, 7.90 ft, Feb. 29, 1984.

Water years 1954-70: Maximum volume of flow downstream, 5,280 mft³, Sept. 10, 1964; maximum volume of flow upstream, 4,410 mft³, Sept. 9, 1964.

Water years 1971-74: Maximum daily discharge, 64,000 ft³/s, June 20, 1972; maximum daily reverse flow, 62,700 ft³/s, Oct. 20, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.72 ft, Nov. 24; minimum, 8.16 ft, Jan. 26.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.33	12.07	11.42	11.33	10.70	10.97	10.46	11.20	11.02	11.02	11.17	
2	12.23	11.96	11.51	11.33	10.86	10.94	10.40	11.09	10.95	10.87	11.25	
3	12.18	12.33	11.54	11.39	10.83	10.76	10.85	10.99	10.99	10.83	11.93	
4	12.06	12.51	11.43	11.34	11.42	11.00	10.79	11.41	11.15	10.82	12.10	
5	11.89	12.39	11.84	10.96	11.67	10.94	10.84	11.55	11.19	10.90	12.00	
6	11.94	11.97	11.95	11.25	11.59	10.90	10.79	11.42	11.08	10.99	11.90	
7	12.13	12.12	11.44	11.37	11.28	11.30	10.82	11.39	10.85	10.72	11.83	
8	12.30	12.15	11.38	11.13	11.14	11.29	10.84	11.13	11.01	10.61	11.94	
9	12.38	12.23	11.26	11.41	11.09	11.16	10.79	11.20	10.93	10.73	11.54	
10	12.55	12.13	11.29	11.66	11.06	11.08	10.74	11.25	11.09	10.81	11.55	
11	12.49	12.05	11.22	11.57	11.32	11.14	10.79	11.12	10.83	10.76	11.60	
12	12.57	11.65	11.36	11.27	10.99	11.08	10.65	11.08	10.68	11.09	11.74	
13	12.32	11.78	11.48	11.53	9.89	10.60	10.71	11.09	10.56	10.86	11.68	
14	12.31	11.72	11.42	11.43	10.26	10.61	10.99	11.06	10.81	10.90	11.54	
15	12.32	11.80	11.44	10.92	10.44	10.45	11.10	11.10	10.80	10.83	11.52	
16	12.35	11.70	11.59	11.19	10.61	10.88	10.85	11.09	10.77	11.04	11.45	
17	12.19	11.61	11.53	11.38	10.63	11.03	10.83	11.14	10.51	11.18	11.41	
18	11.95	11.89	11.61	10.96	10.58	10.92	10.91	11.19	10.41	11.40	11.39	
19	11.88	11.86	11.64	10.87	10.71	10.94	10.80	11.18	10.33	11.61	11.47	
20	11.96	11.46	11.65	11.01	10.82	10.90	10.68	11.30	10.43	11.61	11.58	
21	11.94	11.95	11.66	10.73	10.91	11.21	10.56	11.26	10.56	11.47	11.57	
22	11.93	12.23	11.73	10.61	10.88	11.19	10.69	11.11	10.79	11.37	---	
23	11.92	12.58	11.52	10.69	10.64	11.13	10.73	11.21	10.81	11.22	---	
24	11.99	12.72	11.69	10.75	10.65	11.09	10.76	11.15	10.82	11.26	---	
25	12.12	12.60	11.62	10.53	10.52	10.84	10.72	10.94	10.86	11.31	---	
26	12.23	12.26	11.43	10.30	10.36	10.97	10.68	11.13	10.84	10.95	---	
27	12.39	12.07	11.63	10.60	10.32	11.01	10.65	11.26	10.94	11.08	---	
28	12.16	11.88	11.44	10.64	10.35	10.79	10.62	11.13	11.52	11.07	---	
29	11.93	11.56	11.33	10.87	---	10.40	10.61	10.91	11.36	11.04	---	
30	11.76	11.51	11.21	11.01	---	10.27	11.12	10.97	11.23	11.15	---	
31	11.87	---	11.25	11.05	---	10.36	---	11.19	---	11.22	---	
MEAN	12.15	12.02	11.50	11.07	10.80	10.91	10.76	11.17	10.87	11.06	---	
MAX	12.57	12.72	11.95	11.66	11.67	11.30	11.12	11.55	11.52	11.61	---	
MIN	11.76	11.46	11.21	10.30	9.89	10.27	10.40	10.91	10.33	10.61	---	
CAL YR 1984	MEAN	11.41		MAX	13.44	MIN	9.70					

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.90	10.90	10.10	10.05	9.23	9.74	8.85	9.80	9.19	9.23	9.46	
2	10.81	10.79	10.18	9.95	9.17	9.41	8.77	9.47	9.11	9.21	9.58	
3	10.79	10.83	10.10	9.89	9.00	9.45	8.78	9.29	9.13	9.05	10.26	
4	10.64	11.34	10.06	9.67	9.37	9.49	8.98	9.59	9.36	9.18	10.68	
5	10.47	11.12	10.19	9.18	10.00	9.31	8.99	9.88	9.42	9.29	10.72	
6	10.48	10.58	10.06	9.38	10.01	8.94	8.86	9.66	9.36	9.40	10.65	
7	10.72	10.52	9.58	9.64	9.54	9.57	9.02	9.39	9.54	9.20	10.51	
8	10.83	10.70	9.75	9.45	9.31	9.59	9.04	9.45	9.67	9.05	10.34	
9	10.95	10.76	9.63	9.58	9.49	9.24	9.20	9.95	9.63	9.25	10.20	
10	11.10	10.68	9.57	10.15	9.49	9.25	9.28	9.86	9.59	9.41	10.15	
11	11.33	10.27	9.50	9.95	9.75	9.53	9.40	9.90	9.47	9.33	10.18	
12	11.26	10.15	9.70	9.56	8.50	9.18	9.30	9.92	9.14	9.40	10.19	
13	11.06	10.19	9.92	10.18	8.28	9.17	9.46	9.85	8.98	9.48	10.12	
14	10.94	10.30	9.90	9.64	8.48	9.08	9.89	9.86	9.40	9.36	10.02	
15	10.93	10.39	9.95	9.36	8.75	9.08	9.87	9.76	9.34	9.30	9.88	
16	11.00	10.25	10.06	9.38	8.92	9.40	9.42	9.79	9.04	9.35	9.65	
17	10.79	10.17	10.04	9.54	9.00	9.68	9.24	9.59	8.90	9.55	9.56	
18	10.53	10.35	10.05	9.29	8.89	9.54	9.48	9.76	8.84	9.76	9.44	
19	10.38	10.14	10.00	9.23	8.98	9.59	9.33	9.69	8.64	9.96	9.60	
20	10.29	9.79	9.97	8.95	9.04	9.50	9.15	9.78	8.69	9.97	9.69	
21	10.31	10.19	9.91	8.74	9.34	9.46	9.05	9.59	9.04	9.88	9.60	
22	10.28	10.44	9.97	8.77	9.29	9.63	9.20	9.58	9.30	9.85	---	
23	10.21	10.89	9.76	8.89	9.13	9.69	9.24	9.54	9.40	9.60	---	
24	10.18	11.22	10.00	9.01	9.14	9.26	9.26	9.37	9.48	9.61	---	
25	10.32	10.97	10.13	8.81	9.01	9.22	9.29	9.64	9.52	9.42	---	
26	10.56	10.72	9.93	8.16	8.91	9.67	9.30	9.87	9.39	9.38	---	
27	10.74	10.61	10.30	9.23	8.85	9.57	9.25	9.87	9.24	9.39	---	
28	10.54	10.29	10.10	9.49	9.17	9.22	9.17	9.69	9.69	9.35	---	
29	10.39	10.17	9.94	9.67	---	9.00	9.23	9.36	9.75	9.35	---	
30	10.34	10.19	9.85	9.84	---	8.98	9.75	9.31	9.45	9.39	---	
31	10.49	---	9.96	9.39	---	8.88	---	9.52	---	9.37	---	
MEAN	10.66	10.53	9.94	9.42	9.14	9.37	9.23	9.66	9.29	9.43	---	
MAX	11.33	11.34	10.30	10.18	10.01	9.74	9.89	9.95	9.75	9.97	---	
MIN	10.18	9.79	9.50	8.16	8.28	8.88	8.77	9.29	8.64	9.05	---	
CAL YR 1984	MEAN	9.80	MAX	11.62	MIN	7.90						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246828 PABLO CREEK AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'07", long 81°28'42", in land grant 39, T.3 S., R.28 E., Duval County, Hydrologic Unit 03080103, near right bank on upstream side of timber bridge on private road, 0.5 mi upstream from Cedar Swamp Creek, 4.8 mi upstream from mouth, and 12.5 mi southeast of Main Street Bridge in Jacksonville.

DRAINAGE AREA.--25.8 mi².

PERIOD OF RECORD.--March 1974 to current year.

REVISED RECORDS.--WDR FL-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 0.14 ft above National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 32.8 ft³/s, 17.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s, Sept. 19, 1984, gage height, 8.06 ft; minimum, 1.6 ft³/s, July 15, 1981, gage height, 3.21 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 1	2215	*915	*7.91	No other peak greater than base discharge.			

Minimum discharge, 5.4 ft³/s, June 9,10; minimum gage height, 3.51 ft, July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	194	35	25	15	14	12	7.6	19	7.8	15	25	747	
2	129	32	23	15	15	12	7.5	15	7.4	13	24	785	
3	92	128	22	16	15	12	7.2	15	7.2	11	54	475	
4	70	269	22	16	20	11	7.1	27	6.9	9.4	185	265	
5	56	185	23	16	23	11	7.0	30	6.6	8.5	197	172	
6	48	123	29	16	27	11	8.0	24	6.5	8.8	113	131	
7	42	84	29	15	34	10	8.7	19	6.3	11	68	100	
8	38	61	27	15	31	10	8.3	16	6.0	15	68	76	
9	35	49	25	15	25	9.8	7.7	15	5.6	13	84	60	
10	34	41	24	15	21	9.5	7.3	14	5.6	10	93	50	
11	34	36	22	14	20	9.4	7.1	13	6.4	8.8	74	47	
12	31	32	22	14	21	9.1	7.1	12	7.0	8.1	53	45	
13	28	29	21	14	20	8.8	33	12	7.5	10	46	46	
14	25	26	21	13	18	8.6	59	11	7.7	11	40	49	
15	23	25	20	13	17	8.4	68	10	10	9.1	36	46	
16	22	24	20	13	16	12	50	9.6	19	8.3	30	45	
17	21	22	19	14	16	28	39	8.8	21	7.8	26	75	
18	20	22	19	14	15	29	33	8.1	20	7.9	22	173	
19	19	21	19	14	15	23	26	7.8	15	8.0	23	240	
20	18	20	19	14	15	17	21	8.9	11	7.7	20	173	
21	18	21	18	13	15	15	18	11	10	7.0	18	120	
22	17	36	17	13	14	15	16	12	9.2	6.7	17	91	
23	17	52	17	13	14	14	15	10	8.6	6.3	17	71	
24	17	52	16	14	14	12	14	10	8.4	6.6	16	57	
25	17	43	16	15	13	11	13	13	8.3	7.9	16	46	
26	21	36	16	14	13	9.9	12	11	8.0	8.9	17	39	
27	23	31	16	14	13	9.3	11	9.9	7.8	9.0	21	34	
28	22	29	17	13	12	8.9	10	8.9	8.3	8.4	54	29	
29	21	28	17	13	---	8.6	23	8.2	10	12	69	26	
30	31	26	16	13	---	8.2	23	7.9	13	15	61	85	
31	38	---	16	14	---	8.0	---	8.3	---	18	178	---	
TOTAL	1221	1618	633	440	506	381.5	574.6	405.4	282.1	307.2	1765	4398	
MEAN	39.4	53.9	20.4	14.2	18.1	12.3	19.2	13.1	9.40	9.91	56.9	147	
MAX	194	269	29	16	34	29	68	30	21	18	197	785	
MIN	17	20	16	13	12	8.0	7.0	7.8	5.6	6.3	16	26	
CFSM	1.53	2.09	.79	.55	.70	.48	.74	.51	.36	.38	2.21	5.70	
IN.	1.76	2.33	.91	.63	.73	.55	.83	.58	.41	.44	2.54	6.34	
CAL YR 1984	TOTAL	17180.1		MEAN	46.9	MAX	959	MIN	5.7	CFSM	1.82	IN.	24.77
WTR YR 1985	TOTAL	12531.8		MEAN	34.3	MAX	785	MIN	5.6	CFSM	1.33	IN.	18.07

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246832 CEDAR SWAMP CREEK AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'38", long 81°28'26", in NE¼ sec.15, T.3 S., R.28 E., Duval County, Hydrologic Unit 03080103, on left bank 10 ft upstream from timber bridge on private road, 0.4 mi upstream from mouth, and 12.4 mi southeast of Main Street Bridge in Jacksonville.

DRAINAGE AREA.--3.40 mi².

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.36 ft above National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 7.67 ft³/s, 30.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 270 ft³/s, Sept. 26, 1979; maximum gage height, 5.57 ft, Aug. 5, 1974; minimum discharge, 0.14 ft³/s, Sept. 14-16, 1981; minimum gage height, 0.68 ft, July 21-25, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 1	1830	*188	*5.04	No other peak greater than base discharge.			

Minimum discharge, 0.34 ft³/s, July 21-25, gage height, 0.68 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	26	4.4	5.0	3.5	2.9	2.4	1.3	3.6	1.3	2.0	2.2	152	
2	16	4.7	4.8	3.4	3.1	2.6	1.2	3.1	1.1	1.5	1.6	133	
3	13	11	4.8	3.8	3.0	2.6	1.2	4.5	.97	1.0	12	81	
4	11	17	4.7	3.8	4.6	2.4	1.1	9.5	.88	.79	38	48	
5	9.4	11	5.2	3.4	5.1	2.3	.99	6.1	.75	.75	16	27	
6	8.6	8.5	6.4	3.3	5.4	2.2	1.3	4.5	.69	.76	8.0	17	
7	8.1	7.1	6.2	3.1	6.7	2.1	1.9	3.7	.62	1.4	6.5	12	
8	7.6	6.4	5.6	3.0	5.5	2.0	1.4	3.2	.54	2.2	7.5	9.8	
9	7.2	5.9	5.3	2.8	4.6	2.0	1.1	3.1	.49	1.6	8.4	8.5	
10	7.4	5.5	5.2	2.8	4.1	2.0	.96	3.0	.47	.87	6.8	8.0	
11	7.5	5.3	5.0	2.8	4.0	1.9	.90	2.7	.50	.60	5.7	7.7	
12	7.0	4.9	5.0	2.8	4.4	1.9	.90	2.6	.68	.49	4.9	11	
13	6.3	4.6	4.9	2.8	4.1	1.8	8.9	2.4	.71	.67	19	10	
14	5.9	4.2	4.8	2.8	3.7	1.7	11	2.3	.87	1.3	17	7.9	
15	5.7	4.0	4.9	2.7	3.4	1.7	6.7	2.1	2.0	.59	9.2	7.2	
16	5.5	3.9	4.9	2.6	3.3	3.1	5.4	1.9	4.6	.42	7.3	8.3	
17	5.3	3.6	4.9	2.7	3.2	5.7	6.5	1.7	4.9	.38	5.7	14	
18	5.1	3.5	4.7	2.9	3.1	4.9	5.2	1.5	2.8	.43	5.0	19	
19	4.9	3.4	4.6	2.8	3.1	3.3	4.3	1.5	2.0	.41	5.0	19	
20	4.7	3.4	4.5	2.8	3.1	2.9	3.7	2.1	1.7	.39	4.3	11	
21	4.6	3.7	4.3	2.8	3.1	2.8	3.3	4.5	1.5	.35	4.2	9.3	
22	4.5	7.7	4.2	2.7	2.9	2.7	3.0	2.9	1.3	.34	3.6	8.5	
23	4.6	9.2	4.1	2.8	2.9	2.4	2.8	2.3	1.2	.34	4.2	7.6	
24	4.4	7.4	4.0	2.8	2.8	2.2	2.6	4.7	1.0	.34	3.6	6.9	
25	4.2	6.3	4.0	3.2	2.7	1.9	2.3	3.0	1.3	.89	3.7	6.4	
26	5.9	5.8	3.9	2.9	2.6	1.7	2.1	2.4	1.2	1.8	4.2	6.0	
27	5.7	5.6	3.9	2.8	2.6	1.6	1.9	2.1	.88	.81	6.1	5.7	
28	5.0	5.5	4.0	2.8	2.5	1.6	1.8	1.8	.81	.71	14	5.0	
29	4.7	5.5	4.0	2.8	---	1.5	8.3	1.7	1.5	1.1	12	5.2	
30	5.1	5.2	3.9	2.7	---	1.5	5.4	1.6	2.1	2.0	10	22	
31	4.7	---	3.7	3.0	---	1.3	---	1.5	---	2.0	48	---	
TOTAL	225.6	184.2	145.4	91.9	102.5	72.7	99.45	93.6	41.36	29.23	303.7	694.0	
MEAN	7.28	6.14	4.69	2.96	3.66	2.35	3.31	3.02	1.38	.94	9.80	23.1	
MAX	26	17	6.4	3.8	6.7	5.7	11	9.5	4.9	2.2	48	152	
MIN	4.2	3.4	3.7	2.6	2.5	1.3	.90	1.5	.47	.34	1.6	5.0	
CFSM	2.14	1.81	1.38	.87	1.08	.69	.97	.89	.41	.28	2.88	6.79	
IN.	2.47	2.02	1.59	1.01	1.12	.80	1.09	1.02	.45	.32	3.32	7.59	
CAL YR 1984	TOTAL	3579.2		MEAN	9.78	MAX	173	MIN	1.3	CFSM	2.88	IN.	39.16
WTR YR 1985	TOTAL	2083.64		MEAN	5.71	MAX	152	MIN	.34	CFSM	1.68	IN.	22.80

02246850 DIEGO PLAINS SWAMP DRAIN AT MICKLER LANDING, FL

Water Year 1985: maximum discharge, 81 ft³/s, Sept. 2, gage height, 6.67 ft; no flow many days during the year; minimum gage height, 4.44 ft, June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, PERIOD AUGUST TO SEPTEMBER 1984
MEAN VALUES

[illegible]

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246850 DIEGO PLAINS SWAMP DRAIN AT MICKLER LANDING, FL

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	11	9.4	4.2	2.4	3.0	.97	2.5	1.9	.46	.00	54
2	63	9.7	8.9	4.1	2.4	2.9	.90	2.9	1.5	.71	.00	79
3	54	9.7	8.6	4.2	2.4	2.9	.66	2.9	1.2	1.2	4.4	74
4	44	11	8.3	4.2	3.1	2.8	.47	2.7	.89	1.3	13	67
5	37	12	8.5	4.0	3.4	2.7	.32	3.1	.62	1.3	16	61
6	31	13	8.9	3.8	4.0	2.5	.40	3.1	.40	1.6	16	53
7	27	13	8.5	3.7	4.9	2.4	.46	3.0	.14	1.9	15	47
8	24	12	8.2	3.6	5.3	2.3	.38	2.9	.00	2.5	15	41
9	21	12	7.8	3.4	5.4	2.1	.17	2.9	.00	2.5	17	36
10	19	11	7.3	3.4	5.3	1.9	.01	2.9	.00	2.4	19	31
11	16	10	7.0	3.3	5.3	1.8	.00	2.9	.00	2.2	20	27
12	14	9.7	6.9	3.2	5.7	1.7	.00	2.9	.00	2.0	20	24
13	13	8.9	6.7	3.1	5.6	1.5	1.6	2.8	.00	1.8	19	21
14	12	8.2	6.4	3.0	5.4	1.3	3.5	2.8	.00	1.7	18	19
15	11	7.5	6.3	2.9	5.1	1.1	4.8	3.0	.00	1.5	16	17
16	10	7.2	6.2	2.9	4.8	1.2	5.0	3.2	.75	1.3	14	18
17	9.3	6.7	6.0	2.9	4.6	2.3	5.0	3.7	1.1	1.1	13	19
18	8.7	6.3	5.9	2.8	4.3	2.6	5.0	3.8	.97	.94	13	24
19	8.1	6.1	5.7	2.8	4.1	2.7	4.9	3.8	.72	.94	14	27
20	7.4	6.0	5.6	2.7	4.0	2.6	4.8	4.0	.50	.91	17	29
21	7.0	5.7	5.4	2.7	3.8	2.5	4.6	4.6	.26	.81	18	29
22	6.5	8.3	5.4	2.6	3.7	2.4	4.2	4.4	.03	.63	18	29
23	6.0	11	5.1	2.6	3.6	2.2	3.8	4.3	.00	.50	18	28
24	5.6	11	4.9	2.5	3.4	2.0	3.5	4.6	.00	.38	19	25
25	5.2	11	4.8	2.6	3.3	1.9	3.2	4.3	.00	.40	19	22
26	5.0	11	4.7	2.5	3.2	1.7	2.6	3.8	.00	.53	21	19
27	4.8	11	4.6	2.5	3.1	1.6	2.8	3.4	.00	.36	27	17
28	4.6	10	4.6	2.4	3.0	1.4	2.5	3.0	.00	.07	52	15
29	4.4	10	4.5	2.4	---	1.3	3.0	2.7	.00	.06	63	14
30	6.7	9.7	4.4	2.3	---	1.1	2.9	2.4	.13	.00	57	14
31	10	---	4.2	2.4	---	1.1	---	2.2	---	.00	43	---
TOTAL	568.3	289.7	199.7	95.7	114.6	63.5	72.44	101.5	11.11	34.00	634.40	980
MEAN	18.3	9.66	6.44	3.09	4.09	2.05	2.41	3.27	.37	1.10	20.5	32.7
MAX	73	13	9.4	4.2	5.7	3.0	5.0	4.6	1.9	2.5	63	79
MIN	4.4	5.7	4.2	2.3	2.4	1.1	.00	2.2	.00	.00	.00	14
WTR YR 1985	TOTAL	3164.95		MEAN	8.67	MAX	79	MIN	.00			

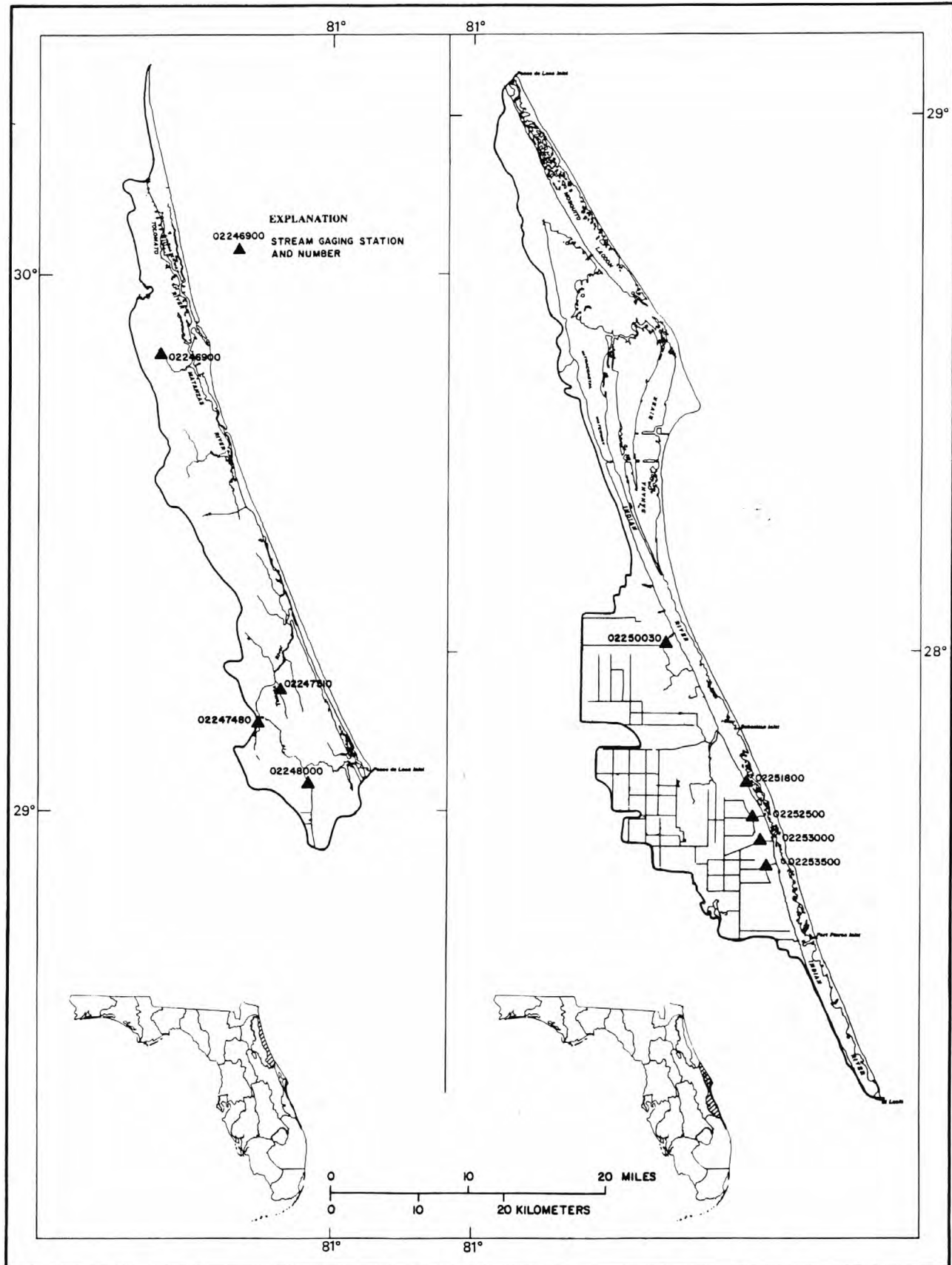


Figure 13. Location of stream gaging stations in the coastal area between the St. Johns and St. Lucie Rivers.

ST. JOHNS RIVER

COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02246900 MOULTRIE CREEK AT STATE HIGHWAY 207, NEAR ST. AUGUSTINE, FL

LOCATION.--Lat 29°50'50", long 81°21'39", in SE¼ sec.34, T.7 S., R.29 E., St. Johns County, Hydrologic Unit 03080201, at center on downstream side of box culverts on State Highway 207, 2.0 mi upstream from Fort Peyton Branch, 4.2 mi southwest of St. Augustine, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--19.8 mi².

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR FL-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.24 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 19-23. Records fair.

AVERAGE DISCHARGE.--24 years, 18.6 ft³/s, 12.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 860 ft³/s, Sept. 21, 1969, gage height, 9.16 ft; no flow for many days in some years; minimum gage height, 1.84 ft, July 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 1	1800	423	7.74	Sept. 17	2000	*429	*7.76

Minimum daily discharge, 0.02 ft³/s, June 11, gage height, 2.11 ft.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	8.2	6.5	1.7	.94	1.0	.82	.08	.03	.17	.10	327
2	94	6.7	5.8	1.6	.93	1.0	.71	.08	.03	.12	.09	314
3	77	11	5.4	1.7	.96	.96	.61	.11	.02	.08	.16	208
4	63	20	5.0	2.1	1.7	.88	.44	.14	.02	.05	.66	155
5	54	19	4.8	2.0	2.3	.79	.33	.14	.02	.05	.96	122
6	47	18	6.0	1.7	3.9	.65	.32	.10	.02	.26	.65	119
7	42	15	6.6	1.6	6.3	.56	.39	.09	.02	.69	.57	132
8	39	13	5.8	1.5	5.0	.48	.38	.08	.02	.72	2.9	101
9	35	11	5.2	1.5	4.3	.43	.28	.08	.02	.23	9.3	84
10	34	10	4.7	1.4	3.9	.37	.19	.07	.02	.13	7.1	70
11	32	9.0	4.4	1.4	3.7	.34	.16	.07	.02	.10	3.3	60
12	28	8.1	4.2	1.3	4.5	.30	.16	.07	.03	.11	2.3	54
13	25	7.0	3.9	1.3	3.7	.27	2.4	.07	.05	.12	1.8	57
14	22	6.1	3.6	1.2	3.2	.24	5.2	.07	.06	.09	1.5	79
15	19	5.5	3.4	1.2	2.8	.22	4.3	.06	.11	.08	1.7	64
16	17	5.0	3.0	1.1	2.6	.37	3.2	.05	.16	.07	1.5	56
17	15	4.6	2.9	1.1	2.3	16	3.2	.04	.14	.60	1.8	229
18	13	4.1	2.7	1.2	2.1	20	3.0	.03	.19	1.2	5.1	318
19	12	3.7	2.7	1.1	2.0	15	2.5	.03	.11	.79	8.7	263
20	11	3.4	2.5	1.0	1.9	12	2.0	.08	.07	2.8	9.5	216
21	9.2	3.2	2.4	1.1	1.8	10	1.6	.17	.06	1.9	18	196
22	8.0	7.4	2.3	1.0	1.6	9.5	1.2	.11	.05	.96	13	175
23	7.0	15	2.2	1.0	1.6	7.3	.81	.11	.04	.50	8.1	142
24	6.2	13	2.1	1.0	1.5	5.5	.51	.25	.04	.37	6.5	120
25	5.7	11	2.0	1.2	1.4	4.0	.32	.13	.03	1.5	6.6	104
26	5.1	9.8	1.9	1.2	1.3	3.0	.21	.08	.04	1.5	6.8	90
27	5.3	9.2	2.0	1.0	1.2	2.3	.16	.06	.03	1.0	19	77
28	4.8	8.7	2.0	.97	1.1	1.9	.11	.05	.04	.61	111	67
29	4.3	8.1	2.0	.93	---	1.6	.09	.04	.08	.36	81	61
30	4.8	7.2	1.9	.89	---	1.3	.09	.04	.11	.23	65	59
31	7.4	---	1.8	.91	---	1.1	---	.04	---	.16	107	---
TOTAL	861.8	281.0	111.7	39.90	70.53	119.36	35.69	2.62	1.68	17.55	501.69	4119
MEAN	27.8	9.37	3.60	1.29	2.52	3.85	1.19	.08	.06	.57	16.2	137
MAX	115	20	6.6	2.1	6.3	20	5.2	.25	.19	2.8	111	327
MIN	4.3	3.2	1.8	.89	.93	.22	.09	.03	.02	.05	.09	54
CFSM	1.40	.47	.18	.07	.13	.19	.06	.00	.00	.03	.82	6.92
IN.	1.62	.53	.21	.07	.13	.22	.07	.00	.00	.03	.94	7.74
CAL YR 1984	TOTAL	7507.11		MEAN	20.5	MAX	228	MIN	.11	CFSM	1.04	IN. 14.10
WTR YR 1985	TOTAL	6162.52		MEAN	16.9	MAX	327	MIN	.02	CFSM	.85	IN. 11.58

ST. JOHNS RIVER

COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02247480 TIGER BAY CANAL NEAR DAYTONA BEACH, FL

LOCATION.--Lat 29°09'58", long 81°09'18", in SW¼ sec.25, T.15 S., R.31 E., Volusia County, Hydrologic Unit 03080201, at center on downstream side of bridge on Indian Lake Road, 2.4 mi north of intersection with U.S. Highway 92, and 8 mi west of Daytona Beach.

DRAINAGE AREA.--29 mi², approximately.

PERIOD OF RECORD.--January 1978 to current year.

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

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

AVERAGE DISCHARGE.--7 years, 23.9 ft³/s, 17,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 263 ft³/s, Mar. 7, 1979, gage height, 32.94 ft; no flow for many days in some years; minimum gage height, 26.00 ft, July 16, 1981, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 164 ft³/s, Oct. 1, gage height, 32.57 ft; no flow for many days; minimum gage height, 26.87 ft, June 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	18	23	.91	.10	.00	.00	.00	.00	20	4.5	130
2	148	17	21	.83	.08	.00	.00	.00	.00	22	3.6	152
3	136	17	18	.92	.07	.00	.00	.00	.00	19	4.3	147
4	124	17	17	1.2	.06	.00	.00	.00	.00	16	6.3	141
5	113	16	16	1.2	.04	.00	.00	.00	.00	12	9.7	143
6	102	15	15	1.3	.04	.00	.00	.00	.00	14	19	139
7	92	13	13	1.2	.05	.00	.00	.00	.00	14	29	131
8	83	12	12	1.1	.06	.00	.00	.00	.00	15	48	121
9	76	11	9.7	.93	.03	.00	.00	.00	.00	10	56	109
10	70	9.5	8.2	.83	.02	.00	.00	.00	.00	7.2	67	98
11	65	8.6	7.0	.74	.01	.00	.00	.00	.00	4.7	75	87
12	61	7.6	5.9	.65	.03	.00	.00	.00	.00	4.1	77	77
13	56	7.0	5.0	.56	.01	.00	.00	.00	.00	7.0	76	69
14	51	6.2	4.6	.52	.00	.00	.00	.00	.00	16	82	65
15	46	5.5	4.2	.48	.00	.00	.00	.00	.00	18	92	59
16	42	4.8	3.8	.42	.00	.00	.00	.00	.00	17	98	52
17	39	4.3	3.4	.38	.00	.00	.00	.00	.00	14	101	52
18	35	3.9	3.0	.36	.00	.00	.00	.00	.00	12	106	57
19	32	3.6	2.7	.37	.00	.00	.00	.00	.00	10	128	61
20	29	3.2	2.5	.34	.00	.00	.00	.00	.44	9.0	146	94
21	27	3.0	2.4	.30	.00	.00	.00	.00	1.8	8.6	151	145
22	25	4.9	2.2	.26	.00	.00	.00	.00	2.7	7.2	147	154
23	25	13	2.0	.25	.00	.00	.00	.00	3.1	6.6	138	150
24	23	25	1.8	.23	.00	.00	.00	.00	2.8	7.3	129	143
25	22	35	1.6	.20	.00	.00	.00	.00	2.3	7.8	121	134
26	21	36	1.5	.18	.00	.00	.00	.00	2.2	7.8	111	123
27	22	33	1.4	.16	.00	.00	.00	.00	2.2	7.7	105	111
28	22	30	1.3	.15	.00	.00	.00	.00	3.1	6.8	104	103
29	22	28	1.2	.14	---	.00	.00	.00	7.8	5.7	101	92
30	21	25	1.1	.12	---	.00	.00	.00	16	4.5	102	83
31	20	---	.98	.11	---	.00	---	.00	---	4.1	109	---
TOTAL	1810	433.1	212.48	17.34	.60	.00	.00	.00	44.44	335.1	2546.4	3222
MEAN	58.4	14.4	6.85	.56	.02	.00	.00	.00	1.48	10.8	82.1	107
MAX	160	36	23	1.3	.10	.00	.00	.00	16	22	151	154
MIN	20	3.0	.98	.11	.00	.00	.00	.00	.00	4.1	3.6	52
AC-FT 6390	3590	859	421	34	1.2	.00	.00	.00	.00	88	665	5050
CAL YR 1984	TOTAL	11975.10		MEAN	32.7	MAX	177	MIN	.01	AC-FT	23750	
WTR YR 1985	TOTAL	8621.46		MEAN	23.6	MAX	160	MIN	.00	AC-FT	17100	

ST. JOHNS RIVER

COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02247510 TOMOKA RIVER NEAR HOLLY HILL, FL

LOCATION.--Lat 29°13'02", long 81°06'32", in NW¼ sec.9, T.15 S., R.32 E., Volusia County, Hydrologic Unit 03080201, near center of span on downstream side of bridge on 11th Street extension, 0.3 mi southwest of Interstate Highway 95, 2 mi upstream from Priest Branch, 4.5 mi southwest of Holly Hill, and 12 mi upstream from mouth.

DRAINAGE AREA.--76.8 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

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

AVERAGE DISCHARGE.--21 years, 57.7 ft³/s, 10.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, Oct. 19, 1968, gage height, 12.92 ft; no flow for part or all of Feb. 16, 20-26, Feb. 28 to Mar. 1, 1968 (creek dry at gage), caused by temporary earthen dam just upstream, and June 26 to July 8, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 11, 1964, reached a stage of 12.65 ft, from floodmarks, discharge, 2,170 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 1	2400	*892	*11.07	Sept. 21	1700	839	10.97

Minimum discharge, .90 ft³/s, June 6; minimum gage height, 6.08 ft, Apr. 5,6, June 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	356	26	42	8.5	4.6	2.7	1.6	2.9	1.5	11	14	450	
2	290	24	39	8.2	4.5	2.6	1.8	2.0	1.4	9.1	33	712	
3	243	24	37	11	4.5	2.5	1.7	1.7	1.3	6.9	24	449	
4	213	24	36	25	4.3	2.5	1.6	5.1	1.2	5.8	35	335	
5	189	23	37	19	4.3	2.4	1.5	21	1.1	5.0	30	283	
6	169	21	35	16	5.0	2.3	1.7	10	1.0	8.9	27	255	
7	153	19	32	13	5.6	2.2	3.1	5.9	1.0	8.6	26	242	
8	141	17	30	11	5.6	2.1	2.5	3.9	1.2	17	119	218	
9	135	16	27	9.6	5.1	2.0	1.9	3.0	2.0	10	188	189	
10	136	15	25	9.1	4.5	2.0	1.7	2.6	3.6	6.2	175	170	
11	133	14	24	8.4	4.5	2.0	1.6	2.4	2.4	5.1	173	156	
12	127	13	23	7.8	5.0	1.9	1.6	2.3	1.8	6.1	165	141	
13	111	12	21	7.2	4.6	1.8	6.0	2.0	6.7	9.2	117	130	
14	92	11	20	6.9	4.2	1.8	14	2.2	20	8.0	113	127	
15	80	9.9	19	6.6	4.1	1.8	7.9	2.0	44	6.5	179	117	
16	72	9.3	18	6.2	3.9	1.7	5.4	1.9	83	7.3	201	106	
17	66	8.8	17	6.1	3.8	2.5	3.7	1.9	48	19	179	125	
18	60	8.2	16	6.1	3.6	2.9	2.9	2.0	30	16	154	169	
19	55	7.8	16	6.4	3.7	2.2	2.6	1.9	20	13	184	158	
20	51	7.4	15	6.1	3.5	1.8	2.3	3.0	15	11	269	280	
21	50	7.2	14	5.6	3.4	2.5	2.1	9.2	12	9.3	270	700	
22	53	14	14	5.4	3.4	11	2.2	5.4	9.4	8.1	243	611	
23	47	57	13	5.4	3.3	7.1	2.1	8.0	8.5	7.2	293	416	
24	44	114	12	5.5	3.2	3.8	2.0	23	14	16	248	316	
25	39	103	12	5.8	3.0	2.8	1.9	12	19	47	214	269	
26	36	85	11	5.2	2.9	2.3	1.8	5.8	19	30	188	234	
27	37	70	11	4.9	2.8	2.0	1.8	3.7	11	22	176	201	
28	36	59	11	4.9	2.8	1.9	1.7	2.7	7.9	18	200	206	
29	33	52	10	4.8	---	1.8	1.6	2.1	11	14	185	194	
30	30	47	9.5	4.6	---	1.7	2.1	1.9	11	12	169	187	
31	28	---	8.9	4.7	---	1.6	---	1.7	---	9.7	181	---	
TOTAL	3305	918.6	655.4	255.0	113.7	82.2	86.4	155.2	409.0	383.0	4772	8146	
MEAN	107	30.6	21.1	8.23	4.06	2.65	2.88	5.01	13.6	12.4	154	272	
MAX	356	114	42	25	5.6	11	14	23	83	47	293	712	
MIN	28	7.2	8.9	4.6	2.8	1.6	1.5	1.7	1.0	5.0	14	106	
CFSM	1.39	.40	.27	.11	.05	.03	.04	.07	.18	.16	2.01	3.54	
IN.	1.60	.44	.32	.12	.06	.04	.04	.08	.20	.19	2.31	3.95	
CAL YR 1984	TOTAL	28667.6		MEAN	78.3	MAX	735	MIN	5.4	CFSM	1.02	IN.	13.89
WTR YR 1985	TOTAL	19281.5		MEAN	52.8	MAX	712	MIN	1.0	CFSM	.69	IN.	9.34

COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02248000 SPRUCE CREEK NEAR SAMSULA, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°03'01", long 81°02'49", in SE¼ sec.1, T.17 S., R.32 E., Volusia County, Hydrologic Unit 03080201, on left bank 50 ft downstream from bridge on State Highway 40A, 1.8 mi north of Samsula, 8 mi west of New Smyrna Beach, 10 mi upstream from Turnbull Bay, and 13 mi upstream from mouth.

DRAINAGE AREA.--33.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 1624: 1958. WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6.25 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 13, 1971, at sites within 100 ft at same datum.

REMARKS.--No estimated daily discharges. Records fair. Some diversions for irrigation above station.

AVERAGE DISCHARGE.--34 years, 33.2 ft³/s, 13.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft³/s, Sept. 10, 1964; maximum gage height, 15.49 ft, Oct. 8, 1953; no flow Apr. 23-26, May 17, 1962; minimum gage height, 0.37 ft, May 22, 23, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 1	2000	518	9.70	Sept. 20	1500	*824	*12.55
Sept. 17	1500	573	10.25				

Minimum discharge, 0.32 ft³/s, May 10-12, gage height, 1.30 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	239	9.7	34	3.2	1.6	1.2	1.1	.93	.82	3.5	8.1	291	
2	161	9.2	29	3.1	1.6	1.3	1.2	.72	.72	3.3	6.9	393	
3	104	13	26	3.2	1.7	1.5	1.2	.79	.72	2.5	11	296	
4	75	16	23	3.8	1.6	1.3	1.0	.99	.67	2.0	17	235	
5	58	15	21	3.5	1.6	1.2	.96	.85	.64	2.2	11	177	
6	47	13	20	3.2	1.7	1.3	1.0	.64	1.3	4.8	7.6	173	
7	39	11	17	3.0	2.1	1.2	1.3	.64	.82	2.8	8.0	131	
8	37	9.5	16	2.8	1.9	1.2	1.1	.58	.97	2.5	40	90	
9	33	8.5	14	2.7	1.7	1.2	1.1	.58	1.9	2.1	45	65	
10	28	7.6	12	2.6	1.7	1.2	.86	.43	1.1	1.7	47	49	
11	34	7.0	12	2.6	1.7	1.1	.87	.48	1.0	1.9	33	38	
12	44	6.4	11	2.4	2.0	1.2	.83	.53	1.3	5.9	27	31	
13	33	5.9	9.9	2.2	1.7	1.1	1.8	.57	3.7	9.7	30	36	
14	26	5.2	9.3	2.2	1.6	1.2	1.5	.55	7.2	6.8	69	37	
15	22	4.7	8.6	2.2	1.6	1.1	1.5	.53	23	10	116	26	
16	19	4.5	8.0	2.1	1.6	1.2	1.2	.54	19	8.3	134	20	
17	16	4.2	7.5	2.0	1.5	1.3	1.1	.58	9.6	9.5	122	382	
18	15	4.0	7.1	2.1	1.5	1.4	.99	.66	6.4	10	79	466	
19	13	3.7	6.7	2.2	1.5	1.2	.98	.77	4.3	9.2	70	371	
20	11	3.6	6.3	2.1	1.5	1.1	.93	2.1	3.3	12	79	599	
21	17	3.4	5.8	1.9	1.4	1.4	.89	3.2	2.7	11	122	684	
22	25	7.3	5.5	1.8	1.4	2.9	.83	1.1	2.4	12	88	597	
23	22	162	5.1	1.8	1.4	1.6	.78	1.0	2.1	42	71	505	
24	19	286	4.8	1.8	1.4	1.3	.79	1.5	1.8	39	63	415	
25	16	190	4.5	1.8	1.3	1.2	.78	1.1	1.9	26	93	341	
26	15	127	4.3	1.7	1.3	1.4	.72	.89	2.3	20	65	254	
27	18	90	4.2	1.6	1.3	1.2	.69	.87	2.5	15	59	153	
28	16	68	4.1	1.6	1.3	1.2	.63	.85	2.5	18	85	107	
29	14	53	3.9	1.7	---	1.1	.62	.86	2.6	15	63	88	
30	13	42	3.6	1.6	---	1.1	.75	1.1	3.1	11	47	75	
31	11	---	3.4	1.6	---	1.1	---	1.1	---	9.2	56	---	
TOTAL	1240	1190.4	347.6	72.1	44.2	40.0	30.00	28.03	112.36	328.9	1772.6	7125	
MEAN	40.0	39.7	11.2	2.33	1.58	1.29	1.00	.90	3.75	10.6	57.2	238	
MAX	239	286	34	3.8	2.1	2.9	1.8	3.2	23	42	134	684	
MIN	11	3.4	3.4	1.6	1.3	1.1	.62	.43	.64	1.7	6.9	20	
CFSM	1.20	1.19	.34	.07	.05	.04	.03	.03	.11	.32	1.71	7.13	
IN.	1.38	1.33	.39	.08	.05	.04	.03	.03	.13	.37	1.97	7.94	
CAL YR 1984	TOTAL	14234.8		MEAN	38.9	MAX	480	MIN	1.1	CFSM	1.16	IN.	15.85
WTR YR 1985	TOTAL	12331.19		MEAN	33.8	MAX	684	MIN	.43	CFSM	1.01	IN.	13.73

ST. JOHNS RIVER

COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02248000 SPRUCE CREEK NEAR SAMSULA, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-71, 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1975 to April 1981; October 1983 to current year

WATER TEMPERATURE: March 1975 to April 1981; October 1983 to current year.

INSTRUMENTATION.--Water-quality monitor since March 1975. Digital recorder--60-minute interval.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 986 microsiemens Apr. 3, 1976; minimum daily mean, 21 microsiemens Sept. 16, 1976.

WATER TEMPERATURE: Maximum daily mean, 29.0°C July 12, 1976; minimum daily mean, 7.0°C Jan. 20, 1977.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum observed, 31.0°C Aug. 17, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 827 microsiemens, Apr. 3; minimum daily mean, 38 microsiemens, Sept. 25.

WATER TEMPERATURE: Maximum daily mean, 27.5°C, Aug. 10-12, 26; minimum daily mean, 8.5°C, Jan. 22.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	227	138	---	539	593	621	524	576	452	137	148
2	70	238	143	---	556	592	731	522	573	438	145	112
3	78	233	149	---	556	588	827	574	564	435	153	53
4	86	211	155	---	579	581	813	596	558	454	160	68
5	93	221	160	---	587	583	803	593	543	473	160	67
6	99	224	165	---	589	587	793	587	571	415	164	82
7	106	228	170	---	589	584	787	585	587	519	165	70
8	111	231	175	---	584	582	785	589	587	598	156	45
9	116	236	183	---	580	590	773	601	591	654	148	59
10	121	236	188	---	577	597	757	616	574	695	135	75
11	130	187	192	---	572	597	732	619	542	726	136	65
12	126	138	197	---	566	603	712	623	517	718	150	60
13	130	153	206	---	547	602	693	627	499	675	155	61
14	138	---	213	---	548	603	669	631	478	669	161	70
15	144	---	217	---	555	603	648	632	459	661	121	88
16	153	---	222	---	555	613	625	632	326	659	119	143
17	161	---	224	---	556	611	598	631	272	659	102	158
18	168	---	240	---	566	605	584	637	343	658	111	105
19	177	---	247	---	570	600	578	640	457	659	130	46
20	184	---	237	---	564	600	569	643	512	656	144	53
21	189	---	155	---	585	602	560	639	510	661	163	56
22	180	152	124	490	584	604	555	641	501	660	196	46
23	185	198	134	493	588	598	545	635	494	212	212	44
24	181	121	153	504	592	579	542	604	490	117	216	41
25	190	115	---	508	594	588	536	573	494	118	177	38
26	200	116	---	518	598	587	530	561	497	121	168	41
27	186	121	---	524	599	583	525	562	493	122	168	48
28	191	124	---	533	599	583	522	563	486	122	146	54
29	197	129	---	532	---	594	524	566	476	131	138	46
30	207	133	---	539	---	601	530	570	467	131	142	42
31	216	---	---	540	---	606	---	573	---	132	147	---
MEAN	148	---	---	---	574	595	649	600	501	465	152	69
MAX	216	---	---	---	599	613	827	643	591	726	216	158
MIN	65	---	---	---	539	579	522	522	272	117	102	38

ST. JOHNS RIVER

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COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02248000 SPRUCE CREEK NEAR SAMSULA, FL--Continued
 (National stream-quality accounting network station)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	23.0	16.0	19.0	18.5	19.0	20.0	20.5	23.5	25.0	26.5	24.0
2	21.5	22.5	17.0	19.5	20.0	19.5	18.0	20.5	24.0	25.0	26.0	25.0
3	20.5	22.5	18.0	20.0	19.5	18.5	17.0	21.0	25.0	25.0	26.0	26.5
4	20.5	22.5	18.5	18.0	18.0	18.5	17.0	21.0	25.0	25.0	27.0	26.5
5	21.0	22.5	18.5	14.0	18.5	20.5	19.0	21.0	24.0	25.0	27.0	25.5
6	21.5	20.5	19.5	13.0	19.0	20.0	19.5	19.5	24.0	25.0	27.0	25.5
7	22.0	18.0	15.0	13.5	17.5	20.0	19.5	20.0	25.0	26.0	26.5	26.0
8	22.5	17.5	12.5	14.0	15.0	19.5	19.5	21.0	25.0	25.5	26.0	26.5
9	22.5	18.0	12.0	13.5	13.5	19.0	18.0	21.0	24.5	25.5	26.0	27.0
10	23.0	18.5	12.0	14.5	14.5	19.5	17.0	21.0	24.0	25.5	27.5	27.0
11	23.0	19.0	13.5	16.5	15.5	19.5	18.0	21.5	24.0	25.5	27.5	26.5
12	22.5	16.5	15.0	13.0	14.5	20.0	19.0	21.5	23.5	25.0	27.5	26.5
13	22.0	15.5	15.0	11.5	12.5	20.5	19.5	21.5	23.5	25.0	27.0	26.0
14	22.0	15.0	16.5	12.5	12.5	20.5	20.0	22.5	23.5	25.0	25.5	24.5
15	22.5	16.0	17.5	12.5	14.0	20.0	20.0	22.5	23.0	24.5	25.0	24.0
16	23.0	16.5	18.0	11.0	13.0	21.0	20.0	22.5	24.5	24.5	25.5	23.5
17	23.0	17.5	17.5	16.5	13.5	19.5	20.0	21.0	25.5	24.0	27.0	22.5
18	23.0	18.0	18.0	15.0	15.0	16.5	20.0	20.5	26.5	24.0	27.0	23.5
19	23.0	19.5	18.0	13.5	16.5	15.5	20.5	20.5	26.5	24.0	27.0	24.0
20	22.5	20.0	18.0	12.0	17.0	16.0	20.5	22.0	26.0	24.0	26.0	23.5
21	22.5	20.0	17.5	---	17.5	17.5	20.5	23.0	25.0	24.5	26.0	24.0
22	23.0	18.0	18.5	8.5	18.5	19.0	21.0	23.5	25.0	24.5	26.5	24.5
23	23.5	16.5	18.0	10.5	19.0	19.0	20.5	23.0	24.5	25.0	26.5	25.0
24	22.5	17.5	18.0	12.0	19.5	18.5	21.5	22.5	24.5	26.0	26.5	25.5
25	22.5	18.5	18.5	15.5	19.5	18.5	21.5	22.5	24.5	26.0	26.5	25.5
26	23.5	18.0	19.5	14.0	20.0	17.5	21.0	22.0	25.0	26.0	27.5	26.0
27	24.0	18.5	19.5	12.0	20.0	17.5	21.5	21.5	25.0	26.0	26.5	25.5
28	24.0	19.0	20.0	14.5	20.0	18.5	21.5	21.0	25.0	26.0	26.0	25.0
29	24.0	17.5	19.5	15.0	---	19.5	22.0	22.0	25.0	27.0	27.0	25.0
30	23.5	15.0	19.0	14.0	---	20.0	22.0	22.5	25.0	27.0	27.0	25.5
31	23.0	---	18.5	17.0	---	20.5	---	23.5	---	26.5	26.0	---
MEAN	22.5	18.5	17.0	---	17.0	19.0	20.0	21.5	24.5	25.0	26.5	25.0
MAX	24.0	23.0	20.0	---	20.0	21.0	22.0	23.5	26.5	27.0	27.5	27.0
MIN	20.5	15.0	12.0	---	12.5	15.5	17.0	19.5	23.0	24.0	25.0	22.5

ST. JOHNS RIVER

COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02248000 SPRUCE CREEK NEAR SAMSULA, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM STAGE (FT ABOVE DATUM) (00065)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 27...	0655	4.02	94	113	6.0	18.0	2.0	6.2	8.9
JAN 22...	0928	1.49	3.8	490	7.7	8.5	2.5	8.1	68
FEB 26...	0745	1.44	3.1	600	7.5	19.5	9.0	6.4	86
MAY 03...	0807	1.38	2.4	620	7.5	20.5	3.3	5.3	92
JUL 03...	1630	1.50	3.6	420	7.5	26.0	3.0	5.5	50
AUG 13...	0800	2.68	36	155	6.4	27.0	2.3	4.0	16

DATE	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)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
NOV 27...	2.0	12	1.1	14	5.9	27	<.10	4.6	121
JAN 22...	5.8	29	1.1	180	9.9	46	.10	13	320
FEB 26...	7.0	36	1.6	240	7.8	57	.20	12	389
MAY 03...	6.6	34	2.5	254	6.2	59	.20	14	402
JUL 03...	5.6	26	1.5	140	23	45	.20	9.5	312
AUG 13...	2.8	12	2.8	36	13	20	<.10	6.9	179

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 27...	<.10	<.010	1.6	.060	.060	.050	31	26
JAN 22...	<.10	.140	.80	.080	.100	.090	1	100
FEB 26...	<.10	.150	.90	.200	.030	.030	82	12
MAY 03...	<.10	<.010	.70	.140	<.010	.050	4	75
JUL 03...	.11	.070	.90	.110	.100	.070	6	50
AUG 13...	.16	.180	2.0	.130	.090	.090	--	--

ST. JOHNS RIVER

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COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02248000 SPRUCE CREEK NEAR SAMSULA, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
NOV 27...	0655	460	<1	21	<.0	<1	<1	<3	1	690	3
FEB 26...	0745	20	<1	36	<.5	1	3	<3	1	170	1
MAY 03...	0807	30	<1	30	.7	<1	<1	<3	3	74	4
AUG 13...	0800	450	1	28	<.5	<1	<1	<3	4	1100	<1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	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)
NOV 27...	<4	11	<.1	<10	<1	<1	<1	59	<6	21
FEB 26...	21	24	.3	<10	<1	<1	1	460	<6	6
MAY 03...	6	30	.2	<10	4	<1	<1	480	<6	33
AUG 13...	<4	16	<.1	<10	4	<1	<1	91	<6	110

ST. JOHNS RIVER

COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET

02250030 TURKEY CREEK AT PALM BAY, FL

LOCATION.--Lat 28°01'00", long 80°35'46", in SE¼ sec.26, T.28 S., R.37 E., Brevard County, Hydrologic Unit 03080202, near right bank on downstream side of bridge on Port Malabar Boulevard, 1.6 mi southwest of the intersection of U.S. Highway 1 and State Highway 516 in Palm Bay, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--105 mi², approximately.

PERIOD OF RECORD.--February 1981 to September 1983. October 1983 to current year (gage heights only).

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

REMARKS.--No discharge was computed this year because of excessive loss of current meter record due to equipment failures. Stage and discharge are affected by tides in the Indian River.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 895 ft³/s, Mar. 1, 1983; maximum gage height, 4.73 ft, Sept. 21, 1985; minimum daily discharge, 34 ft³/s, Dec. 21, 1981; minimum gage height, -0.38 ft, Apr. 5, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.73 ft, Sept. 21; minimum, 0.38 ft below NGVD, Apr. 5.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
NOV 28...	1115	443	MAY 28...	1300	44
JAN 30...	1530	41	JUL 11...	1055	84
MAR 21...	1215	35	SEP 06...	1245	200

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.37	1.24	1.14	.30	.12	.05	.12	---	.45	.61	.65	.82
2	1.45	1.30	1.24	.42	.03	.11	.19	---	.50	.60	.66	1.28
3	1.32	1.32	1.22	.31	.25	.27	.17	---	.46	.48	.71	1.23
4	1.20	1.44	1.13	.59	.40	.08	.06	---	.46	.37	.92	1.15
5	1.13	1.54	1.27	.69	.23	.14	-0.10	---	.44	.33	.91	1.06
6	1.13	1.74	1.25	.44	.36	.40	.07	---	.38	.52	.87	.99
7	1.12	1.68	1.20	.19	.64	.50	.32	---	.28	.38	.84	.92
8	1.17	1.45	1.12	.26	.78	.35	.40	---	.25	.46	.87	.87
9	1.31	1.36	.96	.25	.57	.35	.52	---	.37	.43	.80	.80
10	1.35	1.26	.60	.33	.43	.40	.20	---	.42	.35	.81	.75
11	1.41	1.15	.49	.38	.25	.38	.04	---	.34	.32	.86	.69
12	1.52	1.26	.46	1.04	.28	.31	.18	---	.43	.36	.81	.66
13	1.38	1.27	.50	.93	.39	.34	.50	---	.46	.46	.89	.80
14	1.32	1.08	.48	.31	.29	.25	.71	---	.47	.44	.97	1.35
15	1.33	.98	.55	.38	.20	.28	.95	---	.56	.47	.97	1.38
16	1.37	1.00	.59	.30	.18	.23	.82	---	.42	.46	.94	1.35
17	1.42	1.02	.75	.15	.15	.27	.77	---	.54	.58	.89	1.45
18	1.33	.95	.86	.22	.18	.60	.58	---	.40	.65	.90	1.70
19	1.28	.95	.82	.43	.21	.40	.46	---	.36	.78	.92	2.09
20	1.22	1.19	.70	.21	.24	.17	.45	---	.37	.88	.94	2.72
21	1.15	1.30	.64	.68	.25	.10	.41	---	.29	.88	1.05	4.36
22	1.20	2.06	.73	.13	.13	.62	.27	---	.28	.86	1.13	3.57
23	1.25	3.15	.76	.23	.09	.64	.23	---	.30	.82	.99	3.10
24	1.34	3.24	.76	.25	.00	.58	.25	---	.43	1.04	.97	2.69
25	1.45	2.81	.93	.18	.04	.56	.23	---	.25	1.08	.92	2.42
26	1.48	2.52	.91	.19	.04	.52	---	---	.23	.97	.86	2.27
27	1.28	2.23	.91	.24	-0.02	.30	---	---	.34	.82	1.00	2.12
28	1.29	2.02	.95	.02	.08	.21	---	.59	.36	.74	1.01	2.16
29	1.28	1.86	.89	.22	---	.12	---	.54	.40	.67	.95	2.52
30	1.25	1.28	.89	.11	---	-0.01	---	.46	.52	.65	.96	2.44
31	1.23	---	.52	.13	---	.00	---	.46	---	.63	.78	---
MEAN	1.30	1.59	.85	.34	.24	.31	---	---	.39	.62	.90	1.72
MAX	1.52	3.24	1.27	1.04	.78	.64	---	---	.56	1.08	1.13	4.36
MIN	1.12	.95	.46	.02	-0.02	-0.01	---	---	.23	.32	.65	.66
CAL YR 1984	MEAN	.69	MAX	3.24	MIN	-0.10						

ST. JOHNS RIVER

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COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02251800 INDIAN RIVER AT WABASSO, FL

LOCATION.--Lat 27°45'15", long 80°25'40", in SW¼ sec.27, T.31 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on north side near the southwest end of bridge on State Highway 510 at Wabasso.

PERIOD OF RECORD.--November 1940 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and are available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to June 26, 1970, at site 0.9 mi northeast at same datum.

REMARKS.--Stage affected by tide. The stage record published is the maximum and minimum tide event for each calendar day.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 4.76 ft, Sept. 22, 1948; minimum, 1.36 ft below NGVD, Jan. 20, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 3.61 ft, Nov. 23; minimum, 0.71 ft below NGVD, Mar. 30.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.78	1.55	.88	1.66	.72	.52	.57	.18	1.30	.35	.23	.61
2	1.69	1.78	.75	1.39	.55	.34	.47	.16	.99	.40	.05	.59
3	1.61	1.70	.65	1.29	.38	.36	.39	-0.05	.52	.50	.16	.58
4	1.67	1.68	.47	1.19	.25	.21	.49	-0.04	.46	.56	.16	.31
5	1.57	1.52	.63	1.00	.58	-0.05	.68	.16	.46	.64	.06	.74
6	1.46	1.78	.35	.93	.53	-0.16	.78	.18	.53	.80	.11	.97
7	1.38	1.54	.95	.89	.59	.20	.64	.03	.58	.62	.19	1.21
8	1.43	1.53	.88	1.02	.48	.64	.39	-0.10	.42	.54	.16	1.74
9	1.54	1.64	.50	.85	.29	.36	.19	.03	.51	.44	.12	1.36
10	1.52	1.64	.24	.60	.18	.33	.78	.74	.45	.65	.10	1.26
11	1.48	1.59	.07	.74	.11	.56	1.26	.42	.52	.46	.10	1.18
12	1.47	1.46	.47	1.04	.12	.46	1.24	.38	.71	.19	.26	1.20
13	1.41	1.33	.54	1.15	.13	.13	.79	.42	.37	.10	.29	1.05
14	1.63	1.22	.34	1.45	.56	.68	1.16	.24	.22	.19	.26	.96
15	1.62	1.09	.60	1.31	.77	.52	.98	.15	.23	.02	.30	.84
16	1.58	1.19	.75	1.10	.74	.41	1.02	.57	.23	.04	.36	.85
17	1.66	1.30	.48	1.05	.68	.51	1.04	.75	.17	-0.14	.32	1.17
18	1.77	1.21	.64	.95	.71	.67	.82	.60	.23	-0.22	.38	1.05
19	1.75	.89	1.00	1.45	.66	.51	.73	.44	.22	-0.30	.55	1.43
20	1.61	.69	1.18	1.67	.73	.43	.35	.13	.22	-0.25	.41	1.63
21	1.77	1.07	.89	2.24	.80	.60	.31	-0.01	.24	-0.21	.55	1.61
22	1.63	1.01	1.00	2.23	.98	.56	.18	.01	.60	-0.03	.56	1.55
23	1.62	.80	.97	.96	.89	.34	.10	.23	.65	.05	.78	1.70
24	1.73	.62	1.06	.78	.77	.26	.40	.51	.86	-0.02	.51	1.72
25	2.00	1.17	1.54	.80	.56	.29	.43	.49	.83	.09	.63	1.76
26	1.99	.90	1.22	.94	.57	.42	.20	.65	.84	.01	.76	1.90
27	1.99	.67	.97	.62	.05	.47	.17	.38	.61	.01	.78	2.07
28	1.47	.63	.49	.77	.40	.32	.17	.30	.69	-0.10	.95	1.08
29	1.55	.95	.51	.58	.41	.38	.36	.32	.50	-0.04	.91	1.50
30	1.28	1.06	1.59	.62	---	.49	.32	.35	.17	.08	.76	1.50
31	1.39	---	2.33	.67	---	.55	---	1.28	---	.21	.67	---
MEAN	1.61	1.24	.80	1.09	.52	.40	.58	.32	.51	.18	.40	1.24
MAX	2.00	1.78	2.33	2.24	.98	.68	1.26	1.28	1.30	.80	.95	2.07
MIN	1.28	.62	.07	.58	.05	-0.16	.10	-0.10	.17	-0.30	.05	.31
CAL YR 1983	MEAN	.87	MAX	2.33	MIN	-0.21						
WTR YR 1984	MEAN	.74	MAX	2.33	MIN	-0.30						

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02251800 INDIAN RIVER AT WABASSO, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	.95	1.05	.14	---	-0.20	-0.43	.00	.10	.11	.14	-0.14
2	1.19	1.04	.92	.12	---	.01	-0.02	-0.02	.14	.11	.11	.59
3	.98	.98	.76	.24	---	.29	-0.04	-0.24	.16	-0.06	.33	.65
4	.86	1.04	.89	.26	-0.01	-0.09	-0.29	.09	.13	-0.03	.61	.53
5	.77	1.26	.47	.38	.02	-0.20	-0.56	.33	.13	-0.23	.57	.51
6	.75	1.60	.66	.56	-0.04	-0.17	-0.45	.42	.02	.03	.53	.48
7	.79	1.70	1.35	.38	.19	.25	.01	.04	-0.21	-0.14	.57	.42
8	.80	1.32	.81	.24	.67	.05	.00	-0.14	-0.07	.10	.50	.41
9	1.09	1.20	.59	.41	.36	.02	.45	.06	.12	.14	.35	.38
10	1.16	.95	.36	.44	-0.01	.07	-0.26	.21	.21	.15	.39	.33
11	1.17	.83	.31	.44	-0.08	-0.11	-0.41	.36	.04	.03	.53	.25
12	1.39	1.10	.36	1.01	.14	.02	-0.23	.47	-0.09	-0.02	.40	.22
13	1.18	1.13	.37	.78	.32	-0.05	-0.13	.47	.04	.16	.39	.42
14	1.05	.81	.38	.62	.02	-0.17	.20	.55	.02	.01	.49	.78
15	1.06	.64	.39	.38	-0.06	-0.16	.12	.52	-0.04	-0.15	.35	1.21
16	1.06	.75	.40	.59	-0.05	-0.02	.16	.25	-0.25	-0.01	.26	1.05
17	1.08	.84	.55	.07	-0.05	-0.12	.22	.31	-0.24	.09	.28	1.02
18	1.01	.57	.54	.08	-0.07	.51	.08	.45	-0.30	.27	.31	1.09
19	.92	.53	.55	.44	-0.03	.48	-0.06	.20	-0.27	.26	.29	1.33
20	.75	.75	.48	.22	-0.07	-0.23	.01	-0.21	-0.09	.32	.31	1.26
21	.63	.96	.47	.73	-0.05	-0.45	.01	.07	-0.12	.15	.47	1.60
22	.60	1.14	.42	.39	---	.33	-0.27	.01	-0.18	.17	.53	1.63
23	.71	2.54	.47	.14	---	.43	-0.25	.13	.06	-0.07	.56	1.57
24	.88	2.55	.55	-0.05	---	.32	-0.28	.20	.18	.14	.51	1.50
25	.98	1.63	.63	-0.22	---	.34	-0.39	.29	-0.13	.16	.36	1.43
26	1.01	1.41	.50	.03	---	.08	-0.31	.55	-0.10	.12	.23	1.80
27	.82	1.15	.51	-0.19	---	-0.30	-0.35	.38	.02	.11	.43	1.36
28	.83	1.06	.45	-0.21	---	-0.41	-0.16	.46	.01	.09	.43	1.45
29	.85	1.29	.43	.09	---	-0.53	.06	.18	.11	.09	.22	1.42
30	.88	1.12	.41	.02	---	-0.71	.07	.06	.13	.06	.32	1.33
31	.88	---	.09	---	---	-0.31	---	.08	---	-0.04	-0.02	---
MEAN	.94	1.16	.55	---	---	-0.03	-0.12	.21	-0.02	.07	.38	.93
MAX	1.39	2.55	1.35	---	---	.51	.45	.55	.21	.32	.61	1.80
MIN	.60	.53	.09	---	---	-0.71	-0.56	-0.24	-0.30	-0.23	-0.02	-0.14
CAL YR 1984	MEAN	.28	MAX	2.55	MIN	-0.75						

ST. JOHNS RIVER

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COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02252500 NORTH CANAL NEAR VERO BEACH, FL

LOCATION.--Lat 27°41'32", long 80°25'00", in SE¼ sec.15, T.32 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on left bank 600 ft upstream from bridge on State Highway 605, and 3.9 mi north of Vero Beach.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 27, 1952, at site 50 ft downstream at datum 0.81 ft lower. Feb. 27, 1952, to Nov. 5, 1957, at bridge 600 ft downstream at present datum.

REMARKS.--Records fair except for estimated daily discharges, Nov. 21 to Dec. 19 and Dec. 26 to Jan. 22, which are poor. Considerable pumping into canal for drainage above station. Since Sept. 7, 1954, low flow regulated by control structure 2 mi upstream.

AVERAGE DISCHARGE.--34 years (water years 1951-85), 31.6 ft³/s, 22,890 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft³/s, Sept. 23, 1960; maximum gage height, 11.78 ft, June 18, 1959; no flow part of each day Mar. 7,8, 1969; minimum gage height observed, 0.92 ft, June 22, 1956, site then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 824 ft³/s, Sept. 21, gage height, 8.90 ft; minimum, 7.1 ft³/s, June 6, gage height, 1.70 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	19	30	20	24	18	18	15	16	27	13	38
2	44	20	47	21	24	20	17	14	13	27	17	47
3	31	200	48	21	23	21	19	14	11	25	20	23
4	16	352	46	22	22	23	18	16	7.9	22	22	11
5	15	97	45	24	21	22	17	21	8.5	21	26	10
6	19	58	43	22	19	18	17	21	7.3	20	16	14
7	23	46	41	21	21	18	16	19	7.9	18	14	14
8	28	39	39	20	25	19	14	18	8.7	17	23	12
9	105	26	36	19	24	19	12	17	14	18	78	11
10	43	14	34	19	25	18	11	13	14	17	29	10
11	28	14	33	18	23	17	10	11	12	15	24	12
12	26	13	31	19	22	14	10	11	36	15	15	14
13	15	17	28	22	18	12	18	16	88	17	9.2	15
14	14	22	25	25	17	15	26	11	269	24	40	21
15	13	25	23	30	23	14	115	7.2	81	139	27	31
16	13	25	23	28	25	15	70	9.7	252	98	15	147
17	15	24	25	25	23	23	15	21	95	27	9.1	68
18	18	22	26	22	21	32	14	22	46	193	8.6	283
19	18	22	28	20	22	29	16	17	48	469	8.6	427
20	19	24	27	18	20	24	17	17	166	112	12	314
21	21	300	26	16	18	45	15	19	53	59	82	657
22	25	500	26	60	18	87	19	15	31	81	29	216
23	24	640	27	98	16	11	22	12	24	113	16	105
24	24	600	26	74	15	9.2	22	18	23	60	9.5	75
25	24	350	26	45	17	9.0	22	31	24	64	9.3	61
26	24	200	28	32	19	13	20	40	25	38	11	52
27	23	110	29	27	20	16	19	29	29	32	84	36
28	22	90	25	26	20	17	17	25	24	30	37	52
29	20	75	22	26	---	15	15	22	24	20	26	197
30	20	50	20	25	---	13	15	20	22	11	28	169
31	19	---	19	25	---	17	---	18	---	11	32	---
TOTAL	805	3994	952	890	585	643.2	656	559.9	1480.3	1840	790.3	3142
MEAN	26.0	133	30.7	28.7	20.9	20.7	21.9	18.1	49.3	59.4	25.5	105
MAX	105	640	48	98	25	87	115	40	269	469	84	657
MIN	13	13	19	16	15	9.0	10	7.2	7.3	11	8.6	10
AC-FT	1600	7920	1890	1770	1160	1280	1300	1110	2940	3650	1570	6230
CAL YR 1984	TOTAL	12665.9		MEAN	34.6	MAX	640	MIN	8.2	AC-FT	25120	
WTR YR 1985	TOTAL	16337.7		MEAN	44.8	MAX	657	MIN	7.2	AC-FT	32410	

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02253000 MAIN CANAL AT VERO BEACH, FL
(National stream-quality accounting network station)

LOCATION.--Lat 27°38'54", long 80°24'10", in SE¼ sec.35, T.32 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on right bank 8 ft upstream from dam, 700 ft upstream from U.S. Highway 1, and 0.6 mi northwest of Vero Beach.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1949 to current year. Monthly discharge only for some periods, published in WSP 1724.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Mar. 20, 1952, at datum 0.74 ft lower. Mar. 20, 1952, to Sept. 30, 1956, at datum 0.02 ft lower.

REMARKS.--Estimated daily discharges: Feb. 2-28. Records good. Considerable pumping into canal for drainage upstream from station. Since Aug. 6, 1954, low flow regulated by control structure 1.5 mi upstream.

AVERAGE DISCHARGE.--36 years (water years 1950-85), 78.2 ft³/s, 56,660 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s, Sept. 23, 1960, gage height, 14.21 ft; maximum gage height, 14.38 ft, Sept. 24, 1963; no flow at times in some years; minimum gage height, 8.06 ft, Aug. 8, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,240 ft³/s, Nov. 23; maximum gage height, 13.11 ft, Nov. 23; minimum daily discharge, 0.14 ft³/s, Mar. 24; minimum gage height, 8.14 ft, Mar. 23,24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	29	117	31	34	27	27	25	18	41	19	111
2	137	35	250	33	33	33	27	20	12	40	29	117
3	46	415	168	33	32	37	31	23	9.2	37	36	41
4	3.2	688	62	37	30	48	30	32	4.1	33	45	4.8
5	15	321	71	35	28	43	29	37	1.5	30	400	6.1
6	26	178	65	32	28	30	28	34	1.2	26	112	216
7	34	111	57	30	31	27	27	31	6.8	24	14	176
8	43	85	53	30	33	30	25	30	12	23	400	45
9	247	30	50	30	32	31	22	27	16	25	260	4.0
10	74	2.2	48	30	33	30	19	22	21	23	166	8.0
11	54	2.1	47	27	31	28	18	20	15	25	113	22
12	26	6.2	45	24	29	20	21	19	15	28	36	29
13	2.1	21	127	19	27	17	43	30	66	32	2.5	31
14	2.0	28	31	39	26	17	344	20	372	32	162	39
15	2.2	33	32	53	32	20	296	14	84	285	158	55
16	7.0	33	33	41	35	23	245	13	6.1	221	35	450
17	19	30	35	36	33	55	57	32	21	43	2.2	271
18	21	28	38	31	31	90	1.7	40	27	341	196	592
19	22	30	38	25	32	64	181	32	31	881	303	791
20	25	31	36	9.7	30	47	92	35	258	389	369	519
21	31	619	31	3.5	28	222	13	31	47	184	429	947
22	40	926	30	7.2	27	183	32	23	1.4	272	218	463
23	37	1240	36	88	26	.25	39	19	8.9	491	112	255
24	37	1130	35	148	26	.14	39	28	23	239	3.8	176
25	37	678	33	86	27	5.4	37	41	28	196	9.0	127
26	35	393	39	56	29	16	34	40	31	126	30	104
27	37	239	161	46	30	21	31	43	33	92	339	91
28	33	160	31	43	28	21	26	41	32	80	140	139
29	31	127	32	42	---	19	25	37	32	39	100	194
30	32	86	32	40	---	17	26	30	34	3.4	91	309
31	29	---	31	37	---	27	---	25	---	4.3	89	---
TOTAL	1410.5	7734.5	1894	1222.4	841	1248.79	1865.7	894	1267.2	4305.7	4418.5	6332.9
MEAN	45.5	258	61.1	39.4	30.0	40.3	62.2	28.8	42.2	139	143	211
MAX	247	1240	250	148	35	222	344	43	372	881	429	947
MIN	2.0	2.1	30	3.5	26	.14	1.7	13	1.2	3.4	2.2	4.0
AC-FT	2800	15340	3760	2420	1670	2480	3700	1770	2510	8540	8760	12560
CAL YR 1984	TOTAL	27765.68		MEAN	75.9	MAX	1240	MIN	.00	AC-FT	55070	
WTR YR 1985	TOTAL	33435.19		MEAN	91.6	MAX	1240	MIN	.14	AC-FT	66320	

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02253000 MAIN CANAL AT VERO BEACH, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1975 to October 1981 (incomplete).

WATER TEMPERATURE: March 1975 to October 1981 (incomplete).

INSTRUMENTATION.--Water-quality monitor March 1975 to October 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 2,370 micromhos July 17, 1981; minimum daily mean, 284 micromhos Sept. 4, 1979.

WATER TEMPERATURES: Maximum daily mean, 36.0°C July 21, 1979; minimum daily mean, 12.5°C Dec. 28, 1976.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM STAGE (FT ABOVE DATUM) (00065)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 29...	0824	9.22	120	842	7.3	21.0	10	5.1	78
JAN 25...	1849	8.92	74	990	7.6	15.0	1.5	9.1	100
FEB 28...	0908	8.44	26	1920	7.6	22.5	1.5	5.7	110
APR 30...	0917	8.53	26	1340	7.6	26.0	.70	5.3	100
JUL 02...	1421	8.86	64	1480	7.4	30.0	1.0	10.6	99
AUG 14...	0856	8.20	2.0	1120	7.6	29.0	2.3	3.7	86

DATE	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)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
NOV 29...	16	76	5.2	150	70	160	.30	11	544
JAN 25...	48	210	9.2	164	130	500	.50	11	1180
FEB 28...	44	230	8.1	180	120	460	.60	6.7	1150
APR 30...	25	130	5.4	204	91	270	.40	1.7	845
JUL 02...	32	150	5.6	175	92	380	.50	8.3	982
AUG 14...	22	99	7.4	177	73	230	.60	12	720

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02253000 MAIN CANAL AT VERO BEACH, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	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)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 29...		.69	.330	1.2	.210	.180	.160	13	92
JAN 25...		<.10	.090	.70	.050	.050	.030	<1	<1
FEB 28...		--	--	1.1	.180	.130	--	1	1
APR 30...		<.10	.060	.80	.140	.070	.040	2	1
JUL 02...		<.10	<.010	.70	.180	.160	.150	2	50
AUG 14...		.63	.290	1.1	.270	.150	.170	6	67

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
NOV 29...	0824	40	1	38	.0	<1	<1	<3	6	490	4
FEB 28...	0908	20	<1	53	<.5	<1	<1	<3	3	43	<1
APR 30...	0917	20	<1	50	<.5	2	3	<3	9	47	4
AUG 14...	0856	30	2	40	<.5	<1	3	<3	9	430	<1

DATE		LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	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)
NOV 29...	5		41	.1	<10	<1	<1	<1	2200	<6	20
FEB 28...	14		24	.3	<10	1	<1	1	7300	<6	10
APR 30...	15		12	.3	<10	3	<1	<1	3600	<6	37
AUG 14...	12		60	.4	<10	5	<1	<1	3200	<6	13

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02253500 SOUTH CANAL NEAR VERO BEACH, FL

LOCATION.--Lat 27°36'11", long 80°23'24", in SW¼ sec.13, T.33 S., T.39 E., Indian River County, Hydrologic Unit 03080203, on right bank 1,000 ft upstream from bridge on State Highway 605, and 2.5 mi south of Vero Beach.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 28, 1952, at downstream side of bridge 1,000 ft downstream at datum 1.26 ft lower. Feb. 28, 1952, to Nov. 6, 1957, 20 ft upstream from bridge at datum 0.46 ft lower.

REMARKS.--Estimated daily discharges Mar. 30 to Apr. 30, June 15 to July 15, Aug. 14-28, and Sept. 3-5, 16-20, 23-30. Records poor. Considerable pumping into canal for drainage above station. Since Jan. 6, 1956, low flow regulated by control structure upstream.

AVERAGE DISCHARGE.--35 years, 40.0 ft³/s, 28,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft³/s, Sept. 24, 1963, gage height, 10.97 ft, from floodmarks; maximum gage height, 10.98 ft, Aug. 27, 1964; minimum discharge, 0.43 ft³/s, May 24, 1978; minimum gage height, 0.64 ft, Aug. 15, 1984, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,510 ft³/s, July 18, Sept. 21, maximum gage height, 9.69 ft, July 18; minimum daily discharge, 5.7 ft³/s, June 7; minimum gage height, 0.84 ft, June 3,5-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	22	29	18	15	13	15	13	7.9	23	17	48
2	92	27	42	20	15	16	16	10	6.1	24	20	61
3	46	247	46	20	14	19	17	12	6.2	23	24	25
4	21	573	44	21	15	24	17	16	6.2	21	29	16
5	19	126	44	22	13	21	16	25	6.1	20	38	15
6	22	69	42	20	11	16	16	19	6.0	19	21	19
7	26	54	41	19	18	14	15	16	5.7	18	18	14
8	31	46	38	18	21	15	14	14	5.8	17	146	13
9	161	28	34	18	21	15	13	12	8.2	17	59	12
10	56	14	33	18	20	14	11	10	10	16	50	11
11	53	11	32	17	17	14	10	9.4	6.7	15	44	12
12	45	11	31	17	16	11	10	10	6.2	15	37	14
13	28	13	27	19	11	9.8	13	16	29	16	43	17
14	24	15	22	24	12	9.7	21	11	262	100	87	32
15	23	14	22	27	20	9.8	100	8.9	90	255	80	51
16	24	14	22	21	20	11	80	9.6	100	145	30	330
17	23	14	23	18	16	28	20	17	80	42	16	150
18	21	13	24	17	16	41	14	19	50	388	14	300
19	20	12	24	15	16	29	13	15	40	979	12	793
20	20	14	24	11	13	21	14	15	250	330	20	300
21	22	347	22	12	11	34	12	13	100	129	140	1250
22	26	675	21	12	11	144	14	8.9	40	217	40	453
23	24	1170	22	38	10	14	19	8.1	23	307	19	100
24	26	950	23	58	10	13	20	15	21	125	16	70
25	29	362	22	35	10	13	20	18	22	116	15	50
26	34	152	24	26	13	13	18	19	23	75	17	40
27	27	108	25	21	14	15	17	20	24	63	100	35
28	23	87	22	19	13	15	16	18	22	56	61	29
29	20	75	20	19	---	13	15	15	21	34	59	24
30	21	49	20	18	---	12	14	11	20	17	51	115
31	20	---	19	16	---	14	---	9.7	---	17	43	---
TOTAL	1208	5312	884	654	412	651.3	610	433.6	1298.1	3639	1366	4399
MEAN	39.0	177	28.5	21.1	14.7	21.0	20.3	14.0	43.3	117	44.1	147
MAX	181	1170	46	58	21	144	100	25	262	979	146	1250
MIN	19	11	19	11	10	9.7	10	8.1	5.7	15	12	11
AC-FT	2400	10540	1750	1300	817	1290	1210	860	2570	7220	2710	8730
CAL YR 1984	TOTAL	16271.1		MEAN	44.5	MAX	1170	MIN	4.8	AC-FT	32270	
WTR YR 1985	TOTAL	20867.0		MEAN	57.2	MAX	1250	MIN	5.7	AC-FT	41390	

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. 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 analyses, 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 separate 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 date 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. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1985

Annual maximum discharge at crest-stage partial-record stations during water year 1965						
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual Maximum	
					Date	Gage height (ft)
ST. MARYS RIVER BASIN						
02231250	Little St. Marys River near Hilliard	Lat 30°43'55", long 81°53'35", in SE¼ sec. 27, T.4 N., R.24 E., Nassau County, Hydrologic Unit 03070204, at bridge on State Highway 115-A, 3.3 mi northeast of Hilliard, and 13 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to 1965, at datum 8.56 ft higher.	19.8	1961-65 1965-67* 1968-85	9-03-85	15.44 1,450
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER						
02232505	Savage Creek	Lat 28°32'22", long 81°01'10", in NE¼ sec.33, T.22 S., R.33 E., Orange County, Hydrologic Unit 03080101, on downstream side at bridge on Highway 420, 3.1 mi upstream from mouth, and 0.2 mi north of Christmas and Highway 50. Datum of gage is 28.95 ft above National Geodetic Vertical Datum of 1929.	3.69	1985	9-02-85	5.94 162
OKLAWAHA RIVER BASIN						
02240920	Fairfield Sink drain at Fairfield	Lat 29°21'58", long 82°15'17", NW¼ sec.18, T.13 S., R.21 E., Marion County, Hydrologic Unit 03080102, on right bank of drainage ditches, 50 ft downstream from culvert on State Highway 316, approximately 450 ft upstream of sink, and 0.2 mi west of intersection of State Highways 316 and 225 at Fairfield. Datum of gage is 78.19 ft above National Geodetic Vertical Datum of 1929.	1.70	1966-85	9-01-85	21.76 43.6

* Operated as a continuous record gaging station

Annual maximum discharge at crest-stage partial-record stations during water year 1985

Annual Maximum Discharge at Gage Station during water year 1992					Annual Maximum		
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (ft)	Dis-charge (ft ³ /s)
OKLAWAHA RIVER BASIN--Continued							
02240984	Sweetwater Branch tributary at Gainesville	Lat 29°39'00", long 82°19'14", in SW¼ sec.4, T.10 S., R.20 E., Alachua County, Hydrologic Unit 03080102, at culvert on SE 2nd Ave., 200 ft southeast of Federal Building in Gainesville, and 0.8 mi upstream from mouth. Datum of gage is 138.20 ft above National Geodetic Vertical Datum of 1929.	0.79	1971-85	4-14-85	10.22	596
02243530	Bruntbridge Brook at Kenwood	Lat 29°32'08", long 81°53'02", in SE¼ sec.15, T.11 S., R.24 E., Putnam County, Hydrologic Unit 03080102, at culverts on State Highway 315, 0.5 mi southwest of Kenwood, and 1.9 mi upstream from mouth. Datum of gage not determined.	4.63	1971-85	9-01-85	7.12	94
ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER							
02246200	Durbin Creek near Durbin	Lat 30°05'57", long 81°31'34", in NE¼ sec.6, T.5 S., R.28 E., St. Johns County, Hydrologic Unit 03080103 at bridge on county road, 1.0 mi downstream from Bowen Branch, 4.9 mi northwest of Durbin, and 6.1 mi upstream from mouth. Datum of gage is 1.88 ft below National Geodetic Vertical Datum of 1929.	36.7	1961-85	9-01-85	7.44	904
02246460	Williamson Creek at Cedar Hills	Lat 30°16'19", long 81°45'05", in land grant 37, T.3 S., R.25 E., Duval County, Hydrologic Unit 03080103, at culvert on Hugh Edwards Drive at Cedar Hills, and 0.9 mi upstream from mouth. Datum of gage not determined.	0.92	1971-85	7-17-85	10.92	120
02246497	McCoy Creek at Jacksonville	Lat 30°19'35", long 81°41'56", land grant 41, T.2 S., R.26 E., Duval County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on Leland Street, 2.0 mi upstream from mouth, and 2.7 mi west of Duval County Courthouse. Datum of gage is 14.89 ft below National Geodetic Vertical Datum of 1929.	3.51	1975-85	9-01-85	23.13	766
02246522	Red Bay Branch Tributary at Jacksonville	Lat 30°20'40", long 81°35'22", in SW¼ sec.10, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, on right bank of drainage ditch 35 ft upstream from culvert on Rogero Road, 200 ft south of Pine Summit Drive, in Arlington area of Jacksonville. Datum of gage not determined.	0.57	1975-85	8-31-85	9.36	55.0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1985

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET							
02247200	Fish Swamp Outlet near Summer Haven	Lat 29°39'20", long 81°19'43", in SE¼ sec.27, T.10 S., R.29 E., St. Johns County, Hydrologic Unit 03080201, at culvert on State Highway 204, 0.2 mi upstream from mouth and 7.7 mi south-west of Summer Haven. Datum of gage is 19.14 ft above National Geodetic Vertical Datum of 1929.	4.62	1962-85	9-01-85	5.75	687
02247600	Little Tomoka River near Ormond Beach	Lat 29°15'23", long 81°09'52", in SW¼ sec.27, T.14 S., R.31 E., Volusia County, Hydrologic Unit 03080201, at culverts on Highway 40, 0.3 mi upstream from Hull Cypress Swamp Outlet, 2.8 mi upstream from mouth, and 7.0 mi west of Ormond Beach. Datum of gage is 19.03 ft above National Geodetic Vertical Datum of 1929 (unadjusted). Discontinued 9-30-84.	a10	1962-84	4-05-84	3.78	127

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DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at low-flow partial-record stations during water year 1985

Discharge measurements made at low-flow partial-record stations during water year 1985						
Station No.	Station name	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
ST. MARYS RIVER BASIN						
*02231050	Deep Creek near Baldwin	Lat 30°18'02", long 82°01'50", in NW¼ sec.29, T.2 S., R.27 E., Duval County, Hydrologic Unit 03070204, about 5.0 mi from mouth, 3.2 mi west of Baldwin, and 5.5 mi east of Macclenny.	25	1965-67	02-25-85 05-28-85	.30 .48
COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVER						
02231065	Brandy Branch	Lat 30°22'00", long 82°01'00", in Land Grant 37, T.1 S., R.23 E., Nassau County, Hydrologic Unit 03070205, at bridge on State Highway 121, 4.6 mi west of Bryceville.		1964-67	02-25-85 05-28-85	7.58 .00
02231284	Thomas Creek	Lat 30°31'00", long 81°45'50", in Land Grant 37, T.1 N., R.25 E., Nassau County, Hydrologic Unit 03070205, at bridge on State Highway 115, 4.7 mi southeast of Callahan.		1965	11-02-84 02-26-85 05-30-85	34.6 9.98 .90
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER						
02231396	Blue Cypress Creek	Lat 27°43'40", long 80°48'19", in NW¼ sec.2, T.32 S., R.35 E., Indian River County, Hydrologic Unit 03080101, at culvert on private road, 2.0 mi upstream from Blue Cypress Lake, and 12.8 mi west of Fellsmere.	105	1969,1970	03-13-85	2.3
*02234150	Cow Creek	Lat 28°50'13", long 81°01'32", in SE¼ sec.16, T.19 S., R.33 E., Volusia County, Hydrologic Unit 03080101, at bridge on county road, 2.7 mi upstream from mouth, 4.2 mi northwest of Maytown, and 8.2 mi east of Osteen.	23	1964-66	02-06-85 04-10-85 06-11-85	3.27 .05 .00
OKLAWAHA RIVER BASIN						
02240105	Daisy Creek	Lat 29°18'54", long 81°58'23", in SW¼ sec.35, T.13 S., R.23 E., Marion County, Hydrologic Unit 03080102, at culverts on State Highway 315, 3.4 mi upstream from mouth, and 2.4 mi northeast of Burbank.	11.4	1981	12-17-84 01-28-85 03-25-85 05-20-85 07-10-85 09-17-85	0.00 .00 .00 .00 .00 .00
ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER						
02245325	Mills Creek near Bakersville	Lat 29°57'00", long 81°29'40", in land grant 38, T.6 S., R.28 E., St. Johns County, Hydrologic unit 03080103, at culvert on State Highway 16, 4.0 mi north of Bakersville.		1958	11-07-84	2.92
02245750	North Fork Black Creek above Boggy Branch near Highlands	Lat 30°03'58", long 81°58'44", in NW¼ sec.14, T.5 S, R.23 E, Clay County, Hydrologic Unit 03080103, at bridge on county road, 5.0 mi southwest Highland.	34.1	1958	10-31-84	13.6

* Also a crest-stage partial-record station<

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1985

Discharge measurements made at low-flow partial-record stations during water year 1985						
Station No.	Station name	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER--Continued						
02245800	North Fork Black Creek near Highlands	Lat 30°06'48", long 81°59'00", in SE¼ sec.27, T.4 S., R.23 E., Clay County, Hydrologic Unit 03080103, at bridge on State Highway 218, 3.9 mi east of Highland, and 7.6 mi northwest of Middleburg.	48.9	1957-60 1965 1967	10-31-84 02-27-85 05-29-85	13.6 11.4 7.92
*02245850	Long Branch at Maxville	Lat 30°12'13", long 82°01'06", in SE¼ sec.29, T.3 S., R.23 E., Duval County, Hydrologic Unit 03080103, at culvert on State Highway 228, 5.5 mi upstream from mouth, and 0.3 mi west of Maxville.	2.98	1965-67	10-31-84 02-27-85 05-29-85	9.93 .36 .00
*02245900	Yellow Water Creek near Maxville	Lat 30°13'45", long 81°55'18", in NE¼ sec.20, T.3 S., R.24 E., Duval County, Hydrologic Unit 03080103, at bridge on State Highway 228, 5.8 mi northeast of Maxville, 7.1 mi upstream from mouth, and 7.2 mi southeast of Jacksonville.	25.7	1958-82	10-31-84 02-26-85 05-29-85	15.1 1.49 .00
02246100	Julington Creek near Greenland	Lat 30°11'19", long 81°33'45", in land grant 50, T.4 S., R.27 E., Duval County, Hydrologic Unit 03080103, at culvert on U.S. Highway 1, 11.0 mi upstream from mouth, and 1.5 mi northeast of Greenland.	8.9	1965-66 1967-84	10-31-84 02-25-85 05-30-85	9.34 5.20 2.68
02246110	Sweetwater Creek	Lat 30°10'03", long 81°32'29", in SE¼ sec.12, T.4 S., R.27 E., Duval County, Hydrologic Unit 03080103, at culvert on U.S. Highway 1, 0.3 mi southeast of Greenland.		1964-67	10-31-84 02-25-85 05-30-85	4.73 1.50 .35
02246199	Durbin Creek at U.S. 1	Lat 30°05'54", long 81°28'22", in NE¼ sec.3, T.5 S., R.28 E., St. Johns County, Hydrologic Unit 03080103, at bridge on U.S. Highway 1, and 1.0 mi northwest of Durbin.		1974-75	10-31-84 02-25-85 05-30-85	6.76 6.16 .00
*02246200	Durbin Creek near Durbin	Lat 30°05'57", long 81°31'34", in NE¼ sec.6, T.5 S., R.28 E., St. Johns County, Hydrologic Unit 03080103, at bridge on county road, 1.0 mi downstream from Bowden Branch, 6.1 mi upstream from mouth, and 4.9 mi northwest of Durbin.	36.7	1961-85	11-01-84	3.97
*02246202	Cormorant Branch near Mandarin	Lat 30°08'56", long 81°37'43", in NE¼ sec.20, T.3 S., R.27 E., Duval County, Hydrologic Unit 03080103, at bridge on Marbon Road, 1.1 mi upstream from mouth, and 2.1 mi southeast of Mandarin.	1.62	1975-81	10-31-84 02-26-85 05-30-85	2.32 .52 .23
	McGirts Creek near Whitehouse	Lat 30°19'48", long 81°51'47", in NE¼ sec.13, T.2 S., R.24 E., Duval County, Hydrologic Unit 03080103, at Bridge on Old Plank Road, 4.3 mi upstream from mouth, and 1.2 mi northwest of Whitehouse.		1977	10-31-84 02-26-85 05-30-85	4.04 .63 .12

* Also a crest-stage partial-record station

* Operated as a continuous-record gaging station

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at low-flow partial-record stations during water year 1985

Discharge measurements made at low-flow partial-record stations during water year 1985						
Station No.	Station name	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER--Continued						
	Butcher Pen Creek near Jacksonville	Lat 30°15'34", long 81°44'29", in NE¼ sec.21, T.3 S., R.26 E., Duval County, Hydrologic Unit 03080103, at bridge on Blanding Boulevard in Jacksonville.			10-31-84	1.06
02246360	Cedar River near Marietta	Lat 30°17'55", long 81°45'20", in land grant 39, T.2 S., R.25 E., Duval County, Hydrologic Unit 03080103, at bridge on State Highway 213, and 2.5 mi southeast of Marietta.		1964	10-31-84 02-26-85 05-28-85	27.4 5.87 3.32
*02246450	North Fork Wills Branch near Marietta	Lat 30°17'27", long 81°45'56", in SW¼ sec.40, T.2 S., R.25 E., Duval County, Hydrologic Unit 03080103, at bridge on Old Middleburg Road in Jacksonville.	7.04	1965-67	10-31-84 02-26-85 05-30-85	24.3 3.50 1.34
02246455	South Fork Wills Branch near Marietta	Lat 30°17'05", long 81°46'05", in NE¼ sec.35, T.2 S., R.25 E., Duval County, Hydrologic Unit 03080103, at culvert on State Highway 213, 0.7 mi upstream from mouth, and 2.5 mi southeast of Marietta.		1964 1977	10-31-84 02-26-85 05-30-85	7.70 1.60 .38
*02246522	Red Bay Branch Tributary at Jacksonville	Lat 30°20'40", long 81°35'22", in SW¼ sec.10, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, on right of drainage ditch 35 ft upstream from culvert on Rogero Road, 200 ft south of Pine Summit Drive, in Arlington area of Jacksonville.	0.57	1975-85	11-01-84 02-26-85 05-31-85 09-16-85	1.02 .37 .20 4.00
*02246550	Pottsburg Creek near Jacksonville	Lat 30°15'50", long 81°35'25", in land grant 56, T.3 S., R.27 E., Duval County, Hydrologic Unit 03080103, at bridge on Bowden Road, 700 ft downstream from Bennet Branch, 5.7 mi upstream from Silversmith Creek, and 6.4 mi southeast of Union Station in Jacksonville.	9.89	1965-67 1968-85	11-01-84 02-25-85 05-30-85	12.8 5.13 1.48
	Trout River near Dinsmore	Lat 30°24'25", long 81°50'33", NE¼ sec 19., T.1 S., R.26 E., Duval County, Hydrological Unit 03080103, at bridge on Garden Street, 16.3 mi upstream from mouth, 4.8 mi southeast of Dinsmore.		1977-81	11-01-84 02-27-85 05-31-85	5.35 .60 .20
02246600	Trout River at Dinsmore	Lat 30°25'51", long 81°46'07", in land grant 41, T.1 S., R.25 E., Duval County, Hydrological Unit 03080103, at bridge on Kings Road, at Dinsmore and 11 mi upstream from mouth.	20.9	1962-85	11-01-84 02-27-85	42.7 3.52
02246602	Little Trout River at Dinsmore	Lat 30°26'23", long 81°46'21", in land grant 41, T.1 S., R.25 E., Duval County, Hydrologic Unit 03080103, at bridge on Kings Road, 0.7 mi north of Dinsmore.		1964-67	11-01-84 02-27-85 05-31-85	.37 .29 .00
02246645	Sixmile Creek near Picketville	Lat 30°21'46", long 81°46'24", in NE¼ sec.2, T.2 S., R.25 E., Duval County, Hydrologic Unit 03080103, at bridge on Imeson Road, 2.7 mi upstream from mouth, and 1.0 mi west of Picketville.		1974-75	11-01-84 02-27-85 05-30-85	10.3 2.15 .13

* Also a crest-stage partial-record station

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1985

Discharge measurements made at low-flow partial-record stations during water year 1985					Measurements	
Station No.	Station name	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER--Continued						
*02246650	Sixmile Creek near Marietta	Lat 30°22'14", long 81°44'47", in land grant 38, T.1 S., R.26 E., Duval County, Hydrologic Unit 03080103 at bridge on Kings Road, 0.4 mi upstream from Ribault River, 0.9 mi upstream from Little Sixmile Creek, and 4.3 mi northeast of Marietta.	19.0	1965-67	11-01-84 02-27-85 05-30-85	7.56 2.36 .72
*02246700	Little Sixmile Creek near Marietta	Lat 30°21'51", long 81°44'16", in land grant 53, T.2 S., R.26 E., Duval County, Hydrologic Unit 03080103, at bridge on Kings Road, 0.6 mi upstream from mouth, and 4.3 mi northeast of Marietta.	3.35	1965-81	11-01-84 02-27-85 05-30-85	.00 4.45 3.60
02246750	Cedar Creek near Panama Park	Lat 30°27'30", long 81°40'49", in SW¼ sec.35, T.1 N., R.26 E., Duval County, Hydrologic Unit 03080103, 1.2 mi upstream from Pickett Branch, 3.6 mi upstream from Broward River and confluence of Cedar Creek and Little Cedar Creek, 5.2 mi north of Panama Park and 9.1 mi north of Union Station in Jacksonville.	12.0	1964-68	02-27-85 05-29-85	.00 .00
02246754	Pickett Branch near Eastport	Lat 30°27'59", long 81°40'05", in NE¼ sec.35, T.1 N., R.26 E., Duval County, Hydrologic Unit 03080103, at bridge on State Highway 111, 5.3 mi northwest of Eastport.		1964	10-31-84 02-27-85	.00 .82
02246760	Little Cedar Creek near Eastport	Lat 30°28'05", long 81°39'23", in land grant 38, T.1 N., R.26 E., Duval County, Hydrologic Unit 03080103, at bridge on State Highway 111, 5 miles northwest of Eastport.		1964	10-31-84 02-27-85 05-29-85	.22 .73 .00
*02246800	Dunn Creek near Eastport	Lat 30°28'15", long 81°36'07", in land grant 37, T.1 N., R.27 E., Duval County, Hydrologic Unit 03080103, at bridge on New Berlin Road, 3.7 mi upstream from Rushing Branch, and 3.3 mi north of Eastport.	4.86	1965-67 1968	11-01-84 02-27-85 05-31-85	14.2 5.05 21.4
02246807	Caney Branch near Eastport	Lat 30°27'43", long 81°34'53", in land grant 37, T.1 N., R.27 E., Duval County, Hydrologic Unit 03080103, at bridge on New Berlin Road, 3.2 mi north of Eastport, FL.		1964	11-01-84 02-27-85	.00 2.27
02246810	Rushing Branch near Eastport	Lat 30°27'45", long 81°34'03", in NE¼ sec.35, T.1 N., R.27 E., Duval County, Hydrologic Unit 03080103, at culvert on New Berlin Road and 3.6 mi northeast of Eastport.		1965	11-01-84 02-27-85	.00 .22
COASTAL AREA BETWEEN PONCE-DE LEON INLET AND SEBASTIAN INLET						
02248300	Little Cow Creek near Edgewater	Lat 28°56'29", long 81°56'30", in SE¼ sec.8, T.18 S., R.34 E., Volusia County, Hydrologic Unit 03080202, at bridge on county road, 4.0 mi southwest of Edgewater.		1965, 1984	10-01-84	34

* Also a crest-stage partial-record station

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1985

Discharge measurements made at miscellaneous sites during water year 1985					Measurements	
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER						
282025080560100 Taylor Creek below S-164	St. Johns River	Lat 28°20'25", long 80°56'01", in NE¼ sec.5, T.25 S., R.34 E., Osceola County, Hydrologic Unit 03080101, at downstream side of control structure 164 on Taylor Creek, 5 mi upstream from mouth, and 12.5 mi west of Cocoa.	52	1982,1984	9-06-85	316
02234010 St. Johns River	Atlantic Ocean	Lat 28°47'37", long 81°03'29", in SE¼ sec.31, T.19 S., R.33 E., Volusia County, Hydrologic Unit 03080101, at abandoned railroad bridge, 0.7 mi southeast of Osceola.	2,092	1943,1966 1984	12-03-84 4-04-85	1,550 595
02234600 Wekiva Springs	Wekiva River	Lat 28°42'43", long 81°27'36", in NE¼ sec.36, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080101, at head of Wekiva River, 4.1 mi northeast of Apopka, FL.		1932-33 1936 1945-46 1956 1960-62 1969-80+ 1981-84	5-09-85 9-20-85	60 66
02234610 Rock Springs	Rock Springs Run	Lat 28°45'20", long 81°29'58", in NE¼ sec.15, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080101, at head of Rock Springs Run, 5.7 mi north of Apopka.		1931-33 1935-36 1945-46 1956 1960-62 1965-67 1969-84	5-09-85 9-18-85	55 53
02234650 Miami Springs	Unnamed Creek	Lat 28°42'36", long 81°26'34", in NE¼ sec.31, T.20 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, 1,100 ft upstream from Wekiva River, and 5.9 mi west of Longwood.		1945,1960 1973-84	5-08-85 9-20-85	4.2 4.9
02234991 Sanlando Springs	Little Wekiva River	Lat 28°41'19", long 81°23'45", in SE¼ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at north outlet of spring pool, 0.2 mi upstream from Little Wekiva River, and 3.0 mi west of Longwood.		1942,1946 1954,1956 1958,1961 1972-84	5-08-85 9-19-85	10 25
02234996 Palm Springs	Little Wekiva River	Lat 28°41'27", long 81°23'34", in NW¼ sec.2, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, 200 ft upstream from Little Wekiva River, and 2.9 mi west of Longwood.		1942,1954 1956,1961 1972-84	5-08-85 9-19-85	6.6 7.0
02234997 Starbuck Spring	Little Wekiva River	Lat 28°41'48", long 81°23'28", in NW¼ sec.2, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, at edge of Little Wekiva River, and 2.7 mi west of Longwood.		1944,1961 1972-84	5-08-85 9-19-85	12 14

+ Operated as a periodic station

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1985

Discharge measurements made at miscellaneous sites during water year 1985					Measurements	
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER--Continued						
02235250 Seminole Springs	Seminole Creek	Lat 28°50'44", long 81°31'22", in SW $\frac{1}{4}$ sec.9, T.19 S., R.28 E., Lake County, Hydrologic Unit 03080101, 0.2 mi below head of Seminole Springs, and 3.5 mi northeast of Sorrento.		1931-33 1946,1974	5-07-85	31
02235255 Messant Springs ^{a/}	Seminole Creek	Lat 28°51'21", long 81°29'56", in Theresa Rodriguez Grant, T.19 S., R.28 E., Lake County, Hydrologic Unit 03080101, at head of Messant Spring Run, 5.1 mi northeast of Sorrento.		1946,1961 1972 1981-83	5-07-85	14
02236095 Alexander Springs	St. Johns River	Lat 29°04'50", long 81°34'30", in Levy Land Grant, T.16 S., R.27 E., Lake County, Hydrologic Unit 03080101, at head of Alexander Springs Creek, 1.5 mi upstream from bridge on State Highway 445, and 6.5 mi southwest of Astor.		1931,1933 1935-36 1946,1956 1961 1966-67 1969,1972 1977 1981-84	5-08-85 5-10-85 9-23-85	106 105 103
02236110 Ponce DeLeon Springs	Spring Garden Creek	Lat 29°08'02", long 81°21'47", in land grant 42, T.16 S., R.29 E., Volusia County, Hydrologic Unit 03080101, at weir outlets to Spring Garden Lake, 1.8 mi upstream from Deep Creek, and 8.1 mi northwest of De Land.		1929,1932 1946-47 1956,1961 1965-80+ 1981-84	5-08-85 9-23-85	26 30
02236130 Juniper Springs	Lake George	Lat 29°11'01", long 81°42'45", in SE $\frac{1}{4}$ sec.17, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, at head of Juniper Creek, 4.3 mi west of the intersection of State Highways 19 and 40, 9.3 mi upstream from Lake George, and 26.1 mi east of Ocala.		1929 1935-37 1946,1956 1961,1972 1981-84	5-10-85 9-24-85	9.6 9.8
02236132 Fern Hammock Springs ^{b/}	Juniper Creek	Lat 29°11'00", long 81°42'29", in SE $\frac{1}{4}$ sec.17, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, 0.4 mi downstream from Juniper Springs, 9.0 mi upstream from Lake George, and 26.3 mi east of Ocala.		1935-37 1946,1956 1961,1972 1981-84	5-10-85 9-24-85	14 14
02236147 Sweetwater Springs	Juniper Creek	Lat 29°13'07" long 81°39'36", in NE $\frac{1}{4}$ of F. M. Arredondo Grant, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, near left bank of Juniper Creek, 0.5 mi upstream from State Highway 19, and 7.2 mi north-west of Astor Park.		1981-84	5-10-85 9-20-85	12 12
02236160 Silver Glen Springs	Lake George	Lat 29°14'40", long 81°38'34", in SE $\frac{1}{4}$ sec.25, T.14 S., R.26 E., Marion County, Hydrologic Unit 03080101, 0.5 mi upstream from Lake George, and 9.1 mi north-west of Astor.		1931-33 1935-36 1946,1956 1961,1972 1981-82 1984	5-09-85 9-19-85	114 108

^a Formerly published as Messinger Springs^{*} Operated as a periodic station^b Also known as "The Aquarium"

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1985

Discharge measurements made at miscellaneous sites during water year 1985					Measurements	
Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft³/s)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER--Continued						
02236200 Beecher Springs	St. Johns River	Lat 29°27'00", long 81°38'50", in SW¼ sec.14, T.12 S., R.26 E., Putnam County, Hydrologic Unit 03080101, at head of Beecher Springs Run, 1.5 mi north of Fruitland.		1961	1-25-85	9.9
02236205 Salt Springs	Lake George	Lat 29°21'00", long 81°43'40", in sec.42, Joseph M. Hernandez Grant, T.13 S., R.26 E., Marion County, Hydrologic Unit 03080101, 4.0 mi upstream from Lake George, and 10.9 mi east of Eureka.		1929-33 1935-36 1946,1956 1961 1966-67 1972 1981-84	5-09-85 9-20-84 9-24-85	85 70 78
OKLAWAHA RIVER BASIN						
02237322 Bugg Spring	Helena Run	Lat 28°45'09", long 81°54'06", in NW¼ sec.15, T.20 S., R.24 E., Lake County, Hydrologic Unit 03080102, 0.6 mi northwest of Okahumpka, and about 1 mi above Helena Run.		1943,1946 1956,1961 1967	2-07-85	10
ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER						
Strawberry Creek	Arlington River	Lat 30°19'57", long 81°33'36", in NE¼ sec.14, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at culvert on Mill Creek Road in Jacksonville.			2-26-85 5-29-85	1.13 .64
Strawberry Creek	Arlington River	Lat 30°20'15", long 81°33'37", in SW¼ sec.12, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at culvert along Lone Star Road in Jacksonville.			5-29-85	.63
Strawberry Creek	Arlington River	Lat 30°19'45", long 81°33'44", in SW¼ sec.14, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at 947 Brookmont Road in Jacksonville.			5-29-85	.81
Strawberry Creek	Arlington River	Lat 30°19'35", long 81°34'14", in SW¼ sec.14, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at bridge on State Road 10 in Jacksonville.			5-29-85	.26
Strawberry Creek	Arlington River	Lat 30°19'27", long 81°34'15", in SW¼ sec.14, T.1 S., R.27 E., Duval County, Hydrologic Unit 03080103, at the end of Bowlan Street in the Regency area of Jacksonville.			5-29-85	2.19
Silversmith Creek	Arlington River	Lat 30°18'30", long 81°34'45", in SW¼ sec.50, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at bridge on Arlington Road in Arlington area of Jacksonville.			2-26-85 5-29-85	.76 .59
Big Pottsburg Creek	Arlington River	Lat 30°15'27", long 81°34'53", in SW¼ sec.51, T.3 S., R.27 E., Duval County, Hydrologic Unit 03080103, at bridge on Belfort Road in Jacksonville.			10-31-84 2-26-85 5-30-85	12.5 4.81 .63

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1985

Discharge measurements made at miscellaneous sites during water year 1985					Measurements	
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER--Continued						
Pottsburg Creek	Arlington River	Lat 30°18'46", long 81°35'45", in NW¼ sec.48, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at bridge on Atlantic Boulevard in Jacksonville.			11-28-84	a/ -47.8
					11-28-84	325
					11-28-84	73.0
					11-28-84	336
Pottsburg Creek	Arlington River	Lat 30°17'37", long 81°36'18", in NE¼ sec.52, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at culvert in shopping center on Beach Boulevard in Jacksonville.			11-28-84	.69
					12-05-84	.22
Unnamed Tributary	Little Pottsburg Creek	Lat 30°17'38", long 81°36'35", in NW¼ sec.52, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at culvert on Spring Glen Road in Jacksonville.			11-28-84	1.61
Unnamed Tributary	Little Pottsburg Creek	Lat 30°17'15", long 81°36'53", in NW¼ sec.32, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, 50 ft upstream from Little Pottsburg Creek and Tributary on Damascus Road in Jacksonville.			11-28-84	.13
					12-05-84	.49
Unnamed Tributary	Little Pottsburg Creek	Lat 30°17'53", long 81°37'05", in NW¼ sec.32, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at Koger Center walkway bridge in Jacksonville.			11-28-84	.49
					12-05-84	.70
Unnamed Tributary	Little Pottsburg Creek	Lat 30°17'15", long 81°37'25", in NW¼ sec.32, T.2 S., R.27 E., Duval County, Hydrologic Unit 03080103, at culvert on Cascade Road in Jacksonville.			11-28-84	.06
					12-05-84	.33
Little Cedar Creek	Cedar Creek	Lat 30°28'05", long 81°39'23", in NE¼ sec.38, T.1 N., R.26 E., Duval County, Hydrologic unit 03080103, at culvert on Airport Road in Jacksonville.			8-20-85	.16
Little Cedar Creek	Cedar Creek	Lat 30°29'40", long 81°38'33", in SW¼ sec.19, T.1 N., R.26 E., Duval County, Hydrologic Unit 03080103, at culvert on Interstate 95 and south of Airport Road in Jacksonville.			8-20-85	.00
Little Cedar Creek	Cedar Creek	Lat 30°29'12", long 81°39'06", in SE¼ sec.24, T.1 N., R.26 E., Duval County, Hydrologic Unit 03080103, at culvert on Ranch Road in Jacksonville.			8-20-85	.05
Little Cedar Creek	Cedar Creek	Lat 30°28'05", long 81°39'23", in NE¼ sec.38, T.1 N., R.26 E., Duval County, Hydrological Unit 03080103, at Alvarez Bridge on Duval Road in Jacksonville.			8-20-85	.16
Fishing Creek	Ortega River	Lat 30°14'40", long 81°43'57", in NE¼ sec.18, T.3 S., R.26 E., Duval County, Hydrologic Unit 03080103, on Wesconnett Avenue in Jacksonville.			10-31-84	5.09
					2-26-85	2.91
					5-29-85	1.79

a Negative discharge

ANNUAL MAXIMUM FLOOD-PROFILE DATA

The following table contains the annual maximum stream elevation at selected gaging stations in the St. Johns River basin during the calendar year 1985.

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

Miles above mouth was measured along low-water channel on topographic maps.

The years given in the period of record represent calendar years.

Annual maximum flood-profile data during calendar year 1985							
Station No.	Station name	Location	Miles above mouth	Drainage area (mi ²)	Period of record (calendar) years	Annual Maximum	
						Date	Elevation (ft)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER							
02231460	St. Johns River crest-stage gage No. 1 near Micco, FL	Lat 27°54'42", long 80°46'13", in SW¼ sec.31, T.29 S., R.36 E., Brevard County, Hydrologic Unit 03080101, on right bank at cabbage palm tree, 10 ft west of centerline of dike, at Sotille Ranch, 400 ft north of 90° turn in dike, and 16.6 mi west of Micco. Datum of gage is National Geodetic Vertical Datum of 1929.	276	616	1954-85	1985	<21.53
02231470	St. Johns River crest-stage gage No. 2 near Malabar	Lat 28°00'47", long 80°46'13", in NE¼ sec.36, T.28 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on right bank at palm tree 250 ft west of dike near residence of A. T. Anderson, 12.5 mi west of Malabar. Datum of gage is National Geodetic Vertical Datum of 1929.	269	674	1953-85	1985	<18.21
02231800	St. Johns River crest-stage gage No. 3 near Melbourne	Lat 28°03'27", long 80°46'51", in SW¼ sec.12, T.28 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on right bank at palm tree west of Melbourne-Tillman Drainage District dike, 75 ft south of old road fill, 10.9 mi southwest of Melbourne. Datum of gage is National Geodetic Vertical Datum of 1929.	265	953	1953-85	1985	<19.46
02232160	St. Johns River crest-stage gage No. 5 near Deer Park	Lat 28°12'35", long 80°51'25", in NE¼ sec.19, T.26 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on left bank, on east side of dike at Deseret Farms of Florida, Inc., 8.6 mi north of Deer Park, Osceola County. Datum of gage is National Geodetic Vertical Datum of 1929.	248	1,100	1953-85	1985	<14.35

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

ANNUAL MAXIMUM FLOOD-PROFILE DATA

Annual maximum flood-profile data during calendar year 1985

Annual Maximum Flood-profile data during calendar year 1985							Annual Maximum	
Station No.	Station name	Location	Miles above mouth	Drainage area (mi ²)	Period of record (calendar) years	Date	Elevation (ft)	
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER--Continued								
02232240	St. Johns River crest-stage gage No. 6A at Lake Winder, near Cocoa	Lat 28°16'02", long 80°51'28", in NE¼ sec.31, T.25 S., R.35 E., Brevard County, Hydrologic Unit 03080101, at palm tree, on north side of drainage ditch near northwest shore of Lake Winder, 9.8 mi southwest of Cocoa. Datum of gage is National Geodetic Vertical Datum of 1929.	d/ 246 e/ 244 243	1,180	1961-85	1985	<16.26	
02232260	St. Johns River crest-stage gage No. 7 near Cocoa	Lat 28°17'20", long 80°49'12", in SW¼ sec.22, T.25 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on left bank at palm tree between Lake Winder and Lake Poinsett, 7.2 mi southwest of Cocoa. Datum of gage is unknown.	241	1,209	1953-85	1985	<14.60	
02232430	St. Johns River crest-stage gage No. 8 near Christmas	Lat 28°29'21", long 80°52'55", in NW¼ sec.13, T.23 S., R.34 E., Orange County, Hydrologic Unit 03080101, on left bank at cabbage palm tree, south of power line, at Tootoosahatchee Game Pre- serve 8.8 mi southeast of Christmas. Datum of gage is National Geodetic Vertical Datum of 1929.	217	1,385	1953-85	1985	<11.36	
02232700	St. Johns River crest-stage gage No. 9 near Christmas	Lat 28°36'36", long 80°57'54", in NE¼ sec.1, T.22 S., R.33 E., Brevard County, Hydrologic Unit 03080101, on right bank on west side of cabbage palm tree, 15 ft west of centerline of sand road on Kyzer Ranch, 6.0 mi northeast of Christmas. Datum of gage is National Geodetic Vertical Datum of 1929.	201	1,635	1953-85	1985	<8.19	

d/ Inlet of lake

e/ Outlet of lake

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

MISCELLANEOUS SURFACE WATER QUALITY RECORDS
OCTOBER 1984 TO SEPTEMBER 1985

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The following data were collected in conjunction with an investigative project in Seminole County.

02234010 ST. JOHNS RIVER AT OSCEOLA, FL

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	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)
DEC 03...	1115	1530	970	7.9	20.0	120	8.5	42	17	130	5.6
APR 04...	1130	580	1380	9.0	21.0	80	9.4	65	26	200	9.8

DATE	ALKA- LITY LAB (MG/L) AS CACO3 (90410)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	SILICA, DIS- SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) AS (70300)	NITRO- GEN, NITRITE TOTAL (MG/L) AS N (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)
DEC 03...	72	45	240	.20	4.8	590	.010	--	.20	--
APR 04...	82	94	370	.20	.4	922	--	<.010	--	<.01

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N (00623)	PHOS- PHORUS, TOTAL (MG/L) AS P (00665)	PHOS- PHORUS, DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS, ORTHO, TOTAL (MG/L) AS P (70507)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L) AS P (00671)	STRON- TIUM, DIS- SOLVED (UG/L) AS SR (01080)	CARBON, ORGANIC TOTAL (MG/L) AS C (00680)
DEC 03...	.040	--	1.1	--	.040	--	.020	--	1400	23
APR 04...	--	.040	--	1.6	--	.060	--	.040	2000	25

MISCELLANEOUS SURFACE WATER QUALITY RECORDS
OCTOBER 1984 TO SEPTEMBER 1985

The following data were collected in conjunction with discharge measurements of springs and spring runs.

02235255 MESSANT SPRING NEAR SORRENTO, FL

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAY 07...	1010	14	670	7.8	25.0	--

02236110 PONCE DE LEON SPRINGS NEAR DE LAND, FL

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	TEMPER- ATURE (DEG C) (00010)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)
MAY 08...	1035	26	570	22.5	92
SEP 23...	1230	30	--	23.0	150

02236130 JUNIPER SPRINGS NEAR OCALA, FL

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAY 10...	1125	9.6	119	7.8	22.0	7.0

02236160 SILVER GLEN SPRINGS NEAR ASTOR, FL

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
JAN 23...	1325	91	1980	7.2	23.0	4.8
MAY 09...	1510	114	2050	7.3	23.0	4.8
SEP 19...	1130	108	1960	6.8	23.5	4.3

02236205 SALT SPRINGS NEAR EUREKA, FL

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAY 09...	0945	85	5550	8.2	23.5	3.2
SEP 20...	1500	70	445	6.4	23.0	5.9

ELEVATION AND WATER QUALITY OF LAKES

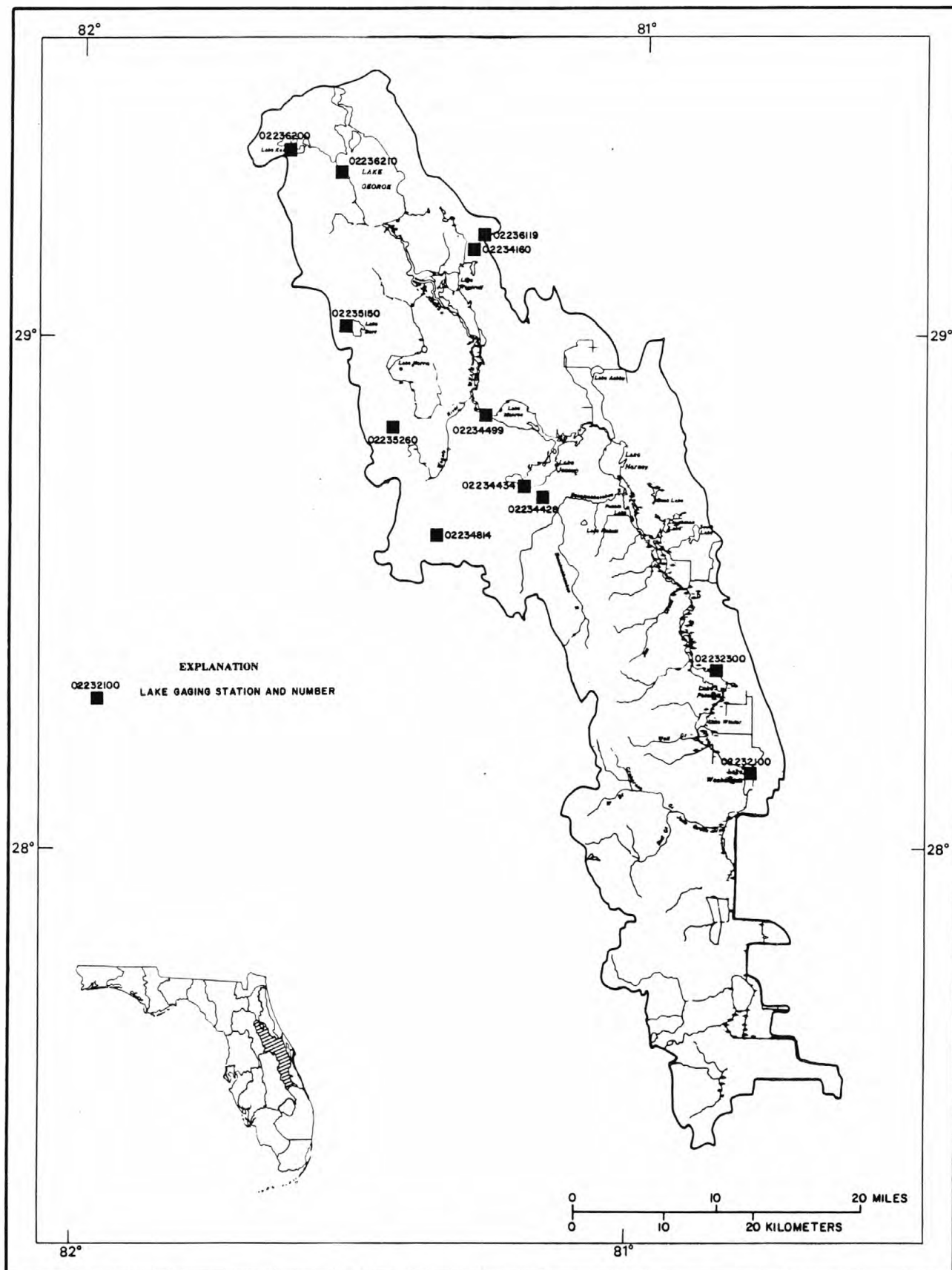


Figure 14. Location of lake gaging stations in the St. Johns River basin above the Oklawaha River.

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232100 LAKE WASHINGTON NEAR EAU GALLIE, FL

LOCATION.--Lat 28°09'00", long 80°44'21", in NW¼ sec.9, T.27 S., R.36 E., Brevard County, Hydrologic Unit 03080101, on east shore of lake, at Melbourne Waterworks intake crib, 6.5 mi west of Eau Gallie.

SURFACE AREA.--2,665 acres (4.16 mi²).

DRAINAGE AREA.--1,025 mi².

PERIOD OF RECORD.--July 1942 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WRD FL 1966: Drainage area. WDR FL-81-1: Surface area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 30, 1975, at several sites within 1,100 ft southeast at following datums: July 24, 1942, to May 13, 1956, 12.39 ft higher; and May 14, 1956, to May 29, 1975, 10.39 ft higher.

REMARKS.--During November 1961, a semipermanent dam was built across the low-water channel of the St. Johns River about 0.5 mi downstream from the lake outlet. The crest of the dam was observed to be about 12.0 ft in 1961, about 13.4 ft in 1968, and about 9.5 ft in 1975. Washouts occurred at times and repairs to the dam were made by the addition of concrete bags. A steel piling dam at the lake outlet was completed on Feb. 1, 1976, with a permanent crest at 13.5 ft, and partially regulates lake elevation. Diversions are made from lake by City of Melbourne for municipal water supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 20.39 ft, Oct. 1, 1960; minimum daily, 9.88 ft, May 28, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 17.64 ft, Sept. 30, occurred on rise preceding crest of Oct. 7, 1985; minimum daily, 13.23 ft, June 11.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.15	14.43	14.87	14.62	13.92	13.75	13.62	13.81	13.48	13.71	14.18	14.85
2	15.14	14.39	14.89	14.59	13.92	13.74	13.62	13.80	13.45	13.70	14.20	14.91
3	15.14	14.39	14.91	14.57	13.88	13.72	13.62	13.80	13.44	13.69	14.22	14.93
4	15.15	14.43	14.91	14.56	13.85	13.71	13.62	13.76	13.40	13.68	14.23	14.96
5	15.16	14.44	14.93	14.51	13.86	13.71	13.62	13.72	13.37	13.67	14.22	15.02
6	15.16	14.40	14.95	14.48	13.85	13.68	13.62	13.71	13.35	13.67	14.22	15.13
7	15.16	14.34	14.91	14.46	13.84	13.62	13.65	13.70	13.32	13.66	14.22	15.25
8	15.16	14.31	14.92	14.44	13.82	13.66	13.64	13.69	13.30	13.65	14.22	15.35
9	15.16	14.29	14.92	14.41	13.83	13.67	13.60	13.66	13.27	13.65	14.23	15.45
10	15.16	14.26	14.92	14.39	13.85	13.66	13.60	13.64	13.24	13.63	14.25	15.54
11	15.16	14.21	14.92	14.37	13.87	13.65	13.60	13.62	13.23	13.62	14.24	15.61
12	15.17	14.15	14.92	14.31	13.88	13.66	13.59	13.60	13.27	13.61	14.24	15.66
13	15.17	14.09	14.92	14.28	13.84	13.64	13.69	13.59	13.37	13.69	14.25	15.69
14	15.16	14.04	14.91	14.28	13.82	13.64	13.82	13.57	13.41	13.69	14.29	15.72
15	15.15	14.00	14.90	14.25	13.82	13.62	13.93	13.54	13.42	13.69	14.34	15.76
16	15.12	13.96	14.90	14.23	13.82	13.63	13.98	13.57	13.48	13.71	14.42	15.77
17	15.10	13.91	14.89	14.23	13.81	13.64	13.99	13.68	13.53	13.73	14.47	15.85
18	15.07	13.89	14.88	14.20	13.79	13.60	13.99	13.62	13.54	13.75	14.50	15.99
19	15.04	13.88	14.87	14.17	13.79	13.60	14.00	13.59	13.54	13.85	14.52	16.10
20	15.01	13.85	14.86	14.14	13.78	13.60	14.00	13.58	13.54	13.96	14.55	16.20
21	14.99	13.86	14.85	14.09	13.76	13.61	13.99	13.56	13.55	13.96	14.58	16.41
22	14.96	14.02	14.84	14.08	13.77	13.77	13.99	13.56	13.55	14.02	14.62	16.52
23	14.91	14.34	14.82	14.06	13.77	13.82	13.98	13.57	13.54	14.04	14.65	16.64
24	14.85	14.57	14.80	14.03	13.77	13.75	13.98	13.56	13.52	14.05	14.66	16.80
25	14.78	14.67	14.77	14.03	13.76	13.71	13.96	13.57	13.55	14.08	14.67	16.97
26	14.77	14.72	14.75	13.97	13.76	13.69	13.95	13.55	13.60	14.08	14.67	17.15
27	14.75	14.76	14.73	13.96	13.76	13.68	13.92	13.53	13.62	14.10	14.70	17.27
28	14.69	14.80	14.71	13.97	13.74	13.67	13.90	13.53	13.63	14.11	14.70	17.40
29	14.64	14.81	14.69	13.93	---	13.66	13.87	13.52	13.64	14.12	14.72	17.58
30	14.57	14.83	14.66	13.92	---	13.65	13.82	13.51	13.65	14.13	14.74	17.64
31	14.49	---	14.64	13.92	---	13.63	---	13.49	---	14.15	14.78	---
MEAN	15.00	14.30	14.85	14.24	13.82	13.67	13.81	13.62	13.46	13.83	14.44	16.00
MAX	15.17	14.83	14.95	14.62	13.92	13.82	14.00	13.81	13.65	14.15	14.78	17.64
MIN	14.49	13.85	14.64	13.92	13.74	13.60	13.59	13.49	13.23	13.61	14.18	14.85
CAL YR 1984 MEAN	14.69			MAX	15.86	MIN	13.58					
WTR YR 1985 MEAN	14.26			MAX	17.64	MIN	13.23					

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232300 LAKE POINSETT NEAR COCOA, FL

LOCATION.--Lat 28°22'10", long 80°52'22", in SE¼ sec.25, T.24 S., R.34 E., Brevard County, Hydrologic Unit 03080101, near right bank of St. Johns River on downstream side of bridge on State Highway 520, 0.7 mi downstream from outlet of Lake Poinsett, and 8.8 mi west of Cocoa.

SURFACE AREA.--4,293 acres (6.71 mi²).

DRAINAGE AREA.--1,272 mi².

PERIOD OF RECORD.--November 1941 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office. Since October 1963, records for St. Johns River near Cocoa (station 02232400).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 23, 1943, nonrecording gage on northeast side of lake at Poinsett Lodge at datum 9.34 ft higher and Feb. 23, 1943, to Sept. 30, 1963, at datum 5.06 ft higher.

REMARKS.--Lake is one of the St. Johns River chain of lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 17.55 ft, Oct. 11, 1953, at site then in use; minimum daily, 7.99 ft, June 18, 1945, at site then in use.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 15.42 ft, Sept. 30, occurred on rise preceding crest of Oct. 8, 1985; minimum daily, 9.52 ft, June 12, 1985.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.75	13.10	13.09	12.76	11.96	10.96	10.60	10.82	9.87	10.66	11.37	13.24
2	13.71	13.05	13.10	12.73	11.92	10.91	10.56	10.78	9.85	10.73	11.36	13.36
3	13.69	13.08	13.09	12.71	11.86	10.88	10.51	10.71	9.81	10.80	11.39	13.46
4	13.68	13.06	13.08	12.63	11.80	10.90	10.53	10.67	9.80	10.86	11.44	13.56
5	13.66	13.01	13.09	12.59	11.80	10.82	10.52	10.66	9.77	10.88	11.50	13.66
6	13.62	12.92	13.04	12.61	11.74	10.73	10.41	10.60	9.72	10.87	11.55	13.71
7	13.61	12.85	12.98	12.60	11.69	10.74	10.42	10.58	9.69	10.87	11.63	13.75
8	13.59	12.83	13.00	12.56	11.60	10.68	10.37	10.54	9.65	10.85	11.72	13.81
9	13.57	12.81	13.01	12.55	11.61	10.64	10.29	10.50	9.60	10.82	11.79	13.83
10	13.53	12.80	13.00	12.52	11.63	10.58	10.35	10.42	9.55	10.81	11.86	13.87
11	13.51	12.76	12.99	12.50	11.65	10.57	10.39	10.36	9.53	10.78	11.92	13.90
12	13.52	12.69	12.98	12.39	11.42	10.51	10.32	10.30	9.52	10.79	11.96	13.93
13	13.51	12.63	12.97	12.39	11.47	10.49	10.40	10.25	9.52	10.83	12.00	13.94
14	13.50	12.62	12.96	12.40	11.48	10.43	10.63	10.20	9.54	10.84	12.08	13.96
15	13.49	12.61	12.95	12.37	11.45	10.40	10.86	10.16	9.58	10.86	12.14	13.99
16	13.48	12.58	12.94	12.37	11.42	10.38	11.02	10.15	9.59	10.88	12.22	14.01
17	13.45	12.52	12.93	12.36	11.40	10.30	11.13	9.95	9.61	10.89	12.27	14.08
18	13.43	12.51	12.92	12.31	11.37	10.20	11.20	9.98	9.61	10.91	12.28	14.23
19	13.41	12.47	12.91	12.29	11.33	10.25	11.22	10.00	9.63	10.92	12.31	14.38
20	13.40	12.39	12.91	12.25	11.27	10.28	11.21	10.02	9.86	10.95	12.38	14.59
21	13.39	12.39	12.90	12.13	11.30	10.40	11.22	10.09	10.00	11.00	12.48	14.84
22	13.37	12.39	12.89	12.14	11.28	10.67	11.24	10.10	10.15	11.09	12.55	14.99
23	13.34	12.55	12.87	12.14	11.23	10.80	11.18	10.08	10.20	11.20	12.61	15.11
24	13.31	12.79	12.86	12.15	11.21	10.86	11.14	10.06	10.21	11.18	12.65	15.18
25	13.27	12.94	12.84	12.11	11.14	10.90	11.10	10.07	10.30	11.29	12.72	15.22
26	13.28	13.02	12.84	12.06	11.09	10.90	11.06	10.07	10.37	11.33	12.75	15.23
27	13.27	13.06	12.83	12.05	11.04	10.89	11.01	10.07	10.42	11.34	12.84	15.29
28	13.24	13.07	12.82	12.04	10.98	10.83	10.92	10.06	10.47	11.35	12.92	15.33
29	13.20	13.07	12.80	12.00	---	10.81	10.86	10.03	10.52	11.36	12.99	15.38
30	13.16	13.07	12.78	12.00	---	10.77	10.87	10.00	10.56	11.36	13.00	15.42
31	13.13	---	12.77	11.98	---	10.68	---	9.96	---	11.37	13.12	---
MEAN	13.45	12.79	12.94	12.34	11.47	10.65	10.78	10.27	9.88	10.99	12.19	14.31
MAX	13.75	13.10	13.10	12.76	11.96	10.96	11.24	10.82	10.56	11.37	13.12	15.42
MIN	13.13	12.39	12.77	11.98	10.98	10.20	10.29	9.95	9.52	10.66	11.36	13.24
CAL YR 1984 MEAN	13.29			MAX	14.43	MIN	12.21					
WTR YR 1985 MEAN	11.84			MAX	15.42	MIN	9.52					

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234160 LAKE WINNEMISSETT NEAR DE LAND, FL

LOCATION.--Lat 29°01'10", long 81°15'06", in SW¼ sec.13, T.17 S., R.30 E., Volusia County, Hydrologic Unit 03080101, on southwest shore of lake, on private pier, 2.9 mi east of De Land.

SURFACE AREA.---169 acres (0.26 mi²).

DRAINAGE AREA.--1.10 mi².

PERIOD OF RECORD.--March 1965 to current year.

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

REMARKS.--Lake is landlocked except possibly at high elevations.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 61.01 ft, Feb. 23, 1984; minimum daily, 53.93 ft, Dec. 25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 60.66 ft, Oct. 1, occurred on recession following crest of Sept. 28,29, 1984; minimum daily, 57.65 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.66	60.34	60.06	59.78	59.40	59.10	58.75	58.38	57.89	58.02	58.13	59.19
2	60.63	60.33	60.05	59.77	59.39	59.09	58.73	58.35	57.86	58.00	58.15	59.21
3	60.61	60.32	60.05	59.77	59.39	59.07	58.71	58.33	57.84	57.99	58.16	59.20
4	60.60	60.31	60.04	59.79	59.38	59.06	58.68	58.32	57.82	57.97	58.38	59.22
5	60.58	60.30	60.04	59.76	59.37	59.05	58.66	58.32	57.80	57.96	58.38	59.24
6	60.57	60.27	60.04	59.73	59.37	59.04	58.66	58.30	57.77	58.06	58.42	59.28
7	60.56	60.23	60.01	59.72	59.36	59.02	58.68	58.27	57.75	58.05	58.55	59.35
8	60.55	60.20	59.99	59.71	59.35	59.00	58.68	58.25	57.72	58.03	58.61	59.34
9	60.54	60.18	59.98	59.69	59.33	58.99	58.65	58.22	57.70	58.01	58.69	59.34
10	60.53	60.16	59.96	59.68	59.31	58.97	58.62	58.20	57.69	57.98	58.72	59.33
11	60.53	60.15	59.95	59.67	59.31	58.95	58.60	58.19	57.66	57.96	58.72	59.32
12	60.53	60.13	59.94	59.65	59.30	58.94	58.59	58.16	57.65	57.97	58.71	59.37
13	60.51	60.10	59.93	59.62	59.27	58.92	58.62	58.14	57.74	58.02	58.71	59.52
14	60.50	60.08	59.93	59.60	59.25	58.90	58.64	58.12	57.84	58.02	58.73	59.55
15	60.49	60.06	59.92	59.59	59.24	58.89	58.64	58.10	58.01	58.03	58.73	59.53
16	60.47	60.05	59.91	59.57	59.23	58.87	58.63	58.07	58.09	58.02	58.73	59.51
17	60.46	60.04	59.90	59.57	59.21	58.88	58.61	58.04	58.08	58.04	58.72	59.56
18	60.45	60.03	59.89	59.57	59.21	58.86	58.59	58.00	58.07	58.03	58.73	59.59
19	60.43	60.02	59.89	59.57	59.20	58.84	58.58	57.97	58.05	58.02	58.83	59.62
20	60.42	60.02	59.88	59.56	59.19	58.81	58.56	57.98	58.04	58.02	58.89	59.80
21	60.42	60.01	59.87	59.54	59.18	58.83	58.54	58.09	58.02	58.00	58.99	59.92
22	60.42	60.03	59.86	59.51	59.16	58.91	58.52	58.08	58.03	58.02	58.98	59.93
23	60.41	60.09	59.85	59.49	59.16	58.91	58.51	58.07	58.01	58.10	58.98	59.94
24	60.40	60.12	59.84	59.47	59.15	58.89	58.49	58.07	57.99	58.08	58.98	59.94
25	60.38	60.11	59.84	59.47	59.14	58.87	58.47	58.06	57.97	58.06	58.98	59.94
26	60.38	60.10	59.83	59.45	59.13	58.85	58.45	58.04	57.96	58.10	58.97	59.94
27	60.40	60.10	59.82	59.44	59.11	58.82	58.43	58.01	57.94	58.18	59.00	59.93
28	60.39	60.10	59.81	59.43	59.11	58.81	58.41	57.99	57.98	58.16	59.09	59.92
29	60.38	60.09	59.81	59.42	---	58.80	58.38	57.96	58.03	58.15	59.11	59.92
30	60.37	60.07	59.80	59.41	---	58.78	58.39	57.94	58.04	58.14	59.11	59.92
31	60.35	---	59.79	59.40	---	58.76	---	57.92	---	58.12	59.16	---
MEAN	60.48	60.14	59.92	59.59	59.26	58.92	58.58	58.13	57.90	58.04	58.74	59.58
MAX	60.66	60.34	60.06	59.79	59.40	59.10	58.75	58.38	58.09	58.18	59.16	59.94
MIN	60.35	60.01	59.79	59.40	59.11	58.76	58.38	57.92	57.65	57.96	58.13	59.19
CAL YR 1984	MEAN	60.43	MAX	61.01	MIN	59.79						
WTR YR 1985	MEAN	59.11	MAX	60.66	MIN	57.65						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234428 LAKE CHARM AT OVIEDO, FL

LOCATION.--Lat 28°40'42", long 81°11'55", in NE¼ sec.10, T.21 S., R.31 E., Seminole County, Hydrologic Unit 03080101, near west shore, 0.8 mi northeast of intersection of State Highways 419 and 426 in Oviedo.

SURFACE AREA.--20.3 acres (0.03 mi²).

DRAINAGE AREA.--0.11 mi².

PERIOD OF RECORD.--November 1975 to September 1979 (weekly), incomplete, May 1983 to current year (weekly), incomplete.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Heath and Associates Land Surveyors bench mark). Prior to Apr. 30, 1976, at same site at datum 41.29 ft higher.

REMARKS.--Lake is landlocked.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 46.50 ft, Sept. 29, 1985; minimum observed, 40.24 ft, July 14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 46.50 ft, Sept. 29, occurred on rise preceding crest in October 1985; minimum observed, 43.60 ft, June 9.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

MAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	45.10
2	---	---	45.84	---	---	---	---	---	43.78	---	---	---
3	---	---	---	---	45.31	45.00	---	---	---	---	---	---
4	---	45.98	---	---	---	---	---	---	---	---	44.28	---
5	---	---	---	---	---	---	---	43.91	---	---	---	---
6	---	---	---	45.63	---	---	---	---	---	---	---	---
7	46.29	---	---	---	---	---	44.36	---	---	43.70	---	---
8	---	---	---	---	---	---	---	43.97	---	---	---	45.32
9	---	---	45.84	---	---	---	---	---	43.60	---	---	---
10	---	---	---	---	45.25	44.84	---	---	---	---	---	---
11	46.25	45.88	---	---	---	44.82	---	---	---	---	44.52	---
12	---	---	---	---	---	---	---	43.82	---	---	---	---
13	---	---	---	45.52	---	---	---	---	---	---	---	---
14	46.22	---	---	---	---	---	44.39	---	---	43.87	---	---
15	---	---	---	45.50	---	---	---	---	---	---	---	45.82
16	---	---	45.77	---	---	---	---	---	43.86	---	---	---
17	---	---	---	---	45.15	44.72	---	---	---	---	---	---
18	---	45.78	---	---	---	---	---	---	43.84	---	44.70	---
19	---	---	---	---	---	---	---	43.66	---	---	---	---
20	---	45.76	---	45.45	---	---	---	---	---	---	---	---
21	46.12	---	---	---	---	---	44.25	---	---	44.00	---	---
22	---	---	---	---	---	---	---	---	---	---	44.68	46.40
23	---	---	45.74	---	---	---	---	---	43.88	---	---	---
24	---	---	---	---	45.07	44.70	---	---	---	---	---	---
25	---	45.98	---	---	---	---	---	---	---	---	44.72	---
26	---	---	---	---	---	---	---	43.92	---	---	---	---
27	---	---	---	45.38	---	---	---	---	---	---	---	---
28	46.09	---	---	---	---	---	44.17	---	---	44.12	---	---
29	---	---	---	---	---	---	---	---	---	---	---	46.50
30	---	---	45.70	---	---	---	---	---	43.76	---	---	---
31	---	---	---	---	---	44.55	---	---	---	---	45.00	---

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02234434 LAKE JESSUP NEAR SANFORD, FL

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 5.26 ft, Sept. 26; minimum observed, .72 ft, June 18.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.90	.98		---	---		---	---
2	---		---	---	---	---		---	---		1.22	---
3	---	2.60	---	---	---	---		---	---		---	---
4	---	---	---	1.42	---	---		---	---		---	---
5	---	---	---	---	---	---		---	---		---	---
6	3.50	---	---	---	---	---		---	---		---	---
7	---	---	2.50	---	---	---		---	---		---	---
8	---	---	---	---	.82	---		1.30	---		1.22	---
9	---	---	---	---	---	.94		---	---		---	---
10	---	2.48	---	---	---	---		---	---		---	---
11	3.21	---	---	---	---	1.04		---	---		---	---
12	---	---	---	---	---	---		---	---		---	---
13	3.42	---	---	---	---	---		---	---		---	---
14	---	---	2.46	---	---	---		---	---		---	---
15	---	---	---	1.61	---	.90		---	---		2.23	---
16	---	---	---	---	---	---		---	---		---	---
17	---	2.06	---	---	---	---		---	---		---	---
18	---	---	---	1.34	---	---		---	.72		---	---
19	---	---	---	---	---	---		---	---		---	---
20	3.12	2.07	---	---	---	---		---	---		---	---
21	---	---	2.02	---	---	---		---	---		---	5.26
22	---	---	---	---	---	.90		---	---		2.60	---
23	---	---	---	---	---	---		---	---		---	---
24	---	2.28	---	---	---	---		---	---		---	---
25	---	---	---	1.36	---	---		---	---		---	---
26	---	---	---	---	---	---		---	---		---	---
27	2.38	---	---	---	---	---		---	---		---	---
28	---	---	2.00	---	---	---		---	---		---	---
29	---	---	---	---	---	.90		---	---		---	---
30	---	2.80	---	---	---	---		---	---		---	---
31	---	---	---	---	---	---		---	---		3.10	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234499 LAKE MONROE NEAR SANFORD, FL

LOCATION.--Lat 28°50'13", long 81°19'28", in SW¼ sec.16, T.19 S., R.30 E., Seminole County, Hydrologic Unit 03080101, on south bank of St. Johns River, at west side of bridge on U.S. Highways 17 and 92, at lake outlet, 4 mi northwest of Sanford.

SURFACE AREA.--8,840 acres (13.8 mi²).

DRAINAGE AREA.--2,582 mi².

PERIOD OF RECORD.--July 1920 to January 1940 (weekly), July 1941 to current year. Since July 1941, records for St. Johns River near Sanford (station 02234500). Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-75-1: Drainage area, surface area.

GAGE.--Water-stage recorder. Datum of gage is 0.09 ft below National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to July 29, 1941, nonrecording gage on south shore of lake at Sanford at datum 0.09 ft higher.

REMARKS.--Lake is one of the St. Johns River chain of lakes. Elevation at gage subject to fluctuations caused by wind seiches and tide.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 8.50 ft, Oct. 15-17, 1953; minimum daily, -0.52, Apr. 5, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation since at least 1871, 13.28 ft in fall of 1880, from information by Mr. Fred T. Williams, former city engineer for Sanford.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 4.79 ft, Sept. 28; minimum daily, 0.26 ft, Apr. 6.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.08	2.09	2.46	1.45	.64	.41	.34	.52	.87	.77	1.03	2.85
2	3.09	2.06	2.40	1.38	.58	.39	.28	.53	.84	.77	1.06	2.90
3	3.09	2.07	2.33	1.36	.51	.40	.27	.55	.83	.73	1.08	2.96
4	3.09	2.06	2.27	1.28	.49	.43	.30	.55	.81	.70	1.27	3.04
5	3.07	2.06	2.20	1.23	.52	.45	.29	.59	.80	.67	1.44	3.15
6	3.04	2.09	2.13	1.24	.65	.46	.26	.66	.78	.64	1.54	3.21
7	2.99	2.17	2.08	1.22	.98	.51	.29	.74	.77	.61	1.61	3.25
8	2.95	2.21	2.09	1.18	1.08	.57	.32	.80	.74	.56	1.73	3.29
9	2.90	2.24	2.05	1.16	1.15	.65	.36	.82	.73	.53	1.76	3.30
10	2.85	2.25	1.99	1.16	1.19	.74	.41	.82	.71	.52	1.79	3.30
11	2.84	2.22	1.93	1.19	1.20	.79	.44	.83	.68	.47	1.83	3.28
12	2.84	2.15	1.86	1.26	1.10	.79	.46	.83	.67	.48	1.83	3.27
13	2.85	2.13	1.81	1.39	1.04	.76	.49	.84	.65	.55	1.84	3.28
14	2.84	2.11	1.76	1.44	1.00	.68	.56	.85	.64	.60	1.93	3.42
15	2.82	2.07	1.73	1.40	.89	.62	.75	.86	.90	.63	1.96	3.46
16	2.78	2.02	1.70	1.37	.78	.60	.76	.87	1.04	.66	2.00	3.50
17	2.74	1.97	1.68	1.32	.71	.63	.75	.87	.92	.67	2.04	3.54
18	2.69	1.94	1.66	1.24	.67	.72	.75	.87	.84	.75	2.07	3.70
19	2.64	1.88	1.65	1.20	.63	.87	.76	.87	.77	.91	2.12	3.78
20	2.59	1.82	1.64	1.15	.61	.86	.76	.89	.72	1.06	2.15	4.05
21	2.52	1.80	1.62	1.11	.59	.86	.76	1.09	.70	1.13	2.19	4.47
22	2.45	1.91	1.60	1.13	.60	.80	.75	1.03	.69	1.17	2.21	4.60
23	2.39	2.11	1.58	1.10	.61	.75	.73	.99	.64	1.25	2.24	4.68
24	2.32	2.38	1.57	1.06	.61	.77	.71	.97	.61	1.18	2.27	4.72
25	2.28	2.57	1.55	.98	.59	.80	.69	.97	.60	1.22	2.31	4.75
26	2.23	2.63	1.56	.87	.55	.79	.66	.96	.60	1.20	2.33	4.74
27	2.23	2.63	1.56	.81	.51	.77	.63	.94	.60	1.14	2.39	4.76
28	2.22	2.60	1.59	.73	.46	.73	.61	.94	.72	1.10	2.56	4.79
29	2.19	2.55	1.58	.63	---	.66	.54	.93	.89	1.05	2.61	4.78
30	2.16	2.51	1.55	.63	---	.57	.52	.91	.78	1.01	2.64	4.78
31	2.13	---	1.50	.63	---	.45	---	.89	---	1.00	2.72	---
MEAN	2.67	2.18	1.83	1.14	.75	.65	.54	.83	.75	.83	1.95	3.79
MAX	3.09	2.63	2.46	1.45	1.20	.87	.76	1.09	1.04	1.25	2.72	4.79
MIN	2.13	1.80	1.50	.63	.46	.39	.26	.52	.60	.47	1.03	2.85
CAL YR 1984 MEAN	1.91			3.20		MIN	.62					
WTR YR 1985 MEAN	1.50			4.79		MIN	.26					

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234814 LAKE WEKIVA NEAR MAITLAND, FL

LOCATION.--Lat 28°36'09", long 81°25'38", in SW¼ sec.4, T.22 S., R.29 E., Orange County, Hydrologic Unit 03080101, near right bank on downstream side of bridge at Lake Wekiva outlet, 110 ft upstream from concrete control structure, 0.4 mi upstream from culvert on U.S. Highway 441, and 4.2 mi southwest of Maitland.

SURFACE AREA.--190 acres (0.30 mi²).

DRAINAGE AREA.--13.4 mi².

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Dec. 10, 1975, at datum 81.93 ft higher.

REMARKS.--Lake level controlled by concrete control structure with removable boards. Since Aug. 11, 1972, undetermined amount of water diverted through drop culvert and underground pipe line to Horseshoe Lake, 2 mi west, for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 87.04 ft, June 30, 1974; minimum daily, 82.09 ft, July 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 84.45 ft, Sept. 21; minimum daily, 82.65 ft, May 20.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.65	83.04	83.19	83.01	82.97	82.94	82.86	82.84	83.38	83.59	83.95	84.07
2	83.59	83.03	83.18	83.01	82.98	82.95	82.84	82.83	83.34	83.55	83.95	84.02
3	83.54	83.02	83.17	83.01	82.97	82.94	82.82	82.82	83.31	83.52	84.02	83.95
4	83.49	83.02	83.16	83.03	82.95	82.93	82.81	82.83	83.28	83.49	83.91	83.90
5	83.45	83.01	83.15	83.00	82.96	82.93	82.80	82.90	83.25	83.47	83.80	84.02
6	83.41	82.99	83.15	82.98	82.96	82.91	82.83	82.89	83.22	83.45	83.71	83.92
7	83.38	82.96	83.13	82.97	82.98	82.90	82.92	82.88	83.19	83.44	83.65	83.81
8	83.35	82.94	83.12	82.96	82.97	82.89	82.92	82.87	83.17	83.41	83.65	83.73
9	83.32	82.93	83.10	82.96	82.96	82.88	82.90	82.85	83.14	83.37	83.67	83.66
10	83.29	82.93	83.09	82.95	82.95	82.87	82.88	82.84	83.15	83.34	83.80	83.61
11	83.28	82.93	83.09	82.96	82.96	82.87	82.86	82.83	83.24	83.33	84.06	83.57
12	83.28	82.92	83.08	82.97	82.98	82.86	82.85	82.81	83.25	83.42	83.94	83.53
13	83.26	82.90	83.07	82.97	82.96	82.85	82.88	82.79	83.51	83.58	83.84	83.51
14	83.25	82.90	83.07	82.98	82.95	82.84	82.89	82.78	83.69	83.64	83.76	83.56
15	83.23	82.89	83.05	82.99	82.94	82.83	82.89	82.76	84.04	83.63	83.72	83.58
16	83.22	82.89	83.05	82.99	82.94	82.82	82.89	82.75	84.13	83.63	83.72	83.57
17	83.20	82.89	83.05	83.00	82.94	82.82	82.87	82.73	83.91	83.61	83.71	83.60
18	83.18	82.89	83.05	83.01	82.94	82.80	82.86	82.68	83.84	83.67	83.84	83.65
19	83.16	82.90	83.05	83.03	82.94	82.79	82.85	82.66	83.72	83.72	83.74	83.65
20	83.15	82.83	83.02	83.03	82.94	82.77	82.84	82.65	83.66	83.85	83.68	83.86
21	83.13	82.83	83.05	83.00	82.93	82.80	82.82	82.86	83.79	83.78	83.62	84.45
22	83.11	82.92	83.04	82.99	82.93	82.97	82.81	82.88	83.90	83.73	83.57	84.35
23	83.09	83.14	83.05	82.98	82.93	82.96	82.80	82.94	83.82	83.67	83.57	84.14
24	83.07	83.22	83.05	82.99	82.93	82.95	82.79	83.36	83.73	83.61	83.63	83.98
25	83.05	83.23	83.04	83.00	82.93	82.93	82.78	83.72	83.65	83.58	83.87	83.86
26	83.05	83.24	83.04	82.99	82.94	82.91	82.76	83.71	83.65	83.56	83.82	83.76
27	83.10	83.24	83.03	82.99	82.94	82.91	82.75	83.63	83.80	83.53	83.78	83.71
28	83.10	83.23	83.03	82.99	82.94	82.90	82.74	83.56	83.70	83.52	83.79	83.65
29	83.10	83.22	83.03	82.98	---	82.89	82.76	83.50	83.67	83.49	83.81	83.60
30	83.08	83.20	83.03	82.98	---	82.88	82.84	83.46	83.65	83.47	83.78	83.57
31	83.06	---	83.02	82.97	---	82.87	---	83.42	---	83.57	83.81	---
MEAN	83.25	83.01	83.08	82.99	82.95	82.88	82.84	83.00	83.56	83.56	83.78	83.79
MAX	83.65	83.24	83.19	83.03	82.98	82.97	82.92	83.72	84.13	83.85	84.06	84.45
MIN	83.05	82.83	83.02	82.95	82.93	82.77	82.74	82.65	83.14	83.33	83.57	83.51
CAL YR 1984	MEAN	83.47	MAX	84.51	MIN	82.83						
WTR YR 1985	MEAN	83.22	MAX	84.45	MIN	82.65						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235150 LAKE DORR NEAR ALTOONA, FL

LOCATION.--Lat 29°00'10", long 81°38'05", in NE¼ sec.20, T.17 S., R.27 E., Lake County, Hydrologic Unit 03080101, on west shore of lake, 0.3 mi east of State Highway 19, and 2.6 mi north of Altoona.

SURFACE AREA.--1,712 acres (2.67 mi²).

DRAINAGE AREA.--26.5 mi².

PERIOD OF RECORD.--August 1965 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-75-1: Surface area. WDR FL-81-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 34.02 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

REMARKS.--Outflow from lake is through Blackwater Swamp into Blackwater Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 44.44 ft, Aug. 31, 1968; minimum observed, 41.52 ft, June 12, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 43.47 ft, Sept. 4; minimum observed, 41.52 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	42.34	---	---	---	---
2	---	---	---	42.86	---	---	---	---	---	---	---	---
3	43.32	---	---	---	---	---	42.50	---	---	42.10	---	---
4	---	---	---	---	---	---	---	---	---	---	---	43.47
5	---	---	---	---	42.78	---	---	---	41.92	---	---	---
6	---	---	---	---	42.74	42.64	---	---	---	---	---	---
7	---	43.02	---	---	---	---	---	---	---	---	42.86	---
8	---	---	---	---	---	---	---	42.32	---	---	42.88	---
9	---	---	---	42.84	---	---	42.48	---	---	---	---	---
10	43.27	---	---	---	---	---	42.48	---	---	42.11	---	---
11	---	---	42.92	---	---	---	---	---	---	---	---	43.42
12	---	---	---	---	---	---	---	---	41.52	---	---	---
13	---	---	---	---	42.71	42.58	---	---	---	---	---	---
14	---	42.88	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	42.22	---	---	43.17	---
16	---	---	---	42.77	---	---	---	---	---	---	---	---
17	43.18	---	---	---	---	---	42.47	---	---	42.52	---	---
18	---	---	---	---	---	---	---	---	---	---	---	43.32
19	---	---	---	---	---	---	---	---	42.16	---	---	---
20	---	---	---	---	42.68	42.52	---	---	---	---	---	---
21	---	42.82	---	---	---	---	---	---	---	---	43.24	---
22	---	---	---	---	---	---	---	42.12	---	---	---	---
23	---	---	---	42.74	---	---	---	---	---	---	---	---
24	43.14	---	---	---	---	---	42.42	---	---	42.70	---	---
25	---	---	---	---	---	---	---	---	---	---	---	43.43
26	---	---	---	---	---	---	---	---	42.12	---	---	---
27	---	---	---	---	42.67	42.56	---	---	---	---	---	---
28	---	42.90	---	---	---	---	---	---	---	---	43.34	---
29	---	---	---	---	---	---	---	42.07	---	---	---	---
30	---	---	---	42.72	---	---	---	---	---	---	---	---
31	43.12	---	---	---	---	---	---	---	---	42.82	---	---

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02235260 MOUNT PLYMOUTH LAKE AT MOUNT PLYMOUTH, FL

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 55.50 ft, Oct. 1; minimum observed, 52.22 ft, June 10.

[illegible]

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236119 LAKE ODOM NEAR DE LEON SPRINGS, FL

LOCATION.--Lat 29°09'25", long 81°21'22", in NW¼ sec.36, T.15 S., R.29 E., Volusia County, Hydrologic Unit 03080101, on southwest shore of lake, 1.2 mi north of intersection of Lake Winona Road and State Highway 17, and 2.5 mi north of De Leon Springs.

SURFACE AREA.--66.0 acres (0.10 mi²).

DRAINAGE AREA.--1.33 mi².

PERIOD OF RECORD.--November 1980 to September 1981, incomplete; October 1981 to current year (fragmentary).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 30.47 ft, Mar. 23, 1983; minimum observed, 22.01 ft, June 26, 1981.

ELEVATION, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			APR		
03...	1115	29.98	08...	1435	27.58
DEC			JUN		
17...	1300	29.34	06...	1350	26.58
FEB			AUG		
11...	1050	28.28	07...	1730	26.97

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236200 LAKE KERR NEAR EUREKA, FL

LOCATION.--Lat 29°20'10", long 81°46'00", in NE¼ sec.26, T.13 S., R.25 E., Marion County, Hydrologic Unit 03080101, on south shore of lake, 2.5 mi southwest of Salt Springs, and 9 mi southeast of Eureka.

SURFACE AREA.--4,484 acres (7.01 mi²).

DRAINAGE AREA.--102 mi².

ELEVATION RECORDS

PERIOD OF RECORD.--April 1936 to April 1950 (monthly); July 1950 to June 1952, October 1955 to March 1960; April 1960 to September 1961 (weekly), incomplete; October 1961 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-75-1: Surface area, drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to July 1, 1950, nonrecording gage at site approximately 3 mi northwest on north shore of lake at datum 21.09 ft higher. July 1, 1950 to Dec. 1, 1955, nonrecording gage at present site at datum 21.50 ft higher and Dec. 2, 1955, to Oct. 10, 1961, at present datum.

REMARKS.--Lake is interconnected with Little Lake Kerr (formerly Lake Warner) during high-water periods.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 27.00 ft, Oct. 11, 1966; minimum daily, 19.92 ft, May 10, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 24.72 ft, Oct. 1; minimum daily, 22.29 ft, July 30.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.72	24.44	24.15	23.98	23.70	23.58	23.38	23.15	22.59	22.52	22.37	23.16
2	24.69	24.43	24.15	23.97	23.70	23.58	23.39	23.12	22.57	22.51	22.35	23.17
3	24.67	24.43	24.14	23.99	23.71	23.57	23.36	23.10	22.55	22.51	22.35	23.18
4	24.66	24.44	24.14	24.00	23.70	23.56	23.35	23.08	22.53	22.50	22.38	23.19
5	24.65	24.43	24.13	23.96	23.71	23.55	23.33	23.05	22.51	22.48	22.36	23.18
6	24.63	24.41	24.14	23.93	23.73	23.54	23.34	23.03	22.49	22.47	22.35	23.17
7	24.62	24.37	24.11	23.92	23.75	23.51	23.35	23.01	22.47	22.46	22.38	23.16
8	24.62	24.34	24.09	23.91	23.74	23.51	23.35	23.00	22.46	22.44	22.50	23.15
9	24.61	24.32	24.08	23.90	23.71	23.50	23.33	22.99	22.45	22.41	22.52	23.13
10	24.61	24.31	24.07	23.89	23.70	23.49	23.31	22.97	22.44	22.41	22.54	23.12
11	24.60	24.31	24.07	23.89	23.70	23.48	23.28	22.96	22.43	22.39	22.66	23.10
12	24.59	24.29	24.07	23.87	23.71	23.47	23.28	22.94	22.43	22.37	22.71	23.09
13	24.57	24.26	24.07	23.85	23.69	23.46	23.37	22.92	22.47	22.37	22.76	23.11
14	24.56	24.24	24.06	23.84	23.67	23.44	23.39	22.90	22.52	22.36	22.81	23.17
15	24.55	24.23	24.06	23.83	23.66	23.42	23.39	22.88	22.59	22.34	22.86	23.14
16	24.54	24.23	24.05	23.81	23.65	23.41	23.38	22.87	22.65	22.31	22.91	23.11
17	24.53	24.22	24.05	23.81	23.64	23.49	23.37	22.83	22.66	22.31	22.95	23.11
18	24.51	24.22	24.05	23.82	23.64	23.49	23.35	22.78	22.65	22.30	22.95	23.10
19	24.50	24.21	24.05	23.80	23.64	23.46	23.34	22.75	22.62	22.32	22.96	23.09
20	24.49	24.21	24.04	23.80	23.62	23.43	23.33	22.74	22.60	22.34	22.97	23.12
21	24.48	24.20	24.04	23.77	23.60	23.45	23.31	22.75	22.60	22.36	22.98	23.14
22	24.47	24.20	24.03	23.74	23.61	23.51	23.30	22.74	22.59	22.37	22.99	23.14
23	24.47	24.21	24.03	23.73	23.61	23.50	23.28	22.72	22.57	22.36	23.00	23.12
24	24.46	24.19	24.02	23.72	23.61	23.49	23.27	22.71	22.55	22.35	23.01	23.11
25	24.45	24.18	24.02	23.73	23.60	23.47	23.25	22.71	22.53	22.34	23.02	23.11
26	24.46	24.18	24.02	23.72	23.60	23.44	23.24	22.70	22.53	22.32	23.05	23.09
27	24.46	24.18	24.01	23.71	23.60	23.43	23.22	22.68	22.50	22.31	23.08	23.07
28	24.46	24.18	24.00	23.71	23.59	23.41	23.21	22.66	22.51	22.30	23.11	23.05
29	24.46	24.17	24.00	23.71	---	23.40	23.19	22.64	22.51	22.30	23.14	23.04
30	24.45	24.16	24.00	23.70	---	23.39	23.17	22.61	22.51	22.29	23.15	23.05
31	24.45	---	23.99	23.70	---	23.38	---	22.60	---	22.32	23.15	---
MEAN	24.55	24.27	24.06	23.83	23.66	23.48	23.31	22.86	22.54	22.38	22.78	23.12
MAX	24.72	24.44	24.15	24.00	23.75	23.58	23.39	23.15	22.66	22.52	23.15	23.19
MIN	24.45	24.16	23.99	23.70	23.59	23.38	23.17	22.60	22.43	22.29	22.35	23.04
CAL YR 1984	MEAN	24.47	MAX	24.86	MIN	23.99						
WTR YR 1985	MEAN	23.40	MAX	24.72	MIN	22.29						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236200 LAKE KERR NEAR EUREKA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

		ELEV- ATION ABOVE NGVD (FEET) (72020)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
MAR 14...	0945	23.42	103	7.0	5	--	--	--	6.5	2.2	
AUG 11...	1230	22.64	117	5.1	<5	.50	>166	.9	--	--	
SEP 04...	0930	23.19	110	7.8	--	--	--	--	--	--	
		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
MAR 14...	10	.40	3.9	19	17	.10	.9	66	<.010	<.01	
AUG 11...	--	--	--	--	--	--	--	--	<.010	<.02	
		NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
MAR 14...	.040	.50	.010	.010	20	--	1	1	70	<10	
AUG 11...	.030	.47	.040	.010	--	--	--	--	--	--	
SEP 04...	--	--	--	--	20	<1	1	1	90	<10	
		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	
MAR 14...	<1	1	<10	10	<.1	1	150	10	1.5		
AUG 11...	--	--	--	--	--	--	--	--	5.0		
SEP 04...	2	4	20	<10	<.1	1	--	20	--		

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236200 LAKE KERR NEAR EUREKA, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR					AUG				
14...	0946	.50	22.0	7.9	11...	1232	3.00	28.5	7.0
14...	0947	3.00	22.0	7.9	11...	1233	6.00	28.5	7.0
14...	0948	6.00	22.0	8.0	11...	1234	9.00	18.0	7.0
14...	0949	9.00	21.5	8.1	11...	1235	12.0	15.0	7.0
14...	0950	11.0	21.0	8.0	SEP				
AUG					04...	0930	--	27.5	7.8
11...	1230	--	29.0	7.0					
11...	1231	.50	29.0	7.0					

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236210 LAKE GEORGE NEAR SALT SPRINGS, FL

LOCATION.--Lat 29°17'41", long 81°39'05", in NW¼ sec.12, T.14 S., R.26 E., Marion County, Hydrologic Unit 03080101, on west shore of lake, on private pier, 6.5 mi southeast of Salt Springs.

SURFACE AREA.--46,780 acres (73.1 mi²).

DRAINAGE AREA.--3,721 mi².

PERIOD OF RECORD.--May 1936 to April 1950 (monthly), August 1972 to current year (incomplete). Records of elevations prior to August 1972 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-75-1: Surface area, drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. May 1936 to April 1950, nonrecording gage on east side of lake at datum 2.91 ft lower. Aug. 1972, to Feb. 1981, at site 300 ft north at present datum.

REMARKS.--Elevation at gage subject to fluctuations caused by wind action and tide.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 4.3 ft, occurred sometime during October 1948; minimum daily, 0.49 ft below NGVD, Feb. 7, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 2.55 ft, Sept. 21; minimum daily, 0.22 ft below NGVD, Apr. 1.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.14	1.46	1.30	.68	.17	.01	-0.22	.45	.40	.48	.57	1.68
2	2.12	1.52	1.20	.65	.01	.20	-0.18	.43	.38	.41	.59	1.80
3	2.05	1.56	1.16	.63	-0.02	.26	-0.09	.33	.34	.34	.76	1.85
4	1.96	1.66	1.14	.50	.14	.31	-0.01	.48	.35	.30	1.21	1.79
5	1.83	1.75	1.19	.48	.44	.32	-0.02	.74	.37	.30	1.36	1.70
6	1.73	1.74	1.21	.50	.59	.36	-0.01	.79	.30	.31	1.38	1.57
7	1.73	1.75	1.21	.54	.64	.56	.06	.71	.26	.25	1.39	1.46
8	1.78	1.81	1.14	.51	.68	.65	.12	.59	.25	.19	1.35	1.38
9	1.85	1.83	1.00	.53	.70	.62	.19	.58	.29	.17	1.24	1.31
10	1.97	1.77	.89	.70	.68	.57	.22	.61	.28	.18	1.19	1.24
11	2.08	1.62	.80	.79	.64	.57	.23	.62	.27	.15	1.26	1.17
12	2.17	1.46	.76	.91	.28	.49	.24	.63	.19	.13	1.31	1.16
13	2.12	1.42	.80	1.00	.10	.36	.34	.67	.05	.19	1.37	1.34
14	2.00	1.39	.83	.96	-0.05	.22	.48	.69	.06	.28	1.38	1.81
15	1.91	1.35	.85	.80	-0.04	.18	.55	.67	.18	.28	1.34	2.06
16	1.86	1.30	.93	.69	.03	.32	.48	.62	.17	.28	1.29	2.25
17	1.81	1.23	.97	.61	.06	.48	.44	.54	.11	.34	1.22	2.38
18	1.70	1.23	.99	.46	.08	.57	.47	.55	.02	.45	1.17	2.48
19	1.55	1.18	1.00	.41	.13	.63	.46	.61	-0.11	.64	1.14	2.50
20	1.45	1.09	.99	.35	.16	.57	.40	.65	-0.17	.82	1.22	2.54
21	1.38	1.27	.98	.44	.28	.50	.33	.65	-0.09	.86	1.20	2.55
22	1.35	1.66	.97	.41	.34	.42	.28	.57	.00	.83	1.18	2.51
23	1.36	2.03	.95	.25	.28	.47	.22	.51	.12	.78	1.17	2.46
24	1.40	2.27	.95	.18	.21	.47	.17	.43	.20	.74	1.25	2.39
25	1.45	2.26	.99	.06	.11	.43	.11	.41	.28	.74	1.22	2.30
26	1.55	2.15	1.00	-0.02	-0.01	.47	.08	.50	.30	.63	1.16	2.32
27	1.66	1.98	1.09	-0.02	-0.11	.46	.06	.59	.26	.54	1.12	2.42
28	1.62	1.77	1.09	-0.06	-0.14	.34	.00	.58	.33	.49	1.26	2.48
29	1.53	1.60	.98	-0.01	---	.14	.01	.47	.46	.48	1.32	2.47
30	1.44	1.44	.86	.18	---	-0.03	.26	.41	.52	.49	1.35	2.46
31	1.41	---	.75	.25	---	-0.16	---	.41	---	.53	1.53	---
MEAN	1.74	1.62	1.00	.46	.23	.38	.19	.56	.21	.44	1.21	1.99
MAX	2.17	2.27	1.30	1.00	.70	.65	.55	.79	.52	.86	1.53	2.55
MIN	1.35	1.09	.75	-0.06	-0.14	-0.16	-0.22	.33	-0.17	.13	.57	1.16
CAL YR 1984	MEAN	.98	MAX	2.27	MIN	-0.17						
WTR YR 1985	MEAN	.84	MAX	2.55	MIN	-0.22						

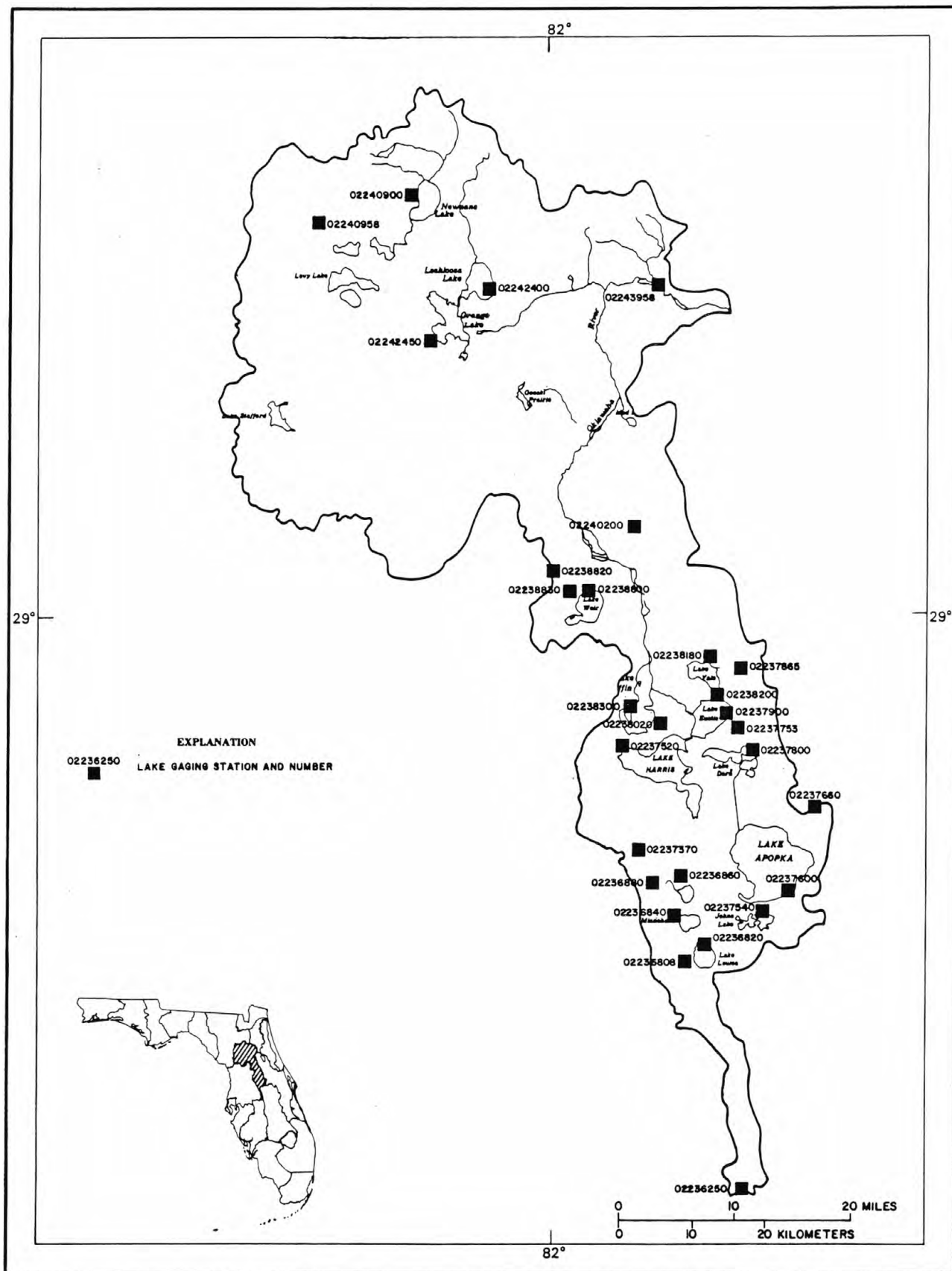


Figure 15. Location of lake gaging stations in the Oklawaha River basin.

[illegible]

OKLAWAHA RIVER BASIN

02236250 LAKE LOWERY NEAR HAINES CITY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1963, 1966 to 1985 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	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)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)
MAR 13...	0800	7.60	127	7.2	35	--	--	1.4	5.3	2.5
AUG 10...	1030	6.42	132	6.7	25	1.6	46.0	1.2	--	--
SEP 03...	1320	6.67	124	8.3	25	3.4	--	--	4.3	2.6
MAR 13...	17	2.7	6.2	10	27	.40	<.1	92	<.010	.02
AUG 10...	--	--	--	--	--	--	--	--	<.010	<.02
SEP 03...	14	3.2	6.7	9.4	26	.30	.9	92	<.010	<.01
MAR 13...	.040	1.0	.020	.020	20	--	1	1	100	10
AUG 10...	.040	1.1	.040	.020	--	--	--	--	--	--
SEP 03...	.010	1.4	.050	.020	60	<1	1	2	120	<10
MAR 13...	<1	1	20	<10	<.1	2	70	<10	15	
AUG 10...	--	--	--	--	--	--	--	--	19	
SEP 03...	4	<1	50	<10	<.1	1	60	20	31	

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236250 LAKE LOWERY NEAR HAINES CITY, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR					AUG				
13...	0801	.50	23.0	6.7	10...	1032	3.00	29.5	7.0
13...	0802	6.00	23.0	7.2	10...	1033	6.00	29.0	6.8
13...	0804	9.00	23.0	6.0	10...	1034	9.50	29.0	6.5
AUG					SEP				
10...	1030	--	29.5	7.0	03...	1320	--	27.5	8.1
10...	1031	.50	29.5	7.0					

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02236808 LAKE NELLIE NEAR CLERMONT, FL

LOCATION.--Lat 28°27'53", long 81°45'57", in SW¼ sec.24, T.23 S., R.25 E., Lake County, Hydrologic Unit 03080102, on private pier on southeast shore of lake, 1.8 mi east of State Highway 561, and 5.6 mi south of Clermont.

SURFACE AREA.--704 acres (1.1 mi²).

DRAINAGE AREA.--13.3 mi².

PERIOD OF RECORD.--July 1979 to current year (weekly) (incomplete).

REVISED RECORDS.--WDR FL-81-1: 1979,1980.

GAGE.--Nonrecording gage. Datum of gage is 90.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. July 18, 1979, to Dec. 3, 1980, at site 0.4 mi north at datum 5.00 ft higher, and Dec. 3, 1980 to July 16, 1981, at present site at datum 5.00 ft higher.

REMARKS.--Lake is one of the Palatlahaha River headwaters chain of lakes. Lake is landlocked except above an elevation of about 98.5 ft, when there is flow through Lake Nellie Outlet into Lake Louisa. There is some pumpage from the lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 100.82 ft, Mar. 28,31, Apr. 2, 1983; minimum observed, 95.72 ft, June 20, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 100.18 ft, Oct. 6, occurred on general recession; minimum observed, 97.60 ft, June 8.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	99.54	---	---	---	---	---	97.80			
2	---	---	---	---	99.12	98.90	---	98.14	---			
3	---	99.78	---	---	---	---	---	---	---			
4	---	---	---	---	---	---	---	98.14	---			
5	---	---	---	99.38	---	---	---	---	---			
6	100.18	---	---	---	---	---	98.60	---	---			
7	---	---	---	---	---	98.82	---	---	---			
8	---	---	99.50	---	---	---	---	---	97.60			
9	---	---	---	---	99.08	98.80	---	---	---			
10	100.07	99.66	---	---	---	---	---	---	---			
11	---	---	---	---	---	---	---	97.96	---			
12	---	---	---	99.20	---	---	---	---	---			
13	100.08	---	---	---	---	---	98.49	---	---			
14	---	---	---	99.25	---	---	---	---	---			
15	---	---	99.46	---	---	---	---	---	97.84			
16	---	---	---	---	99.10	98.70	---	---	---			
17	---	99.58	---	---	---	---	---	---	---			
18	---	---	---	---	---	---	---	97.86	---			
19	---	99.54	---	99.28	---	---	---	---	---			
20	99.94	---	---	---	---	---	98.36	---	---			
21	---	---	---	---	---	---	---	---	---			
22	---	---	99.42	---	---	---	---	---	98.00			
23	---	---	---	---	---	98.80	---	---	---			
24	---	99.58	---	---	---	---	---	---	---			
25	---	---	---	---	---	---	---	97.94	---			
26	---	---	---	99.16	---	---	---	---	---			
27	99.86	---	---	---	---	---	98.28	---	---			
28	---	---	---	---	98.94	---	---	---	---			
29	---	---	99.38	---	---	---	---	---	98.20			
30	---	---	---	---	---	98.68	---	---	---			
31	---	---	99.38	---	---	98.62	---	---	---			

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02236820 LAKE LOUISA NEAR CLERMONT, FL

LOCATION.--Lat 28°29'49", long 81°44'02", in SW¼ sec.8, T.23 S., R.26 E., Lake County, Hydrologic Unit 03080102, on north shore of lake, 4.5 mi southeast of Clermont.

SURFACE AREA.--3,659 acres (5.72 mi²).

DRAINAGE AREA.--121 mi².

PERIOD OF RECORD.--March 1957 to September 1975, October 1975 to current year (weekly). Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WRD FL 1965: Surface area. WDR FL-72-3: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Gee and Jenson, Inc.). Prior to Aug. 30, 1974, at site 0.2 mi northwest at same datum.

REMARKS.--Lake is the most upstream of the Palatlahkaha River headwaters chain of lakes. Since 1956, lake level partly controlled by earthen dam and concrete spillway with radial lift gates at outlet of Cherry Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 99.64 ft, Mar. 25, 1960; minimum observed, 92.48 ft, Dec. 24, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 96.37 ft, Oct. 4, occurred on general recession; minimum observed, 94.06 ft, June 8.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

[illegible]

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02236840 LAKE MINNEHAHA AT CLERMONT, FL

LOCATION.--Lat 28°32'38", long 81°47'05", in NW¼ sec.26, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, on northwest side of lake in cypress cove, on southeast side of bridge on State Highway 561, at lake outlet, 1 mi southwest of Clermont.

SURFACE AREA.--2,410 acres (3.77 mi²).

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--May 1945 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to June 5, 1946, nonrecording gage, and June 5, 1946, to Dec. 8, 1969, water-stage recorder, at site 1.8 mi east on north shore of lake. Gage at datum 91.32 ft higher May 31, 1945, to Aug. 20, 1955.

REMARKS.--Lake is one of the Palatlahaha River headwaters chain of lakes. Since 1956, lake level partly controlled by earthen dam and concrete spillway with radial lift gates at outlet of Cherry Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 99.04 ft, Apr. 5, 1960; minimum daily, 92.49 ft, Dec. 20-25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 96.42 ft, Oct. 1,2; occurred on recession following crest of Sept. 28, 1985; minimum daily, 94.05 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96.42	96.12	95.82	95.66	95.44	95.24	94.97	94.58	94.25	94.67	94.70	95.24
2	96.42	96.10	95.82	95.65	95.44	95.23	94.94	94.56	94.22	94.67	94.73	95.22
3	96.41	96.09	95.81	95.67	95.43	95.22	94.92	94.54	94.20	94.65	94.75	95.23
4	96.40	96.09	95.81	95.69	95.43	95.21	94.91	94.53	94.18	94.64	94.76	95.25
5	96.38	96.08	95.83	95.66	95.42	95.19	94.92	94.51	94.17	94.62	94.75	95.28
6	96.37	96.05	95.83	95.64	95.44	95.18	94.96	94.50	94.16	94.61	94.75	95.31
7	96.36	96.02	95.81	95.63	95.43	95.15	94.95	94.48	94.13	94.62	94.76	95.31
8	96.35	95.99	95.80	95.62	95.42	95.15	94.93	94.46	94.10	94.60	94.77	95.32
9	96.34	95.98	95.79	95.61	95.40	95.13	94.90	94.44	94.08	94.58	94.84	95.32
10	96.34	95.96	95.78	95.60	95.40	95.12	94.89	94.42	94.06	94.56	94.86	95.32
11	96.33	95.95	95.77	95.59	95.40	95.10	94.86	94.40	94.06	94.53	94.85	95.31
12	96.31	95.93	95.77	95.56	95.37	95.09	94.87	94.39	94.05	94.52	94.85	95.32
13	96.31	95.91	95.77	95.54	95.36	95.08	94.88	94.38	94.06	94.51	94.86	95.41
14	96.30	95.90	95.76	95.53	95.35	95.07	94.87	94.36	94.21	94.51	94.87	95.40
15	96.29	95.88	95.76	95.53	95.35	95.07	94.85	94.35	94.26	94.49	94.91	95.38
16	96.29	95.88	95.75	95.52	95.34	95.05	94.84	94.40	94.36	94.54	95.01	95.36
17	96.28	95.87	95.75	95.53	95.33	95.02	94.83	94.38	94.46	94.61	95.04	95.35
18	96.26	95.86	95.75	95.54	95.32	95.01	94.81	94.33	94.45	94.62	95.02	95.34
19	96.25	95.86	95.74	95.55	95.32	94.99	94.80	94.31	94.44	94.63	95.03	95.34
20	96.25	95.85	95.73	95.54	95.32	95.02	94.78	94.30	94.42	94.64	95.06	95.40
21	96.23	95.83	95.73	95.51	95.31	95.11	94.77	94.30	94.43	94.66	95.08	95.49
22	96.22	95.86	95.72	95.48	95.30	95.11	94.75	94.32	94.46	94.66	95.08	95.49
23	96.22	95.86	95.71	95.47	95.30	95.09	94.73	94.34	94.49	94.65	95.09	95.50
24	96.20	95.86	95.71	95.47	95.29	95.08	94.71	94.36	94.54	94.63	95.09	95.49
25	96.18	95.86	95.70	95.47	95.28	95.07	94.70	94.38	94.55	94.64	95.09	95.49
26	96.17	95.86	95.70	95.46	95.27	95.05	94.68	94.40	94.54	94.65	95.10	95.48
27	96.17	95.86	95.69	95.46	95.26	95.04	94.65	94.37	94.57	94.66	95.11	95.47
28	96.17	95.85	95.69	95.45	95.25	95.03	94.63	94.34	94.60	94.66	95.16	95.48
29	96.16	95.83	95.69	95.44	---	95.02	94.63	94.32	94.64	94.65	95.16	95.48
30	96.15	95.83	95.68	95.44	---	95.01	94.60	94.29	94.66	94.64	95.17	95.48
31	96.14	---	95.67	95.44	---	94.99	---	94.27	---	94.67	95.22	---
MEAN	96.28	95.93	95.75	95.55	95.36	95.09	94.82	94.40	94.33	94.61	94.95	95.38
MAX	96.42	96.12	95.83	95.69	95.44	95.24	94.97	94.58	94.66	94.67	95.22	95.50
MIN	96.14	95.83	95.67	95.44	95.25	94.99	94.60	94.27	94.05	94.49	94.70	95.22
CAL YR 1984 MEAN	96.65			MAX 97.28		MIN 95.67						
WTR YR 1985 MEAN	95.20			MAX 96.42		MIN 94.05						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236860 LAKE APSHAWA NEAR MINNEOLA, FL

LOCATION.--Lat 28°36'13", long 81°46'36" (revised), in NE¼ sec.2, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, on east shore of south portion of lake, 2.8 mi northwest of Minneola.

SURFACE AREA.--110 acres (0.17 mi²).

DRAINAGE AREA.--1.48 mi².

PERIOD OF RECORD.--January to September 1985 (once-daily), April 1953 to December 1985 (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Surface area, drainage area.

GAGE.--Water-state recorder. Datum of gage is National Geodetic Vertical Datum of 1929. April 1953 to Feb. 8, 1968, at site 1,500 ft northwest at datum 86.16 ft higher. Prior to Jan. 19, 1985, nonrecording gage at site 800 ft east at present datum.

REMARKS.--Lake has no surface outlet. There is some pumpage from the lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 92.68 ft, Oct. 8, 15, 1960; minimum observed, 82.10 ft, Nov. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 85.62 ft, Nov. 8; minimum elevation, 83.51 ft, June 11.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	85.13	84.88	84.49	84.05	83.74	84.33	84.24	84.56
2		---	---	---	85.13	84.87	84.47	84.03	83.71	84.32	84.23	84.55
3		---	---	---	85.13	84.85	84.44	84.02	83.69	84.32	84.21	84.55
4		---	---	---	85.12	84.84	84.42	84.01	83.67	84.30	84.19	84.55
5		---	---	---	85.11	84.82	84.40	83.98	83.65	84.29	84.17	84.54
6		---	---	---	85.11	84.81	84.43	83.96	83.62	84.27	84.16	84.52
7		---	---	---	85.12	84.73	84.47	83.94	83.60	84.24	84.17	84.52
8		85.62	---	---	85.10	84.72	84.46	83.92	83.57	84.23	84.19	84.50
9		---	---	---	85.08	84.71	84.44	83.90	83.55	84.21	84.26	84.49
10		---	---	---	85.07	84.69	84.41	83.88	83.53	84.19	84.29	84.47
11		---	---	---	85.07	84.68	84.39	83.85	83.51	84.17	84.27	84.51
12		---	---	85.27	85.06	84.66	84.38	83.84	83.52	84.16	84.27	84.57
13		---	---	---	85.03	84.63	84.37	83.82	83.56	84.16	84.26	84.57
14		---	---	---	85.02	84.62	84.37	83.81	83.66	84.14	84.30	84.55
15		---	---	---	85.01	84.60	84.35	83.79	83.77	84.12	84.45	84.54
16		---	---	---	85.00	84.60	84.34	83.84	83.79	84.15	84.57	84.52
17		---	---	---	84.99	84.59	84.32	83.89	83.77	84.18	84.57	84.51
18		---	---	---	84.98	84.57	84.30	83.85	83.77	84.18	84.57	84.50
19		---	---	85.26	84.97	84.54	84.28	83.82	83.92	84.18	84.57	84.49
20		---	---	85.25	84.97	84.51	84.26	83.80	84.07	84.18	84.57	84.55
21		---	---	85.23	84.96	84.57	84.24	83.81	84.16	84.18	84.57	84.62
22		---	---	85.21	84.95	84.65	84.22	83.82	84.18	84.17	84.55	84.63
23		---	---	85.19	84.94	84.64	84.20	83.83	84.21	84.14	84.54	84.63
24		---	---	85.18	84.93	84.62	84.18	83.88	84.20	84.14	84.53	84.63
25		---	---	85.18	84.92	84.60	84.16	83.91	84.18	84.19	84.52	84.62
26		---	---	85.17	84.91	84.58	84.14	83.89	84.20	84.23	84.54	84.60
27		---	84.39	85.16	84.90	84.57	84.12	83.86	84.23	84.21	84.55	84.59
28		---	---	85.15	84.89	84.55	84.10	83.83	84.26	84.21	84.54	84.57
29		---	---	85.15	---	84.53	84.09	83.81	84.31	84.19	84.55	84.57
30		---	---	85.14	---	84.52	84.08	83.79	84.32	84.19	84.57	84.56
31		---	---	85.14	---	84.50	---	83.77	---	84.23	84.58	---
MEAN		---	---	---	85.02	84.65	84.31	83.88	83.86	84.21	84.40	84.55
MAX		---	---	---	85.13	84.88	84.49	84.05	84.32	84.33	84.58	84.63
MIN		---	---	---	84.89	84.50	84.08	83.77	83.51	84.12	84.16	84.47

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236880 CHERRY LAKE NEAR GROVELAND, FL

LOCATION.--Lat 28°35'33", long 81°49'21", in NE¼ sec.8, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, on southwest shore of lake, 21 ft upstream from spillway at outlet, and 3 mi northeast of Groveland.

SURFACE AREA.--520 acres (0.81 mi²).

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--September 1956 to current year. Records for Palatlahaha River at Cherry Lake Outlet, near Groveland (station 02236900). Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Gee and Jenson, Inc. bench mark).

REMARKS.--Lake is one of the Palatlahaha River headwaters chain of lakes. Since 1956, lake level controlled by earthen dam and concrete spillway with radial lift gates at outlet. An undetermined amount of water is diverted at times through a gated culvert in dam for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 98.13 ft, Apr. 22, 1959; minimum daily, 92.40 ft, Dec. 21-25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 96.33 ft, Oct. 1, occurred on recession following crest of Sept. 28, 1984; minimum daily, 93.95 ft, June 11.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96.33	96.04	95.75	95.60	95.37	95.16	94.91	94.51	94.12	94.60	94.62	95.19
2	96.32	96.01	95.75	95.60	95.37	95.15	94.89	94.51	94.10	94.60	94.63	95.17
3	96.29	96.01	95.75	95.61	95.36	95.14	94.86	94.47	94.09	94.59	94.65	95.15
4	96.28	96.00	95.75	95.62	95.35	95.13	94.85	94.46	94.07	94.57	94.68	95.15
5	96.29	95.99	95.74	95.57	95.34	95.11	94.84	94.46	94.06	94.56	94.67	95.17
6	96.27	95.96	95.74	95.56	95.35	95.10	94.86	94.42	94.04	94.54	94.67	95.17
7	96.26	95.91	95.73	95.55	95.36	95.10	94.89	94.40	94.01	94.53	94.69	95.18
8	96.25	95.89	95.71	95.53	95.34	95.07	94.88	94.37	94.00	94.52	94.71	95.20
9	96.24	95.88	95.69	95.51	95.33	95.06	94.85	94.36	93.98	94.50	94.79	95.21
10	96.23	95.88	95.70	95.51	95.33	95.05	94.83	94.34	93.96	94.48	94.80	95.21
11	96.21	95.86	95.70	95.51	95.32	95.04	94.81	94.31	93.95	94.47	94.79	95.22
12	96.21	95.84	95.70	95.48	95.30	95.02	94.80	94.29	94.04	94.45	94.78	95.23
13	96.21	95.82	95.70	95.45	95.28	95.00	94.80	94.26	94.14	94.44	94.78	95.33
14	96.19	95.81	95.69	95.45	95.26	94.99	94.80	94.26	94.22	94.43	94.77	95.34
15	96.19	95.80	95.69	95.45	95.26	94.99	94.80	94.32	94.38	94.42	94.87	95.28
16	96.19	95.80	95.68	95.44	95.26	94.99	94.77	94.33	94.38	94.45	95.02	95.26
17	96.19	95.79	95.67	95.45	95.25	94.97	94.75	94.26	94.37	94.52	94.99	95.25
18	96.17	95.79	95.67	95.46	95.24	94.93	94.75	94.23	94.35	94.55	94.96	95.24
19	96.17	95.78	95.67	95.46	95.24	94.92	94.75	94.21	94.39	94.55	94.94	95.23
20	96.16	95.77	95.66	95.46	95.24	94.93	94.74	94.23	94.50	94.56	94.97	95.24
21	96.15	95.75	95.66	95.42	95.23	94.99	94.72	94.24	94.48	94.60	94.98	95.37
22	96.14	95.75	95.65	95.40	95.22	95.05	94.70	94.23	94.50	94.60	94.98	95.38
23	96.14	95.73	95.64	95.38	95.22	95.02	94.68	94.32	94.52	94.60	94.99	95.39
24	96.12	95.71	95.64	95.38	95.21	95.01	94.67	94.32	94.50	94.57	95.00	95.40
25	96.09	95.74	95.63	95.38	95.20	95.00	94.65	94.31	94.48	94.60	95.00	95.40
26	96.07	95.76	95.63	95.37	95.19	94.99	94.62	94.30	94.50	94.59	95.01	95.39
27	96.08	95.78	95.62	95.35	95.18	94.98	94.60	94.26	94.55	94.58	95.01	95.38
28	96.09	95.77	95.61	95.36	95.17	94.97	94.57	94.25	94.52	94.57	95.06	95.38
29	96.09	95.76	95.61	95.36	---	94.96	94.55	94.21	94.58	94.57	95.07	95.36
30	96.06	95.75	95.60	95.36	---	94.95	94.52	94.19	94.59	94.57	95.09	95.38
31	96.05	---	95.60	95.36	---	94.94	---	94.16	---	94.59	95.12	---
MEAN	96.18	95.84	95.68	95.46	95.28	95.02	94.76	94.32	94.28	94.54	94.87	95.27
MAX	96.33	96.04	95.75	95.62	95.37	95.16	94.91	94.51	94.59	94.60	95.12	95.40
MIN	96.05	95.71	95.60	95.35	95.17	94.92	94.52	94.16	93.95	94.42	94.62	95.15
CAL YR 1984	MEAN	96.31	MAX	97.00	MIN	94.97						
WTR YR 1985	MEAN	95.13	MAX	96.33	MIN	93.95						

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02237520 LAKE HARRIS AT LEESBURG, FL

LOCATION.--Lat 28°48'14", long 81°52'24", in SE¼ sec.26, T.19 S., R.24 E., Lake County, Hydrologic Unit 03080102, on northwest shore of lake, at north side of concrete pier, 500 ft southeast of Leesburg Boat Club building in public park at Leesburg.

SURFACE AREA.--17,650 acres (27.6 mi²), includes Little Lake Harris.

DRAINAGE AREA.--357 mi², includes Little Lake Harris.

PERIOD OF RECORD.--June 1936 to April 1950 (monthly), August 1956 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Mar. 27, 1968, nonrecording gage at several sites within 700 ft northwest at following datums: June 1936, to April 1950, 61.09 ft higher; Aug. 9, 1956, to Aug. 21, 1961, 0.13 ft lower; Aug. 22, 1961, to Mar. 26, 1968, at present datum.

REMARKS.--Lake is one of the Oklawaha River headwaters chain of lakes. Since 1956, lake levels have been partially controlled by lock and dam structure with gated spillway in Haines Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 64.81 ft, Apr. 22,24,26,27, 1960; minimum observed, 58.87 ft, Sept. 17,19-21,25-29, Oct. 3, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 62.60 ft, Sept. 2; minimum observed, 61.46 ft, June 14,15.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.50	62.28	62.18	62.26	62.26	62.24	62.08	61.86	61.62	61.72	61.74	62.54
2	62.48	62.26	62.20	62.26	62.26	62.24	62.08	61.84	61.60	61.74	61.74	62.60
3	62.44	62.27	62.20	62.24	62.26	62.22	62.06	61.84	61.60	61.74	61.72	62.50
4	62.42	62.30	62.20	62.24	62.26	62.22	62.06	61.84	61.58	61.76	61.76	62.40
5	62.41	62.31	62.20	62.24	62.28	62.20	62.06	61.82	61.58	61.76	61.80	62.40
6	62.42	62.26	62.20	62.26	62.28	62.20	62.06	61.82	61.56	61.78	61.86	62.40
7	62.43	62.25	62.20	62.26	62.28	62.18	62.04	61.82	61.56	61.78	61.90	62.40
8	62.45	62.26	62.20	62.26	62.28	62.18	62.04	61.80	61.54	61.80	61.92	62.40
9	62.43	62.27	62.20	62.28	62.28	62.16	62.04	61.80	61.52	61.80	61.94	62.40
10	62.41	62.20	62.20	62.28	62.26	62.16	62.02	61.80	61.50	61.80	61.96	62.40
11	62.40	62.20	62.22	62.28	62.26	62.14	62.00	61.78	61.50	61.78	61.98	62.40
12	62.39	62.18	62.22	62.28	62.26	62.14	61.98	61.78	61.48	61.80	62.00	62.40
13	62.38	62.17	62.22	62.28	62.26	62.12	61.97	61.78	61.48	61.80	62.04	62.40
14	62.37	62.16	62.24	62.28	62.26	62.12	61.96	61.76	61.46	61.80	62.08	62.40
15	62.37	62.15	62.24	62.26	62.24	62.10	61.95	61.76	61.46	61.80	62.10	62.42
16	62.37	62.16	62.26	62.26	62.24	62.10	61.94	61.76	61.50	61.80	62.12	62.42
17	62.38	62.16	62.26	62.26	62.26	62.08	61.94	61.74	61.55	61.80	62.10	62.44
18	62.39	62.16	62.28	62.26	62.26	62.08	61.93	61.74	61.60	61.82	62.10	62.44
19	62.38	62.15	62.28	62.26	62.26	62.06	61.92	61.72	61.65	61.82	62.12	62.46
20	62.36	62.15	62.30	62.24	62.28	62.06	61.91	61.72	61.70	61.82	62.14	62.46
21	62.34	62.16	62.30	62.24	62.28	62.04	61.90	61.72	61.72	61.80	62.16	62.48
22	62.32	62.17	62.32	62.24	62.28	62.04	61.90	61.70	61.74	61.80	62.18	62.48
23	62.30	62.18	62.32	62.24	62.28	62.02	61.90	61.70	61.74	61.80	62.20	62.50
24	62.29	62.19	62.30	62.22	62.26	62.04	61.90	61.70	61.76	61.80	62.22	62.50
25	62.29	62.20	62.30	62.22	62.26	62.04	61.90	61.68	61.76	61.80	62.28	62.50
26	62.29	62.20	62.30	62.22	62.26	62.06	61.90	61.68	61.78	61.80	62.34	62.48
27	62.30	62.20	62.28	62.22	62.26	62.06	61.90	61.66	61.78	61.80	62.38	62.48
28	62.32	62.18	62.28	62.22	62.24	62.08	61.88	61.66	61.76	61.78	62.40	62.46
29	62.33	62.18	62.28	62.24	---	62.08	61.88	61.64	61.76	61.78	62.44	62.46
30	62.32	62.18	62.28	62.24	---	62.08	61.86	61.64	61.74	61.76	62.48	62.46
31	62.30	---	62.28	62.24	---	62.08	---	61.62	---	61.76	62.50	---
MEAN	62.37	62.20	62.25	62.25	62.26	62.12	61.97	61.75	61.62	61.79	62.09	62.45
MAX	62.50	62.31	62.32	62.28	62.28	62.24	62.08	61.86	61.78	61.82	62.50	62.60
MIN	62.29	62.15	62.18	62.22	62.24	62.02	61.86	61.62	61.46	61.72	61.72	62.40
CAL YR 1984	MEAN	62.69	MAX	63.14	MIN	62.15						
WTR YR 1985	MEAN	62.09	MAX	62.60	MIN	61.46						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237540 JOHNS LAKE AT OAKLAND, FL

LOCATION.--Lat 28°32'30", long 81°38'28", in SW¼ sec.29, T.22 S., R.27 E., Orange County, Hydrologic Unit 03080102, on north shore of lake, 0.4 mi south of State Highway 50, and 1.0 mi southwest of Oakland.

SURFACE AREA.--2,411 acres (3.77 mi²).

DRAINAGE AREA.--40.1 mi².

PERIOD OF RECORD.--September 1959 to current year (twice weekly), incomplete. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is 81.93 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Oct. 15, 1980, at several sites within 0.8 mi at datum 6.15 ft higher. Oct. 15, 1980 to May 20, 1981, at present site at datum 4.00 ft higher.

REMARKS.--Lake level partially controlled by culvert with lift gate in outlet canal to Lake Apopka. Outlet canal opened Sept. 30, 1959 and control installed in June or July 1960; culvert invert at about elevation 95.4 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 99.32 ft, Apr. 6, 1960; minimum observed, 85.57 ft, July 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 91.83 ft, Oct. 4; minimum observed, 88.88 ft, June 19.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	91.15	---	---	90.29	---	---	---	---	89.38	90.43
2	---	---	---	---	---	---	89.87	88.93	---	88.93	---	---
3	---	91.43	---	---	---	90.29	---	---	---	---	---	90.43
4	91.83	---	---	---	---	---	89.93	---	---	88.98	89.43	---
5	---	---	---	90.61	---	90.31	---	88.97	---	---	---	90.43
6	91.73	---	---	---	---	---	---	89.01	---	---	89.48	---
7	---	---	---	---	---	90.33	89.73	88.95	---	89.03	---	---
8	---	---	91.11	---	---	---	---	---	---	---	89.53	---
9	---	---	---	---	---	90.31	---	88.95	---	89.08	---	---
10	---	91.27	---	---	---	90.13	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	89.08	89.58	---
12	---	---	---	90.63	---	89.93	---	88.99	---	---	---	---
13	91.69	---	---	---	---	---	---	---	---	---	89.58	---
14	---	---	---	90.67	90.35	89.93	---	88.95	---	89.13	---	---
15	91.65	---	91.03	---	---	---	---	---	---	---	89.63	---
16	---	---	---	---	90.33	---	---	88.93	88.97	89.18	---	---
17	---	91.21	---	---	---	89.91	---	---	---	---	---	---
18	---	---	---	---	90.31	---	---	---	88.99	89.18	90.33	---
19	91.63	91.13	---	---	---	89.85	---	88.95	88.88	---	90.30	---
20	---	---	---	---	90.29	---	---	---	88.99	---	90.33	---
21	---	---	---	---	---	---	89.17	88.95	---	89.18	---	---
22	---	---	90.93	---	90.29	89.83	---	---	---	---	---	---
23	---	---	---	---	---	---	89.13	88.93	88.93	89.23	90.33	---
24	---	91.21	---	---	---	89.89	---	---	---	---	---	---
25	---	---	---	---	90.31	---	89.03	---	88.83	89.23	90.38	---
26	---	---	---	---	---	89.87	---	---	---	---	---	---
27	91.61	---	---	---	90.31	---	---	---	88.93	---	90.38	---
28	---	---	---	---	---	89.93	88.95	---	---	89.33	90.38	---
29	---	---	90.83	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	88.93	---	88.93	89.38	---	---
31	---	---	90.83	---	---	89.93	---	---	---	---	---	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237600 LAKE APOPKA AT WINTER GARDEN, FL

LOCATION.--Lat 28°34'36", long 81°35'13", in NW¼ sec.14, T.22 S., R.27 E., Orange County, Hydrologic Unit 03080102, in southeast corner of west boat basin in public park at Winter Garden.

SURFACE AREA.--30,630 acres (47.9 mi²).

DRAINAGE AREA.--128 mi².

ELEVATION RECORDS

PERIOD OF RECORD.--December 1935 to August 1942 (monthly), September 1942 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WRD FL 1965: Surface area, drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1942, nonrecording gage near present site on public pier at datum 66.25 ft higher. Sept. 18, 1942, to June 26, 1956, water-stage recorder at present site at datum 62.57 ft higher.

REMARKS.--Lake level partly regulated by lock and dam structure on Apopka-Beauclair Canal, 2.5 mi east of Astatula. Gate sills are at elevation 63.0 ft and fixed sheet piling weir at elevation 69.0 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 69.3 ft, Oct. 12, 1936; minimum daily, 64.04 ft, Aug. 13, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 66.96 ft, Sept. 26; minimum daily, 64.92 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.91	66.66	66.55	66.43	66.31	66.22	65.99	65.56	65.24	65.72	65.85	66.60
2	66.87	66.66	66.55	66.44	66.35	66.24	65.99	65.57	65.20	65.73	65.86	66.78
3	66.84	66.63	66.55	66.45	66.39	66.19	65.91	65.55	65.18	65.71	65.87	66.79
4	66.80	66.65	66.56	66.63	66.39	66.13	65.85	65.52	65.14	65.71	65.92	66.80
5	66.79	66.67	66.56	66.63	66.34	66.17	65.79	65.50	65.07	65.65	65.91	66.82
6	66.78	66.75	66.68	66.52	66.37	66.18	65.89	65.48	65.05	65.66	65.89	66.84
7	66.77	66.66	66.64	66.47	66.44	66.09	65.93	65.48	65.02	65.72	65.88	66.82
8	66.77	66.59	66.55	66.51	66.43	66.11	65.95	65.46	65.02	65.73	65.89	66.82
9	66.77	66.54	66.53	66.48	66.37	66.10	65.87	65.40	65.00	65.74	65.97	66.81
10	66.78	66.53	66.52	66.46	66.32	66.09	65.82	65.42	64.95	65.67	66.03	66.79
11	66.80	66.56	66.53	66.50	66.26	66.08	65.76	65.39	64.94	65.65	66.05	66.78
12	66.78	66.59	66.53	66.55	66.54	66.08	65.80	65.40	64.92	65.60	66.07	66.78
13	66.75	66.54	66.52	66.46	66.42	66.07	65.88	65.40	65.14	65.65	66.10	66.76
14	66.73	66.48	66.53	66.41	66.31	66.06	65.85	65.36	65.19	65.65	66.15	66.79
15	66.72	66.46	66.52	66.45	66.32	66.05	65.84	65.33	65.34	65.66	66.21	66.75
16	66.70	66.46	66.53	66.39	66.29	66.02	65.88	65.35	65.40	65.70	66.28	66.74
17	66.69	66.46	66.53	66.37	66.28	66.06	65.80	65.40	65.41	65.69	66.30	66.74
18	66.67	66.44	66.54	66.47	66.28	66.13	65.76	65.30	65.45	65.70	66.30	66.73
19	66.65	66.44	66.53	66.45	66.28	65.96	65.75	65.18	65.45	65.70	66.32	66.71
20	66.64	66.49	66.53	66.49	66.29	65.89	65.75	65.13	65.51	65.68	66.35	66.79
21	66.61	66.53	66.52	66.56	66.24	65.90	65.70	65.28	65.52	65.68	66.40	66.90
22	66.62	66.74	66.52	66.46	66.23	66.10	65.69	65.25	65.56	65.68	66.41	66.92
23	66.62	66.84	66.52	66.42	66.22	66.11	65.67	65.25	65.59	65.68	66.43	66.91
24	66.61	66.63	66.51	66.35	66.21	66.10	65.69	65.37	65.60	65.71	66.42	66.91
25	66.61	66.58	66.51	66.40	66.22	66.06	65.67	65.37	65.58	65.70	66.42	66.92
26	66.62	66.56	66.51	66.44	66.24	65.99	65.65	65.36	65.57	65.71	66.40	66.96
27	66.59	66.54	66.53	66.35	66.26	65.97	65.68	65.32	65.63	65.69	66.44	66.88
28	66.66	66.60	66.50	66.37	66.24	65.96	65.64	65.29	65.63	65.69	66.48	66.86
29	66.68	66.59	66.49	66.39	---	65.93	65.61	65.28	65.68	65.70	66.48	66.85
30	66.68	66.56	66.49	66.35	---	65.93	65.57	65.26	65.74	65.73	66.50	66.84
31	66.67	---	66.46	66.33	---	65.93	---	65.25	---	65.82	66.37	---
MEAN	66.72	66.58	66.53	66.45	66.32	66.06	65.79	65.37	65.32	65.69	66.19	66.81
MAX	66.91	66.84	66.68	66.63	66.54	66.24	65.99	65.57	65.74	65.82	66.50	66.96
MIN	66.59	66.44	66.46	66.33	66.21	65.89	65.57	65.13	64.92	65.60	65.85	66.60
CAL YR 1984	MEAN	66.67	MAX	67.30	MIN	65.98						
WTR YR 1985	MEAN	66.15	MAX	66.96	MIN	64.92						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237600 LAKE APOPKA AT WINTER GARDEN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-63, 1965 to 1985 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
MAR 13...	1130	66.06	360	8.3	30	--	--	6.6	29	19
AUG 11...	1820	66.06	345	8.9	25	5.2	17.0	--	--	--
SEP 03...	1100	66.77	345	8.5	30	17	--	--	31	17

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
MAR 13...	21	12	115	26	43	.70	1.5	270	.010	.01
AUG 11...	--	--	--	--	--	--	--	--	<.010	<.02
SEP 03...	15	12	112	25	38	.60	8.6	279	.010	.01

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
MAR 13...	.060	3.7	.110	.070	<10	--	2	2	50	<10
AUG 11...	.050	.41	.080	.050	--	--	--	--	--	--
SEP 03...	.010	3.9	.150	.080	70	8	1	3	90	<10

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
MAR 13...	<1	2	<10	<10	.2	2	200	20	26
AUG 11...	--	--	--	--	--	--	--	--	33
SEP 03...	5	3	40	<10	.1	2	180	<10	43

OKLAWAHA RIVER BASIN

02237600 LAKE AOPKA AT WINTER GARDEN, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR					AUG				
13...	1131	.50	23.5	8.0	11...	1821	.50	33.5	11.3
13...	1132	3.00	23.0	7.3	11...	1822	2.00	29.0	11.1
13...	1133	4.00	23.0	7.1	SEP				
AUG					03...	1100	--	26.5	10.1
11...	1820	--	33.5	11.3					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237660 LAKE FRANCIS NEAR PLYMOUTH, FL

LOCATION.--Lat 28°40'20", long 81°32'23", in NW¼ sec.32, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080102, on north shore of lake at Errol Estate, 1.3 mi northeast of Plymouth.

SURFACE AREA.--33.0 acres (0.05 mi²).

DRAINAGE AREA.--0.67 mi².

PERIOD OF RECORD.--September 1959 to July 1963 (twice weekly), incomplete; August 1963 to August 1964 (fragmentary); September 1964 to June 1967 (weekly), incomplete; July 1967 to current year (fragmentary). Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office. Prior to January 1961, published as Lake Wenonah near Plymouth.

REVISED RECORDS.--WRD FL 1965: Surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 8, 1971, at site 1,400 ft south at datum 54.40 ft higher and Oct. 8, 1971, to Feb. 23, 1982 at present site at datum 54.40 ft higher.

REMARKS.--Lake is landlocked. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 66.22 ft, Oct. 15,17,24,29, 1960, present datum; minimum observed, 53.30 ft, June 24, 1981, present datum.

ELEVATION, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
FEB			JUN		
26...	0942	58.22	25...	0734	58.02
APR			AUG		
23...	0825	57.78	12...	0856	58.76
MAY					
20...	0930	57.75			

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02237753 WEST CROOKED LAKE NEAR EUSTIS, FL

LOCATION.--Lat 28°49'49", long 81°40'20", in SW¼ sec.13, T.19 S., R.26 E., Lake County, Hydrologic Unit 03080102, on east shore of southeast bay of lake, 1.7 mi southeast of Eustis.

SURFACE AREA.--107 acres (0.17 mi²).

DRAINAGE AREA.--0.67 mi², includes East Crooked Lake.

PERIOD OF RECORD.--February 1970 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is interconnected with East Crooked Lake above an elevation of about 69 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 71.48 ft, Apr. 11, 1970; minimum observed, 60.30 ft, Dec 4, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 74.74 ft was reached in 1960 from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 67.08 ft, Oct. 6, occurred on general recession; minimum observed, 63.30 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	65.34	---	---	64.17	---	63.48	---	---
3	---	---	---	---	---	65.30	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	66.20	---	---	---	---	---	---	---	---	---	63.93
6	67.08	---	---	65.98	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	64.68	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	65.95	---	---	---	---	---	---	---	---
10	---	---	---	---	65.57	65.12	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	63.30	---	63.49	---
13	---	---	---	65.86	---	---	---	---	---	63.37	---	---
14	---	66.45	66.28	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	65.00	---	---	---	---	63.65	63.88
17	---	---	---	---	65.48	---	---	---	---	---	---	---
18	66.90	---	---	---	---	---	---	63.68	---	---	---	---
19	---	---	---	---	---	---	---	---	63.50	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	64.40	---	---	63.40	---	---
22	---	---	66.16	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	64.38	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	64.08
25	---	---	---	---	---	---	---	63.70	63.41	---	63.73	---
26	---	---	---	---	65.35	---	---	---	---	---	---	---
27	---	---	---	65.70	---	64.88	64.28	---	---	---	63.87	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	66.36	66.08	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	63.40	---	63.42	---	---

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02237800 LAKE DORA AT MOUNT DORA, FL

LOCATION.--Lat 28°47'46", long 81°38'39", in NE¼ sec.31, T.19 S., R.27 E., Lake County, Hydrologic Unit 03080102, on west shore of northeast bay of lake, at Mount Dora Marina at Mount Dora.

SURFACE AREA.--4,437 acres (6.93 mi²).

DRAINAGE AREA.--236 mi².

ELEVATION RECORDS

PERIOD OF RECORD.--November 1935 to June 1942 (monthly), July 1942 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. See WDR FL-80-1 for history of changes prior to Sept. 28, 1973.

REMARKS.--Lake is one of the Oklawaha River headwaters chain of lakes. Since 1956, lake levels have been partially controlled by lock and dam structure with gated spillway in Haines Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 65.20 ft, Apr. 5, 1960; minimum observed, 60.59 ft, Feb. 18, 19, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 65.7 ft was reached in September 1926, from information by two local residents.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 62.50 ft, Oct. 1, occurred on recession following crest of Sept. 28, 1984; minimum observed, 61.38 ft, June 11.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.50	62.26	62.18	62.24	62.20	62.14	62.02	61.84	61.54	61.74	61.70	62.24
2	62.48	62.26	62.16	62.24	62.22	62.16	62.02	61.80	61.52	61.78	61.72	62.30
3	62.42	62.24	62.18	62.26	62.24	62.14	62.00	61.78	61.52	61.76	61.70	62.36
4	62.40	62.26	62.16	62.36	62.24	62.12	61.98	61.76	61.48	61.74	61.72	62.34
5	62.40	62.28	62.16	62.32	62.22	62.10	61.94	61.74	61.46	61.76	61.70	62.34
6	62.40	62.26	62.24	62.32	62.24	62.10	61.96	61.72	61.42	61.74	61.72	62.34
7	62.44	62.24	62.24	62.30	62.24	62.08	61.94	61.70	61.40	61.76	61.72	62.34
8	62.42	62.22	62.22	62.28	62.24	62.06	61.94	61.68	61.42	61.74	61.72	62.36
9	62.40	62.18	62.22	62.26	62.22	62.08	61.92	61.66	61.42	61.72	61.70	62.34
10	62.38	62.16	62.20	62.24	62.26	62.08	61.90	61.64	61.40	61.70	61.72	62.34
11	62.40	62.16	62.20	62.26	62.30	62.08	61.88	61.62	61.38	61.70	61.72	62.32
12	62.38	62.16	62.20	62.28	62.30	62.08	61.86	61.62	61.40	61.68	61.74	62.32
13	62.38	62.14	62.20	62.24	62.26	62.06	61.86	61.60	61.40	61.68	61.88	62.34
14	62.38	62.14	62.18	62.26	62.22	62.06	61.88	61.60	61.48	61.70	61.94	62.34
15	62.36	62.14	62.20	62.24	62.22	62.06	61.90	61.60	61.72	61.68	62.06	62.28
16	62.36	62.12	62.20	62.22	62.20	62.04	61.94	61.60	61.74	61.70	62.06	62.26
17	62.34	62.12	62.22	62.22	62.18	62.04	61.92	61.60	61.74	61.72	62.10	62.24
18	62.34	62.12	62.22	62.28	62.16	62.02	61.88	61.56	61.70	61.70	62.12	62.28
19	62.32	62.14	62.22	62.26	62.16	62.00	61.86	61.56	61.72	61.70	62.16	62.28
20	62.32	62.12	62.24	62.26	62.16	61.98	61.84	61.56	61.76	61.68	62.14	62.32
21	62.30	62.14	62.22	62.26	62.16	61.96	61.84	61.60	61.72	61.72	62.22	62.42
22	62.28	62.16	62.24	62.24	62.14	62.08	61.82	61.60	61.72	61.70	62.18	62.44
23	62.26	62.16	62.24	62.24	62.14	62.10	61.82	61.60	61.70	61.68	62.18	62.42
24	62.28	62.18	62.24	62.24	62.16	62.08	61.80	61.64	61.68	61.70	62.16	62.42
25	62.26	62.18	62.22	62.24	62.14	62.06	61.80	61.70	61.66	61.68	62.18	62.42
26	62.28	62.20	62.22	62.24	62.14	62.04	61.80	61.66	61.66	61.64	62.16	62.40
27	62.26	62.20	62.22	62.24	62.14	62.02	61.78	61.62	61.68	61.70	62.14	62.42
28	62.28	62.18	62.22	62.22	62.16	62.02	61.78	61.58	61.66	61.68	62.22	62.42
29	62.28	62.16	62.22	62.22	---	62.00	61.82	61.56	61.68	61.66	62.22	62.40
30	62.30	62.16	62.24	62.24	---	62.00	61.86	61.56	61.70	61.64	62.22	62.40
31	62.28	---	62.24	62.22	---	61.98	---	61.54	---	61.70	62.18	---
MEAN	62.35	62.18	62.21	62.26	62.20	62.06	61.89	61.64	61.58	61.71	61.97	62.35
MAX	62.50	62.28	62.24	62.36	62.30	62.16	62.02	61.84	61.76	61.78	62.22	62.44
MIN	62.26	62.12	62.16	62.22	62.14	61.96	61.78	61.54	61.38	61.64	61.70	62.24
CAL YR 1984	MEAN	62.71	MAX	64.08	MIN	62.12						
WTR YR 1985	MEAN	62.03	MAX	62.50	MIN	61.38						

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02237800 LAKE DORA AT MOUNT DORA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1966 to 1985 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	
MAR 13...	1300	62.08	--	8.7	30	--	--	9.4	40	17	
AUG 10...	1530	61.94	380	9.3	--	5.0	11.0	--	--	--	
SEP 03...	1745	62.34	388	8.3	--	--	--	--	--	--	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
MAR 13...	17	10	124	30	36	.40	.2	280	.010	.01	
AUG 10...	--	--	--	--	--	--	--	--	<.010	<.02	
SEP 03...	--	--	--	--	--	--	--	--	--	--	
DATE		NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
MAR 13...	.050	3.9	.110	.070	70	--	<1	3	70	10	
AUG 10...	.060	2.8	.130	.090	--	--	--	--	--	--	
SEP 03...	--	--	--	--	60	5	1	2	150	<10	
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	
MAR 13...	<1	2	30	<10	.2	4	230	<10	27		
AUG 10...	--	--	--	--	--	--	--	--	--		
SEP 03...	<1	3	30	<10	<.1	1	--	10	--		

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237800 LAKE DORA AT MOUNT DORA, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR					AUG				
13...	1301	.50	25.0	13.0	10...	1533	6.00	28.5	5.6
13...	1302	3.00	23.0	10.0	10...	1534	9.00	28.5	4.7
13...	1303	6.00	23.0	8.6	SEP				
13...	1304	9.00	22.5	6.4	03...	1745	--	27.5	9.6
13...	1305	11.0	22.0	3.6	03...	1746	2.00	27.0	8.0
AUG					03...	1748	6.00	26.5	6.2
03...	1747	4.00	26.5	7.4	03...	1749	8.00	26.0	5.1
10...	1530	--	32.5	10.8	03...	1750	10.0	26.0	4.1
10...	1531	.50	32.5	10.8	03...	1751	11.0	26.0	2.5
10...	1532	3.00	30.0	10.2					

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02237865 LAKE UMATILLA AT UMATILLA, FL

LOCATION.--Lat 28°55'06", long 81°39'44", in SE¼ sec.13, T.18 S., R.26 E., Lake County, Hydrologic Unit 03080102, on south shore of lake, 0.8 mi south of Umatilla.

SURFACE AREA.--165 acres (0.26 mi²).

DRAINAGE AREA.--2.46 mi².

PERIOD OF RECORD.--March 1970 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 4, 1983, at site 1,200 ft west at present datum.

REMARKS.--Lake is landlocked except above an elevation of about 70 ft, when there is overflow to the south into a swamp known as Eustis Meadows, thence through a canal into Lake Eustis.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 68.66 ft, Mar. 13, 1970; minimum observed, 64.20 ft, Dec. 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 67.85 ft, Oct. 6, occurred on general recession; minimum observed, 65.80 ft, June 8.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	67.15	67.04	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	66.48	---
4	---	67.62	---	---	---	---	---	66.44	---	---	---	---
5	---	---	67.50	---	---	---	---	---	---	---	---	---
6	67.85	---	---	67.38	---	---	66.76	---	---	66.28	---	---
7	---	---	---	---	---	---	---	---	---	---	---	57.25
8	---	---	67.47	67.36	---	---	---	---	65.80	---	---	---
9	---	67.52	---	---	---	66.96	---	---	---	---	66.74	---
10	---	---	---	---	67.18	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	66.30	---	---	---	---
12	---	---	---	---	---	---	66.72	---	---	---	66.74	---
13	67.78	---	---	67.30	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	66.46	---	67.44
15	---	---	---	---	---	---	---	---	66.16	---	---	---
16	---	---	---	---	67.12	---	---	---	---	---	---	---
17	---	---	67.44	---	---	66.88	---	---	---	---	66.89	---
18	---	67.42	---	---	---	---	---	66.14	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	67.72	---	---	---	---	---	66.64	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	67.70
22	---	---	---	---	---	---	---	---	66.10	---	---	---
23	---	---	67.42	---	---	66.93	66.60	---	---	---	---	---
24	---	---	---	67.33	---	---	---	---	---	---	66.90	---
25	---	---	---	---	67.10	---	---	66.10	66.08	---	---	---
26	---	---	---	---	67.09	---	---	---	---	---	---	---
27	67.68	---	---	---	---	---	66.54	---	---	66.50	---	---
28	---	67.45	---	---	---	---	---	---	---	---	---	67.77
29	---	---	---	---	---	---	---	---	66.20	---	---	---
30	---	---	---	67.20	---	66.85	---	---	---	---	---	---
31	---	---	67.38	---	---	---	---	65.98	---	---	67.20	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237900 LAKE EUSTIS AT EUSTIS, FL

LOCATION.--Lat 28°51'06", long 81°41'29", in SE¼ sec.10, T.19 S., R.26 E., Lake County, Hydrologic Unit 03080102, on northeast shore of lake, on private pier at Eustis.

SURFACE AREA.--7,806 acres (12.2 mi²).

DRAINAGE AREA.--646 mi².

PERIOD OF RECORD.--November 1935 to June 1942 (monthly), July 1942 to current year. July 1942 to June 1956, records for Dead River near Tavares. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. See WDR FL-80-1 for history of changes prior to Oct. 18, 1970.

REMARKS.--Lake is one of the Oklawaha River headwaters chain of lakes. Since 1956, lake levels have been partially controlled by lock and dam structure with gated spillway in Haines Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 64.84 ft, Apr. 28, 1960; minimum observed, 58.82 ft, Sept. 22, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 66.1 ft was reached in 1926, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 62.50 ft, Oct. 1 occurred on general recession following the crest of Sept. 28, 1984; minimum observed, 61.48 ft, June 7, 11.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.50	62.26	62.22	62.28	62.30	62.22	62.04	61.82	61.60	61.84	61.70	62.26
2	62.46	62.30	62.20	62.28	62.32	62.22	62.10	61.82	61.60	61.78	61.76	62.34
3	62.48	62.28	62.20	62.28	62.30	62.18	62.06	61.88	61.56	61.76	61.70	62.34
4	62.46	62.30	62.18	62.32	62.24	62.18	62.04	61.76	61.54	61.76	61.62	62.34
5	62.42	62.36	62.28	62.30	62.26	62.16	62.02	61.72	61.52	61.78	61.70	62.34
6	62.40	62.26	62.40	62.28	62.26	62.10	62.02	61.74	61.52	61.76	61.68	62.40
7	62.42	62.20	62.22	62.30	62.28	62.08	62.08	61.72	61.48	61.76	61.76	62.38
8	62.38	62.18	62.24	62.30	62.26	62.10	62.00	61.74	61.50	61.74	61.84	62.38
9	62.40	62.20	62.22	62.30	62.26	62.10	61.94	61.74	61.52	61.74	61.98	62.38
10	62.36	62.24	62.22	62.30	62.26	62.10	61.96	61.70	61.50	61.76	61.94	62.34
11	62.38	62.28	62.24	62.34	62.26	62.10	61.90	61.68	61.48	61.76	61.96	62.36
12	62.42	62.28	62.30	62.28	62.40	62.18	61.90	61.68	61.50	61.78	61.94	62.36
13	62.40	62.18	62.24	62.26	62.24	62.12	61.88	61.66	61.52	61.78	61.90	62.30
14	62.40	62.18	62.24	62.28	62.26	62.10	61.98	61.68	61.64	61.78	61.94	62.30
15	62.38	62.18	62.22	62.28	62.24	62.10	62.00	61.66	61.70	61.78	61.96	62.36
16	62.40	62.20	62.24	62.28	62.26	62.10	62.06	61.66	61.78	61.78	62.12	62.30
17	62.40	62.18	62.24	62.30	62.24	62.10	61.96	61.66	61.78	61.76	62.18	62.30
18	62.40	62.18	62.24	62.28	62.26	62.06	61.90	61.64	61.74	61.74	62.18	62.24
19	62.38	62.20	62.26	62.28	62.20	62.06	62.00	61.52	61.74	61.74	62.16	62.26
20	62.36	62.18	62.26	62.38	62.26	62.02	61.96	61.56	61.76	61.76	62.20	62.38
21	62.36	62.10	62.26	62.38	62.18	62.04	61.90	61.66	61.70	61.74	62.20	62.48
22	62.36	62.10	62.24	62.38	62.18	62.16	61.90	61.62	61.72	61.76	62.20	62.46
23	62.36	62.10	62.28	62.36	62.20	62.20	61.88	61.66	61.70	61.72	62.20	62.48
24	62.34	62.20	62.26	62.30	62.20	62.24	61.86	61.66	61.68	61.78	62.20	62.48
25	62.28	62.20	62.24	62.30	62.24	62.14	61.86	61.68	61.70	61.70	62.24	62.48
26	62.26	62.18	62.24	62.24	62.22	62.10	61.86	61.60	61.70	61.68	62.20	62.46
27	62.24	62.18	62.24	62.28	62.22	62.06	61.86	61.62	61.74	61.70	62.14	62.46
28	62.24	62.26	62.26	62.28	62.20	62.06	61.86	61.62	61.80	61.70	62.24	62.34
29	62.34	62.20	62.28	62.28	---	62.06	61.86	61.60	61.76	61.70	62.22	62.42
30	62.32	62.20	62.28	62.28	---	62.06	61.80	61.58	61.80	61.66	62.24	62.40
31	62.28	---	62.28	62.28	---	62.08	---	61.60	---	61.70	62.26	---
MEAN	62.37	62.21	62.25	62.30	62.25	62.12	61.95	61.68	61.64	61.75	62.02	62.37
MAX	62.50	62.36	62.40	62.38	62.40	62.24	62.10	61.88	61.80	61.84	62.26	62.48
MIN	62.24	62.10	62.18	62.24	62.18	62.02	61.80	61.52	61.48	61.66	61.62	62.24
CAL YR 1984	MEAN	62.66	MAX	63.26	MIN	62.10						
WTR YR 1985	MEAN	62.07	MAX	62.50	MIN	61.48						

02238020 SILVER LAKE NEAR LEESBURG, FL

SURFACE AREA.--382 acres (0.60 mi²).

DRAINAGE AREA.--1.50 mi².

PERIOD OF RECORD.--April 1983 to current year (weekly), incomplete.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 68.10 ft, Mar. 5, 1984; minimum observed, 67.10 ft, June 20, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 67.47 ft, Oct. 1, occurred on general recession; minimum observed, 65.28 ft, June 10.

[illegible]

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238180 HOLLY LAKE NEAR UMATILLA, FL

LOCATION.--Lat 28°56'11", long 81°43'04", in SW¼ sec.9, T.18 S., R.26 E., Lake County, Hydrologic Unit 03080102, on south shore of lake, at county boat ramp on State Highway 450, and 3.1 mi west of Umatilla.

SURFACE AREA.--96 acres (0.15 mi²).

DRAINAGE AREA.--0.78 mi².

PERIOD OF RECORD.--October 1967 to October 1968 (thrice weekly), November 1968 to February 1970 (weekly), August 1982 to March 1983 (fragmentary), April 1983 to current year (weekly), incomplete.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--At high stages Holly, Ella, and Yale Lakes are interconnected and some natural diversion occurs northward to Nicotoon Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.43 ft, July 31, 1984; minimum observed, 58.10 ft, June 8, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 60.40 ft, Oct. 7, occurred on recession following crest in September 1984; minimum observed, 58.10 ft, June 8.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	58.30	---	---	---
2	---	---	59.90	---	---	59.38	---	---	---	---	---	---
3	---	---	---	---	59.55	---	---	---	---	---	58.46	---
4	---	60.02	---	---	---	---	---	58.85	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	59.70	---	---	59.15	---	---	58.40	---	---
7	60.40	---	---	---	---	---	---	---	---	---	---	58.56
8	---	---	---	59.70	---	---	---	---	58.10	---	---	---
9	---	---	59.88	---	---	59.28	---	---	---	---	---	---
10	---	---	---	---	59.50	---	---	---	---	---	58.44	---
11	---	59.98	---	---	---	---	---	58.78	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	58.48	---
13	---	---	---	59.68	---	---	59.10	---	---	58.30	---	---
14	60.30	---	---	---	---	---	---	---	---	---	---	58.60
15	---	---	---	---	---	---	---	---	58.30	58.46	---	---
16	---	---	---	---	---	59.20	---	---	58.30	---	---	---
17	---	---	59.85	---	59.45	---	---	---	---	---	58.48	---
18	---	59.94	---	---	---	---	---	58.46	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	59.65	---	---	59.00	---	---	58.40	---	---
21	60.20	---	---	---	---	---	---	---	---	---	---	58.70
22	---	---	---	---	---	---	---	---	58.40	---	---	---
23	---	---	59.82	---	---	---	58.95	---	---	---	---	---
24	---	---	---	---	59.40	59.20	---	---	---	---	58.50	---
25	---	59.90	---	---	---	---	---	58.40	58.34	---	---	---
26	---	---	---	---	59.41	---	---	---	---	---	---	---
27	---	---	---	59.62	---	---	58.88	---	---	58.45	---	---
28	60.16	---	---	---	---	---	---	---	---	---	---	58.60
29	---	---	---	---	---	---	---	---	58.48	---	---	---
30	---	---	59.76	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	59.15	---	---	---	---	---	---

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02238200 LAKE YALE AT GRAND ISLAND, FL

LOCATION.--Lat 28°52'52", long 81°42'21", in NW¼ sec.34, T.18 S., R.26 E., Lake County, Hydrologic Unit 03080102, at southeast end of lake, on east bank at end of stub canal in public park, 1 mi east of Grand Island, and 2.8 mi northwest of Eustis.

SURFACE AREA.--4,030 acres (6.30 mi²).

DRAINAGE AREA.--67.6 mi².

ELEVATION RECORDS

PERIOD OF RECORD.--September 1959 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-74-1: Surface area, drainage area.

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

REMARKS.--Water is diverted from the west side of the lake through Yale-Griffin Canal into Lake Griffin, one of the Oklawaha River headwaters chain of lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 61.29 ft, Oct. 12, 1960; minimum daily, 57.12 ft, Dec. 26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 59.44 ft, Oct. 1; minimum daily, 57.69 ft, June 8.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.44	59.21	58.96	58.94	58.82	58.82	58.69	58.43	57.88	58.14	58.16	58.37
2	59.41	59.20	58.96	58.94	58.85	58.83	58.67	58.43	57.85	58.13	58.16	58.40
3	59.39	59.18	58.96	58.95	58.86	58.81	58.63	58.40	57.82	58.12	58.20	58.42
4	59.37	59.18	58.96	59.02	58.85	58.79	58.61	58.37	57.79	58.11	58.21	58.43
5	59.37	59.18	58.99	58.99	58.85	58.80	58.61	58.35	57.76	58.11	58.18	58.43
6	59.36	59.18	59.05	58.94	58.88	58.80	58.63	58.34	57.74	58.12	58.19	58.43
7	59.35	59.13	59.04	58.92	58.90	58.77	58.64	58.32	57.71	58.11	58.29	58.42
8	59.35	59.09	58.99	58.92	58.89	58.76	58.63	58.29	57.69	58.11	58.28	58.42
9	59.34	59.06	58.98	58.91	58.87	58.76	58.59	58.27	57.70	58.10	58.34	58.41
10	59.34	59.05	58.97	58.90	58.86	58.75	58.57	58.25	57.79	58.09	58.24	58.39
11	59.34	59.05	58.97	58.91	58.87	58.75	58.56	58.22	57.92	58.07	58.22	58.38
12	59.32	59.05	58.97	58.91	58.92	58.75	58.59	58.21	58.09	58.10	58.21	58.39
13	59.31	59.02	58.97	58.87	58.87	58.74	58.59	58.18	58.11	58.15	58.20	58.45
14	59.30	58.99	58.97	58.86	58.84	58.73	58.58	58.16	58.09	58.17	58.29	58.46
15	59.30	58.98	58.97	58.86	58.84	58.73	58.59	58.13	58.08	58.17	58.25	58.42
16	59.29	58.97	58.97	58.84	58.83	58.71	58.57	58.11	58.07	58.18	58.24	58.41
17	59.28	58.98	58.97	58.84	58.82	58.75	58.54	58.07	58.07	58.18	58.23	58.40
18	59.28	58.97	58.97	58.87	58.83	58.70	58.54	58.05	58.11	58.16	58.23	58.41
19	59.27	58.97	58.97	58.89	58.83	58.66	58.53	58.12	58.07	58.15	58.22	58.41
20	59.25	58.97	58.97	58.90	58.83	58.64	58.51	58.11	58.06	58.15	58.23	58.56
21	59.24	58.98	58.96	58.89	58.82	58.73	58.49	58.11	58.05	58.17	58.23	58.59
22	59.24	59.02	58.96	58.85	58.82	58.78	58.48	58.12	58.04	58.18	58.22	58.61
23	59.24	59.07	58.96	58.83	58.82	58.78	58.47	58.11	58.05	58.17	58.25	58.61
24	59.22	59.01	58.96	58.82	58.82	58.77	58.46	58.09	58.06	58.16	58.26	58.62
25	59.21	58.98	58.96	58.85	58.82	58.75	58.45	58.07	58.04	58.20	58.26	58.61
26	59.21	58.98	58.95	58.82	58.82	58.72	58.43	58.04	58.05	58.19	58.24	58.63
27	59.21	58.98	58.96	58.81	58.84	58.71	58.43	58.02	58.05	58.19	58.36	58.60
28	59.21	58.99	58.95	58.83	58.83	58.70	58.46	57.99	58.07	58.17	58.36	58.59
29	59.24	58.98	58.95	58.82	---	58.69	58.47	57.96	58.14	58.16	58.36	58.58
30	59.24	58.97	58.95	58.81	---	58.69	58.45	57.93	58.13	58.17	58.35	58.59
31	59.22	---	58.95	58.81	---	58.69	---	57.90	---	58.17	58.37	---
MEAN	59.29	59.05	58.97	58.88	58.85	58.74	58.55	58.17	57.97	58.15	58.25	58.48
MAX	59.44	59.21	59.05	59.02	58.92	58.83	58.69	58.43	58.14	58.20	58.37	58.63
MIN	59.21	58.97	58.95	58.81	58.82	58.64	58.43	57.90	57.69	58.07	58.16	58.37
CAL YR 1984	MEAN	60.01	MAX	61.27	MIN	58.95						
WTR YR 1985	MEAN	58.61	MAX	59.44	MIN	57.69						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238200 LAKE YALE AT GRAND ISLAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
MAR 14...	1320	58.72	270	8.0	5	--	--	--	28	11
AUG 10...	1430	58.10	310	8.1	5	1.9	37.0	1.0	--	--
SEP 03...	1625	58.41	308	8.2	--	--	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
MAR 14...	21	4.6	123	6.6	27	.20	1.1	186	<.010	<.01
AUG 10...	--	--	--	--	--	--	--	--	<.010	<.02
SEP 03...	--	--	--	--	--	--	--	--	--	--

DATE	NITRO- GEN,AM- MONIA + TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, TOTAL (MG/L AS P) (70507)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
MAR 14...	.040	1.1	.010	.010	<10	--	<1	1	70	10
AUG 10...	.030	.94	.040	.020	--	--	--	--	--	--
SEP 03...	--	--	--	--	20	<1	<1	2	130	<10

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
MAR 14...	<1	2	20	<10	<.1	2	160	<10	13
AUG 10...	--	--	--	--	--	--	--	--	17
SEP 03...	3	<1	50	<10	<.1	1	--	20	--

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02238200 LAKE YALE AT GRAND ISLAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR					AUG				
14...	1321	.50	24.0	9.4	10...	1434	10.0	29.0	7.3
14...	1322	3.00	23.5	9.4	SEP				
14...	1323	6.00	22.5	9.3	03...	1625	--	28.0	9.0
14...	1324	9.00	22.5	9.4	03...	1626	6.00	27.5	8.8
AUG					03...	1627	7.00	26.5	8.4
10...	1430	--	30.0	7.6	03...	1628	8.00	26.5	8.0
10...	1431	.50	30.0	7.6	03...	1629	9.00	26.5	6.7
10...	1432	3.00	30.0	7.6					
10...	1433	6.00	29.5	7.6					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238300 LAKE GRIFFIN AT LEESBURG, FL

LOCATION.--Lat 28°51'48", long 81°51'31", in SE¼ sec.1, T.19 S., R.24 E., Lake County, Hydrologic Unit 03080102, on western portion of lake, on private boat pier at Twin Palms Marina, 3.7 mi north of Leesburg.

SURFACE AREA.--10,660 acres (16.7 mi²).

DRAINAGE AREA.--775 mi²

ELEVATION RECORDS

PERIOD OF RECORD.--May 1936 to September 1944 (monthly), October 1944 to October 1952 (weekly), November 1952 to May 1955 (twice weekly), June 1955 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-74-1: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Since November 1978 at present site and datum. For history of changes prior to November 1978, see WDR FL-80-1.

REMARKS.--Lake is the most downstream of the Oklawaha River headwaters chain of lakes. Lake levels are partially controlled by earthen dam and concrete control with vertical lift gates in Oklawaha River at Moss Bluff.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 60.74 ft, Oct. 11,12, 1960; minimum observed, 52.14 ft, June 29, July 2, 1984, result of drawdown.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 58.48 ft, Sept. 24-28; minimum observed, 57.00 ft, June 9,10.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.34	58.12	57.78	57.76	57.78	57.88	57.74	57.50	57.10	57.48	57.40	58.24
2	58.34	58.10	57.78	57.76	57.78	57.88	57.76	57.46	57.10	57.46	57.40	58.30
3	58.32	58.08	57.78	57.76	57.78	57.88	57.76	57.46	57.08	57.46	57.40	58.38
4	58.30	58.08	57.78	57.76	57.84	57.88	57.76	57.44	57.08	57.44	57.50	58.38
5	58.30	58.06	57.78	57.76	57.84	57.86	57.76	57.40	57.10	57.44	57.50	58.38
6	58.30	58.06	57.78	57.76	57.84	57.86	57.76	57.36	57.08	57.46	57.50	58.38
7	58.30	58.00	57.78	57.76	57.90	57.84	57.76	57.34	57.06	57.46	57.65	58.38
8	58.30	57.98	57.78	57.76	57.90	57.84	57.76	57.34	57.04	57.46	57.75	58.38
9	58.30	57.96	57.76	57.76	57.88	57.84	57.76	57.30	57.00	57.44	57.80	58.38
10	58.30	57.96	57.76	57.76	57.88	57.84	57.76	57.28	57.00	57.42	57.80	58.38
11	58.28	57.92	57.76	57.76	57.86	57.84	57.76	57.28	57.04	57.40	57.80	58.36
12	58.26	57.90	57.76	57.76	57.88	57.82	57.76	57.26	57.06	57.40	57.80	58.36
13	58.24	57.90	57.76	57.74	57.88	57.82	57.76	57.24	57.10	57.42	57.85	58.36
14	58.24	57.88	57.76	57.74	57.86	57.82	57.76	57.22	57.18	57.38	57.90	58.36
15	58.24	57.88	57.76	57.74	57.88	57.80	57.74	57.22	57.26	57.38	57.92	58.36
16	58.24	57.86	57.76	57.74	57.88	57.80	57.74	57.20	57.30	57.38	57.92	58.34
17	58.24	57.86	57.76	57.74	57.88	57.80	57.72	57.18	57.30	57.44	58.00	58.34
18	58.24	57.82	57.76	57.75	57.90	57.78	57.72	57.18	57.30	57.48	58.00	58.32
19	58.20	57.82	57.76	57.76	57.92	57.78	57.68	57.16	57.28	57.50	58.00	58.30
20	58.20	57.82	57.76	57.76	57.92	57.76	57.66	57.16	57.28	57.50	58.00	58.36
21	58.20	57.82	57.76	57.76	57.92	57.76	57.64	57.20	57.32	57.48	58.00	58.44
22	58.20	57.82	57.76	57.76	57.92	57.78	57.60	57.20	57.38	57.48	57.92	58.46
23	58.20	57.84	57.76	57.76	57.92	57.84	57.60	57.20	57.38	57.50	57.92	58.46
24	58.18	57.84	57.76	57.76	57.88	57.76	57.56	57.20	57.38	57.50	57.92	58.48
25	58.16	57.84	57.76	57.76	57.88	57.76	57.56	57.20	57.36	57.48	57.90	58.48
26	58.16	57.82	57.76	57.76	57.88	57.74	57.52	57.20	57.38	57.46	57.90	58.48
27	58.16	57.82	57.76	57.78	57.88	57.74	57.52	57.18	57.38	57.46	57.90	58.48
28	58.14	57.80	57.76	57.78	57.88	57.74	57.52	57.16	57.40	57.46	58.00	58.48
29	58.14	57.80	57.76	57.78	---	57.72	57.52	57.16	57.42	57.46	58.00	58.46
30	58.12	57.78	57.76	57.78	---	57.72	57.50	57.14	57.42	57.44	58.00	58.46
31	58.12	---	57.76	57.78	---	57.74	---	57.12	---	57.44	58.10	---
MEAN	58.23	57.91	57.77	57.76	57.87	57.80	57.68	57.26	57.22	57.45	57.82	58.39
MAX	58.34	58.12	57.78	57.78	57.92	57.88	57.76	57.50	57.42	57.50	58.10	58.48
MIN	58.12	57.78	57.76	57.74	57.78	57.72	57.50	57.12	57.00	57.38	57.40	58.24
CAL YR 1984	MEAN	56.34	MAX	59.28	MIN	52.14						
WTR YR 1985	MEAN	57.76	MAX	58.48	MIN	57.00						

OKLAWAHA RIVER BASIN

02238300 LAKE GRIFFIN AT LEESBURG, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to 1985 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
MAR 13...	1430	57.82	310	8.1	25	--	--	5.1	43	10	
AUG 10...	1300	57.77	250	8.1	15	3.0	12.0	5.1	--	--	
SEP 03...	1515	58.30	274	8.8	--	--	--	--	--	--	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
MAR 13...	14	5.5	128	20	25	.30	.6	228	<.010	<.01	
AUG 10...	--	--	--	--	--	--	--	--	.060	.52	
SEP 03...	--	--	--	--	--	--	--	--	--	--	
DATE		NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
MAR 13...	.040	2.0	.050	.040	<10	--	1	4	90	<10	
AUG 10...	.060	2.3	.090	.090	--	--	--	--	--	--	
SEP 03...	--	--	--	--	50	2	1	2	150	<10	
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	
MAR 13...	<1	2	<10	<10	<.1	1	210	<10	18		
AUG 10...	--	--	--	--	--	--	--	--	31		
SEP 03...	4	2	30	<10	<.1	1	--	10	--		

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238300 LAKE GRIFFIN AT LEESBURG, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR					SEP				
13...	1431	.50	25.0	10.0	03...	1515	--	30.5	14.5
13...	1432	3.00	22.5	10.7	03...	1516	2.00	28.0	15.1
13...	1433	6.00	22.0	8.1	03...	1517	3.00	27.0	12.5
13...	1434	9.00	22.0	7.8	03...	1518	4.00	27.0	11.5
AUG					03...	1519	5.00	27.0	10.4
10...	1300	--	29.5	9.7	03...	1520	6.00	26.5	8.7
10...	1302	2.00	29.0	9.5					
10...	1303	4.00	28.0	8.0					
10...	1304	6.00	28.0	6.8					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238800 LAKE WEIR AT OKLAWAHA, FL

LOCATION.--Lat 29°02'23", long 81°55'44", in SE¼ sec.5, T.17 S., R. 24 E., Marion County, Hydrologic Unit 03080102, on north shore of lake, on east side of pier, 100 ft east of Johnson's Beach Pavilion at Oklawaha.

SURFACE AREA.--5,760 acres (9.00 mi²).

ELEVATION RECORDS

DRAINAGE AREA.--53.8 mi².

PERIOD OF RECORD.--April 1936 to October 1942 (monthly), November 1942 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-74-1: Surface area, drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Nov. 4, 1942, nonrecording gage at site 100 ft west at datum 56.58 ft higher. Nov. 4, 1942, to Mar. 22, 1956, water-stage recorder at datum 55.58 ft higher and Mar. 23, 1956, to Feb. 7, 1957, water-stage recorder at datum 54.00 ft higher, at sites within 100 ft.

REMARKS.--Lake level partly controlled by broad-crested weir in outlet canal to the Oklawaha River; elevation of fixed crest is 57.44 ft. Canal dug and control built in April 1938.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 59.6 ft, in January 1938; minimum daily, 53.46, ft May 9, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 57.31 ft, Oct. 1; minimum daily, 55.21 ft, June 10.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.31	56.98	56.69	56.57	56.36	56.26	56.03	55.84	55.36	55.57	55.38	56.00
2	57.28	56.97	56.68	56.57	56.37	56.25	56.02	55.83	55.34	55.57	55.42	56.03
3	57.26	56.97	56.68	56.59	56.38	56.24	56.00	55.81	55.33	55.55	55.46	56.03
4	57.24	56.96	56.68	56.62	56.36	56.25	55.98	55.78	55.31	55.55	55.46	56.05
5	57.23	56.96	56.68	56.58	56.37	56.25	55.97	55.76	55.30	55.54	55.45	56.10
6	57.22	56.93	56.69	56.55	56.38	56.22	55.98	55.74	55.28	55.55	55.43	56.17
7	57.21	56.88	56.66	56.54	56.39	56.21	56.00	55.72	55.25	55.54	55.47	56.16
8	57.20	56.85	56.65	56.53	56.37	56.21	55.99	55.72	55.23	55.54	55.57	56.15
9	57.18	56.83	56.64	56.52	56.35	56.21	55.97	55.70	55.22	55.52	55.59	56.15
10	57.18	56.82	56.63	56.51	56.34	56.20	55.95	55.68	55.21	55.51	55.58	56.14
11	57.17	56.82	56.63	56.51	56.36	56.19	55.93	55.67	55.22	55.50	55.58	56.13
12	57.17	56.79	56.62	56.48	56.38	56.19	55.92	55.66	55.22	55.48	55.57	56.16
13	57.16	56.77	56.62	56.46	56.34	56.17	55.96	55.64	55.29	55.47	55.58	56.15
14	57.15	56.75	56.62	56.46	56.32	56.17	55.98	55.64	55.42	55.45	55.64	56.12
15	57.14	56.74	56.61	56.45	56.31	56.15	56.01	55.62	55.47	55.44	55.66	56.09
16	57.14	56.73	56.62	56.43	56.31	56.15	56.00	55.61	55.55	55.45	55.70	56.07
17	57.13	56.73	56.61	56.44	56.30	56.17	55.98	55.58	55.56	55.48	55.88	56.05
18	57.12	56.72	56.61	56.46	56.30	56.15	55.97	55.53	55.56	55.48	55.91	56.03
19	57.11	56.72	56.61	56.46	56.30	56.12	55.97	55.50	55.55	55.47	55.92	56.01
20	57.10	56.71	56.61	56.45	56.29	56.11	55.95	55.50	55.54	55.47	55.92	56.05
21	57.09	56.69	56.61	56.43	56.28	56.11	55.94	55.54	55.52	55.47	55.92	56.10
22	57.08	56.72	56.60	56.41	56.28	56.14	55.93	55.52	55.50	55.50	55.90	56.12
23	57.07	56.72	56.60	56.39	56.28	56.11	55.92	55.52	55.51	55.48	55.90	56.12
24	57.05	56.72	56.60	56.38	56.28	56.10	55.91	55.51	55.49	55.46	55.90	56.18
25	57.03	56.71	56.59	56.39	56.28	56.10	55.91	55.49	55.47	55.43	55.90	56.17
26	57.02	56.71	56.59	56.38	56.28	56.09	55.89	55.46	55.50	55.43	55.88	56.15
27	57.02	56.71	56.58	56.37	56.28	56.07	55.89	55.45	55.50	55.43	55.88	56.15
28	57.02	56.71	56.58	56.36	56.27	56.06	55.87	55.42	55.50	55.41	55.91	56.13
29	57.01	56.70	56.59	56.35	---	56.05	55.86	55.40	55.55	55.41	55.90	56.11
30	57.01	56.69	56.58	56.35	---	56.04	55.85	55.40	55.55	55.39	55.88	56.11
31	57.00	---	56.58	56.35	---	56.04	---	55.39	---	55.37	55.95	---
MEAN	57.13	56.79	56.62	56.46	56.33	56.15	55.95	55.60	55.41	55.48	55.71	56.11
MAX	57.31	56.98	56.69	56.62	56.39	56.26	56.03	55.84	55.56	55.57	55.95	56.18
MIN	57.00	56.69	56.58	56.35	56.27	56.04	55.85	55.39	55.21	55.37	55.38	56.00
CAL YR 1984 MEAN	57.47			58.01		56.58						
WTR YR 1985 MEAN	56.15			57.31		55.21						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238800 LAKE WEIR AT OKLAWAHA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1965 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)	SPE- CIFIC CON- DUC- TANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	TRANS- PAR- ENCY (SECCHI DISK) (IN) (00077)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
MAR 14...	1200	56.16	133	7.8	15	--	--	--	5.0	3.8	
AUG 11...	1100	55.58	155	7.3	<5	1.1	72.0	.7	--	--	
SEP 04...	0730	56.02	148	7.8	--	--	--	--	--	--	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
MAR 14...	17	2.6	14	9.4	29	.10	.6	82	<.010	<.01	
AUG 11...	--	--	--	--	--	--	--	--	<.010	<.02	
SEP 04...	--	--	--	--	--	--	--	--	--	--	
DATE		NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
MAR 14...	.050	1.2	.010	.010	10	--	<1	1	60	<10	
AUG 11...	.030	.55	.040	.010	--	--	--	--	--	--	
SEP 04...	--	--	--	--	30	<1	1	1	40	<10	
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	
MAR 14...	<1	2	10	<10	.1	4	100	<10	10		
AUG 11...	--	--	--	--	--	--	--	--	12		
SEP 04...	1	<1	20	<10	<.1	3	--	10	--		

OKLAWAHA RIVER BASIN

02238800 LAKE WEIR AT OKLAWAHA, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR					AUG				
14...	1201	.50	23.0	9.1	11...	1101	5.00	29.0	7.1
14...	1202	3.00	21.0	9.4	11...	1102	10.0	29.0	6.9
14...	1203	6.00	21.0	9.5	11...	1103	15.0	27.5	6.7
14...	1204	9.00	20.5	9.6	11...	1104	22.0	25.0	6.5
14...	1205	12.0	20.0	9.5	SEP				
14...	1206	14.0	20.0	9.4	04...	0730	--	27.5	7.5
AUG					04...	0731	18.0	27.0	7.2
11...	1100	--	29.0	7.2					

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02238820 SMITH LAKE NEAR CANDLER, FL

LOCATION.--Lat 29°04'12", long 81°59'25", in NE¼ sec. 27, T.16 S., R.23 E., Marion County, Hydrologic Unit 03080102, on north shore of lake, on north side of private pier, 1.1 mi west of Candler.

SURFACE AREA.--482 acres (0.75 mi²)

DRAINAGE AREA.--5.01 mi².

PERIOD OF RECORD.--July 1972 to current year (monthly).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is landlocked. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 57.82 ft, Feb. 14, 1984; minimum observed, 49.70 ft, Dec. 24, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
DEC			MAY		
13...	1325	56.14	20...	0855	54.12
20...	0900	56.12	JUN		
JAN			17...	0930	54.20
28...	0930	55.68	JUL		
FEB			09...	1020	54.17
16...	1000	55.46	26...	1000	54.10
MAR			AUG		
20...	1000	55.10	20...	0930	54.10
25...	0845	55.07	SEP		
APR			16...	0900	54.40
26...	0730	54.70			

ST. JOHNS RIVER

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OKLAWAHA RIVER BASIN

02238830 BOWERS LAKE NEAR OKLAWAHA, FL

LOCATION.--Lat 29°02'22", long 81°57'24", in SE¼ sec.1, T.17 S., R.23 E., Marion County, Hydrologic Unit 03080102, on southwest shore of lake at Lakefront Apartments, 1.6 mi west of Oklawaha.

SURFACE AREA.--633 acres (0.99 mi²).

DRAINAGE AREA.--8.48 mi².

PERIOD OF RECORD.--July 1972 to current year (monthly).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Dec. 12, 1981, at site 0.4 mi west at same datum.

REMARKS.--Lake is landlocked except at high stages when outflow is to the northeast to Lake Weir outlet, thence to Oklawaha River. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 58.52 ft, Sept. 1, 1983; minimum observed, 53.50 ft, Oct. 30, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			MAR		
02...	1720	57.12	01...	0930	56.10
DEC			25...	0900	55.84
10...	1200	56.56	MAY		
13...	1340	56.54	20...	0915	55.01
JAN			JUL		
04...	1030	56.42	09...	1035	55.04
28...	0945	56.29	SEP		
FEB			16...	1200	55.62
10...	1030	56.24			

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02240200 LAKE BRYANT NEAR SILVER SPRINGS, FL

LOCATION.--Lat 29°08'21", long 81°51'03", in SW¼ sec.31, T.15 S., R.25 E., Marion County, Hydrologic Unit 03080102, on southeast shore on private pier, 4.4 mi northeast of Moss Bluff Dam, and 13.5 mi southeast of Silver Springs.

SURFACE AREA.--1,261 acres (1.97 mi²), does not include North Lake.

DRAINAGE AREA.--9.86 mi².

PERIOD OF RECORD.--April 1936 to April 1950 and July 1972 to current year (monthly). Records of elevations prior to July 1972 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. April 1936 to April 1950, nonrecording gage on northeast side of lake at datum 53.36 ft higher.

REMARKS.--Lake is in a chain of lakes in the western part of the Ocala National Forest. Outflow is to the east to Halfmoon Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 54.8 ft, in October 1945; minimum observed, 50.20 ft, Dec. 2, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
DEC			MAY		
11...	0900	52.30	14...	1700	51.40
13...	1640	52.35	20...	1135	51.27
JAN			JUL		
11...	1400	52.20	09...	1230	51.24
28...	1230	52.10	31...	0900	51.09
MAR			AUG		
25...	1135	51.84	08...	0900	51.90
APR			SEP		
11...	1000	51.70	16...	1435	52.26

02240900 NEWNANS LAKE NEAR GAINESVILLE, FL

SURFACE AREA.--7,350 acres (11.5 mi²).

DRAINAGE AREA.--114 mi².

PERIOD OF RECORD.--April 1936 to October 1945 (monthly), incomplete; November 1945 to January 1946 and June 1946 to December 1952 (twice weekly), incomplete; July 1957 to September 1960; October 1960 to September 1962 (weekly), incomplete; October 1962 to July 1965 (fragmentary); August 1965 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-74-3: Drainage area. WDR FL-81-1: Surface area.

GAGE.--Nonrecording gage. Datum of gage is 63.33 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Nov. 2, 1945, at approximately present site at datum 1.88 ft higher. Nov. 2, 1945, to Dec. 31, 1952, and July 15, 1957, to June 23, 1966, at several sites within 500 ft of present site at present datum.

REMARKS.--Outflow from lake is through Prairie Creek to Camps Canal and thence through River Styx to Orange Lake; some diversion of outflow to Paynes Prairie for irrigation. Since November 1966, lake level partially controlled by concrete dam in Prairie Creek at lake outlet; present control, completed in March 1976, has crest elevation at 66.8 ft with removable boards.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 71.21 ft, Mar. 12, 1948; minimum observed, 63.87 ft, May 19, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 69.11 ft, Sept. 10; minimum observed, 65.40 ft, June 15.

[illegible]

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240958 LAKE KANAPAHA AT ARREDONDO, FL

LOCATION.--Lat 29°36'44", long 82°24'14", in NW¼ sec.22, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080102, on south shore of lake at Broken Arrow Bluff Mobile Homes Park, 0.6 mi northeast of Arredondo, and 5.4 mi southwest of Gainesville.

SURFACE AREA.--204 acres (0.32 mi²).

DRAINAGE AREA.--8.65 mi².

PERIOD OF RECORD.--November 1971 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-73-3: Surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Outflow from lake is into Haile Sink.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 58.44 ft, Aug. 29, 1972; lake dry at gage Oct. 27 to Nov. 29, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 55.10 ft, Sept. 13; minimum observed, 50.85 ft, June 28, July 26.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	51.84	51.80	---	---	---	---	---	---
2	52.30	---	---	---	---	---	---	---	---	---	50.96	---
3	---	52.18	---	---	---	---	51.43	51.36	---	---	---	---
4	---	---	---	52.04	---	---	---	---	---	---	---	---
5	52.26	---	---	---	---	---	51.38	---	---	50.94	---	---
6	---	---	52.10	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	50.94	---	---	---
8	---	---	---	---	51.94	51.76	---	---	---	---	---	---
9	---	52.10	---	---	---	---	---	---	---	---	51.08	---
10	---	---	---	---	---	---	---	51.32	---	---	---	---
11	---	---	---	52.00	---	---	---	---	---	---	---	---
12	52.18	---	---	---	---	---	51.34	51.22	---	50.92	---	---
13	---	---	---	---	---	---	---	---	---	---	---	55.10
14	---	---	52.08	---	---	---	---	---	50.90	---	---	---
15	---	---	---	---	51.90	51.72	---	---	---	50.94	---	---
16	---	52.06	---	---	---	---	---	---	---	---	51.45	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	51.98	---	---	---	---	---	---	---	---
19	52.14	---	52.06	---	---	---	51.64	---	---	50.96	---	53.90
20	---	---	---	---	---	---	---	---	---	---	---	53.90
21	---	---	52.04	---	---	---	---	---	50.92	---	---	---
22	---	---	---	---	51.86	51.80	---	---	---	---	---	---
23	---	52.18	---	---	---	---	---	51.29	---	---	---	---
24	---	---	---	---	---	---	---	51.28	---	---	---	---
25	---	---	---	51.88	---	---	---	---	---	---	---	---
26	52.06	---	---	---	---	---	51.44	---	---	50.85	---	---
27	---	---	---	---	---	---	---	---	---	---	---	52.80
28	---	---	52.00	---	---	51.50	---	---	50.85	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	52.14	---	---	---	51.48	---	---	---	---	---	---
31	---	---	---	51.82	---	---	---	51.20	---	---	---	---

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.23		---	---	---	---	---	---	55.93	---	---	---
2	---		---	---	57.31	57.15	---	---	---	---	---	---
3	---		---	---	---	---	---	---	---	---	55.99	---
4	---		57.72	---	---	---	---	56.47	---	---	---	---
5	---		---	57.51	---	---	---	---	---	---	---	---
6	---		---	---	---	---	56.83	---	---	55.83	---	---
7	---		57.69	---	---	---	---	---	55.83	---	---	57.85
8	---		---	---	---	---	---	---	---	---	---	---
9	---		---	---	57.33	---	---	---	---	55.79	---	---
10	---		---	---	---	---	---	---	---	---	56.13	---
11	---		---	---	---	---	---	56.43	---	---	---	---
12	---		---	57.39	---	---	---	---	---	---	---	---
13	---		---	---	---	---	---	---	---	55.83	---	---
14	---		57.63	---	---	---	---	---	55.79	---	---	---
15	---		---	---	---	56.97	---	---	---	---	---	---
16	---		---	---	---	---	---	---	---	---	---	57.69
17	---		---	---	---	---	---	---	---	---	56.29	---
18	---		---	---	---	---	---	56.15	---	---	---	---
19	---		57.62	57.37	---	---	---	---	---	---	---	---
20	---		---	---	---	---	56.73	---	---	55.85	---	---
21	---		---	---	---	---	---	---	---	---	---	---
22	---		57.61	---	---	---	---	56.20	55.79	---	---	---
23	---		---	---	---	---	---	---	---	---	56.39	---
24	---		---	57.29	---	57.03	---	---	---	---	---	---
25	---		---	---	---	---	---	56.11	---	---	---	---
26	---		---	---	---	---	---	---	---	---	---	---
27	---		---	---	---	---	56.59	---	---	---	---	---
28	---		57.55	---	---	56.97	---	---	---	---	---	57.93
29	---		---	---	---	---	---	---	55.69	---	---	---
30	---		---	---	---	---	---	---	---	---	---	---
31	---		---	57.29	---	---	---	---	---	---	---	---

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02242450 ORANGE LAKE AT ORANGE LAKE, FL

LOCATION.--Lat 29°25'37", long 82°12'26", in SE¼, sec.21, T. 12 S., R.21 E., Alachua County, Hydrologic Unit 03080102, on south shore of southwest bay of lake, at public boat landing in town of Orange Lake.

SURFACE AREA.--13,160 acres (20.6 mi²).

DRAINAGE AREA.--1,012 mi², includes drainage area of Paynes Prairie, a diked sinkhole area of 650 mi², approximately, which is noncontributing except by pumpage.

PERIOD OF RECORD.--May 1933 to March 1934 and November 1935 to June 1942 (monthly), July 1942 to current year. July 1942 to May 1955, records for Orange Lake Outlet near Citra. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-74-1: Surface area. WDR FL-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 2, 1942, nonrecording gage at approximately present site at datum 56.24 ft higher. July 2, 1942, to June 27, 1943, nonrecording gage at lake outlet at datum 55.41 ft higher. June 28, 1943, to Mar. 28, 1947, nonrecording gage and Mar. 28, 1947, to May 31, 1955, water-stage recorder, at lake outlet at datum 53.41 ft higher. July 8, 1955, to Sept. 30, 1957, nonrecording gages at several sites between Boardman and present site at various datums.

REMARKS.--Since April 1963, outlet controlled by concrete dam 160 ft long; elevation of crest is 58.0 ft with notch in center at elevation 55.5 ft. Outflow from lake is through Orange Creek to Oklawaha River. Elevation at gage subject to fluctuations caused by wind action.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.95 ft, Mar. 19, 1948 (near Boardman); minimum observed, 50.38 ft, Aug. 11, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 58.32 ft, Oct. 2-8; minimum daily, 55.78 ft, July 11-14.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.27	57.98	57.90	57.67	57.38	57.34	57.08	56.76	56.14	55.86	55.86	56.36
2	58.32	57.98	57.90	57.67	57.38	57.34	57.05	56.75	56.14	55.88	55.86	56.36
3	58.32	57.98	57.88	57.67	57.38	57.34	56.99	56.75	56.07	55.87	55.86	56.59
4	58.32	57.98	57.86	57.67	57.38	57.32	56.99	56.76	56.02	55.87	55.86	57.13
5	58.32	58.00	57.86	57.67	57.38	57.28	56.99	56.75	56.02	55.88	55.89	57.16
6	58.32	58.04	57.86	57.67	57.37	57.28	56.99	56.65	56.02	55.88	55.93	57.16
7	58.32	58.04	57.86	57.63	57.37	57.28	56.99	56.59	56.02	55.87	55.93	57.16
8	58.32	58.04	57.86	57.56	57.37	57.28	56.97	56.59	56.02	55.86	55.93	57.16
9	58.28	58.04	57.86	57.56	57.37	57.28	56.95	56.59	56.02	55.83	55.93	57.34
10	58.24	58.04	57.83	57.56	57.37	57.28	56.96	56.59	55.91	55.81	55.93	57.54
11	58.24	58.04	57.78	57.56	57.37	57.24	56.96	56.59	55.84	55.78	55.96	57.54
12	58.24	58.04	57.78	57.56	57.35	57.18	56.96	56.59	55.84	55.78	55.99	57.54
13	58.24	57.99	57.78	57.56	57.33	57.18	56.96	56.59	55.84	55.78	55.99	57.69
14	58.24	57.91	57.78	57.53	57.33	57.18	56.96	56.59	55.84	55.78	55.99	57.85
15	58.24	57.91	57.78	57.49	57.33	57.18	56.96	56.51	55.84	55.82	55.99	57.85
16	58.24	57.91	57.78	57.49	57.33	57.18	56.95	56.42	55.84	55.88	55.99	57.90
17	58.16	57.91	57.78	57.49	57.33	57.18	56.95	56.42	55.88	55.88	55.99	57.98
18	58.10	57.91	57.77	57.49	57.33	57.18	56.95	56.42	55.94	55.88	55.99	58.04
19	58.10	57.86	57.75	57.49	57.35	57.17	56.95	56.42	55.94	55.88	56.00	58.10
20	58.10	57.82	57.75	57.49	57.38	57.14	56.95	56.42	55.94	55.88	56.01	58.10
21	58.10	57.82	57.75	57.48	57.38	57.14	56.95	56.37	55.94	55.88	56.01	58.10
22	58.10	57.82	57.75	57.46	57.38	57.14	56.92	56.26	55.94	55.88	56.01	58.10
23	58.06	57.82	57.75	57.46	57.38	57.14	56.89	56.23	55.94	55.90	56.01	58.19
24	58.03	57.82	57.73	57.46	57.38	57.14	56.89	56.23	55.91	55.92	56.01	58.28
25	58.03	57.82	57.71	57.46	57.37	57.13	56.89	56.23	55.84	55.92	56.01	58.28
26	58.03	57.87	57.71	57.46	57.34	57.12	56.89	56.23	55.84	55.92	56.13	58.28
27	58.03	57.90	57.71	57.46	57.34	57.12	56.89	56.19	55.84	55.92	56.36	58.28
28	58.03	57.90	57.71	57.42	57.34	57.10	56.89	56.14	55.84	55.92	56.36	58.28
29	58.00	57.90	57.71	57.38	---	57.08	56.89	56.14	55.84	55.89	56.36	58.28
30	57.98	57.90	57.71	57.38	---	57.08	56.84	56.14	55.84	55.86	56.36	58.31
31	57.98	---	57.69	57.38	---	57.08	---	56.14	---	55.86	56.36	---
MEAN	58.17	57.93	57.78	57.53	57.36	57.20	56.95	56.45	55.93	55.87	56.03	57.70
MAX	58.32	58.04	57.90	57.67	57.38	57.34	57.08	56.76	56.14	55.92	56.36	58.31
MIN	57.98	57.82	57.69	57.38	57.33	57.08	56.84	56.14	55.84	55.78	55.86	56.36
CAL YR 1984	MEAN	58.61		MAX	59.30	MIN	57.69					
WTR YR 1985	MEAN	57.07		MAX	58.32	MIN	55.78					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02243958 LAKE OKLAWAHA NEAR ORANGE SPRINGS, FL

LOCATION.--Lat 29°30'30", long 81°48'15", in NW¼ sec.28, T.11 S., R.25 E., Putnam County, Hydrologic Unit 030810102, at upstream side of control structure of Rodman Dam on Oklawaha River, 8.4 mi east of Orange Springs.

SURFACE AREA.--10,800 acres (16.9 mi²), at elevation 20.0 ft above NGVD, from data furnished by U.S. Army Corps of Engineers.

DRAINAGE AREA.--2,747 mi², includes Paynes Prairie, a diked sinkhole area of 650 mi², approximately, which is noncontributing except for pumpage.

PERIOD OF RECORD.--October 1968 to current year. Records for Oklawaha River above Rodman Dam, near Orange Springs (station 02243959). Prior to October 1969, published as Rodman Reservoir near Orange Springs.

REVISED RECORDS.--WDR FL-77-1: Drainage area.

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

REMARKS.--Lake is formed by earthfill dam with concrete control structure. Dam was completed and storage began on Sept. 30, 1968; water in reservoir reached an interim elevation of about 16 ft in November 1968 and was raised to the optimum pool elevation of 20 ft in July 1969. Capacity, 120,000 acre-ft between elevations 6.0 ft, invert of gate sills and 23.2 ft, standard project flood; no dead storage below elevation 6.0 ft. Lake is part of the Cross-Florida Barge Canal and is used for recreation purposes. Figures given herewith represent total contents.

COOPERATION.--Preliminary capacity table provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 85,000 acre-ft, Feb. 4, 1970, elevation, 20.70 ft; minimum since July 1969, 15,000 acre-ft, Sept. 5, Nov. 10, 1972; minimum elevation, 12.57 ft, Nov. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 65,200 acre-ft, Sept. 7, 30, elevation, 19.10 ft; minimum observed, 52,280 acre-ft, Oct. 7, elevation, 17.92 ft.

Preliminary capacity table
(elevation, in feet NGVD, and contents, in acre-feet)

10	5,000	14	22,000	18	53,000	22	102,000
11	9,000	15	28,000	19	64,000	23	117,000
12	13,000	16	35,000	20	76,000		
13	17,000	17	44,000	21	88,000		

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.05	18.07	17.95	18.06	18.07	18.05	18.14	18.12	18.27	18.30	18.05	19.00
2	18.02	18.05	17.99	18.05	18.11	18.12	18.14	18.04	18.23	18.11	17.97	18.82
3	18.00	18.05	18.03	18.09	18.02	18.12	18.08	18.09	18.23	18.07	17.96	18.76
4	18.00	18.06	18.08	18.22	18.01	18.11	18.08	18.06	18.21	18.02	18.02	18.90
5	17.95	18.08	18.14	18.27	18.05	18.10	18.07	18.06	18.18	18.00	18.00	19.04
6	17.93	18.11	18.21	18.20	18.07	18.10	18.08	18.05	18.17	18.02	18.00	19.08
7	17.92	18.11	18.11	18.21	18.12	18.03	18.10	18.07	18.20	18.03	18.04	19.10
8	17.94	18.09	18.06	18.24	18.08	18.02	18.09	18.10	18.23	18.04	18.26	18.98
9	17.97	18.08	18.02	18.24	18.02	18.02	18.07	18.11	18.24	18.02	18.46	18.92
10	18.04	18.06	17.98	18.24	17.96	18.00	18.09	18.12	18.24	18.01	18.26	19.00
11	18.03	18.07	17.96	18.28	18.05	17.96	18.07	18.13	18.22	18.03	18.34	19.04
12	18.02	18.05	18.00	18.25	18.08	17.98	18.08	18.11	18.22	18.02	18.38	19.02
13	18.04	18.00	18.05	18.24	17.96	17.98	18.11	18.12	18.23	18.04	18.32	19.06
14	18.03	17.98	18.10	18.28	17.93	18.01	18.21	18.11	18.39	18.02	18.36	19.06
15	18.00	17.97	18.13	18.28	17.95	18.07	18.18	18.11	18.43	18.02	18.36	19.06
16	18.00	17.97	18.09	18.24	17.98	18.09	18.16	18.14	18.47	18.06	18.24	19.06
17	18.00	17.96	18.05	18.18	17.97	18.42	18.08	18.23	18.22	18.08	18.21	19.03
18	18.02	17.97	18.02	18.23	17.94	18.43	18.07	18.17	18.15	18.08	18.10	19.05
19	18.05	18.07	17.96	18.16	18.00	18.33	18.07	18.13	18.15	18.09	18.14	19.06
20	18.07	18.13	17.95	18.14	17.98	18.25	18.08	18.14	18.17	18.10	18.40	19.06
21	18.10	18.15	17.96	18.12	17.98	18.18	18.09	18.24	18.08	18.10	18.54	19.08
22	18.12	18.27	17.97	18.14	17.97	18.22	18.10	18.27	18.09	18.13	18.30	19.08
23	18.15	18.32	17.97	18.15	18.00	18.17	18.08	18.30	18.10	18.15	18.29	19.08
24	18.12	18.18	17.99	18.25	18.03	18.11	18.08	18.32	18.08	18.19	18.56	19.06
25	18.05	18.03	18.03	18.12	18.06	18.11	18.07	18.28	18.12	18.12	18.65	19.06
26	18.07	17.98	18.02	18.10	18.07	18.10	18.09	18.21	18.18	18.01	18.62	19.00
27	18.10	17.98	18.02	18.13	18.07	18.10	18.09	18.20	18.19	18.06	18.58	18.96
28	18.10	17.99	18.02	18.13	18.03	18.14	18.08	18.22	18.19	18.06	18.78	18.92
29	18.07	17.95	18.05	18.08	---	18.12	18.08	18.26	18.23	18.07	18.85	18.98
30	18.07	17.94	18.06	18.05	---	18.14	18.16	18.24	18.30	18.16	18.91	19.10
31	18.08	---	18.04	18.07	---	18.15	---	18.29	---	18.14	18.99	---
MEAN	18.04	18.06	18.03	18.18	18.02	18.12	18.10	18.16	18.21	18.08	18.35	19.01
MAX	18.15	18.32	18.21	18.28	18.12	18.43	18.21	18.32	18.47	18.30	18.99	19.10
MIN	17.92	17.94	17.95	18.05	17.93	17.96	18.07	18.04	18.08	18.00	17.96	18.76
CAL YR 1984	MEAN	18.07		MAX	18.78	MIN	17.60					
WTR YR 1985	MEAN	18.20		MAX	19.10	MIN	17.92					

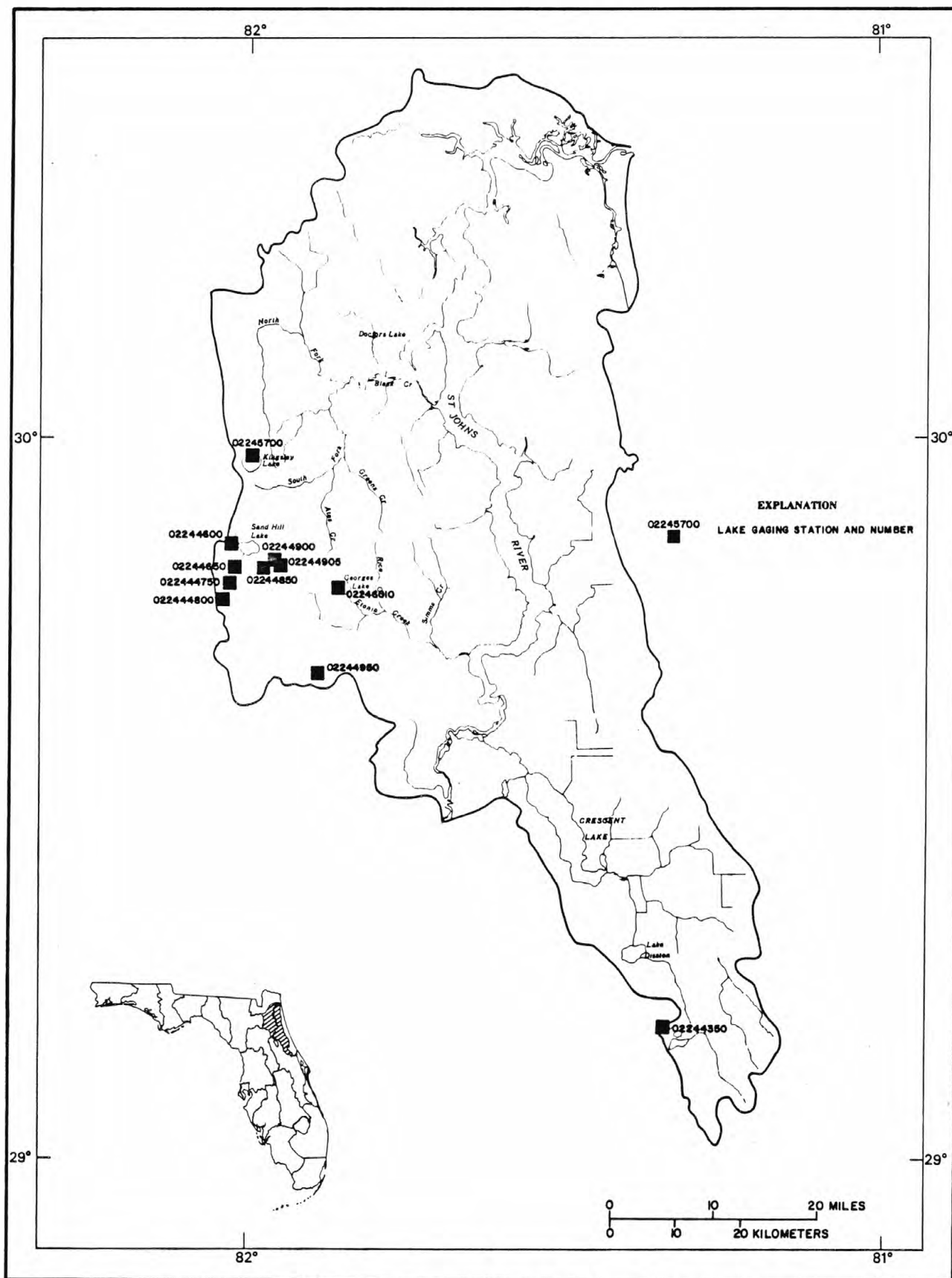


Figure 16. Location of lake gaging stations in the St. Johns River basin below the Oklawaha River.

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244350 LAKE WINONA NEAR DE LAND, FL

LOCATION.--Lat 29°10'50", long 81°20'06", in SE¼ sec.19, T.15 S., R.30 E., Volusia County, Hydrologic Unit 03080103, on northwest shore of lake, on pier at YMCA camp, 10.8 mi north of De Land.

SURFACE AREA.--156 acres (0.24 mi²).

DRAINAGE AREA.--1.35 mi².

PERIOD OF RECORD.--March 1965 to current year.

REVISED RECORDS.--WDR FL-75-1: Surface area, drainage area.

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

REMARKS.--Lake is landlocked.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 40.52 ft, Oct. 20, 1969; minimum daily, 31.72 ft, July 7, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 36.95 ft, Oct. 1; minimum daily, 33.99 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.95	36.76	36.59	36.43	35.89	35.53	35.10	34.74	34.23	34.20	34.22	34.82
2	36.94	36.75	36.58	36.42	35.89	35.52	35.10	34.72	34.20	34.19	34.23	34.83
3	36.93	36.77	36.58	36.42	35.89	35.50	35.07	34.69	34.19	34.17	34.24	34.83
4	36.92	36.78	36.57	36.42	35.88	35.48	35.05	34.70	34.16	34.15	34.32	34.83
5	36.91	36.78	36.62	36.39	35.87	35.47	35.02	34.74	34.14	34.15	34.30	34.85
6	36.90	36.75	36.66	36.37	35.87	35.46	35.03	34.71	34.11	34.22	34.29	34.86
7	36.90	36.72	36.64	36.35	35.86	35.43	35.05	34.69	34.08	34.23	34.31	34.85
8	36.89	36.70	36.61	36.33	35.86	35.42	35.04	34.66	34.06	34.23	34.36	34.84
9	36.88	36.68	36.59	36.31	35.83	35.40	35.01	34.64	34.04	34.20	34.40	34.83
10	36.88	36.66	36.58	36.29	35.81	35.38	34.98	34.62	34.02	34.18	34.41	34.82
11	36.88	36.66	36.57	36.29	35.80	35.37	34.96	34.60	34.00	34.16	34.41	34.81
12	36.88	36.63	36.57	36.27	35.79	35.36	34.95	34.57	33.99	34.22	34.39	34.80
13	36.87	36.61	36.56	36.24	35.76	35.34	35.01	34.55	34.05	34.23	34.42	34.84
14	36.86	36.59	36.55	36.23	35.74	35.32	35.05	34.52	34.16	34.25	34.54	34.92
15	36.85	36.58	36.54	36.21	35.72	35.30	35.07	34.50	34.27	34.31	34.56	34.89
16	36.84	36.57	36.54	36.19	35.70	35.28	35.06	34.47	34.29	34.30	34.56	34.88
17	36.83	36.56	36.53	36.17	35.68	35.30	35.04	34.44	34.29	34.31	34.56	34.89
18	36.83	36.54	36.53	36.17	35.66	35.28	35.01	34.39	34.27	34.30	34.55	34.89
19	36.82	36.54	36.52	36.17	35.65	35.25	35.00	34.36	34.25	34.29	34.54	34.89
20	36.81	36.53	36.52	36.16	35.64	35.23	34.98	34.37	34.22	34.29	34.53	34.96
21	36.80	36.52	36.51	36.13	35.62	35.23	34.96	34.43	34.20	34.28	34.52	35.02
22	36.80	36.58	36.50	36.08	35.61	35.29	34.94	34.42	34.19	34.29	34.50	35.01
23	36.81	36.64	36.49	36.05	35.60	35.28	34.92	34.42	34.17	34.30	34.50	35.01
24	36.81	36.64	36.48	36.02	35.59	35.26	34.90	34.45	34.14	34.29	34.51	35.00
25	36.80	36.64	36.48	36.00	35.58	35.24	34.88	34.42	34.12	34.32	34.50	35.00
26	36.79	36.63	36.47	35.98	35.57	35.21	34.86	34.39	34.10	34.30	34.48	34.98
27	36.80	36.63	36.47	35.95	35.56	35.19	34.84	34.36	34.08	34.29	34.53	34.98
28	36.80	36.63	36.46	35.94	35.55	35.17	34.82	34.33	34.10	34.27	34.64	34.96
29	36.80	36.62	36.45	35.93	---	35.16	34.79	34.30	34.16	34.26	34.64	34.94
30	36.79	36.60	36.45	35.91	---	35.14	34.76	34.28	34.21	34.24	34.64	34.93
31	36.78	---	36.44	35.90	---	35.12	---	34.26	---	34.23	34.72	---
MEAN	36.85	36.64	36.54	36.18	35.73	35.32	34.97	34.51	34.15	34.25	34.46	34.90
MAX	36.95	36.78	36.66	36.43	35.89	35.53	35.10	34.74	34.29	34.32	34.72	35.02
MIN	36.78	36.52	36.44	35.90	35.55	35.12	34.76	34.26	33.99	34.15	34.22	34.80
CAL YR 1984	MEAN	36.25		MAX	36.95	MIN	35.69					
WTR YR 1985	MEAN	35.37		MAX	36.95	MIN	33.99					

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244600 SAND HILL LAKE NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°51'01", long 82°01'10", in NE¼ sec.32, T.7 S., R.23 E., Clay County, Hydrologic Unit 03080103, on west shore of lake, at end of graded road, 1.3 mi east of Keystone Airport, and 3.5 mi north of Keystone Heights.

SURFACE AREA.--1,250 acres (1.95 mi²).

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--July 1957 to July 1959 (twice weekly), August 1959 to September 1960 (weekly), October 1960 to September 1965 (fragmentary), October 1965 to February 1976 (weekly), March 1976 to current year (monthly). Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 126.02 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

REMARKS.--Lake is one of the Etonia Creek headwaters chain of lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 132.73 ft, Sept. 22, 1964; minimum observed, 130.74 ft, May 26, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 132.63 ft, Sept. 27; minimum observed, 131.22 ft, June 4,5.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER, 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			MAY		
01...	1000	131.90	03...	1500	131.44
NOV			JUN		
02...	0830	131.82	04...	1300	131.22
DEC			05...	0900	131.22
03...	1530	131.76	JUL		
JAN			03...	1530	131.50
03...	0930	131.72	AUG		
FEB			01...	0900	131.80
01...	1300	131.58	SEP		
11...	1015	131.67	03...	1530	132.62
MAR			27...	1200	132.63
01...	0830	131.62			
APR					
01...	1500	131.46			

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02244650 MAGNOLIA LAKE NEAR KEYSTONE HEIGHTS, FL

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 125.36 ft, Sept. 14; minimum observed, 123.46 ft, June 8.

[illegible]

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244800 LAKE GENEVA AT KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°46'26", long 82°01'59", in NE¼ sec.30, T.8 S., R.23 E., Clay County, Hydrologic Unit 03080103, on northwest shore of lake, on private beach, 0.8 mi south of Keystone Heights.

SURFACE AREA.--1,746 acres (2.73 mi²).

DRAINAGE AREA.--35.5 mi².

PERIOD OF RECORD.--July 1957 to January 1961, February 1961 to July 1965 (fragmentary), August 1965 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 94.91 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

REMARKS.--Lake is one of the Etonia Creek headwaters chain of lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 107.23 ft, July 15, 1973; minimum observed, 97.61 ft, June 12, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 109.1 ft was reached in 1948, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 99.72 ft, Sept. 27; minimum observed, 97.61 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	98.33	---	---	---	---
2	---	---	---	99.11	---	---	---	---	---	---	---	---
3	99.45	---	---	---	---	---	98.51	---	---	97.75	---	---
4	99.41	---	---	---	---	---	---	---	97.73	---	---	99.65
5	---	---	99.25	---	---	---	---	---	---	---	---	---
6	---	---	---	---	98.95	98.81	---	---	---	---	---	---
7	---	99.33	---	---	---	---	---	---	---	---	98.33	---
8	---	---	---	---	---	---	---	98.23	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	99.39	---	---	---	---	---	98.43	---	---	97.63	---	99.65
11	---	---	---	---	98.91	---	---	---	---	---	---	---
12	---	---	99.17	---	---	---	---	---	97.61	---	---	---
13	---	---	---	99.01	98.95	98.67	---	---	---	---	---	---
14	---	99.25	---	---	---	---	---	---	---	---	98.71	---
15	---	---	---	---	---	---	---	98.11	---	---	---	---
16	---	---	---	98.97	---	---	---	---	---	---	---	---
17	99.31	---	---	---	---	---	98.55	---	---	97.73	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	99.16	---	---	---	---	---	97.73	---	---	---
20	---	---	99.17	---	98.87	98.69	---	---	---	---	---	---
21	---	99.21	---	---	---	---	---	---	---	---	98.93	---
22	---	---	---	---	---	---	---	98.03	---	---	---	---
23	---	---	---	98.91	---	---	---	---	---	---	---	---
24	99.26	---	---	---	---	---	---	---	---	97.85	---	---
25	---	---	---	---	---	---	98.45	---	---	---	---	---
26	---	---	99.15	---	---	98.65	---	---	97.71	---	---	---
27	---	---	---	---	98.85	---	---	---	---	---	---	99.72
28	---	99.23	---	---	---	---	---	97.89	---	---	---	---
29	---	---	---	---	---	---	---	---	---	98.03	99.33	---
30	---	---	---	98.85	---	---	---	---	---	---	---	---
31	99.21	---	---	---	---	---	---	---	---	98.01	---	---

02244900 LAKE JOHNSON (LITTLE LAKE) NEAR KEYSTONE HEIGHTS, FL

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 95.42 ft, Oct. 2; minimum observed, 94.64 ft, June 11.

[illegible]

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244905 LAKE JOHNSON (BIG LAKE) NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°49'26", long 81°56'42", in SW¼ sec.6, T.8 S., R.24 E., Clay County, Hydrologic Unit 03080103, on northwest shore of big lake in Gold Head Branch State Park, 5.8 mi northeast of Keystone Heights.

SURFACE AREA.--441 acres (0.69 mi²), big lake area. Combined areas of big lake and little lake are 475 acres (0.74 mi²).

DRAINAGE AREA.--6.37 mi², combined areas.

PERIOD OF RECORD.--February 1959 to June 1960 (fragmentary), January 1963 to current year (weekly), incomplete. Records of elevations prior to January 1963 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 89.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Jan. 7, 1963, at same site at datum 2.40 ft lower.

REMARKS.--Gold Head Branch flows into little lake; little lake was first separated from big lake below an elevation of about 95 ft by a shallow channel and earthen dam, which was constructed June 30, 1957; the channel was deepened and a control with removable boards was constructed during August 1968. On January 17, 1969, the dam was found partially washed out and a new dam was constructed in April 1969; the top of the new dam is at an elevation of about 96 ft. Lake Johnson has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 98.30 ft, Mar. 4, 1966; minimum observed, 87.48 ft, Nov. 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 92.60 ft, Oct. 2; minimum observed, 88.74 ft, July 23.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

[illegible]

ST. JOHNS RIVER

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ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244950 LAKE GRANDIN NEAR INTERLACHEN, FL

LOCATION.--Lat 29°40'16", long 81°52'55", in NE¼ sec.34, T.9 S., R.24 E., Putnam County, Hydrologic Unit 03080103, on south shore of lake, on private pier, 2.8 mi north of Interlachen.

SURFACE AREA.--354 acres (0.55 mi²).

DRAINAGE AREA.--3.71 mi².

PERIOD OF RECORD.--ELEVATION: July 1957 to September 1960 (incomplete), October 1960 to current year (fragmentary). Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 73.69 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

REMARKS.--Lake outlet is through a swampy area and canal northward to Etonia Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 83.33 ft, on or about Sept. 13, 1964, from floodmark; minimum observed, 79.81 ft, about July 31, 1961.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			JUL		
04...	1130	81.68	10...	1420	80.31
DEC			29...	0930	80.43
19...	1015	81.43	SEP		
FEB			27...	1500	81.61
15...	0830	81.29			
APR					
11...	1100	80.99			

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245010 GEORGES LAKE NEAR FLORAHOME, FL

LOCATION.--Lat 29°47'24", long 81°51'34", in NW¼ sec.24, T.8 S., R.24 E., Putnam County, Hydrologic Unit 03080103, on west side of lake, on south side of stub canal, at Lakeside Hills Fish Camp, 4.3 mi northeast of Florahome.

SURFACE AREA.--812 acres (1.27 mi²).

DRAINAGE AREA.--5.33 mi².

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

GAGE.--Nonrecording gage. Datum of gage is 85.51 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

REMARKS.--Lake is headwaters of Falling Branch.

EXTREMES FOR CURRENT PERIOD.--December 1982 to September 1983; maximum elevation observed, 98.98 ft, Apr. 26; minimum observed, 97.87 ft, Dec. 27, Jan. 3, 11.

Water Year 1984: Maximum elevation observed, 98.87 ft, Feb. 28; minimum observed, 97.91 ft, July 17.

Water Year 1985: Maximum elevation observed, 98.29 ft, Sept. 24; minimum observed, 96.95 ft, July 9.

ELEVATION, IN FEET NGVD, PERIOD DECEMBER 1982 TO SEPTEMBER 1983
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	---	98.03	---	---	---	---	---	---	---
2			---	---	---	98.36	---	---	---	---	98.28	---
3			---	97.87	---	---	---	98.81	---	---	---	---
4			---	---	---	---	---	---	---	---	---	---
5			---	---	---	---	---	98.87	---	98.67	---	---
6			---	---	---	---	98.67	---	---	---	---	98.71
7			---	---	---	---	---	---	98.37	---	---	---
8			---	---	98.18	98.71	---	---	---	---	---	---
9			---	---	---	---	---	---	---	---	98.57	---
10			---	---	---	---	---	---	---	---	---	---
11			---	97.87	---	---	---	---	---	---	---	---
12			---	---	---	---	98.66	98.71	---	98.69	---	---
13			---	97.93	---	---	---	---	---	---	---	98.61
14			---	---	---	---	---	---	98.53	---	---	---
15			---	---	98.37	98.41	---	---	---	---	---	---
16			---	---	---	---	---	---	---	---	98.93	---
17			---	---	---	---	---	98.61	---	---	---	---
18			---	97.88	---	---	---	---	---	---	---	---
19			---	---	---	---	98.63	---	---	---	---	---
20			---	---	---	---	---	---	---	98.44	---	98.80
21			97.90	---	---	---	---	---	98.61	---	---	---
22			---	---	98.38	98.69	---	---	---	---	---	---
23			---	---	---	---	---	---	---	---	98.71	---
24			---	---	---	---	---	98.41	---	---	---	---
25			---	97.99	---	---	---	---	---	---	---	---
26			---	---	---	---	98.98	---	---	98.31	---	---
27			97.87	---	---	---	---	---	---	---	---	---
28			---	---	---	---	---	---	98.67	---	---	---
29			---	---	---	98.66	---	---	---	---	---	98.61
30			---	---	---	---	---	---	---	---	98.61	---
31			---	---	---	---	---	98.35	---	---	---	---

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02245010 GEORGES LAKE NEAR FLORAHOME, FL

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
INSTANT VALUES

[illegible]

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245010 GEORGES LAKE NEAR FLORAHOME, FL

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

[illegible]

02245700 KINGSLEY LAKE AT CAMP BLANDING, FL

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 176.80 ft, Sept. 14; minimum observed, 175.46 ft, June 15.

[illegible]

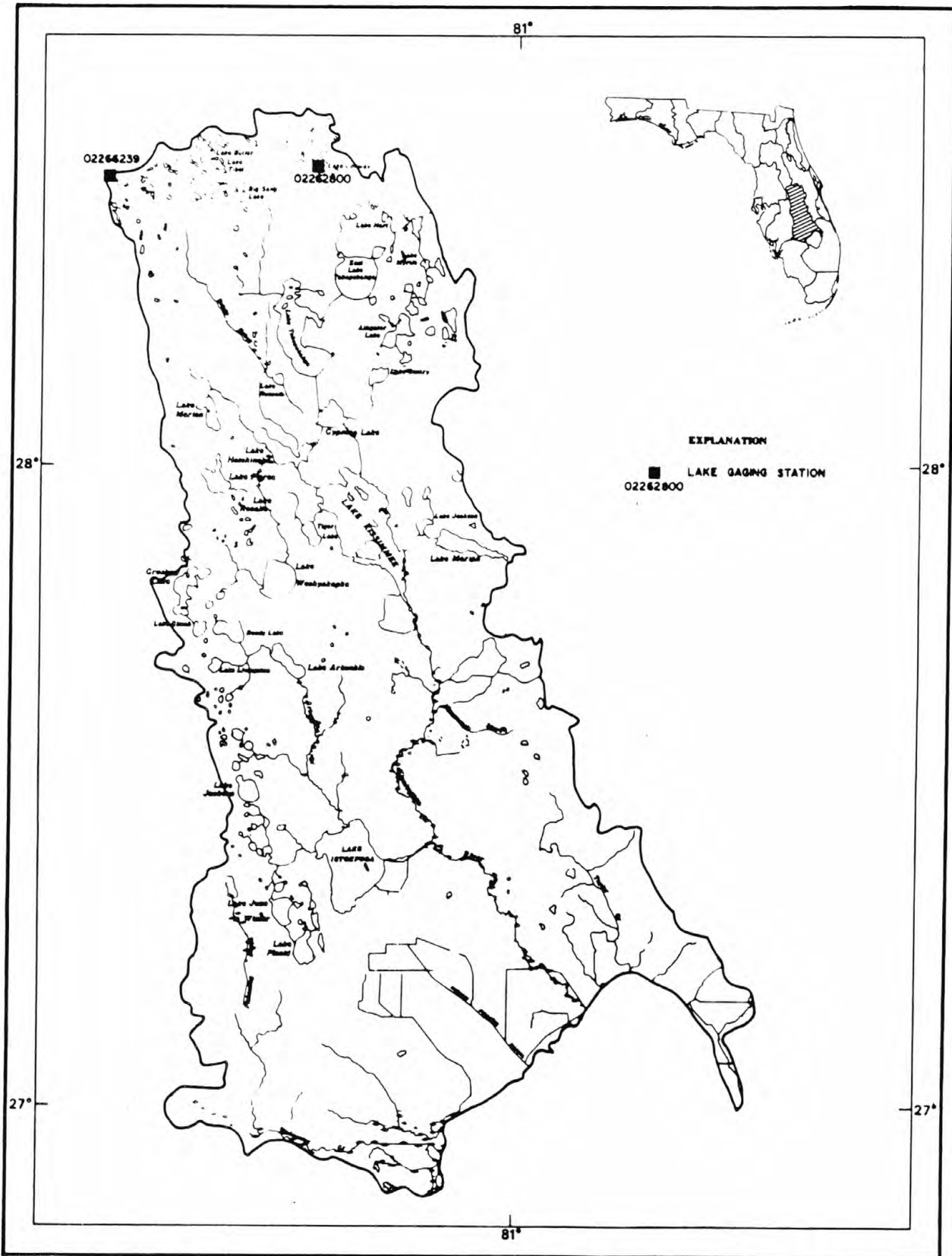


Figure 17. Location of lake gaging stations in the Kissimmee River basin; the Taylor Creek basin and inflow to Lake Okeechobee from the north; and Fisheating Creek basin and inflow to Lake Okeechobee from the north-west.

SOUTH FLORIDA

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KISSIMMEE RIVER BASIN

02262800 LAKE CONWAY AT PINE CASTLE, FL

LOCATION.--Lat 28°27'55", long 81°21'21", in SW¼ sec.19, T.23 S., R.30 E., Orange County, Hydrologic Unit 03090101, near west-central part of lake on north side of peninsula, at Pine Castle.

SURFACE AREA.--1,079 acres (1.69 mi²).

DRAINAGE AREA.--12.7 mi².

PERIOD OF RECORD.--March 1952 to current year. Records of elevations prior to October 1960 are unpublished and are available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Aug. 25, 1952, at Nela Isle Bridge, 0.2 mi southwest at datum 69.00 ft higher. Aug. 25, 1952, to Sept. 20, 1973, nonrecording gage at site 150 ft east at datum 69.00 ft higher. Sept. 21, 1973, to Sept. 6, 1974, nonrecording gage at site 150 ft east at present datum.

REMARKS.--Lake elevation is controlled by several drainage wells and a concrete and timber control at outlet. Outflow is to Lake Warren, thence through canal to Boggy Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 89.10 ft, Mar. 25-29, 1960; minimum observed, 82.44 ft, Oct. 23, 24, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 85.54 ft, Oct. 1, occurred on general recession following crest of Sept. 28, 1984; minimum observed, 83.38 ft, July 9, 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85.54	85.11	84.86	84.68	84.34	84.20	84.15	83.87	83.58	83.44	83.65	84.33
2	85.52	85.09	84.86	84.67	84.34	84.19	84.13	83.85	83.56	83.42	83.68	84.35
3	85.49	85.08	84.86	84.66	84.34	84.18	84.11	83.83	83.53	83.42	83.67	84.35
4	85.47	85.08	84.85	84.68	84.34	84.17	84.09	83.81	83.51	83.41	83.71	84.35
5	85.45	85.08	84.85	84.66	84.34	84.16	84.07	83.84	83.52	83.39	83.72	84.41
6	85.43	85.06	84.85	84.63	84.33	84.14	84.05	83.82	83.50	83.42	83.71	84.40
7	85.40	85.05	84.84	84.62	84.39	84.13	84.12	83.80	83.48	83.42	83.70	84.39
8	85.39	85.05	84.83	84.61	84.38	84.11	84.12	83.78	83.46	83.40	83.69	84.45
9	85.38	85.03	84.82	84.59	84.37	84.10	84.10	83.76	83.44	83.38	83.88	84.44
10	85.37	85.03	84.81	84.57	84.35	84.09	84.08	83.74	83.42	83.42	83.87	84.43
11	85.35	85.00	84.80	84.57	84.36	84.08	84.06	83.72	83.40	83.40	83.88	84.42
12	85.33	84.97	84.80	84.55	84.34	84.07	84.04	83.70	83.39	83.38	83.87	84.41
13	85.32	84.94	84.79	84.52	84.32	84.06	84.07	83.69	83.49	83.44	83.87	84.40
14	85.31	84.91	84.79	84.51	84.30	84.05	84.09	83.67	83.50	83.49	83.85	84.50
15	85.30	84.88	84.78	84.50	84.30	84.03	84.08	83.65	83.51	83.47	83.84	84.49
16	85.30	84.85	84.77	84.49	84.28	84.03	84.07	83.63	83.54	83.49	83.83	84.47
17	85.29	84.82	84.77	84.48	84.27	84.02	84.06	83.60	83.53	83.47	83.89	84.44
18	85.27	84.79	84.76	84.48	84.27	84.01	84.04	83.55	83.54	83.45	83.87	84.43
19	85.25	84.79	84.75	84.49	84.26	83.98	84.03	83.51	83.50	83.50	84.24	84.41
20	85.24	84.78	84.75	84.48	84.25	83.96	84.02	83.50	83.49	83.53	84.13	84.42
21	85.23	84.77	84.75	84.46	84.24	83.93	84.00	83.49	83.48	83.54	84.17	84.68
22	85.21	84.79	84.74	84.44	84.24	84.26	83.99	83.47	83.51	83.54	84.16	84.69
23	85.19	84.86	84.73	84.41	84.24	84.26	83.98	83.49	83.50	83.53	84.16	84.69
24	85.17	84.90	84.73	84.39	84.23	84.26	83.96	83.64	83.48	83.51	84.15	84.69
25	85.15	84.90	84.72	84.38	84.23	84.24	83.95	83.67	83.46	83.57	84.22	84.69
26	85.13	84.90	84.71	84.37	84.23	84.22	83.93	83.69	83.44	83.56	84.20	84.68
27	85.18	84.89	84.70	84.36	84.22	84.21	83.91	83.67	83.48	83.55	84.23	84.66
28	85.17	84.89	84.70	84.36	84.21	84.20	83.90	83.65	83.45	83.54	84.26	84.65
29	85.16	84.88	84.70	84.35	---	84.19	83.88	83.64	83.44	83.52	84.28	84.65
30	85.15	84.86	84.69	84.35	---	84.18	83.89	83.62	83.42	83.50	84.29	84.65
31	85.13	---	84.69	84.34	---	84.16	---	83.60	---	83.54	84.27	---
MEAN	85.30	84.93	84.78	84.50	84.30	84.12	84.03	83.68	83.48	83.47	83.97	84.50
MAX	85.54	85.11	84.86	84.68	84.39	84.26	84.15	83.87	83.58	83.57	84.29	84.69
MIN	85.13	84.77	84.69	84.34	84.21	83.93	83.88	83.47	83.39	83.38	83.65	84.33
CAL YR 1984	MEAN	85.48	MAX	85.97	MIN	84.69						
WTR YR 1985	MEAN	84.26	MAX	85.54	MIN	83.38						

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266239 TROUT LAKE NEAR CLERMONT, FL

LOCATION.--Lat 28°27'04", long 81°43'00", in SW¼ sec.28, T.23 S., R.26 E., Lake County, Hydrologic Unit 03090101, on northwest shore of lake, 7.8 mi southeast of Clermont.

SURFACE AREA.--163 acres (0.25 mi²).

DRAINAGE AREA.--1.31 mi².

PERIOD OF RECORD.--March 1970 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-81-1: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

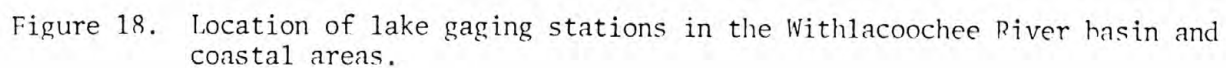
REMARKS.--Lake is landlocked except at extremely high stages.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 96.90 ft, Apr. 1, 8, 1970; minimum observed, 85.98 ft, Dec. 19, 26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 93.51 ft, Oct. 4, occurred on general recession; minimum observed, 91.68 ft, May 31.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	93.38	---	---	---	---	---	---	---	---	---
2	---	---	---	---	92.96	92.80	---	92.15	91.70	---	---	---
3	---	---	---	---	---	---	---	---	---	---	92.14	---
4	93.51	93.32	---	---	---	---	---	92.08	---	---	---	---
5	---	---	---	93.17	---	---	---	---	---	---	---	---
6	93.50	---	---	---	---	---	92.38	---	---	---	---	---
7	---	---	---	---	---	92.78	---	---	---	---	---	92.38
8	---	---	93.35	---	---	---	---	---	---	---	---	---
9	---	---	---	---	92.92	---	---	---	91.80	---	---	---
10	---	---	---	---	---	---	---	---	---	---	92.14	---
11	---	93.28	---	---	---	---	---	92.00	---	---	---	---
12	---	---	---	93.10	---	---	---	---	---	---	---	---
13	93.40	---	---	---	---	---	92.34	---	---	---	---	---
14	---	---	---	93.08	---	---	---	---	---	---	---	92.38
15	---	---	93.33	---	---	---	---	---	---	---	---	---
16	---	---	---	---	92.88	92.58	---	---	91.88	---	---	---
17	---	---	---	---	---	---	---	---	---	---	92.18	---
18	---	---	---	---	---	---	---	91.94	---	---	---	---
19	---	93.24	---	93.04	---	---	---	---	91.76	---	92.11	---
20	93.36	---	---	---	---	---	92.30	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	92.12	---	92.34
22	---	---	93.30	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	92.60	---	---	91.96	---	---	---
24	---	93.36	---	---	92.80	---	---	---	---	---	92.20	---
25	---	---	---	---	---	---	---	91.80	---	---	---	---
26	---	---	---	93.00	---	---	---	---	---	---	---	---
27	93.32	---	---	---	---	---	92.18	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	92.10	---	92.34
29	---	---	93.28	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	92.62	---	---	92.04	---	---	---
31	---	---	---	---	---	---	---	91.68	---	---	---	---



02312670 LAKE CATHERINE AT GROVELAND, FL

SURFACE AREA.--137 acres (0.21 mi²).

DRAINAGE AREA.--4.53 mi².

PERIOD OF RECORD.--September 1965 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-71-3: Surface area, drainage area.

GAGE.--Nonrecording gage. Datum of gage is 87.09 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

REMARKS.--Lake has no surface outlet. Elevations affected occasionally by pumpage out of lake or inflow into lake from citrus canning plant.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 99.27 ft, Jan. 17, 1970; minimum observed, 97.25 ft, May 4, 11, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 98.40 ft, Sept. 29, occurred on rise preceding crest in October 1985; minimum observed, 97.57 ft, May 6.

[illegible]

WITHLACOOCHEE RIVER BASIN

02312694 LADY LAKE NEAR LADY LAKE, FL

LOCATION.--Lat 28°54'50", long 81°53'43", in NE¼ sec.22, T.18 S., R.24 E., Lake County, Hydrologic Unit 03100208, on south shore of lake, 1.5 mi east of town of Lady Lake.

SURFACE AREA.--190 acres (0.30 mi²).

DRAINAGE AREA.--4.67 mi².

PERIOD OF RECORD.--February 1970 to September 1973 (weekly); October 1973 to current year (fragmentary).

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is landlocked. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 66.60 ft, Apr. 16, 1984; minimum observed, 60.70 ft, Apr. 15, 1976.

ELEVATION, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
JAN			JUL		
07...	1310	64.96	19...	1010	63.37
FEB			AUG		
27...	1310	64.77	12...	1229	63.19

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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). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

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)
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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