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Water Resources Data Florida Water Year 1986

Volume 1A: Northeast Florida Surface Water

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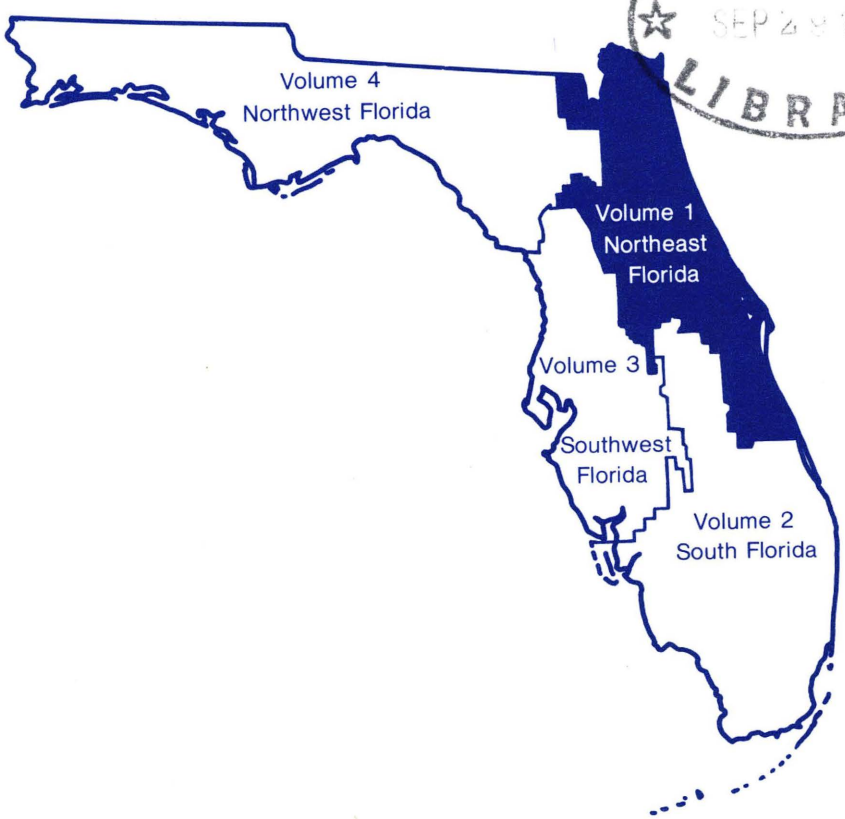

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-86-1A
Prepared in cooperation with the State of Florida
and with other agencies

CALENDAR FOR WATER YEAR 1986

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Water Resources Data Florida

Water Year 1986

Volume 1A: Northeast Florida Surface Water



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-86-1A
Prepared in cooperation with the State of Florida
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

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

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80 North Hughey Avenue, Suite 216
Orlando, Florida 32801

1987

WATER RESOURCES DATA - FLORIDA, 1986
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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This report was prepared in cooperation with the State of Florida and with other agencies under the general supervision of I.H. Kantrowitz, District Chief, Florida.

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-87/259	2.	3. Recipient's Accession No.

4. Title and Subtitle
Water Resources Data - Florida, Water Year 1986
Volume 1A: Northeast Florida - Surface Water

5. Report Date
July 1987

6.

7. Author(s)

8. Performing Organization Rept. No.
USGS-WDR-FL-86-1A

9. Performing Organization Name and Address
U.S. Geological Survey
Water Resources Division
80 North Hughey Avenue, Suite 216
Orlando, FL 32801

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.
(C)
(G)

12. Sponsoring Organization Name and Address
U.S. Geological Survey
Water Resources Division
227 North Bronough Street, Suite 3015
Tallahassee, FL 32301

13. Type of Report & Period Covered
Annual - Oct. 1, 1985 to Sept. 30, 1986

14.

15. Supplementary Notes
Prepared in cooperation with the State of Florida and other agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1986 water year in Florida consist of continuous or daily discharge for 277 streams, periodic discharge for 38 streams, miscellaneous discharge for 34 streams, continuous or daily stage for 77 streams, periodic stage for 20 streams, peak discharge for 88 streams, and peak stage for 69 streams; continuous or daily elevations for 69 lakes, periodic elevations for 72 lakes; continuous ground-water levels for 476 wells, periodic ground-water levels for 1,226 wells, and miscellaneous water-level measurements for 1,570 wells; quality-of-water data for 188 surface-water sites and 878 wells.

The data for northeast Florida include continuous or daily discharge for 70 streams, periodic discharge for 9 streams, miscellaneous discharge for 21 streams, continuous or daily stage for 27 streams, periodic stage for 8 streams, peak discharge for 21 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 105 wells, and miscellaneous water-level measurements for 589 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

18. Availability Statement	19. Security Class (This Report)	21. No. of Pages
No restrictions on distribution. This report may be purchased from: National Technical Information Center, Springfield, VA 22161	UNCLASSIFIED	254
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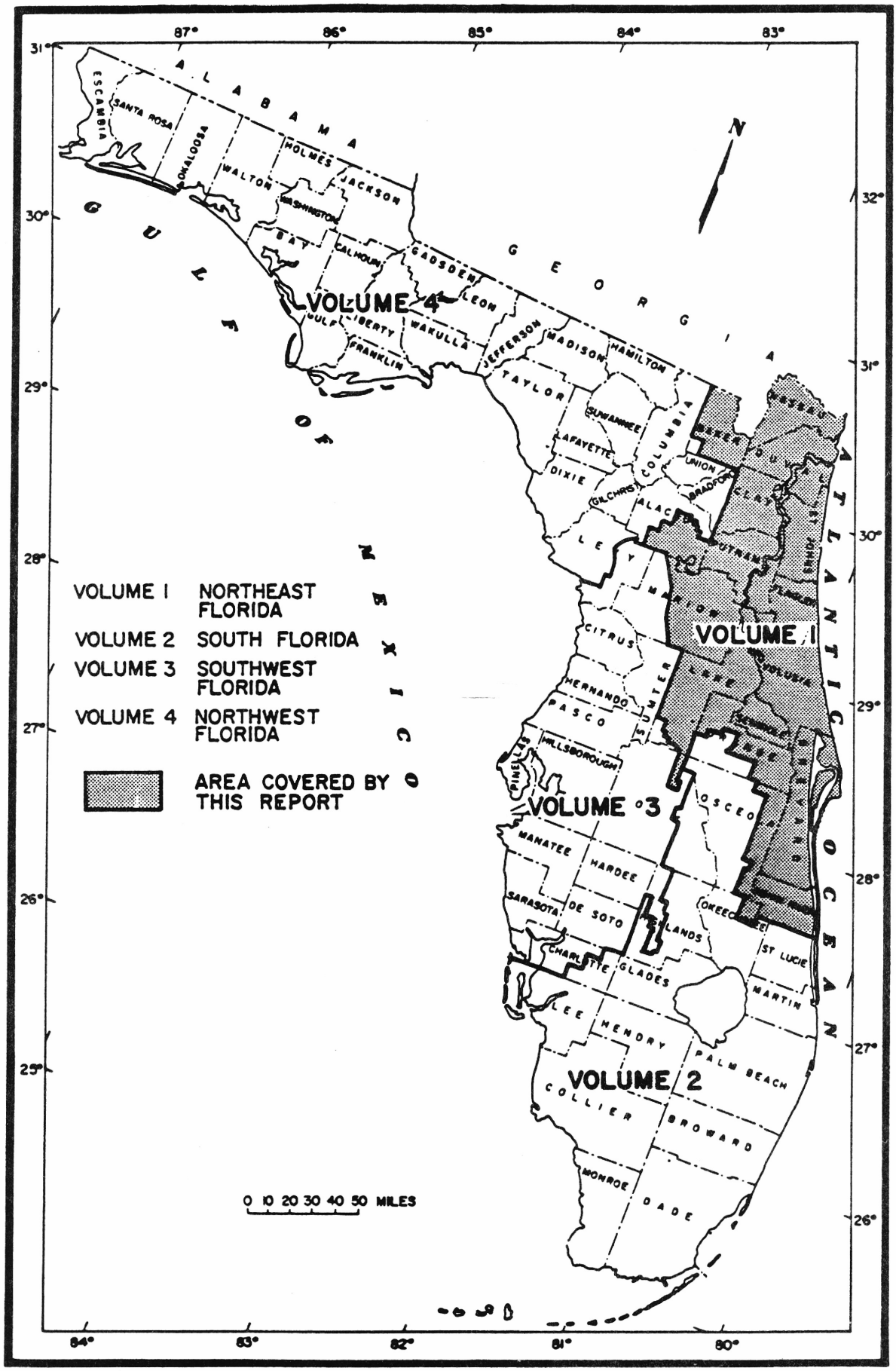

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WATER RESOURCES DATA - FLORIDA, 1986
Volume 1A: Northeast Florida

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 70 streams, periodic discharge for 9 streams, miscellaneous discharge for 21 streams, continuous or daily stage for 27 streams, periodic stage for 8 streams, peak discharge for 21 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 105 wells, and miscellaneous water-level measurements for 589 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." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report FL-86-1A." 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 Office Chief at the address given on the back of the title page or by telephone (305) 648-6191.

COOPERATION

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

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

SUMMARY OF HYDROLOGIC CONDITIONS

Rainfall was below normal at five representative rainfall stations 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 was -9.53 inches at Melbourne; -2.08 inches at Orlando; -2.01 inches at Clermont; -7.38 inches at Crescent City; and -3.96 inches at Jacksonville.

Streamflow reflected the below normal rainfall pattern as shown in figures 2-5 which are discharge hydrographs for four streams in the St. Johns River basin. 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 at St. Marys River near Macclenny (base period 1927-85; fig. 2) was below average during the months of October, and April through September. The St. Johns River near Cocoa (base period 1954-85; fig. 3) was below average from February through September. The St. Johns River near De Land (base period 1934-85; fig. 4) had below average flow from March through September. Discharge at Silver Springs near Ocala (base period 1933-85; fig. 5) was below average from October through January and July through September. All other months had above average streamflow at each station.

SUMMARY OF HYDROLOGIC CONDITIONS--Continued

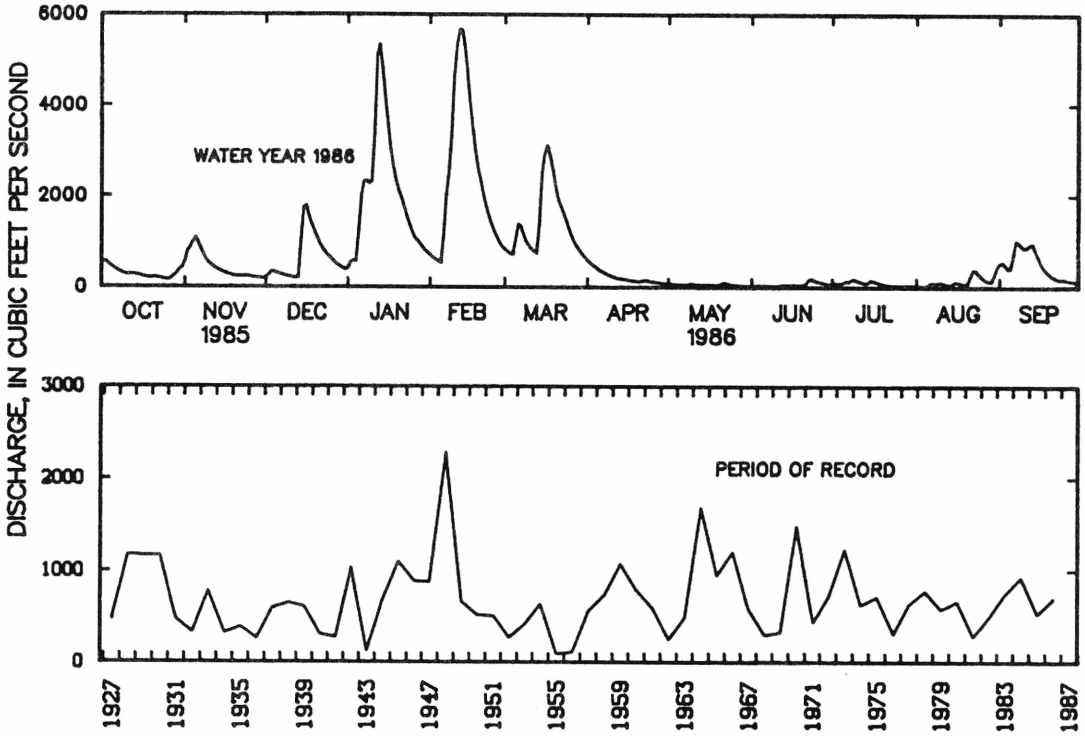

Figure 2.--Water-year and long-term hydrograph for 02231000
St. Marys River near Macclenny, FL.

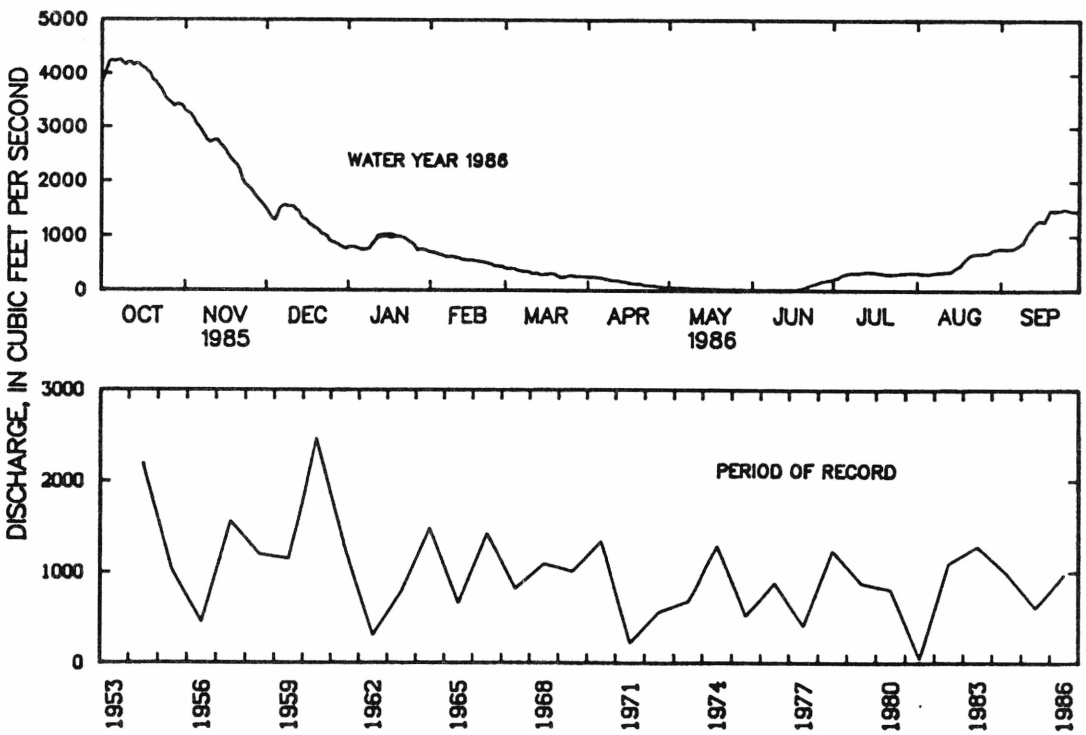

Figure 3.--Water-year and long-term hydrographs for 02232400
St. Johns River near Cocoa, FL.

SUMMARY OF HYDROLOGIC CONDITIONS--Continued

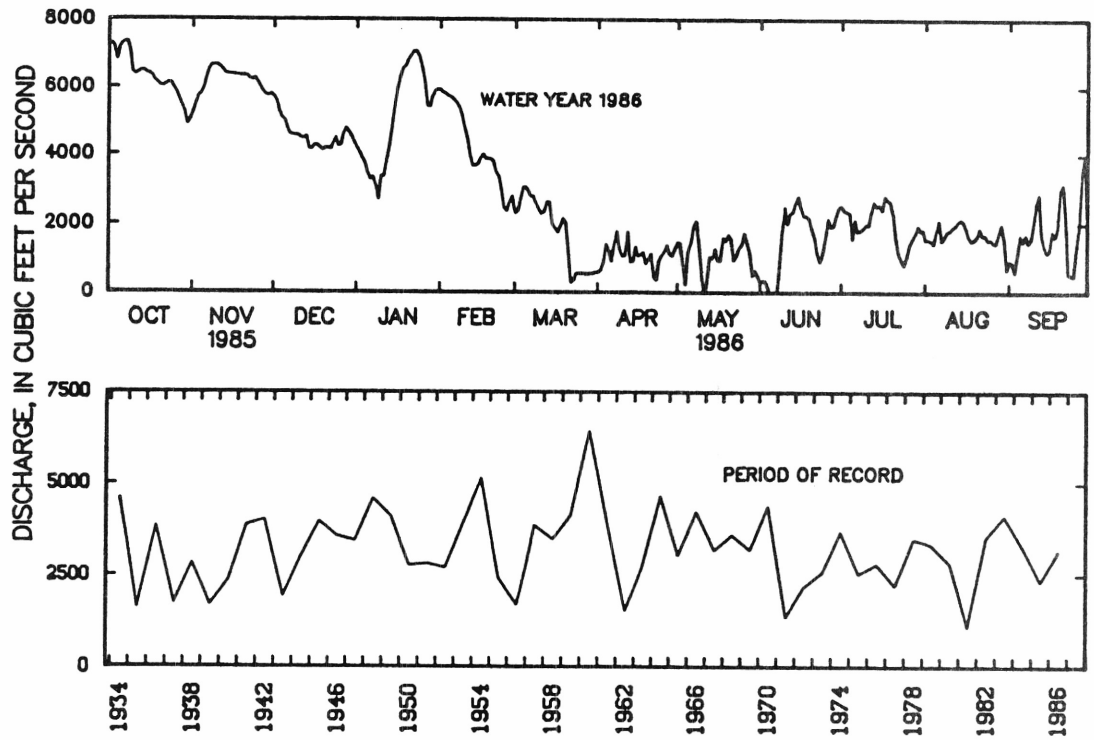

Figure 4.--Water-year and long-term hydrographs for 02236000
St. Johns River near De Land, FL.

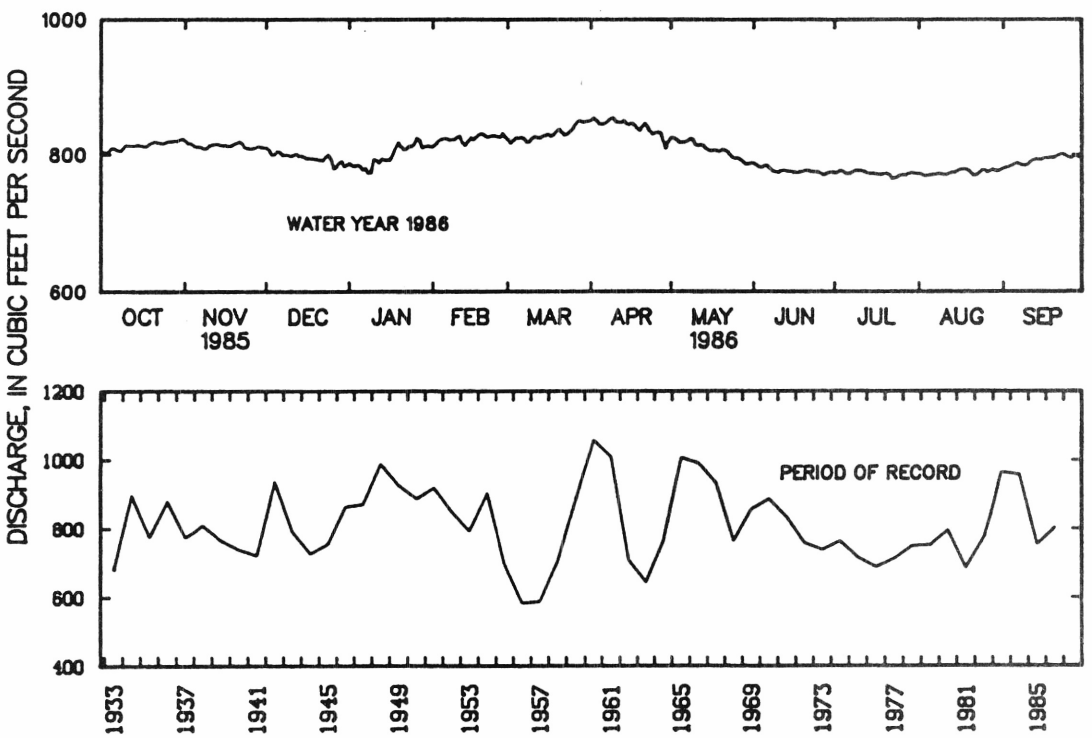

Figure 5.--Water-year and long-term hydrographs for 02239500
Silver Springs near Ocala, FL.

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 Sation'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.



1. Perdido River at Barrineau Park
2. Escambia River near Century
3. Yellow River at Milligan
4. Choctawhatchee River near Bruce
5. Chipola River near Altha
6. Apalachicola River at Chattahoochee
7. Ochlockonee near Havana
8. St. Marks River near Newport
9. Aucilla River near Scanlon
10. Steinhatchee River near Cross City
11. Suwannee River at Branford
12. St. Marys River near Macclenny
13. Oklawaha River near Conner
14. Spruce Creek near Samsula
15. Withlacoochee River near Holder
16. St. Johns River near De Land
17. Hillsborough River near Zephyrhills
18. Alafia River at Lithia
19. Main Canal at Vero Beach
20. Kissimmee River at S65E near Okeechobee
21. Peace River at Arcadia
22. Myakka River near Sarasota
23. Fisheating Creek near Palmdale
24. St. Lucie Canal at lock near Stuart
25. Caloosahatchee Canal at Ortona lock near Labelle
26. West Palm Beach Canal at West Palm Beach
27. Miami Canal at NW 36th Street, Miami
28. Tamiami Canal-40 mile bend to Monroe
29. Santa Fe River at Worthington Springs
30. Econfina Creek near Bennett
31. Sopchoppy River near Sopchoppy (hydrologic bench-mark station)

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 1986 water year that began October 1, 1985, and ended September 30, 1986. 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 indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention 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.)

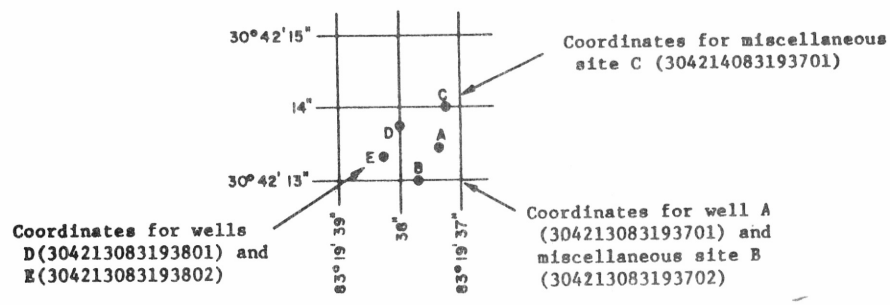

Figure 7. System for numbering wells and miscellaneous sites. (latitude and longitude)

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.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/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.

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 **WAT**er Data **STO**rage and **RE**trieval 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/m^3), and periphyton and benthic organisms in grams per square mile (g/m^2).

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

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

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

Bottom material: See Bed material.

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

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

CFSM (cubic 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 chloro-platinate ion. Color is expressed in units of the platinum-cobalt scale.

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

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

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

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

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 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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

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

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

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

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

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

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

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

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

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

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

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

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

Organism is any living entity.

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

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

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

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

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

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentaiton 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 micro-curie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegrations per minute.

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

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

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

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

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

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

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

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

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

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 (ft^3/s) x 0.0027.

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

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

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

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

Solute is any substance that is dissolved in water.

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

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

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

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

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

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

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

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

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

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

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial 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	Hexagenia
Species	Hexagenia limbata

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

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

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

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

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

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

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

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1986, is called the "1986 water year."

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

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

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

1-D1. WATER TEMPERATURE-INFLUENTIAL FACTORS, FIELD MEASUREMENT, AND DATA PRESENTATION, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. GUIDELINES FOR COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FOR SELECTED UNSTABLE CONSTITUENTS, W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. APPLICATION OF SURFACE GEOPHYSICS TO GROUND-WATER INVESTIGATIONS, by A A.R. Zohdy, G.P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. APPLICATION OF BOREHOLE GEOPHYSICS TO WATER-RESOURCES INVESTIGATIONS, by W.S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. GENERAL FIELD AND OFFICE PROCEDURES FOR INDIRECT DISCHARGE MEASUREMENTS, by M.A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. MEASUREMENT OF PEAK DISCHARGE BY THE SLOPE-AREA METHOD, by Tate Dalrymple and M.A. Benson, USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. MEASUREMENT OF PEAK DISCHARGE AT CULVERTS BY INDIRECT METHODS, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. MEASUREMENT OF PEAK DISCHARGE AT WIDTH CONTRACTIONS BY INDIRECT METHODS, by H.F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. MEASUREMENT OF PEAK DISCHARGE AT DAMS BY INDIRECT METHODS, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. GENERAL PROCEDURE FOR GAGING STREAMS, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. STAGE MEASUREMENTS AT GAGING STATIONS, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

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STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

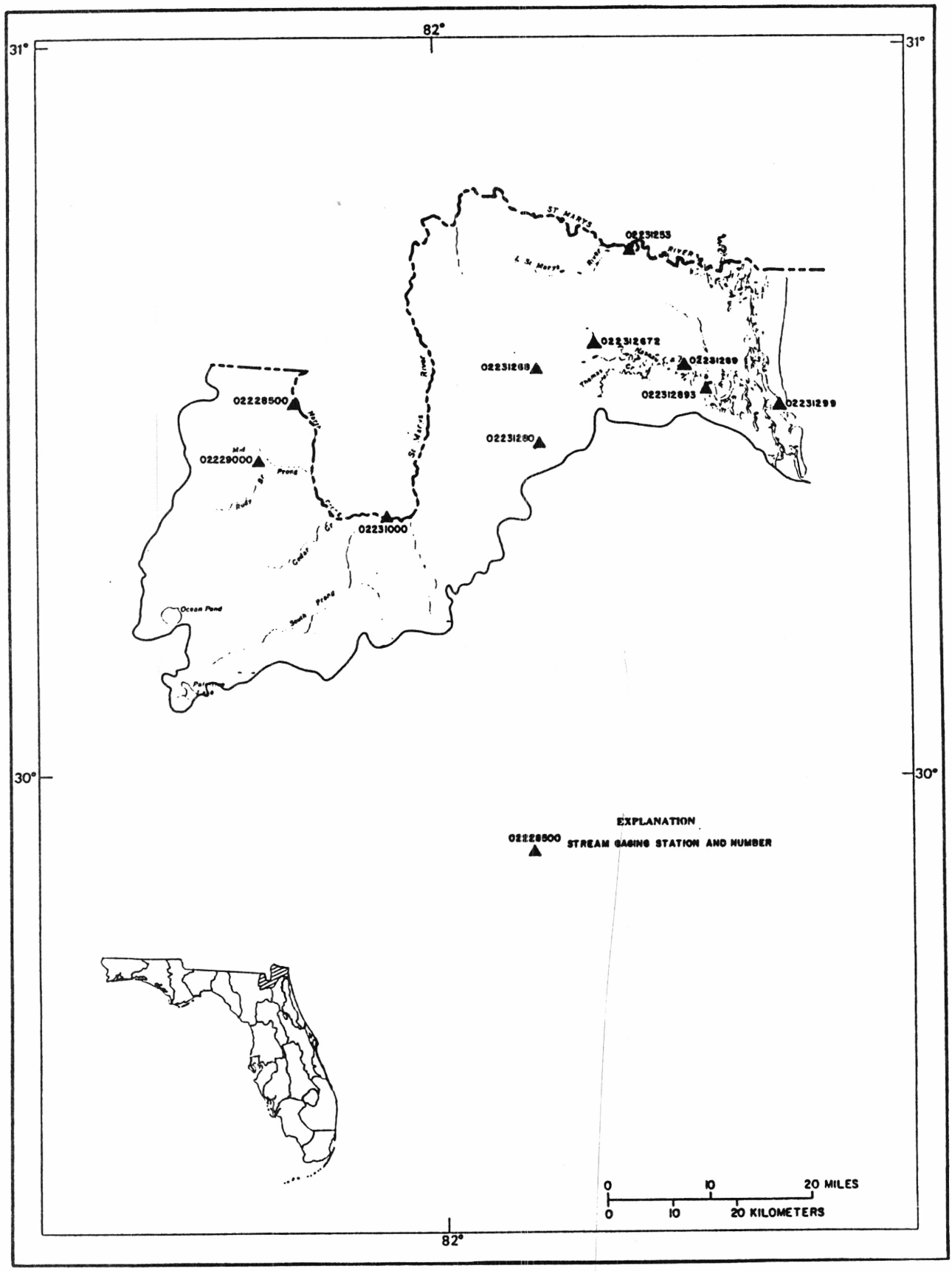

Figure 8. Location of stream gaging stations in the St. Marys River basin and the coastal area between the St. Marys and St. Johns Rivers. nd St. Johns Rivers.

ALTAMAHA-ST. MARYS RIVER

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 mi^2, 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.--Records good.

AVERAGE DISCHARGE.--41 years (water years 1922-23, 1928-29, 1933, 1951-86), 159 ft^3/s, 13.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft^3/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, 2,300 ft^3/s, Feb. 11, gage height, 15.00 ft; minimum, 2.7 ft^3/s, May 29, gage height, 4.54 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	264	45	77	184	290	148	14	9.9	26	13	142
2	117	316	76	97	168	258	133	13	9.3	20	12	107
3	108	316	89	95	156	226	119	12	12	35	13	81
4	100	303	86	154	145	309	108	11	9.1	39	23	66
5	93	271	84	693	160	635	98	9.6	7.6	30	37	178
6	83	217	86	821	647	590	89	9.0	6.4	28	37	360
7	71	172	81	752	954	490	81	8.0	5.3	110	41	273
8	63	143	74	756	1070	429	74	7.7	4.5	98	35	185
9	57	121	69	693	1600	385	68	7.1	3.7	52	29	202
10	53	106	64	811	2030	347	60	6.3	3.4	35	25	222
11	56	98	60	1420	2270	319	54	5.5	6.3	28	21	288
12	56	90	57	1380	2210	292	49	4.9	8.0	27	17	371
13	61	83	92	1200	2000	267	48	5.4	8.3	97	16	336
14	60	77	280	1050	1760	433	46	7.1	8.6	139	26	284
15	55	72	331	905	1530	701	43	6.8	8.2	100	26	230
16	50	68	282	785	1320	817	40	5.9	7.4	62	23	175
17	47	64	263	687	1130	789	37	5.2	6.7	41	20	137
18	44	59	243	609	993	692	34	4.8	10	33	17	108
19	42	56	210	599	899	587	33	4.6	11	27	18	90
20	43	55	174	616	789	510	31	7.5	28	22	155	75
21	40	54	146	554	685	486	32	9.6	97	17	309	64
22	37	55	124	491	603	483	34	8.4	114	14	290	55
23	36	54	108	441	538	433	32	7.1	67	12	179	57
24	35	51	98	402	488	375	30	6.1	44	11	105	59
25	35	49	90	363	438	332	27	5.2	32	11	70	54
26	34	47	81	335	390	296	25	4.5	25	13	50	48
27	40	45	72	325	350	266	24	3.9	20	15	40	43
28	63	43	68	289	320	239	21	3.4	15	19	38	38
29	84	42	65	251	---	211	18	2.9	30	18	52	34
30	95	41	62	228	---	186	16	3.7	33	15	132	32
31	177	---	58	207	---	165	---	9.1	---	14	165	---
TOTAL	2055	3432	3718	18086	25827	12838	1652	219.3	650.7	1208	2034	4394
MEAN	66.3	114	120	583	922	414	55.1	7.07	21.7	39.0	65.6	146
MAX	177	316	331	1420	2270	817	148	14	114	139	309	371
MIN	34	41	45	77	145	165	16	2.9	3.4	11	12	32
CFSM	.41	.71	.75	3.64	5.76	2.59	.34	.04	.14	.24	.41	.91
IN.	.48	.80	.86	4.20	6.00	2.98	.38	.05	.15	.28	.47	1.02

CAL YR 1985 TOTAL 25683.11 MEAN 70.4 MAX 850 MIN .00 CFSM .44 IN. 5.97
WTR YR 1986 TOTAL 76114.0 MEAN 209 MAX 2270 MIN 2.9 CFSM 1.31 IN. 17.70

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 mi^2, 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: Oct. 27 to Nov. 18, Dec. 19 to Jan. 6, Feb. 7 to Mar. 10. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--22 years (water years 1955-67, 1977-86), 112 ft^3/s, 12.17 in/yr.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 15	0100	676	9.54	Feb. 11	unknown	*1,500	*11.52
Jan. 11	1300	1,060	10.76				

Minimum discharge, 0.53 ft^3/s, Aug. 1, 2, gage height, 1.06 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	60	56	90	171	160	133	1.7	1.3	3.5	.59	30
2	84	75	65	140	162	140	117	1.7	1.1	3.1	1.1	16
3	76	85	53	300	148	125	103	1.5	1.2	3.4	1.4	10
4	70	80	44	440	135	180	90	1.3	1.4	3.7	1.7	8.2
5	63	75	39	490	131	300	77	1.2	1.4	5.1	1.3	25
6	54	70	35	475	352	260	67	1.2	1.2	9.5	1.2	20
7	46	65	31	439	466	220	56	1.4	1.1	6.8	1.1	14
8	38	62	29	457	580	200	45	1.6	.91	5.4	1.6	10
9	33	58	27	432	700	180	37	1.2	.82	4.6	2.4	7.5
10	30	55	26	559	980	161	31	1.1	.87	4.1	1.3	7.0
11	32	52	25	1020	1400	156	26	.98	.88	3.5	1.1	9.5
12	33	48	24	954	1250	149	23	.95	.92	2.8	.94	7.8
13	30	45	102	878	1120	141	21	1.2	1.2	2.3	2.3	7.7
14	27	40	581	836	1000	224	19	1.3	1.2	2.0	5.6	7.0
15	24	38	612	807	900	310	15	1.2	1.2	1.7	2.9	9.5
16	22	36	504	774	780	381	13	1.1	1.4	1.4	2.2	11
17	20	34	444	731	630	366	11	1.0	1.7	1.2	1.9	11
18	19	32	396	676	580	334	8.9	.92	2.8	1.0	1.6	12
19	18	30	357	635	500	304	7.3	1.3	3.0	.87	1.8	14
20	17	32	310	588	450	286	6.3	1.6	3.2	.89	5.6	14
21	15	34	270	509	400	296	6.7	1.8	3.4	.82	9.1	14
22	13	38	230	437	360	281	7.3	1.5	5.0	.80	5.3	13
23	12	39	200	382	330	259	6.4	1.3	5.0	.90	3.6	12
24	11	36	175	334	300	241	5.2	1.2	4.2	.98	2.7	11
25	9.6	34	150	295	270	227	4.4	1.1	3.5	1.2	2.1	9.8
26	10	32	130	269	230	214	3.7	1.0	2.8	1.3	1.9	8.9
27	14	31	110	254	210	202	3.1	.97	2.9	1.2	2.6	8.1
28	18	30	90	229	180	189	2.7	.93	2.9	1.1	5.7	7.5
29	24	29	80	208	---	178	2.4	.88	2.4	1.1	25	7.0
30	34	29	75	194	---	166	2.0	.93	2.8	.87	32	6.9
31	45	---	70	183	---	151	---	1.1	---	.77	27	---
TOTAL	1035.6	1404	5340	15015	14715	6981	950.4	38.16	63.70	77.90	156.63	349.4
MEAN	33.4	46.8	172	484	526	225	31.7	1.23	2.12	2.51	5.05	11.6
MAX	94	85	612	1020	1400	381	133	1.8	5.0	9.5	32	30
MIN	9.6	29	24	90	131	125	2.0	.88	.82	.77	.59	6.9
CFSM	.27	.37	1.38	3.87	4.21	1.80	.25	.01	.02	.02	.04	.09
IN.	.31	.42	1.59	4.47	4.38	2.08	.28	.01	.02	.02	.05	.10

CAL YR 1985	TOTAL	35670.91	MEAN	97.7	MAX	906	MIN	.06	CFSM	.78	IN.	10.62
WTR YR 1986	TOTAL	46126.79	MEAN	126	MAX	1400	MIN	.59	CFSM	1.01	IN.	13.73

ALTAMAHA-ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231000 ST. MARYS RIVER NEAR MACCLENNY, 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 mi^2, 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.--Records good.

AVERAGE DISCHARGE.--60 years, 674 ft^3/s, 13.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,100 ft^3/s, Sept. 25, 1947; maximum gage height, 23.25 ft, Sept. 13, 1964, from floodmark; minimum discharge observed, 12 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 12	2400	5,420	14.76	Mar. 17	0800	3,170	12.71
Feb. 12	2300	*5,770	*15.18				

Minimum discharge, 32 ft^3/s, Aug. 3, gage height, 1.17 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	491	561	222	428	708	833	589	81	36	99	37	538
2	577	802	274	562	657	789	532	76	41	92	36	565
3	553	881	346	590	613	738	482	72	45	85	33	494
4	491	1010	337	575	573	722	437	69	46	92	36	411
5	441	1090	307	1220	544	1070	394	65	49	108	43	430
6	404	965	287	2020	1140	1390	356	63	47	142	98	723
7	362	813	273	2340	2020	1350	322	60	45	135	105	1040
8	321	686	255	2330	2560	1170	292	66	41	172	97	985
9	296	582	239	2270	3420	1020	264	82	37	184	101	916
10	278	511	226	2330	4680	918	237	78	36	149	115	862
11	275	459	215	3410	5340	844	213	66	43	129	90	884
12	281	419	206	5150	5690	789	196	59	56	109	70	934
13	276	382	220	5350	5670	744	187	60	56	96	59	959
14	267	352	1020	4860	5270	1360	180	64	58	110	64	833
15	257	325	1760	4200	4590	2470	170	66	57	161	118	685
16	239	302	1790	3580	3980	2960	159	61	67	144	124	544
17	222	280	1570	3050	3440	3130	148	57	61	123	100	442
18	207	261	1390	2640	2950	2930	139	53	53	99	83	363
19	199	243	1250	2340	2570	2600	131	52	53	84	72	307
20	209	232	1110	2130	2280	2240	126	69	67	70	102	262
21	216	233	979	1960	1990	1950	136	105	101	59	245	223
22	198	239	874	1760	1740	1770	156	96	174	50	389	193
23	187	242	788	1540	1530	1640	146	82	195	43	380	177
24	173	239	717	1360	1370	1470	129	68	160	39	305	185
25	164	229	655	1210	1230	1290	121	58	137	44	238	176
26	165	218	591	1090	1090	1130	113	51	121	42	190	157
27	197	208	534	1030	979	996	105	47	105	40	155	142
28	252	198	487	973	894	891	98	43	96	43	136	136
29	304	191	450	890	---	805	91	40	87	43	144	126
30	391	187	416	817	---	730	85	38	83	44	292	115
31	442	---	386	760	---	659	---	36	---	41	474	---
TOTAL	9335	13340	20174	64765	69518	43398	6734	1983	2253	2871	4531	14807
MEAN	301	445	651	2089	2483	1400	224	64.0	75.1	92.6	146	494
MAX	577	1090	1790	5350	5690	3130	589	105	195	184	474	1040
MIN	164	187	206	428	544	659	85	36	36	39	33	115
CFSM	.43	.64	.93	2.98	3.55	2.00	.32	.09	.11	.13	.21	.71
IN.	.50	.71	1.07	3.44	3.69	2.31	.36	.11	.12	.15	.24	.79

CAL YR 1985	TOTAL	185674	MEAN	509	MAX	4830	MIN	24	CFSM	.73	IN.	9.87
WTR YR 1986	TOTAL	253709	MEAN	695	MAX	5690	MIN	33	CFSM	.99	IN.	13.48

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 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.03	5.13	3.08	4.40	5.90	6.56	5.32	1.84	1.25	1.95	1.23	5.02
2	5.58	6.40	3.46	5.15	5.63	6.33	5.04	1.79	1.31	1.88	1.22	5.16
3	5.43	6.81	3.92	5.29	5.41	6.06	4.77	1.74	1.36	1.81	1.18	4.78
4	5.02	7.45	3.87	5.21	5.20	5.97	4.53	1.70	1.36	1.88	1.23	4.30
5	4.69	7.83	3.68	8.31	5.05	7.71	4.30	1.66	1.39	2.04	1.32	4.41
6	4.43	7.23	3.55	10.99	7.92	9.07	4.09	1.62	1.37	2.37	1.94	5.98
7	4.15	6.46	3.45	11.63	10.85	8.93	3.90	1.59	1.34	2.30	2.01	7.59
8	3.85	5.78	3.33	11.60	11.85	8.20	3.72	1.65	1.29	2.66	1.93	7.33
9	3.66	5.25	3.22	11.47	12.97	7.51	3.54	1.86	1.24	2.77	1.97	6.98
10	3.52	4.87	3.12	11.55	14.15	7.00	3.36	1.81	1.22	2.44	2.11	6.71
11	3.49	4.58	3.04	13.00	14.68	6.62	3.20	1.67	1.32	2.24	1.86	6.83
12	3.55	4.34	2.96	14.56	15.08	6.34	3.05	1.57	1.48	2.05	1.64	7.07
13	3.51	4.13	3.06	14.68	15.05	6.10	2.99	1.58	1.48	1.92	1.51	7.20
14	3.43	3.96	7.39	14.30	14.62	8.76	2.93	1.64	1.50	2.06	1.58	6.56
15	3.35	3.79	10.41	13.73	14.07	11.70	2.83	1.67	1.48	2.56	2.14	5.78
16	3.22	3.64	10.51	13.14	13.54	12.46	2.70	1.60	1.61	2.39	2.19	5.05
17	3.09	3.50	9.83	12.57	13.00	12.67	2.58	1.54	1.54	2.19	1.96	4.48
18	2.97	3.37	9.19	12.00	12.45	12.40	2.48	1.49	1.45	1.95	1.78	4.02
19	2.91	3.24	8.58	11.49	11.88	11.88	2.40	1.47	1.45	1.79	1.67	3.68
20	2.99	3.16	7.91	11.11	11.38	11.24	2.34	1.70	1.60	1.65	1.98	3.38
21	3.04	3.17	7.30	10.76	10.83	10.66	2.45	2.12	1.97	1.51	3.21	3.10
22	2.89	3.21	6.78	10.22	10.18	10.18	2.68	2.02	2.67	1.40	4.18	2.85
23	2.79	3.24	6.33	9.59	9.56	9.80	2.57	1.86	2.87	1.32	4.12	2.71
24	2.67	3.22	5.95	8.97	9.01	9.26	2.38	1.69	2.55	1.26	3.66	2.78
25	2.59	3.14	5.62	8.36	8.44	8.59	2.30	1.56	2.32	1.32	3.20	2.70
26	2.60	3.06	5.30	7.83	7.84	7.90	2.21	1.46	2.17	1.30	2.82	2.52
27	2.89	2.98	4.99	7.56	7.30	7.29	2.12	1.40	2.01	1.28	2.49	2.37
28	3.31	2.90	4.73	7.27	6.88	6.80	2.05	1.35	1.92	1.31	2.31	2.31
29	3.65	2.84	4.52	6.86	---	6.38	1.97	1.31	1.82	1.31	2.39	2.21
30	4.19	2.80	4.33	6.48	---	6.01	1.90	1.28	1.78	1.33	3.53	2.11
31	4.48	---	4.16	6.18	---	5.66	---	1.26	---	1.29	4.66	---
MEAN	3.64	4.38	5.41	9.88	10.38	8.45	3.09	1.63	1.67	1.86	2.29	4.60
MAX	5.58	7.83	10.51	14.68	15.08	12.67	5.32	2.12	2.87	2.77	4.66	7.59
MIN	2.59	2.80	2.96	4.40	5.05	5.66	1.90	1.26	1.22	1.26	1.18	2.11

CAL YR 1985 MEAN 4.29 MAX 14.82 MIN 1.04
WTR YR 1986 MEAN 4.74 MAX 15.08 MIN 1.18

ALTAMAHA-ST. MARYS RIVERS

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. Discontinued.

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 1985 TO SEPTEMBER 1986

DATE	TIME	GAGE HEIGHT (FEET ABOVE DATUM) (00065)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV												
25...	1030	3.15	226	60	5.70	20.5	2.0	--	--	--	3.5	1.5
MAR												
18...	1130	12.44	3010	36	4.30	19.0	3.5	--	120	73	2.6	0.7
MAY												
28...	1000	1.36	42	86	6.90	27.0	2.0	6.7	10	15	6.3	2.8
AUG												
19...	0900	1.68	78	72	6.46	27.0	1.6	6.3	130	15	5.2	2.3

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, 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)
NOV												
25...	4.9	0.5	3.0	10	13	<0.1	9.4	82	<0.10	2.00	0.6	0.05
MAR												
18...	3.2	0.4	<3.0	--	--	<0.1	3.3	--	<0.10	0.05	0.8	0.03
MAY												
28...	4.9	1.4	21	13	8.0	<0.1	5.9	75	0.17	0.14	0.8	0.12
AUG												
19...	5.0	0.8	13	15	7.9	<0.1	8.3	83	0.12	0.02	<0.2	0.13

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	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												
25...	0.05	0.05	310	<1	26	<0.5	1	<1	<3	28	760	6
MAR												
18...	0.03	0.03	420	<1	19	<0.5	<1	<1	<3	25	530	1
MAY												
28...	0.09	0.06	130	1	25	<0.5	<1	<1	<3	3	310	3
AUG												
19...	0.11	0.08	290	4	26	<0.5	<1	<1	<3	8	480	<5

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 1985 TO SEPTEMBER 1986

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-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV												
25...	<4	13	<0.1	<10	5	<1	<1	27	<6	120	--	--
MAR												
18...	<4	10	--	<10	1	<1	<1	20	<6	63	12	25
MAY												
28...	<4	3	--	<10	10	<1	<1	34	<6	21	5	60
AUG												
19...	<4	6	--	<10	<1	<1	<1	44	<6	33	--	--

ALTAMAHA-ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, FL

LOCATION.--Lat 30°44'29", long 81°41'17", in land grant 41, T.4 N., R.26 E., Nassau County, Hydrologic Unit 03070204, at Florida-Georgia state line, near center of span on upstream side of bridge on U.S. Highway 17, 1.8 mi downstream from Little St. Marys River, 2.1 mi north of Gross, and 21 mi upstream from mouth.

DRAINAGE AREA.--1,360 mi^2, approximately.

PERIOD OF RECORD.--April 1966 to May 1975, October 1980 to September 1983, October 1984 to current year (daily discharge and/or gage heights) incomplete.

GAGE.--Water-stage and electromagnetic flowmeter recorders. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929. April 1966 to August 1975 water-stage and deflection meter recorder at same site and datum.

REMARKS.--Records poor. Discharge computed from continuous electromagnetic flowmeter record and represents net of much larger upstream and downstream discharges. The stage record published is the maximum and minimum tide event for each calendar day. Discharge for Apr. 1-30, July 1 to Aug. 31, 1985 and Jan. 1 to July 31, 1986 not published due to faulty velocity record.

AVERAGE DISCHARGE.--8 years (1967-72, 1981-82), 1,280 ft^3/s, 928,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,300 ft^3/s, Nov. 2, 1969; maximum gage height, 14.60 ft, Nov. 1, 1969; maximum daily reverse flow, 5,780 ft^3/s, Aug. 28, 1982; minimum gage height, 5.63 ft Feb. 13, 1971.

EXTREMES FOR CURRENT PERIOD.--
Water Year 1985: Maximum daily discharge, 8,670 ft^3/s, Mar. 24; maximum gage height, 14.41 ft, Nov. 23, Sept. 16; maximum daily reverse flow, 3,160 ft^3/s, Mar. 25; minimum gage height, 7.18 ft, June 16.

Water Year 1986: Maximum daily discharge, 7,170 ft^3/s, Oct. 28; maximum gage height, 14.34 ft, Oct. 30; maximum daily reverse flow, 880 ft^3/s, Aug. 29; minimum gage height, 7.83 ft, Apr. 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	1660	1880	-907	1500	2260	1150		1700	3280			2000
2	-92	1770	-958	1450	1920	1700		1800	2860			30
3	1420	-75	355	1240	2300	1310		3470	3710			1250
4	1430	3210	884	963	2670	1120		3170	3740			2570
5	791	2100	1280	503	3890	2170		4120	3320			1630
6	1760	2050	864	2230	2610	2470		3500	2880			1850
7	3280	1740	800	2660	3070	3910		3580	3430			1930
8	2210	2430	1440	2470	1740	4400		2970	3030			283
9	4080	2520	404	2570	2030	2650		3430	3090			1110
10	3870	1790	990	3580	2060	3020		3250	2170			498
11	3310	2440	837	3910	1690	3100		3130	2040			343
12	3430	1150	1940	3320	2150	3070		2600	1880			1080
13	2500	442	1300	3980	187	2690		2310	878			977
14	926	311	1360	3870	-388	2090		2340	2120			2710
15	293	-1670	1750	2460	559	1160		1440	2000			667
16	411	-241	984	2430	629	2260		2380	2200			-808
17	710	-1280	733	2270	986	2280		2790	2400			-106
18	-204	-814	2130	2160	59	2970		2220	2600			2400
19	-940	358	1870	2010	1410	1860		3420	2800			-369
20	-1340	723	1870	601	1970	830		3250	3060			473
21	-182	3420	2660	2250	2720	270		3730	3570			324
22	396	3870	2840	2250	1290	2040		3510	3700			30
23	1540	5420	2020	2110	893	5080		3080	3930			-418
24	2480	5400	2410	3350	729	8670		3330	4050			667
25	3310	4550	2510	2150	1300	-3160		3270	4630			318
26	3410	1650	2530	2030	1750	1300		3450	3800			1590
27	2730	-191	3450	2490	1080	1200		3260	2030			2570
28	1820	193	2510	2550	227	1100		2960	2330			1270
29	2040	677	1800	2230	---	1000		2640	3740			2070
30	1360	-493	1700	2780	---	1300		1370	3670			1930
31	1690	---	1600	2980	---	1400		2770	---			---
TOTAL	50099	45330	45956	73347	43791	66410		90240	88938			30869
MEAN	1616	1511	1482	2366	1564	2142		2911	2965			1029
MAX	4080	5420	3450	3980	3890	8670		4120	4630			2710
MIN	-1340	-1670	-958	503	-388	-3160		1370	878			-808
AC-FT	99370	89910	91150	145500	86860	131700		179000	176400			61230

NOTE.--Negative figures indicate reverse flow.

ALTAMAHA ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, 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	13.51	13.31	12.55	12.71	12.46	12.85		12.95	13.16			14.05
2	13.55	13.20	12.74	12.76	12.64	12.81		13.07	12.59			13.78
3	13.50	13.64	12.85	12.89	12.75	12.71		13.25	13.25			13.55
4	13.31	13.71	12.85	13.05	13.46	13.08		13.38	13.31			13.40
5	13.40	13.50	13.31	12.50	13.64	13.00		13.83	13.29			13.19
6	13.61	13.11	13.27	13.10	13.44	13.35		13.58	13.09			13.08
7	13.71	13.50	12.95	13.09	13.19	13.60		13.31	12.99			13.14
8	13.80	13.55	12.90	12.95	13.21	13.21		13.10	13.01			13.20
9	13.84	13.55	12.95	13.43	13.07	13.20		13.38	12.69			13.21
10	13.95	13.45	12.94	13.46	13.00	13.05		13.11	12.56			13.25
11	14.00	13.10	12.95	13.20	13.08	13.29		12.91	12.41			13.30
12	13.74	13.20	13.14	13.11	12.44	13.01		12.86	12.14			13.81
13	13.38	13.28	13.15	13.06	11.75	12.59		12.77	12.59			13.85
14	13.37	13.15	12.95	12.93	12.40	12.65		12.71	12.75			14.31
15	13.41	13.21	13.10	12.39	12.58	12.54		12.89	12.65			14.35
16	13.40	12.91	13.01	12.94	12.74	12.95		12.98	12.56			14.41
17	13.18	13.11	13.05	13.06	12.77	13.04		12.89	12.39			14.25
18	13.07	13.25	13.25	12.85	12.71	12.70		13.08	12.59			13.95
19	13.09	13.04	13.31	12.79	12.80	12.80		12.60	12.60			13.95
20	13.24	13.31	13.39	12.86	12.77	12.75		13.10	12.70			13.80
21	13.31	13.94	13.50	12.82	12.98	12.95		13.10	12.75			13.65
22	13.36	14.21	13.40	12.46	12.80	12.94		12.97	12.91			13.65
23	13.48	14.41	13.30	12.65	12.54	13.11		12.99	12.85			13.61
24	13.57	14.21	13.45	12.40	12.51	12.91		12.77	12.77			13.49
25	13.71	13.78	13.19	12.23	12.35	12.65		12.81	13.14			13.75
26	13.95	13.45	13.21	12.29	12.20	12.44		13.05	13.44			13.91
27	13.75	13.24	13.11	12.20	12.15	12.91		13.00	13.41			13.70
28	13.45	12.89	12.81	12.21	12.18	12.55		12.81	13.30			13.61
29	13.21	12.78	12.51	12.37	---	12.69		12.68	13.21			13.58
30	13.11	12.68	12.44	12.61	---	12.30		13.11	13.30			13.71
31	13.27	---	12.44	12.72	---	12.25		13.32	---			---
MEAN	13.49	13.39	13.03	12.78	12.74	12.87		13.04	12.88			13.68
MAX	14.00	14.41	13.50	13.46	13.64	13.60		13.83	13.44			14.41
MIN	13.07	12.68	12.44	12.20	11.75	12.25		12.60	12.14			13.08

ALTAMAHA ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, 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	9.85	10.28	8.90	8.64	7.70	8.80		8.00	7.50			11.58
2	10.11	10.14	8.71	8.77	7.59	9.01		8.17	7.51			10.98
3	9.98	10.24	8.99	8.47	7.36	7.99		7.95	7.79			10.75
4	9.79	11.44	8.60	8.38	8.67	8.61		9.69	8.21			10.31
5	9.54	10.58	9.34	7.53	9.59	8.14		9.19	8.10			9.81
6	10.09	9.60	8.85	8.01	8.91	7.38		8.45	8.10			9.54
7	10.61	9.70	7.70	8.28	8.36	9.48		7.89	8.40			9.41
8	10.91	10.24	8.15	7.61	8.20	8.57		8.54	8.71			9.45
9	11.14	10.10	7.80	8.48	8.60	7.89		9.04	8.49			9.34
10	11.38	9.80	7.81	9.38	8.67	8.34		8.90	8.25			9.14
11	11.54	9.04	7.81	9.11	8.81	8.27		9.01	7.95			8.80
12	10.90	8.74	8.45	8.48	7.21	7.35		9.08	7.35			9.61
13	10.04	9.21	8.70	8.79	7.21	7.89		8.90	7.49			11.24
14	9.85	9.08	8.61	7.29	8.01	7.61		8.79	8.29			11.84
15	10.00	9.21	8.75	7.64	7.60	8.45		8.64	7.98			12.04
16	10.14	9.00	9.20	8.85	7.61	8.78		8.90	7.18			11.91
17	9.59	8.89	8.90	8.45	7.68	8.65		8.41	7.20			11.64
18	9.00	9.55	8.74	7.28	7.51	8.31		8.65	7.87			11.15
19	8.81	8.74	8.60	7.45	7.81	8.40		8.59	7.75			10.81
20	8.96	8.14	8.64	7.59	7.78	8.29		8.85	7.61			10.64
21	9.07	9.90	8.51	7.24	8.74	8.31		8.24	8.04			10.25
22	9.21	10.80	8.65	7.25	7.99	8.88		8.44	8.40			10.20
23	9.38	11.35	8.14	7.24	7.84	8.79		8.38	8.64			10.20
24	9.50	11.40	9.00	7.29	7.88	8.60		8.05	8.63			9.71
25	9.64	10.44	9.04	7.24	7.70	7.74		8.94	8.03			10.10
26	10.29	9.44	8.69	7.24	7.71	8.40		9.11	8.97			11.14
27	10.10	9.20	9.41	8.04	7.79	8.20		8.78	8.82			10.71
28	9.44	9.08	8.88	8.30	8.40	9.40		8.38	8.19			10.38
29	9.00	8.84	8.50	8.91	---	8.65		7.70	7.72			10.50
30	9.10	9.04	8.30	8.80	---	8.19		8.01	7.99			10.85
31	9.50	---	8.79	8.90	---	7.84		8.54	---			---
MEAN	9.89	9.71	8.62	8.09	8.03	8.36		8.59	8.04			10.47
MAX	11.54	11.44	9.41	9.38	9.59	9.48		9.69	8.97			12.04
MIN	8.81	8.14	7.70	7.24	7.21	7.35		7.70	7.18			8.80

ALTAMAHA ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, FL

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	5090	3340								1000	1800
2	1110	4700	4410								873	2060
3	1540	2900	3520								900	2780
4	2570	5420	3870								665	2070
5	2390	3590	2880								1030	2500
6	2130	2760	2650								1190	2120
7	1890	3290	2540								1210	2670
8	1500	2180	2710								1350	2760
9	1160	2630	3770								1380	2790
10	3390	1440	3540								1020	3370
11	1360	3800	4790								876	2660
12	2890	2830	4790								429	2250
13	5560	3480	4000								120	777
14	6700	3360	2990								750	-15
15	6270	3400	3780								-824	2110
16	6070	3520	3230								-473	2040
17	6150	3410	2760								798	1570
18	6700	1960	3350								1160	2490
19	6690	2760	3990								1200	2720
20	4420	1270	2930								1570	2470
21	3980	661	2890								1700	2110
22	3340	2080	2560								1570	1380
23	3840	2810	1800								1290	1400
24	5160	4070	1630								1550	1800
25	4990	4830	2660								1040	1430
26	5400	4630	2430								1740	964
27	6850	3840	1930								1810	708
28	7170	3590	2410								1620	99
29	6160	3560	3140								-880	-470
30	5570	3190	3250								2040	1030
31	5880	---	3040								2390	---
TOTAL	130720	97051	97580								32094	54443
MEAN	4217	3235	3148								1035	1815
MAX	7170	5420	4790								2390	3370
MIN	1110	661	1630								-880	-470
AC-FT	259300	192500	193500								63660	108000

ALTAMAHA ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.54	13.45	13.24	12.68	12.76	13.22	13.04	13.19	13.11	12.78	12.73	13.55
2	13.41	13.25	12.91	12.98	12.68	12.99	12.94	12.76	13.06	12.69	12.65	13.70
3	13.21	13.45	13.12	12.80	12.65	12.68	12.90	13.19	13.44	12.98	12.58	13.64
4	12.84	12.96	13.17	12.79	12.80	12.42	13.00	13.22	13.54	13.42	12.73	13.54
5	12.85	12.75	13.13	13.11	12.91	12.70	13.01	12.92	13.64	13.18	12.88	13.57
6	13.25	13.01	12.76	13.19	13.04	12.91	12.90	12.84	13.52	13.11	12.88	13.53
7	13.41	13.09	12.98	13.23	13.07	12.85	12.82	12.91	13.23	13.09	12.93	13.72
8	13.71	13.35	13.16	13.93	13.36	13.19	12.96	13.04	13.05	13.02	12.86	13.66
9	13.81	13.55	13.34	13.76	13.60	13.18	13.12	13.66	12.98	12.92	12.75	13.60
10	13.84	13.69	13.46	13.82	13.81	13.03	13.15	13.74	13.05	12.76	12.66	13.48
11	13.40	13.71	13.49	14.18	13.73	12.75	13.18	13.58	13.19	12.68	12.67	13.20
12	13.71	13.70	13.35	13.90	13.40	12.77	13.00	13.27	12.99	12.69	12.80	12.93
13	13.85	13.61	13.29	13.44	13.38	12.86	13.03	13.02	12.73	12.49	12.90	13.13
14	14.00	13.55	12.76	13.32	13.36	13.02	13.14	13.19	12.65	12.42	12.73	13.56
15	13.94	13.51	13.40	13.18	13.04	12.89	13.06	13.13	12.81	12.67	13.09	13.47
16	13.81	13.41	13.30	13.23	13.16	12.83	12.70	13.03	12.84	12.83	13.30	13.51
17	13.89	13.28	13.10	13.10	13.13	12.88	12.73	12.94	12.98	12.97	13.25	13.81
18	13.98	13.15	12.79	12.86	13.00	12.74	12.76	12.87	13.17	13.04	13.24	13.93
19	13.74	13.17	12.68	13.12	12.98	12.64	13.05	12.95	13.55	13.17	13.23	13.65
20	13.45	12.95	12.73	12.72	13.17	12.17	13.24	13.08	13.58	13.39	13.26	13.38
21	13.37	12.87	12.55	12.65	13.46	12.79	13.15	13.34	13.75	13.40	13.25	13.02
22	13.41	12.76	12.75	12.95	13.35	13.30	13.20	13.50	13.84	13.31	12.99	12.99
23	13.49	12.89	12.57	12.98	13.52	13.31	13.57	13.58	13.86	13.29	12.98	13.10
24	13.46	13.27	12.52	13.66	13.67	13.17	13.64	13.47	13.61	13.23	13.05	12.85
25	13.55	13.31	12.47	13.73	13.62	13.42	13.65	13.44	13.31	13.17	13.16	12.51
26	14.01	13.17	12.44	13.61	13.64	13.49	13.53	13.46	13.33	12.98	13.00	12.41
27	14.01	12.98	12.38	12.57	13.16	13.48	13.61	13.52	13.39	12.72	12.66	12.42
28	14.11	12.93	12.51	12.59	13.01	13.51	13.57	13.44	13.07	12.67	12.39	12.69
29	14.31	12.95	12.74	12.69	---	13.61	13.40	13.25	12.87	12.62	13.17	13.12
30	14.34	12.97	12.83	12.69	---	13.47	13.26	13.20	12.85	12.59	13.41	13.05
31	14.01	---	12.89	12.79	---	13.25	---	13.13	---	12.83	13.38	---
MEAN	13.67	13.22	12.93	13.17	13.23	13.02	13.14	13.22	13.23	12.94	12.95	13.29
MAX	14.34	13.71	13.49	14.18	13.81	13.61	13.65	13.74	13.86	13.42	13.41	13.93
MIN	12.84	12.75	12.38	12.57	12.65	12.17	12.70	12.76	12.65	12.42	12.39	12.41

WTR YR 1986 MEAN 13.17 MAX 14.34 MIN 12.17

ALTAMAHA ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.45	10.21	8.85	8.25	8.05	8.39	8.33	8.73	9.29	8.30	8.34	10.02
2	10.14	9.61	9.18	8.87	7.84	8.13	8.44	8.25	8.75	7.99	8.04	10.30
3	9.85	9.95	8.74	8.22	7.85	7.87	8.72	8.38	9.31	8.04	7.87	9.91
4	9.19	9.01	9.40	8.39	7.85	7.95	8.61	9.59	10.15	9.38	7.86	9.97
5	9.01	8.51	9.33	8.29	7.84	8.14	8.61	8.65	10.11	9.39	8.07	9.99
6	9.85	9.04	8.63	8.34	7.84	8.35	8.40	7.96	9.99	8.77	8.18	10.06
7	10.01	9.31	8.99	8.36	7.95	7.88	7.83	7.90	8.98	8.42	8.11	10.68
8	11.04	9.21	8.69	8.64	8.11	7.88	7.95	7.91	8.50	8.12	7.98	10.50
9	11.08	10.18	8.51	9.74	9.15	8.75	8.16	9.04	8.39	7.91	7.90	10.15
10	11.49	10.10	8.39	8.95	10.35	8.47	8.88	10.40	9.17	7.88	7.98	9.66
11	9.51	9.81	8.25	10.64	10.38	7.95	8.55	9.51	9.14	8.09	7.87	8.92
12	9.74	9.30	8.08	10.76	9.88	7.95	8.69	8.69	8.24	8.18	8.00	8.25
13	10.50	8.91	7.86	9.48	9.68	8.15	9.17	9.43	8.31	7.88	8.16	8.05
14	10.68	8.81	7.85	9.25	10.03	8.10	9.10	9.31	8.47	7.88	7.88	9.35
15	10.60	8.89	8.44	8.50	9.13	8.57	9.12	9.33	8.74	7.87	7.88	9.22
16	10.18	8.84	9.09	9.53	9.73	9.04	8.53	9.22	8.59	7.87	8.36	9.24
17	9.91	9.14	9.02	9.13	9.75	8.94	8.90	9.20	8.18	7.87	8.28	9.84
18	10.71	8.88	8.54	9.10	9.25	9.26	9.21	8.95	8.01	7.87	7.85	10.60
19	10.40	9.50	8.70	8.52	9.32	8.16	9.52	8.60	8.98	7.86	8.40	9.96
20	9.61	9.05	8.20	8.00	9.24	8.51	9.70	8.33	8.65	7.92	8.68	9.46
21	9.51	9.05	8.24	7.97	9.82	8.83	8.93	8.37	8.83	7.95	8.47	8.88
22	9.74	8.10	8.11	8.58	9.49	9.82	8.76	8.59	9.77	8.31	8.44	8.73
23	10.05	7.91	8.23	8.50	9.16	9.56	9.05	8.50	9.11	8.50	8.63	9.07
24	10.30	9.21	7.99	9.52	10.11	9.03	8.96	8.17	8.56	8.84	8.96	9.14
25	10.41	9.42	7.85	10.31	9.71	8.92	8.64	8.24	8.62	9.05	9.09	8.45
26	10.75	9.07	7.87	9.57	9.89	9.27	8.45	8.79	9.41	8.67	9.38	8.28
27	11.60	8.49	7.84	7.84	7.85	9.00	8.85	9.16	9.48	8.19	8.75	8.24
28	11.60	8.21	7.87	7.84	8.64	9.20	8.99	9.16	8.98	8.10	8.09	8.39
29	11.50	8.18	7.85	7.84	---	9.23	8.82	9.14	8.45	8.09	8.40	9.09
30	12.44	8.42	7.84	7.84	---	8.73	8.91	9.35	8.18	7.98	10.39	8.09
31	11.60	---	8.07	8.25	---	8.44	---	9.31	---	8.40	9.86	---
MEAN	10.43	9.08	8.40	8.81	9.07	8.60	8.76	8.84	8.91	8.24	8.39	9.35
MAX	12.44	10.21	9.40	10.76	10.38	9.82	9.70	10.40	10.15	9.39	10.39	10.68
MIN	9.01	7.91	7.84	7.84	7.84	7.87	7.83	7.90	8.01	7.86	7.85	8.05

WTR YR 1986 MEAN 8.90 MAX 12.44 MIN 7.83

ALTAMAHA-ST. MARYS RIVERS

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 mi^2.

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

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

REMARKS.--Estimated daily discharges: Oct. 28 to Nov. 19. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--5 years, 11.7 ft^3/s, 11.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 495 ft^3/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, 299 ft^3/s, Mar. 15, gage height, 11.81 ft; minimum, 0.20 ft^3/s, July 31, Aug. 1,2, gage height, 6.35 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	38	20	8.8	8.4	6.5	3.8	.66	.73	.40	.22	22
2	124	34	46	16	7.7	6.5	3.6	.49	1.0	.47	.29	11
3	57	30	50	14	7.7	6.0	3.2	.42	1.0	.58	.29	8.0
4	32	28	26	17	7.4	29	2.8	.41	1.4	.65	.40	5.3
5	21	25	18	86	15	130	2.5	.42	1.2	.68	1.9	3.6
6	16	25	14	139	147	78	2.1	.44	1.0	.79	.97	5.9
7	12	22	12	75	200	35	2.0	.86	.85	.63	.51	6.4
8	10	18	10	51	137	22	1.9	1.4	.65	.50	.41	4.4
9	9.3	15	9.1	38	184	16	1.6	1.2	1.2	.42	2.5	3.5
10	8.9	18	7.9	63	196	13	1.3	1.0	3.4	.31	2.3	3.5
11	13	22	7.4	192	179	12	1.2	.82	14	.25	1.2	4.4
12	18	20	6.7	161	127	10	1.2	.68	17	.47	1.0	6.8
13	16	16	36	86	74	12	1.5	1.1	13	.51	1.1	4.3
14	12	13	151	47	41	107	1.7	1.4	11	.32	2.8	2.6
15	9.9	11	132	32	30	271	1.7	1.5	5.2	.26	4.3	1.9
16	8.0	9.5	57	24	24	190	1.4	1.3	3.1	2.1	4.6	1.4
17	7.1	8.5	31	20	19	107	1.3	1.1	3.6	1.5	2.5	1.1
18	6.1	7.0	23	18	17	53	1.2	.93	14	.56	2.5	1.7
19	5.1	6.1	18	18	15	32	.97	1.6	15	.44	39	1.8
20	4.4	7.6	16	23	14	25	.91	2.1	9.5	.38	46	1.4
21	4.9	10	13	21	13	25	3.1	2.1	18	.29	19	1.1
22	4.4	10	11	16	11	21	4.9	1.7	13	.23	14	.88
23	6.5	9.7	9.7	14	10	16	4.6	1.2	4.5	.24	6.6	.74
24	5.3	9.5	8.8	12	9.3	13	2.9	.92	2.0	.26	3.3	.69
25	4.8	9.0	8.2	11	8.4	11	2.0	.73	1.1	.30	1.9	.56
26	4.1	8.1	7.3	11	7.4	9.5	1.5	.52	.69	.32	1.1	.48
27	4.0	7.4	6.5	13	6.9	8.6	1.2	.45	.56	.36	2.7	.45
28	20	6.5	6.3	14	6.6	8.5	1.1	.44	.49	.33	6.2	.45
29	60	5.7	6.5	11	---	7.3	.78	.39	.43	.36	25	.43
30	50	9.3	6.5	10	---	6.4	.66	.30	.39	.33	67	.42
31	40	---	6.1	9.2	---	4.7	---	.67	---	.27	51	---
TOTAL	686.8	458.9	781.0	1271.0	1522.8	1292.0	60.62	29.25	158.99	15.51	312.59	107.20
MEAN	22.2	15.3	25.2	41.0	54.4	41.7	2.02	.94	5.30	.50	10.1	3.57
MAX	124	38	151	192	200	271	4.9	2.1	18	2.1	67	22
MIN	4.0	5.7	6.1	8.8	6.6	4.7	.66	.30	.39	.23	.22	.42
CFSM	1.59	1.09	1.80	2.93	3.89	2.98	.14	.07	.38	.04	.72	.25
IN.	1.82	1.22	2.08	3.38	4.05	3.43	.16	.08	.42	.04	.83	.28

CAL YR 1985	TOTAL	5609.33	MEAN	15.4	MAX	434	MIN	.05	CFSM	1.10	IN.	14.90
WTR YR 1986	TOTAL	6696.66	MEAN	18.3	MAX	271	MIN	.22	CFSM	1.31	IN.	17.79

ALTAMAHA-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 A1A, 1.5 mi west of Italia, and 5.5 mi east of Callahan.

DRAINAGE AREA.--56.6 mi^2.

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 PERIOD OF RECORD.--Maximum gage height, 13.26 ft, Sept. 3, 1985; minimum, 4.92 ft, Jan. 26, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 11.41 ft, Feb. 11,12; minimum, 5.45 ft, Dec. 26.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.55	10.68	8.71	7.85	8.01	8.34	8.20	8.50	8.65	7.98	7.84	9.24
2	9.46	10.30	9.03	8.11	7.81	8.14	8.04	8.17	8.59	7.77	7.74	9.31
3	9.34	9.98	8.75	8.23	7.59	7.56	8.03	8.07	8.60	7.64	7.56	9.40
4	9.06	9.84	8.88	8.02	7.66	7.53	8.16	8.81	9.00	8.38	7.40	9.38
5	8.68	9.42	9.00	8.73	7.84	8.32	8.21	8.79	9.11	8.82	7.78	9.36
6	8.61	9.12	8.90	9.26	9.04	8.60	8.17	8.32	9.21	8.60	8.01	9.32
7	8.91	9.07	8.72	9.93	9.55	8.43	7.91	7.92	9.09	8.31	8.02	9.35
8	9.22	8.96	8.77	10.05	9.99	8.62	7.76	7.85	8.63	8.07	7.93	9.36
9	9.47	9.15	8.76	10.02	10.47	8.91	7.93	8.02	8.19	7.86	7.81	9.34
10	9.65	9.30	8.76	9.98	10.95	8.72	8.39	8.83	8.46	7.61	7.81	9.26
11	9.69	9.32	8.75	10.35	11.35	8.24	8.35	9.16	8.59	7.67	7.78	9.01
12	9.48	9.26	8.64	10.69	11.25	8.06	8.14	8.97	8.40	7.80	7.78	8.55
13	9.49	9.16	8.61	10.65	10.87	8.14	8.33	8.48	8.11	7.54	7.94	8.11
14	9.61	9.05	9.18	10.27	10.36	8.61	8.41	8.59	7.91	7.37	7.74	8.55
15	9.66	8.97	9.24	9.78	9.85	9.17	8.34	8.60	8.09	7.35	7.60	8.89
16	9.60	8.89	9.50	9.46	9.32	10.32	7.80	8.52	8.15	7.60	8.18	8.86
17	9.50	8.84	9.52	9.09	8.94	10.50	7.92	8.43	8.09	7.70	8.42	8.95
18	9.52	8.63	9.29	8.58	8.55	10.18	8.03	8.36	8.09	7.71	8.31	9.29
19	9.56	8.74	8.85	8.42	8.24	9.73	8.40	8.23	8.56	7.81	8.39	9.36
20	9.42	8.72	8.57	7.78	8.26	9.04	8.78	8.29	8.84	8.11	8.58	9.20
21	9.20	8.59	8.13	7.64	8.65	8.65	8.79	8.35	8.91	8.43	8.58	8.85
22	9.06	8.30	7.99	8.04	8.61	8.99	8.55	8.59	9.13	8.57	8.37	8.44
23	9.08	7.75	7.78	8.13	8.59	9.04	8.66	8.70	9.25	8.59	8.34	8.41
24	9.14	8.60	7.43	8.76	8.91	8.78	8.86	8.69	9.11	8.59	8.44	8.41
25	9.21	8.79	7.19	9.17	8.92	8.68	8.89	8.57	8.78	8.61	8.46	7.88
26	9.37	8.66	7.06	9.13	9.00	8.80	8.76	8.64	8.70	8.45	8.61	7.46
27	9.68	8.32	7.10	8.19	8.33	8.80	8.71	8.79	8.89	8.13	8.26	7.36
28	10.05	8.10	7.22	7.15	8.10	8.80	8.78	8.81	8.72	7.80	7.85	7.54
29	10.43	8.05	7.48	7.71	---	8.90	8.72	8.71	8.34	7.68	8.00	8.13
30	10.85	8.23	7.61	7.55	---	8.82	8.54	8.65	8.07	7.55	9.07	8.46
31	10.88	---	7.90	8.05	---	8.54	---	8.71	---	7.69	9.20	---
MEAN	9.50	8.96	8.43	8.86	9.11	8.77	8.35	8.52	8.61	7.99	8.12	8.77
MAX	10.88	10.68	9.52	10.69	11.35	10.50	8.89	9.16	9.25	8.82	9.20	9.40
MIN	8.61	7.75	7.06	7.15	7.59	7.53	7.76	7.85	7.91	7.35	7.40	7.36

WTR YR 1986 MEAN 8.66 MAX 11.35 MIN 7.06

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 mi^2.

PERIOD OF RECORD.--January 1965 to May 1984, October 1984 to current year.

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--21 years, 35.0 ft^3/s, 15.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,020 ft^3/s, Apr. 4, 1973, gage height, 21.04 ft, from rating curve extended above 1,600 ft^3/s; minimum, 0.41 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 1	1200	343	17.65	Jan. 11	1500	592	18.04
Oct. 29	0600	343	17.65	Feb. 9	0800	562	18.00
Dec. 14	1800	*624	*18.08				

Minimum discharge, 1.8 ft^3/s, Aug. 1, 2, gage height, 14.84 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	320	188	34	39	19	23	6.6	3.4	4.8	3.3	1.8	144
2	265	174	56	54	18	26	6.5	3.3	4.5	3.1	1.8	101
3	172	130	44	42	18	21	6.4	3.2	9.0	4.1	2.0	63
4	115	102	31	43	17	42	5.9	3.2	9.8	3.9	1.9	38
5	109	103	24	148	18	112	5.8	3.3	8.5	3.2	2.1	34
6	78	76	20	184	148	107	5.8	3.3	7.2	5.6	3.3	51
7	49	54	17	149	285	78	5.8	3.4	5.4	4.7	2.8	56
8	32	38	15	143	283	57	5.6	31	4.4	3.3	4.2	38
9	32	30	14	130	492	43	5.5	45	3.6	2.7	3.5	24
10	37	43	13	181	362	35	5.5	13	3.5	2.4	12	19
11	48	46	13	507	327	30	5.8	8.9	3.7	2.2	12	23
12	55	38	13	392	299	25	5.9	7.1	3.6	2.3	6.2	23
13	46	31	38	237	202	80	6.2	7.0	3.8	4.6	5.3	17
14	36	26	419	160	142	171	7.6	8.6	5.6	5.3	11	13
15	27	23	380	117	109	91	7.6	7.2	7.3	3.5	16	11
16	20	20	211	90	88	33	5.7	6.0	6.3	2.8	12	9.1
17	17	18	139	72	71	19	5.1	5.2	11	2.8	8.5	7.5
18	15	15	102	61	60	14	4.9	4.8	33	3.5	6.3	10
19	18	15	79	60	55	13	4.8	5.4	47	3.5	10	17
20	25	23	62	60	49	12	4.8	20	51	2.5	17	13
21	18	39	50	52	41	12	9.6	19	32	2.1	34	10
22	21	40	42	42	35	11	17	10	33	2.0	49	8.1
23	18	33	37	36	31	11	9.7	7.3	20	2.2	32	6.9
24	14	26	33	32	29	10	7.2	5.7	13	2.2	16	6.1
25	16	22	32	28	25	9.6	6.2	4.8	8.8	2.2	9.7	5.3
26	22	19	27	29	21	9.3	5.4	4.2	6.4	2.2	6.7	4.8
27	70	17	23	35	19	9.1	4.9	3.8	5.0	2.3	6.3	4.3
28	173	15	22	30	19	8.9	4.3	3.8	4.0	2.5	21	4.1
29	323	14	21	25	---	8.6	3.8	3.6	3.4	2.3	26	3.8
30	264	13	20	23	---	8.5	3.6	3.5	3.1	2.1	73	3.6
31	194	---	18	21	---	7.2	---	4.0	---	1.9	148	---
TOTAL	2649	1431	2049	3222	3282	1137.2	189.5	262.0	361.7	93.3	561.4	768.6
MEAN	85.5	47.7	66.1	104	117	36.7	6.32	8.45	12.1	3.01	18.1	25.6
MAX	323	188	419	507	492	171	17	45	51	5.6	148	144
MIN	14	13	13	21	17	7.2	3.6	3.2	3.1	1.9	1.8	3.6
CFSM	2.86	1.60	2.21	3.48	3.91	1.23	.21	.28	.40	.10	.61	.86
IN.	3.30	1.78	2.55	4.01	4.08	1.41	.24	.33	.45	.12	.70	.96

CAL YR 1985	TOTAL	13065.1	MEAN	35.8	MAX	578	MIN	1.2	CFSM	1.20	IN.	16.25
WTR YR 1986	TOTAL	16006.7	MEAN	43.9	MAX	507	MIN	1.8	CFSM	1.47	IN.	19.91

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312893 NASSAU RIVER NEAR TISONIA, FL

WATER-QUALITY RECORDS

LOCATION.--Lat 30°33'02", long 81°35'24", in SE¼ sec.34, T.2 N., R.27 E., Duval County, Hydrologic Unit 03070205, on private dock on right bank at Pearson Island, 2.1 mi northeast of Tisonia, 3.5 mi south of Hedges, 5.3 mi downstream from U.S. Highway 17 bridge, and about 16.0 mi upstream from mouth.

DRAINAGE AREA.--285 mi^2, approximately.

PERIOD OF RECORD.--October 1985 to September 1986.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1985 to September 1986.
WATER TEMPERTURE: February to September 1986.

INSTRUMENTATION.--Water-quality monitor since October 1985. Digital recorder set for one-hour punch interval.

REMARKS.--Interruptions in record were due to malfunction of recording instrument. Unpublished records of gage heights are available in the files of the Jacksonville Field Headquarters. This is the auxiliary gage for Nassau River near Hedges (station 02231289) located 5.3 mi upstream at U.S. Highway 17.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 57,200 microsiemens, July 20; minimum, less than 100 microsiemens, Feb. 2-14.
WATER TEMPERATURE: Maximum, 32.5° C, July 19,20; minimum, 10.0° C, Feb. 1.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEC. C), WATER YEAR OCTOBER 1985 TO SPETEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17600	2900	31300	20600	20800	24800	25700	47000	49200	---	50900	50700
2	15400	3000	26800	23800	21100	23200	25500	45300	49100	---	48600	50800
3	12000	6510	26700	22200	22000	20500	26200	48900	46100	---	45800	51600
4	7810	1400	27600	21100	23400	18500	28100	48800	47800	---	46700	51100
5	8710	1700	26900	22400	25500	18700	28900	47800	46600	---	47500	51000
6	15900	5910	21100	21600	22600	18900	28300	47900	43000	---	48500	50100
7	20300	8310	24900	20300	16200	16900	29400	48500	45400	---	44600	50600
8	26200	13400	27800	35000	16100	22000	31800	49000	49500	53200	46200	50600
9	27800	17600	30600	29600	12400	22900	34900	51100	50300	54400	47600	50100
10	27100	20100	33100	27400	7510	21400	36100	52800	50600	54600	47800	48700
11	18600	22700	33900	29700	1900	19200	36600	52400	51700	54900	48700	45600
12	24700	24200	33500	13700	400	20700	35900	50400	48000	55000	49600	43100
13	28300	25200	33200	1300	15700	22200	36800	50200	49100	54200	50100	45600
14	32000	25900	17300	500	14900	22400	38600	49700	47300	54500	49300	49700
15	32700	26900	20100	---	400	12100	38100	51100	49600	55200	50800	49200
16	32100	26900	15900	---	16800	3700	35200	48800	50800	55600	51900	49800
17	34100	25900	10600	---	1200	1900	35900	50900	51800	55700	52400	51200
18	36100	25100	6310	---	1300	801	36800	50900	46600	55800	52700	53100
19	33300	26200	6410	---	3300	500	40200	50100	---	56200	52500	49900
20	29800	23000	8210	---	7610	701	41300	47600	---	57200	52800	48700
21	29100	21500	7310	---	12800	5310	41100	48400	---	57000	52700	46400
22	30300	19500	10800	---	13100	13900	41200	48500	---	56900	51400	47300
23	31600	24700	10200	---	18200	14000	44300	48600	---	54200	52200	49000
24	32200	29200	11000	---	21700	12300	45700	48100	---	53500	52700	47500
25	32900	29800	12400	---	24400	19300	45600	50200	---	53200	54000	44800
26	36400	28800	13600	---	25000	22500	45800	50600	---	52800	53500	44900
27	36500	27400	14700	---	18000	22700	47300	46500	---	48000	51900	44800
28	32700	27600	16900	---	21200	25500	47800	46000	---	46100	48900	47100
29	33700	28100	19300	17600	---	29700	47700	46000	---	48600	51700	49700
30	28300	29100	21100	18300	---	29000	47600	44600	---	48800	50900	49800
31	16200	---	22400	50400	---	27500	---	44900	---	50700	50100	---
MAX	36500	29800	33900	---	25500	29700	47800	52800	---	---	54000	53100

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312893 NASSAU RIVER NEAR TISONIA, FL

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEC. C), WATER YEAR OCTOBER 1985 TO SPETEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2200	701	7610	3600	2600	2500	3000	28500	30700	---	39300	35900
2	1500	500	7210	5110	2200	2300	3800	24700	29700	---	37600	36900
3	1000	500	4300	4200	3000	1300	5410	28400	26700	---	32900	36200
4	701	500	5810	4100	2600	1400	5310	28900	31900	---	32000	35700
5	701	400	6710	1700	3200	1200	6710	29100	33100	---	30200	35800
6	801	400	3600	1500	2000	901	7910	30400	30800	---	30500	34600
7	1100	601	5210	1000	801	701	7510	30700	29500	---	31400	35500
8	5000	601	4900	801	701	701	7810	30900	31900	41100	32900	36000
9	8010	1000	5410	4300	500	1300	9510	35500	30800	41600	34400	34600
10	11600	1700	5710	1000	300	1300	14800	44600	26000	41800	30100	30300
11	2800	2100	6310	901	300	1000	14300	32000	30100	43000	30900	26000
12	2400	1900	6410	400	0	1100	15100	31100	33500	41800	35600	22600
13	4000	1800	5510	300	0	1700	17700	21200	36500	43100	36900	21800
14	7310	1900	1000	300	0	701	18100	36800	36000	42400	29700	26700
15	8810	2500	901	---	200	500	18400	29000	36000	41400	32200	30200
16	7210	2800	701	---	200	400	16800	27700	38200	44000	34800	30600
17	5710	3700	500	---	300	300	18600	32300	38400	43400	34300	34100
18	10400	3100	400	---	300	200	21800	31200	39600	44200	33800	40900
19	11300	5910	400	---	300	200	24700	33200	---	45200	33700	37000
20	6810	5710	400	---	300	200	26900	29000	---	47500	39800	34900
21	5610	5410	400	---	400	300	25600	28300	---	49100	32300	30900
22	6210	2700	500	---	500	300	3000	26500	---	47200	33600	28500
23	8610	1800	500	---	601	601	25900	29200	---	37300	35300	30500
24	11100	6110	500	---	1700	500	27000	26900	---	46100	37000	30700
25	12600	9010	500	---	1900	601	26900	30800	---	43500	38600	27900
26	15800	8310	601	---	4100	1000	25800	28900	---	39700	40700	27300
27	22200	7110	701	---	1100	1400	28600	30300	---	37300	41300	28000
28	15900	5910	901	---	2000	2500	30100	29000	---	36100	37200	29800
29	9010	6410	1300	1300	---	4300	29600	28400	---	36600	36500	34300
30	8210	7210	1900	1100	---	3300	30600	28800	---	36900	38400	35600
31	1600	---	3600	2800	---	2800	---	28600	---	37900	36600	---
MIN	701	400	400	---	0	200	3000	21200	---	---	29700	21800

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312893 NASSAU RIVER NEAR TISONIA, FL

TEMPERATURE, WATER (DEG. C), PERIOD FEBRUARY 1986 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					11.0	15.5	21.0	24.5	29.5	---	31.5	28.0
2					12.0	14.0	21.5	25.0	29.5	---	31.5	28.5
3					12.5	14.0	22.0	24.5	29.5	---	30.5	29.0
4					13.5	14.0	22.5	24.0	29.5	---	30.5	29.5
5					14.5	14.5	23.0	24.5	29.5	---	30.0	29.5
6					15.0	14.5	23.5	25.0	29.5	---	30.0	29.5
7					16.0	14.5	24.0	26.0	30.0	---	30.5	30.0
8					16.0	15.0	24.0	26.5	30.0	31.0	30.5	29.5
9					16.0	15.5	23.5	26.0	31.0	31.5	30.5	29.5
10					16.5	17.0	22.5	25.5	31.0	31.5	31.0	28.5
11					17.0	18.0	22.0	25.0	31.0	31.5	30.5	28.5
12					16.5	19.5	22.0	25.0	31.5	31.5	30.5	28.5
13					15.0	20.5	22.0	25.0	31.0	31.5	30.0	29.0
14					14.0	20.5	22.0	25.5	30.5	32.0	29.5	28.5
15					13.5	20.5	22.5	25.5	30.5	32.0	30.0	28.5
16					14.0	20.5	22.0	26.0	31.0	32.0	30.0	29.0
17					14.0	21.5	21.5	26.5	31.0	32.0	30.5	29.0
18					14.5	21.0	21.5	26.5	30.5	32.0	30.5	28.5
19					15.5	21.5	21.5	26.0	---	32.5	30.5	28.0
20					17.0	21.5	22.0	26.0	---	32.5	30.0	28.5
21					17.5	20.5	22.0	26.0	---	32.0	30.0	28.5
22					18.5	19.5	22.0	26.0	---	31.5	30.0	29.0
23					18.5	17.5	21.5	26.0	---	30.5	30.5	29.0
24					18.5	17.5	21.5	27.0	---	31.0	31.0	29.5
25					17.5	18.0	21.5	27.5	---	31.0	31.0	29.5
26					17.0	19.0	22.0	28.0	---	---	31.5	29.5
27					16.5	19.5	23.0	28.5	---	---	31.5	30.0
28					16.5	20.5	23.5	28.5	---	---	31.0	30.0
29					---	20.5	24.0	29.0	---	---	30.5	30.0
30					---	20.5	24.0	29.0	---	---	29.0	30.0
31					---	21.0	---	29.0	---	---	28.5	---
MAX					18.5	21.5	24.0	29.0	---	---	31.5	30.0

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312893 NASSAU RIVER NEAR TISONIA, FL

TEMPERATURE, WATER (DEG. C), PERIOD FEBRUARY 1986 TO SEPTEMBER 1986
MINIMUM VALUES

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

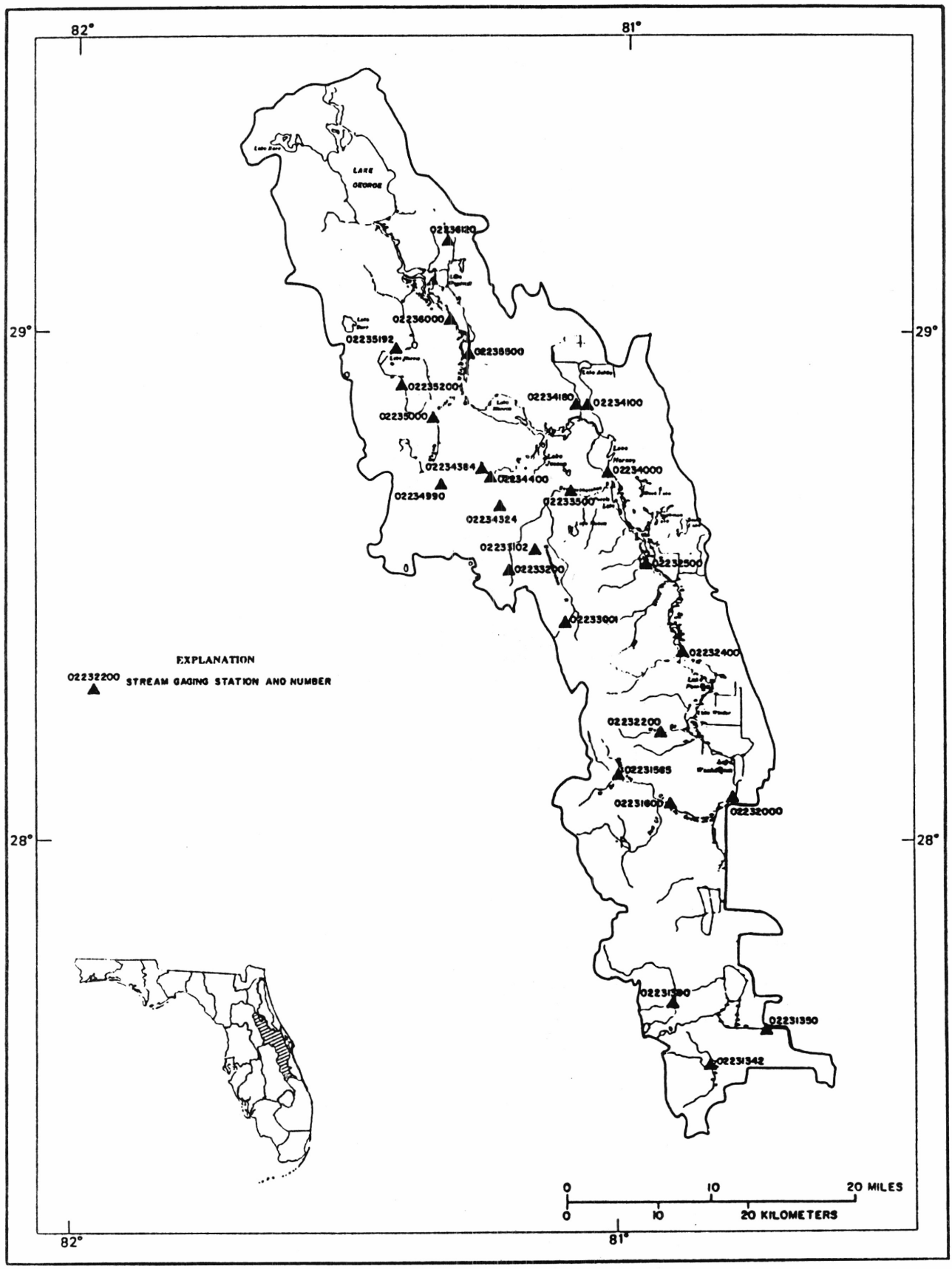

Figure 9. Location of stream gaging stations in the St. Johns River basin above the Oklawaha River.

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 mi^2.

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.--9 years, 44.4 ft^3/s, 11.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft^3/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, 377 ft^3/s, Aug. 6, gage height, 36.69 ft; no flow Apr. 13 to June 13; minimum gage height, 32.28 ft, June 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	29	10	16	17	4.9	1.9	.00	.00	88	32	65
2	107	26	9.7	20	15	4.5	1.7	.00	.00	84	32	81
3	99	28	9.6	18	13	4.3	1.4	.00	.00	60	31	70
4	92	57	9.3	16	12	4.3	1.2	.00	.00	87	37	58
5	87	98	12	18	12	4.9	.99	.00	.00	146	113	51
6	86	98	20	22	13	6.9	.86	.00	.00	156	346	110
7	75	60	19	21	11	6.2	.68	.00	.00	127	318	138
8	62	41	18	19	10	4.6	.43	.00	.00	96	214	118
9	52	33	19	19	10	4.2	.25	.00	.00	66	143	88
10	44	30	18	29	11	6.2	.15	.00	.00	47	100	152
11	39	26	16	32	11	9.9	.06	.00	.00	39	82	199
12	36	24	14	29	10	10	.01	.00	.00	39	73	175
13	39	22	13	25	9.3	13	.00	.00	.00	34	81	125
14	40	20	13	22	9.0	13	.00	.00	18	36	83	90
15	37	18	12	19	9.3	14	.00	.00	30	39	107	67
16	35	17	11	18	8.5	14	.00	.00	26	34	176	53
17	31	16	12	18	7.8	14	.00	.00	22	27	221	45
18	28	15	12	18	7.3	11	.00	.00	26	21	190	42
19	27	14	12	26	7.1	8.7	.00	.00	52	16	146	44
20	27	15	11	26	7.0	7.5	.00	.00	69	13	121	58
21	27	18	10	24	7.9	6.9	.00	.00	68	10	132	55
22	26	19	9.7	21	6.8	5.9	.00	.00	51	14	277	45
23	23	17	9.3	19	6.1	5.0	.00	.00	48	25	323	39
24	21	15	9.6	17	6.2	4.2	.00	.00	50	20	246	34
25	19	14	11	15	5.6	3.6	.00	.00	63	21	182	29
26	17	13	11	15	5.1	3.4	.00	.00	152	18	135	25
27	17	12	10	15	4.7	3.5	.00	.00	149	15	112	22
28	20	12	9.5	15	4.6	3.3	.00	.00	117	24	102	20
29	23	11	9.6	14	---	2.9	.00	.00	80	28	87	17
30	28	11	9.2	14	---	2.6	.00	.00	76	28	70	16
31	30	---	9.4	15	---	2.2	---	.00	---	32	58	---
TOTAL	1412	829	378.9	615	257.3	209.6	9.63	.00	1097.00	1490	4370	2131
MEAN	45.5	27.6	12.2	19.8	9.19	6.76	.32	.00	36.6	48.1	141	71.0
MAX	118	98	20	32	17	14	1.9	.00	152	156	346	199
MIN	17	11	9.2	14	4.6	2.2	.00	.00	.00	10	31	16
CFSM	.87	.52	.23	.38	.17	.13	.01	.00	.70	.91	2.68	1.35
IN.	.00	.59	.27	.43	.18	.15	.01	.00	.78	1.05	3.09	1.51

CAL YR 1985	TOTAL	17799.26	MEAN	48.8	MAX	967	MIN	.00	CFSM	.93	IN.	12.59
WTR YR 1986	TOTAL	12799.43	MEAN	35.1	MAX	346	MIN	.00	CFSM	.67	IN.	9.05

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 mi^2.

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 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.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.62	6.23	5.88	5.69	5.86	5.59	5.39	4.64	3.88	6.17	6.52	6.32
2	7.48	6.21	5.86	5.70	5.85	5.56	5.37	4.60	3.90	6.22	6.78	6.28
3	7.41	6.19	5.85	5.70	5.84	5.54	5.35	4.57	3.97	6.21	6.67	6.25
4	7.35	6.19	5.83	5.70	5.83	5.54	5.33	4.52	4.01	6.22	6.48	6.23
5	7.29	6.17	5.86	5.71	5.82	5.54	5.30	4.48	4.32	6.22	6.34	6.20
6	7.24	6.15	5.91	5.73	5.81	5.52	5.27	4.46	4.39	6.20	6.35	6.17
7	7.16	6.14	5.90	5.73	5.80	5.51	5.25	4.42	4.34	6.17	6.95	6.13
8	7.09	6.13	5.88	5.74	5.80	5.49	5.22	4.39	4.39	6.15	6.98	6.13
9	7.03	6.12	5.88	5.80	5.80	5.48	5.20	4.36	4.54	6.13	6.79	6.15
10	6.98	6.11	5.86	5.87	5.81	5.52	5.17	4.35	4.66	6.11	6.76	6.26
11	6.93	6.10	5.85	5.95	5.80	5.55	5.15	4.31	4.69	6.10	6.60	6.33
12	6.87	6.10	5.84	5.95	5.79	5.54	5.12	4.28	4.73	6.11	6.47	6.35
13	6.83	6.09	5.83	5.96	5.77	5.54	5.10	4.29	4.92	6.10	6.43	6.34
14	6.78	6.09	5.82	5.96	5.76	5.55	5.08	4.31	5.06	6.11	6.38	6.34
15	6.74	6.08	5.81	5.95	5.75	5.59	5.05	4.32	5.15	6.10	6.35	6.33
16	6.70	6.07	5.80	5.96	5.74	5.60	5.03	4.31	5.21	6.08	6.34	6.32
17	6.66	6.06	5.80	5.96	5.73	5.59	5.00	4.28	5.27	6.42	6.32	6.32
18	6.62	6.04	5.79	5.96	5.72	5.57	4.98	4.25	6.03	6.36	6.30	6.31
19	6.59	6.04	5.78	5.97	5.71	5.57	4.95	4.21	6.65	6.08	6.28	6.38
20	6.55	6.04	5.76	5.96	5.71	5.55	4.93	4.18	6.68	6.02	6.28	6.47
21	6.52	6.03	5.75	5.96	5.70	5.56	4.90	4.18	6.64	5.97	6.31	6.46
22	6.48	6.01	5.74	5.95	5.68	5.55	4.87	4.26	6.62	5.95	6.31	6.42
23	6.44	5.99	5.72	5.96	5.67	5.52	4.84	4.28	6.60	5.96	6.31	6.41
24	6.41	5.98	5.72	5.96	5.66	5.50	4.82	4.29	6.59	5.97	6.29	6.41
25	6.38	5.96	5.72	5.95	5.64	5.48	4.80	4.28	6.56	5.97	6.28	6.40
26	6.35	5.95	5.70	5.93	5.62	5.50	4.77	4.24	6.60	5.97	6.28	6.36
27	6.32	5.93	5.69	5.91	5.61	5.49	4.75	4.20	6.53	5.97	6.30	6.31
28	6.30	5.92	5.68	5.88	5.59	5.47	4.72	4.13	6.30	6.02	6.85	6.26
29	6.28	5.90	5.67	5.86	---	5.45	4.69	4.04	6.23	6.09	6.74	6.22
30	6.26	5.89	5.67	5.86	---	5.44	4.66	3.99	6.18	6.14	6.43	6.17
31	6.24	---	5.66	5.86	---	5.42	---	3.93	---	6.20	6.36	---
MEAN	6.77	6.06	5.79	5.87	5.75	5.53	5.04	4.30	5.39	6.11	6.48	6.30
MAX	7.62	6.23	5.91	5.97	5.86	5.60	5.39	4.64	6.68	6.42	6.98	6.47
MIN	6.24	5.89	5.66	5.69	5.59	5.42	4.66	3.93	3.88	5.95	6.28	6.13

CAL YR 1985 MEAN 5.97 MAX 8.23 MIN 4.88
WTR YR 1986 MEAN 5.78 MAX 7.62 MIN 3.88

ST. JOHNS RIVER

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 mi^2.

PERIOD OF RECORD.--1956, 1965, 1967 (one discharge measurement each year), October 1982 to current year (discharge measurements only).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 74 ft^3/s, July 24, 1984; no flow observed in 1956, 1967.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT			MAY		
04...	1655	15	21...	1136	E0.02
DEC			JUL		
11...	1200	4.3	24...	1700	66
FEB			SEP		
04...	1334	2.8	25...	1048	33
APR					
04...	1118	0.89			
29...	1340	E0.04			

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 mi^2.

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 ft^3/s, July 25, 1984, gage height 7.81 ft; maximum discharge measured, 484 ft^3/s, Aug. 22, 1974; no flow for many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 235 ft^3/s, July 22, gage height, 6.41 ft.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT			APR		
29...	0935	6.1	14...	1050	0.78
DEC			JUN		
16...	0950	5.8	10...	1025	0.29
FEB			AUG		
19...	1025	13	04...	1020	11

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 mi^2

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

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

REMARKS.--Estimated daily discharges: Nov. 5 to Dec. 16. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--33 years, 235 ft^3/s, 12.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft^3/s, Oct. 17, 1956, gage height, 10.95 ft, from rating curve extended above 11,000 ft^3/s; no flow for many days in some years; creek dry at gage at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft^3/s, Oct. 1, gage height, 6.39 ft; no flow Apr. 25 to June 13; minimum gage height, 0.61 ft, June 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1180	53	21	19	47	39	19	.00	.00	227	41	117
2	1090	50	19	23	43	33	17	.00	.00	172	38	108
3	913	48	18	27	40	29	14	.00	.00	148	34	120
4	772	55	16	36	38	25	12	.00	.00	217	29	168
5	662	60	15	51	35	23	10	.00	.00	265	25	211
6	598	67	14	64	32	20	8.6	.00	.00	326	24	305
7	590	70	14	71	30	18	7.2	.00	.00	393	23	337
8	597	56	111	75	31	16	5.9	.00	.00	416	36	402
9	580	49	119	78	34	15	4.8	.00	.00	400	60	585
10	536	44	117	103	38	13	3.9	.00	.00	369	72	889
11	481	41	107	142	50	13	3.2	.00	.00	329	69	940
12	426	40	92	186	71	12	2.5	.00	.00	282	60	854
13	375	42	81	238	89	11	2.2	.00	.00	260	51	732
14	330	59	70	264	107	11	1.8	.00	.04	282	49	623
15	303	62	63	262	122	14	1.4	.00	.20	319	58	537
16	314	56	56	245	122	18	1.1	.00	.99	345	67	454
17	312	49	49	230	117	25	.88	.00	4.9	327	122	380
18	287	43	44	209	112	40	.69	.00	17	279	188	329
19	255	36	40	188	103	64	.53	.00	82	225	238	367
20	226	32	37	169	94	88	.37	.00	219	177	301	500
21	198	30	33	153	85	102	.24	.00	369	137	352	579
22	171	29	29	139	78	100	.14	.00	362	108	346	598
23	149	29	26	125	71	90	.07	.00	401	83	321	552
24	130	31	24	111	65	79	.02	.00	424	64	286	475
25	112	33	23	99	58	68	.00	.00	398	51	246	397
26	100	30	21	88	51	58	.00	.00	372	52	212	328
27	87	27	19	79	47	49	.00	.00	355	43	179	266
28	77	26	18	69	43	41	.00	.00	327	43	151	213
29	68	24	17	62	---	34	.00	.00	300	46	137	169
30	61	22	16	57	---	28	.00	.00	289	43	126	133
31	54	---	15	52	---	23	---	.00	---	41	124	---
TOTAL	12034	1293	1344	3714	1853	1199	117.54	.00	3921.13	6469	4065	12668
MEAN	388	43.1	43.4	120	66.2	38.7	3.92	.00	131	209	131	422
MAX	1180	70	119	264	122	102	19	.00	424	416	352	940
MIN	54	22	14	19	30	11	.00	.00	.00	41	23	108
CFSM	1.56	.17	.17	.48	.27	.16	.02	.00	.53	.84	.53	1.70
IN.	1.81	.19	.20	.56	.28	.18	.02	.00	.59	.97	.61	1.90

CAL YR 1985	TOTAL	60991.07	MEAN	167	MAX	2710	MIN	.00	CFSM	.67	IN.	9.15
WTR YR 1986	TOTAL	48677.67	MEAN	133	MAX	1180	MIN	.00	CFSM	.54	IN.	7.30

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 mi^2.

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, and 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 discharge: Sept. 2. Records poor.

AVERAGE DISCHARGE.--47 years, 674 ft^3/s, 488,310 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,000 ft^3/s, Oct. 18, 1956; maximum gage height, 9.66 ft, Sept. 30, 1960; minimum daily discharge, -118 ft^3/s, May 23, 1984, affected by wind; minimum gage height, -1.28 ft, May 27, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,260 ft^3/s, Oct. 2,3; maximum gage height, 6.96 ft, Oct. 3; minimum daily discharge, 6.0 ft^3/s, Mar. 11,12, affected by wind; minimum gage height, 0.99 ft, June 7,11, affected by wind.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4090	1920	565	394	418	146	22	50	29	780	483	812
2	4260	1810	561	398	416	146	60	49	14	757	468	808
3	4260	1780	554	398	412	104	60	49	14	722	482	804
4	4090	1700	464	394	409	103	60	48	28	723	525	818
5	3510	1670	393	376	405	103	60	47	13	666	527	846
6	3450	1560	404	372	338	102	59	47	36	650	549	849
7	3430	1530	402	398	336	62	59	46	36	645	493	835
8	3190	1510	481	379	382	62	96	46	36	637	498	846
9	2870	1420	479	428	338	22	95	17	36	635	479	876
10	2700	1400	472	508	403	22	95	48	35	645	472	867
11	2690	1320	468	432	403	6.0	94	46	50	686	486	864
12	2620	1300	387	530	410	6.0	94	75	84	689	489	884
13	2600	1280	382	578	410	22	131	103	99	728	644	894
14	2580	1260	384	578	290	60	131	74	88	697	993	902
15	2550	1180	380	578	223	22	93	73	78	694	1020	910
16	2530	1030	377	578	221	62	57	72	79	684	950	922
17	2510	1020	374	608	220	23	56	72	93	643	950	901
18	2490	940	420	637	252	23	56	71	94	650	881	897
19	2460	925	441	713	253	61	56	69	96	625	881	889
20	2440	916	437	618	221	23	55	69	139	597	888	895
21	2330	899	432	593	186	23	88	69	161	583	918	898
22	2220	884	428	618	150	63	20	69	290	524	941	908
23	2180	725	425	593	150	101	20	69	398	579	936	910
24	2100	713	418	593	186	61	87	68	481	576	938	926
25	2060	701	418	588	150	61	86	67	414	559	924	956
26	2050	605	414	588	183	61	85	66	443	567	931	970
27	2030	596	407	586	215	61	52	65	508	552	886	1020
28	2050	585	401	506	148	61	51	65	543	516	774	1040
29	2040	578	400	502	---	61	51	64	585	526	722	1010
30	2020	569	401	448	---	61	50	14	801	529	774	1000
31	1980	---	391	446	---	22	---	14	---	490	783	---
TOTAL	84380	34326	13360	15956	8128	1816.0	2079	1801	5801	19554	22685	26957
MEAN	2722	1144	431	515	290	58.6	69.3	58.1	193	631	732	899
MAX	4260	1920	565	713	418	146	131	103	801	780	1020	1040
MIN	1980	569	374	372	148	6.0	20	14	13	490	468	804
AC-FT	167400	68090	26500	31650	16120	3600	4120	3570	11510	38790	45000	53470

CAL YR 1985	TOTAL	238029	MEAN	652	MAX	4260	MIN	-20	AC-FT	472100
WTR YR 1986	TOTAL	236843.0	MEAN	649	MAX	4260	MIN	6.0	AC-FT	469800

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 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.92	5.47	3.55	2.79	2.98	2.72	2.51	1.88	1.18	3.32	3.17	3.85
2	6.94	5.39	3.52	2.81	2.97	2.71	2.49	1.86	1.16	3.33	3.13	3.82
3	6.94	5.32	3.47	2.82	2.94	2.66	2.47	1.86	1.15	3.35	3.13	3.79
4	6.92	5.30	3.39	2.79	2.91	2.63	2.46	1.80	1.14	3.40	3.17	3.78
5	6.91	5.22	3.44	2.81	2.88	2.64	2.45	1.76	1.13	3.40	3.18	3.77
6	6.90	5.13	3.56	2.79	2.87	2.62	2.44	1.73	1.09	3.39	3.17	3.76
7	6.86	5.04	3.54	2.82	2.86	2.59	2.42	1.71	1.06	3.38	3.16	3.76
8	6.80	4.97	3.52	2.85	2.87	2.56	2.38	1.70	1.06	3.37	3.15	3.79
9	6.76	4.91	3.50	2.87	2.88	2.52	2.37	1.73	1.07	3.36	3.14	3.88
10	6.73	4.85	3.45	2.97	2.86	2.49	2.37	1.77	1.05	3.36	3.12	3.97
11	6.70	4.81	3.41	3.11	2.86	2.49	2.35	1.70	1.07	3.37	3.10	4.05
12	6.66	4.75	3.38	3.12	2.93	2.47	2.34	1.67	1.15	3.38	3.13	4.14
13	6.61	4.69	3.34	3.13	2.92	2.43	2.35	1.65	1.22	3.39	3.18	4.24
14	6.56	4.62	3.35	3.13	2.85	2.45	2.34	1.63	1.24	3.39	3.29	4.32
15	6.50	4.56	3.31	3.13	2.85	2.53	2.29	1.60	1.26	3.37	3.43	4.38
16	6.44	4.49	3.27	3.13	2.81	2.57	2.28	1.56	1.30	3.36	3.47	4.41
17	6.39	4.44	3.25	3.15	2.80	2.59	2.26	1.56	1.37	3.34	3.51	4.43
18	6.34	4.36	3.22	3.18	2.79	2.56	2.24	1.54	1.40	3.32	3.53	4.46
19	6.29	4.29	3.19	3.20	2.80	2.54	2.21	1.47	1.47	3.30	3.53	4.49
20	6.24	4.24	3.15	3.22	2.82	2.55	2.16	1.45	1.60	3.28	3.56	4.50
21	6.19	4.16	3.11	3.21	2.81	2.59	2.12	1.44	1.81	3.25	3.63	4.51
22	6.13	4.09	3.07	3.21	2.81	2.63	2.13	1.45	1.99	3.29	3.66	4.52
23	6.04	4.05	3.04	3.21	2.80	2.56	2.12	1.44	2.21	3.33	3.68	4.53
24	5.94	3.97	2.98	3.21	2.81	2.54	2.09	1.41	2.41	3.35	3.72	4.56
25	5.85	3.90	2.98	3.18	2.82	2.52	2.06	1.39	2.53	3.33	3.74	4.57
26	5.82	3.84	2.95	3.18	2.77	2.52	2.03	1.36	2.68	3.30	3.77	4.57
27	5.77	3.78	2.89	3.17	2.71	2.53	2.00	1.32	2.82	3.27	3.80	4.56
28	5.71	3.70	2.85	3.13	2.75	2.54	1.99	1.30	2.92	3.23	3.86	4.54
29	5.69	3.65	2.83	3.09	---	2.54	1.96	1.28	3.04	3.22	3.86	4.51
30	5.62	3.59	2.84	3.04	---	2.53	1.92	1.25	3.28	3.20	3.86	4.48
31	5.52	---	2.75	3.03	---	2.52	---	1.22	---	3.19	3.86	---
MEAN	6.38	4.52	3.23	3.05	2.85	2.56	2.25	1.56	1.66	3.33	3.44	4.23
MAX	6.94	5.47	3.56	3.22	2.98	2.72	2.51	1.88	3.28	3.40	3.86	4.57
MIN	5.52	3.59	2.75	2.79	2.71	2.43	1.92	1.22	1.05	3.19	3.10	3.76

CAL YR 1985 MEAN 3.40 MAX 6.94 MIN 2.03
WTR YR 1986 MEAN 3.26 MAX 6.94 MIN 1.05

ST. JOHNS RIVER

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 mi^3.

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.--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.--30 years, 32.1 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,700 ft^3/s Oct. 16, 1956, from rating curve extended above 1,400 ft^3/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, 786 ft^3/s, Aug. 19, gage height, 8.02 ft; no flow for many days; minimum gage height, 2.82 ft, June 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	19	3.5	22	9.2	5.4	2.0	.00	.00	18	31	26
2	27	20	3.4	62	8.7	5.2	1.6	.00	.00	13	34	30
3	24	18	3.2	62	8.4	4.8	1.3	.00	.00	20	20	22
4	32	26	2.9	48	8.0	4.4	.99	.00	.00	108	60	24
5	34	25	23	39	7.5	4.2	.81	.00	.00	103	67	18
6	40	21	147	43	7.0	3.9	.64	.00	.00	70	166	20
7	37	17	103	44	6.6	3.5	.52	.00	.00	53	87	20
8	31	13	61	40	7.6	3.1	.42	.00	.00	37	58	24
9	26	12	44	43	16	2.7	.35	.00	.00	24	42	105
10	24	14	33	168	22	2.6	.34	.06	.06	16	28	339
11	21	17	26	449	22	2.5	.32	.08	1.5	12	20	144
12	18	20	20	259	38	2.4	.27	.05	44	11	28	88
13	16	18	16	150	37	2.2	.26	.03	42	22	62	63
14	18	15	15	97	27	4.8	.25	.01	26	29	90	47
15	15	13	15	68	22	37	.21	.00	63	22	490	32
16	13	11	15	50	18	74	.17	.00	76	15	148	23
17	13	9.7	13	41	15	77	.13	.00	61	10	113	18
18	12	8.5	12	35	15	43	.09	.00	78	7.6	116	21
19	12	8.0	10	32	15	28	.07	.00	74	5.8	466	78
20	11	8.6	8.8	27	13	20	.06	.00	97	5.0	119	61
21	12	9.7	7.5	22	11	16	.06	.01	228	4.4	109	44
22	10	9.1	6.5	18	10	13	.06	.04	131	418	78	30
23	8.6	8.1	5.9	16	9.6	9.8	.04	.02	86	133	55	21
24	7.2	7.3	5.6	15	10	7.6	.03	.00	66	75	39	17
25	6.2	6.5	6.5	13	9.5	6.1	.02	.00	51	52	26	13
26	5.6	5.6	6.9	13	7.8	5.2	.02	.00	99	34	18	10
27	5.4	5.0	6.1	13	6.5	4.5	.02	.00	76	27	13	8.1
28	6.1	4.4	5.5	13	5.7	4.0	.01	.00	51	54	13	6.8
29	12	4.0	5.2	12	---	3.4	.00	.00	36	35	36	5.7
30	11	3.6	4.8	11	---	2.8	.00	.00	24	21	24	4.8
31	14	---	4.5	9.8	---	2.4	---	.00	---	16	15	---
TOTAL	552.1	377.1	639.8	1934.8	393.1	405.5	11.06	.30	1410.56	1470.8	2671	1363.4
MEAN	17.8	12.6	20.6	62.4	14.0	13.1	.37	.01	47.0	47.4	86.2	45.4
MAX	40	26	147	449	38	77	2.0	.08	228	418	490	339
MIN	5.4	3.6	2.9	9.8	5.7	2.2	.00	.00	.00	4.4	13	4.8

CAL YR 1985	TOTAL	6338.36	MEAN	17.4	MAX	639	MIN	.03
WTR YR 1986	TOTAL	11229.52	MEAN	30.8	MAX	490	MIN	.00

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 mi^2.

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.--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.--33 years, 991 ft^3/s, 10.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 10,700 ft^3/s, Oct. 11, 1953; maximum gage height observed, 16.96 ft, present site and datum, Oct. 11, 1953; minimum daily discharge, 5.6 ft^3/s, July 17, 1981; minimum gage height, 7.77 ft, Mar. 6, 1962, affected by wind.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,260 ft^3/s, Oct. 8; maximum gage height, 15.79 ft, Oct. 8, minimum daily discharge, 19 ft^3/s, June 5,6; minimum gage height, 8.58 ft, May 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3830	3290	1490	789	702	396	246	68	23	211	324	772
2	3940	3260	1410	801	693	396	246	59	22	229	317	772
3	4090	3230	1320	792	679	398	244	55	21	241	310	761
4	4240	3150	1280	785	664	393	243	60	22	281	309	770
5	4250	3040	1380	760	648	382	233	61	19	294	305	773
6	4230	3000	1500	747	630	360	225	52	19	312	317	788
7	4250	2920	1540	748	612	352	216	49	21	319	326	817
8	4260	2830	1560	757	611	343	204	45	22	322	331	849
9	4200	2750	1530	768	620	350	192	43	23	321	336	881
10	4160	2710	1540	865	607	336	185	46	23	317	339	971
11	4220	2740	1520	913	595	309	182	42	23	324	342	1060
12	4210	2770	1470	1010	580	310	181	42	24	341	343	1130
13	4160	2740	1440	1030	561	315	166	39	25	344	351	1200
14	4200	2670	1340	1030	556	289	157	39	26	343	373	1260
15	4180	2620	1310	1040	548	284	157	41	27	337	412	1290
16	4130	2560	1280	1040	553	297	140	36	27	337	440	1280
17	4100	2470	1220	1040	546	296	129	34	28	331	467	1270
18	4050	2400	1180	1020	535	313	128	33	35	319	528	1360
19	4000	2350	1150	995	526	299	119	31	44	312	586	1470
20	3870	2300	1130	987	517	283	125	27	57	303	627	1470
21	3850	2220	1090	978	512	253	111	27	75	300	664	1470
22	3770	2030	1030	965	502	232	98	27	91	299	675	1470
23	3700	1940	1010	930	488	244	94	28	112	301	679	1470
24	3610	1900	988	893	471	260	92	27	123	310	683	1490
25	3520	1850	902	864	441	275	90	27	136	313	686	1490
26	3480	1790	884	828	443	272	84	28	157	317	685	1480
27	3430	1720	866	731	437	259	79	29	173	317	690	1460
28	3380	1660	843	751	437	253	75	27	182	327	711	1450
29	3430	1600	806	754	---	255	70	24	191	328	752	1450
30	3410	1550	782	737	---	252	70	23	196	325	760	1450
31	3390	---	763	714	---	250	---	23	---	325	772	---
TOTAL	121540	74060	37554	27062	15714	9506	4581	1192	1967	9600	15440	35624
MEAN	3921	2469	1211	873	561	307	153	38.5	65.6	310	498	1187
MAX	4260	3290	1560	1040	702	398	246	68	196	344	772	1490
MIN	3380	1550	763	714	437	232	70	23	19	211	305	761
CFSM	2.95	1.85	.91	.66	.42	.23	.11	.03	.05	.23	.37	.89
IN.	3.40	2.07	1.05	.76	.44	.27	.13	.03	.05	.27	.43	.00

CAL YR 1985 TOTAL 371463 MEAN 1018 MAX 4260 MIN 56 CFSM .76 IN. 10.38
WTR YR 1986 TOTAL 353840 MEAN 969 MAX 4260 MIN 19 CFSM .73 IN. 9.89

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 mi^2, includes that of Tootoosahatchee Creek.

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

GAGE.--Water-stage and electromagnetic current meter recorders. 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.--Estimated daily discharges: Oct. 12-27, Nov. 24 to Dec. 19. Records fair.

AVERAGE DISCHARGE.--53 years, 1,298 ft^3/s, 11.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft^3/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 discharge, 4,440 ft^3/s, Oct. 30,31; gage height, 7.98 ft; minimum daily discharge, 24 ft^3/s, June 7,8; minimum gage height, 0.88 ft, June 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3750	4340	1860	1080	1250	512	251	87	31	269	282	1040
2	3780	4230	1730	1180	1200	498	246	84	30	264	284	1040
3	3800	4140	1640	1220	1150	472	242	81	29	255	290	1040
4	3810	4080	1590	1250	1100	450	239	76	28	255	302	1030
5	3860	3970	1840	1250	1050	444	235	73	26	255	331	1040
6	3900	3900	2100	1250	997	426	231	74	25	256	345	1110
7	3930	3790	2320	1240	957	412	226	72	24	262	339	1120
8	3970	3690	2300	1240	1000	397	220	70	24	268	334	1140
9	3990	3630	2230	1250	1140	385	212	70	26	271	330	1170
10	4010	3590	2180	1460	1170	372	205	71	28	270	328	1240
11	4040	3540	2090	2140	1200	363	197	66	35	269	326	1270
12	4100	3490	1980	2850	1230	356	190	63	63	275	330	1330
13	4170	3430	1900	3020	1210	343	185	61	61	280	352	1410
14	4190	3370	1810	2950	1180	331	182	59	60	282	400	1440
15	4190	3310	1750	2800	1110	337	173	57	70	280	422	1480
16	4170	3230	1700	2630	1060	364	164	56	82	277	440	1490
17	4120	3160	1680	2480	992	374	156	55	100	277	467	1500
18	4080	3090	1650	2340	933	374	148	52	133	278	597	1510
19	4010	3040	1630	2210	883	362	139	49	167	283	729	1510
20	3990	3000	1570	2110	832	356	134	47	171	279	811	1520
21	3930	2930	1520	2030	791	347	128	48	189	273	904	1540
22	3920	2810	1470	1950	752	329	126	45	206	270	959	1560
23	3920	2690	1420	1860	708	312	119	43	212	269	982	1590
24	3900	2600	1370	1770	671	293	112	42	209	267	991	1630
25	3880	2520	1310	1710	629	283	108	41	208	264	994	1680
26	3860	2480	1270	1640	599	277	104	39	206	263	988	1690
27	3880	2390	1230	1530	558	277	101	37	211	262	974	1690
28	3940	2250	1180	1500	537	275	99	37	238	264	965	1680
29	4060	2180	1110	1450	---	271	95	36	262	269	982	1670
30	4420	1970	1070	1370	---	263	91	34	270	273	992	1660
31	4400	---	1030	1310	---	257	---	32	---	277	1000	---
TOTAL	123970	96840	51530	56070	26889	11112	5058	1757	3424	8356	18770	41820
MEAN	3999	3228	1662	1809	960	358	169	56.7	114	270	605	1394
MAX	4420	4340	2320	3020	1250	512	251	87	270	283	1000	1690
MIN	3750	1970	1030	1080	537	257	91	32	24	255	282	1030
CFSM	2.60	2.10	1.08	1.18	.62	.23	.11	.04	.07	.18	.39	.91
IN.	3.00	2.34	1.25	1.36	.65	.27	.12	.04	.08	.20	.45	1.01

CAL YR 1985	TOTAL	459242	MEAN	1258	MAX	4420	MIN	129	CFSM	.82	IN.	11.10
WTR YR 1986	TOTAL	445596	MEAN	1221	MAX	4420	MIN	24	CFSM	.79	IN.	10.77

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232500 ST. JOHNS RIVER NEAR CHRISTMAS, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.59	7.93	---	5.50	5.49	4.20	3.09	1.70	1.03	3.72	3.81	5.59
2	7.60	7.88	---	5.62	5.41	4.16	3.06	1.67	1.01	3.68	3.82	5.59
3	7.61	7.84	---	5.65	5.35	4.10	3.03	1.64	1.00	3.61	3.87	5.58
4	7.62	7.81	---	5.66	5.28	4.04	3.00	1.60	.98	3.61	3.95	5.57
5	7.65	7.75	---	5.64	5.21	4.02	2.97	1.56	.94	3.62	4.14	5.59
6	7.67	7.71	---	5.63	5.13	3.97	2.95	1.57	.92	3.62	4.21	5.67
7	7.69	7.66	---	5.60	5.07	3.92	2.91	1.56	.90	3.67	4.19	5.68
8	7.71	7.60	---	5.58	5.13	3.86	2.86	1.53	.91	3.71	4.16	5.72
9	7.72	7.57	---	5.56	5.33	3.82	2.81	1.54	.94	3.73	4.13	5.75
10	7.74	7.55	---	5.80	5.38	3.76	2.76	1.55	.98	3.73	4.12	5.83
11	7.75	7.52	---	6.47	5.41	3.71	2.69	1.51	1.11	3.72	4.12	5.87
12	---	7.50	---	7.02	5.46	3.68	2.63	1.47	1.57	3.75	4.13	5.94
13	---	7.46	---	7.13	5.43	3.63	2.60	1.44	1.54	3.80	4.24	6.02
14	---	7.43	---	7.06	5.39	3.56	2.57	1.43	1.52	3.81	4.43	6.06
15	---	7.39	---	6.95	5.30	3.59	2.51	1.41	1.68	3.80	4.49	6.10
16	---	7.35	---	6.83	5.22	3.71	2.43	1.40	1.85	3.78	4.54	6.11
17	---	7.30	---	6.71	5.12	3.76	2.37	1.38	2.09	3.77	4.61	6.12
18	---	7.26	---	6.60	5.03	3.75	2.28	1.34	2.47	3.78	4.88	6.13
19	---	7.23	---	6.49	4.95	3.70	2.21	1.31	2.84	3.82	5.12	6.13
20	---	7.21	6.11	6.40	4.87	3.67	2.16	1.28	2.87	3.79	5.26	6.14
21	---	7.16	6.06	6.33	4.79	3.63	2.11	1.30	3.05	3.75	5.40	6.15
22	---	7.08	6.00	6.25	4.71	3.54	2.09	1.26	3.20	3.73	5.47	6.18
23	---	7.00	5.94	6.17	4.63	3.45	2.03	1.23	3.26	3.71	5.51	6.21
24	---	---	5.88	6.08	4.56	3.34	1.96	1.21	3.23	3.70	5.52	6.25
25	---	---	5.82	6.02	4.47	3.28	1.91	1.19	3.22	3.68	5.53	6.29
26	---	---	5.76	5.94	4.41	3.25	1.87	1.17	3.21	3.67	5.52	6.30
27	---	---	5.71	5.82	4.31	3.25	1.84	1.14	3.25	3.66	5.50	6.30
28	7.69	---	5.64	5.79	4.27	3.24	1.82	1.13	3.48	3.68	5.48	6.29
29	7.77	---	5.55	5.73	---	3.20	1.78	1.11	3.66	3.72	5.51	6.28
30	7.97	---	5.49	5.64	---	3.16	1.74	1.09	3.73	3.74	5.52	6.27
31	7.96	---	5.43	5.56	---	3.12	---	1.05	---	3.78	5.53	---
MEAN	---	---	---	6.10	5.04	3.65	2.43	1.38	2.08	3.72	4.73	5.99
MAX	---	---	---	7.13	5.49	4.20	3.09	1.70	3.73	3.82	5.53	6.30
MIN	---	---	---	5.50	4.27	3.12	1.74	1.05	.90	3.61	3.81	5.57

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 mi^2.

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.--Estimated daily discharges: Sept. 12-30. Records fair.

AVERAGE DISCHARGE.--14 years, 23.9 ft^3/s, 9.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 474 ft^3/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, 253 ft^3/s, Jan. 11, gage height, 62.43 ft; no flow Apr. 25 to June 19, river dry at gage many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	23	13	28	36	29	9.2	.00	.00	12	.48	41
2	92	22	13	54	33	27	8.1	.00	.00	9.2	.24	55
3	89	23	12	56	31	25	7.2	.00	.00	8.1	.56	57
4	84	29	11	50	29	26	6.3	.00	.00	10	.80	49
5	79	27	17	45	28	24	5.5	.00	.00	13	1.3	43
6	75	24	32	43	26	23	4.6	.00	.00	11	1.1	38
7	70	23	33	42	25	20	3.8	.00	.00	9.0	.58	34
8	66	21	32	43	50	18	3.1	.00	.00	7.6	.28	37
9	61	20	30	43	65	17	2.8	.00	.00	5.9	.76	62
10	57	21	29	105	67	16	2.4	.00	.00	4.2	5.3	102
11	53	22	28	226	61	15	2.1	.00	.00	3.6	2.5	116
12	48	25	27	207	58	14	1.6	.00	.00	6.0	4.3	109
13	44	25	27	166	56	14	2.1	.00	.00	7.8	19	93
14	40	25	33	147	54	15	2.1	.00	.00	7.7	22	81
15	37	24	35	132	51	19	1.6	.00	.00	4.9	17	79
16	34	23	34	125	49	32	1.1	.00	.00	3.0	13	73
17	31	22	32	109	48	37	.62	.00	.00	1.9	9.5	62
18	29	21	30	99	49	34	.36	.00	.00	2.4	10	50
19	28	21	28	91	48	30	.24	.00	.00	6.8	8.7	76
20	26	25	26	82	46	27	.16	.00	3.1	3.6	7.3	158
21	25	25	24	75	44	25	.09	.00	14	1.9	7.4	141
22	24	23	23	69	43	23	.04	.00	39	1.1	6.9	122
23	22	21	21	65	41	21	.02	.00	43	.86	6.8	103
24	23	20	20	60	39	19	.01	.00	33	.70	7.4	89
25	19	19	21	55	35	17	.00	.00	26	.46	8.1	75
26	17	18	20	52	29	16	.00	.00	23	.32	8.2	66
27	16	17	19	50	27	15	.00	.00	22	.31	7.5	58
28	17	16	18	47	27	14	.00	.00	18	.54	6.7	50
29	19	15	18	44	---	12	.00	.00	14	.87	7.3	46
30	20	14	17	41	---	11	.00	.00	14	1.1	15	44
31	21	---	16	38	---	10	---	.00	---	.77	31	---
TOTAL	1363	654	739	2489	1195	645	65.14	.00	249.10	146.63	237.00	2209
MEAN	44.0	21.8	23.8	80.3	42.7	20.8	2.17	.00	8.30	4.73	7.65	73.6
MAX	97	29	35	226	67	37	9.2	.00	43	13	31	158
MIN	16	14	11	28	25	10	.00	.00	.00	.31	.24	34
CFSM	1.34	.66	.72	2.44	1.30	.63	.07	.00	.25	.14	.23	2.24
IN.	1.54	.74	.84	2.81	1.35	.73	.07	.00	.28	.17	.27	2.50

CAL YR 1985	TOTAL	8044.55	MEAN	22.0	MAX	294	MIN	.00	CFSM	.67	IN.	9.10
WTR YR 1986	TOTAL	9991.87	MEAN	27.4	MAX	226	MIN	.00	CFSM	.83	IN.	11.30

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 mi^2.

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.--Estimated daily discharges: Nov. 30 to Dec. 2. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft^3/s, Sept. 22, 1969, gage height, 4.83 ft, from rating curve extended above 120 ft^3/s; minimum daily discharge, 0.01 ft^3/s, May 18,19, 1985, minimum gage height, 2.11 ft, part or all of each day May 30 to June 7, June 9, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 228 ft^3/s, Jan. 10, gage height, 4.34 ft; minimum daily discharge, 0.03 ft^3/s, May 31; minimum gage height, 2.11 ft, part or all of each day May 30 to June 7, June 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.7	.62	6.3	1.6	1.0	.80	.20	.04	.58	.77	11
2	2.8	1.3	.60	5.0	1.3	.88	.75	.20	.06	.57	.77	6.1
3	2.3	1.1	.54	3.8	1.5	.90	.67	.20	.06	1.8	.67	3.8
4	2.3	1.6	.54	3.1	1.4	.97	.64	.20	.06	3.2	.58	2.2
5	2.3	1.2	1.9	2.7	1.3	.94	.58	.20	.06	1.3	.58	6.1
6	2.3	1.1	1.8	2.2	1.2	.81	.58	.20	.06	.95	.58	13
7	2.1	.97	1.1	2.0	1.2	.77	.58	.20	.50	.85	.91	6.8
8	1.9	.90	1.1	2.3	4.1	.77	.58	.20	.15	.77	1.6	4.7
9	1.8	.81	1.1	2.2	4.3	.67	.58	.21	1.2	.73	.94	5.2
10	1.8	.92	1.0	69	3.4	.75	.51	.29	1.1	.56	.74	7.4
11	1.7	.87	.95	69	4.2	.77	.44	.20	.74	1.6	.63	5.3
12	1.5	.92	.86	24	4.2	.71	.44	.19	.74	2.1	.92	3.5
13	1.4	.92	.92	16	3.0	.67	1.2	.15	.66	1.3	1.3	2.0
14	1.4	.86	2.5	11	2.5	1.2	1.1	.24	.88	.98	.97	1.4
15	1.3	.81	1.8	7.8	2.9	2.7	.82	.21	1.8	.86	.92	1.1
16	1.2	.75	1.7	6.4	1.9	5.1	.67	.20	1.1	.78	.75	.85
17	1.2	.71	1.5	5.3	1.9	3.2	.38	.18	.77	.93	.67	.77
18	1.1	.69	1.4	4.4	1.9	2.2	.31	.15	1.9	3.0	1.3	.80
19	1.1	.64	1.2	3.9	1.6	2.0	.31	.17	8.2	4.1	.95	1.3
20	1.0	.72	1.1	3.4	1.4	2.2	.31	.36	7.1	1.6	.96	1.5
21	1.2	1.3	.97	3.3	1.2	2.0	.31	.55	3.5	1.2	1.6	1.4
22	.94	1.1	.88	2.5	1.1	1.4	.31	.32	2.2	1.4	4.7	1.2
23	.86	.96	.85	2.3	1.0	1.2	.29	.20	1.4	1.6	1.9	2.5
24	.84	.85	.83	2.3	1.2	1.0	.25	.14	1.2	1.3	1.3	3.8
25	.84	.80	1.1	2.1	1.1	1.1	.25	.10	1.1	1.2	1.3	1.9
26	.76	.78	.85	2.4	.94	.96	.25	.09	.89	1.0	1.1	1.3
27	.71	.78	.85	2.3	.97	1.4	.25	.06	.79	.88	.96	1.0
28	.85	.76	.85	2.1	1.1	1.3	.25	.06	.77	.88	13	.88
29	.75	.71	.85	2.0	---	1.2	.25	.06	.74	.88	8.7	.78
30	.64	.69	.85	1.9	---	.96	.23	.05	.66	.84	7.2	.77
31	1.3	---	.85	1.7	---	.88	---	.03	---	.77	8.0	---
TOTAL	45.19	28.22	33.96	274.7	55.41	42.61	14.89	5.81	40.43	40.51	67.27	100.35
MEAN	1.46	.94	1.10	8.86	1.98	1.37	.50	.19	1.35	1.31	2.17	3.34
MAX	3.0	1.7	2.5	69	4.3	5.1	1.2	.55	8.2	4.1	13	13
MIN	.64	.64	.54	1.7	.94	.67	.23	.03	.04	.56	.58	.77

CAL YR 1985	TOTAL	1372.30	MEAN	3.76	MAX	119	MIN .01
WTR YR 1986	TOTAL	749.35	MEAN	2.05	MAX	69	MIN .03

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 mi^2.

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.--Records good.

AVERAGE DISCHARGE.--27 years, 25.5 ft^3/s, 12.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft^3/s, Mar. 17, 1960, gage height, 11.64 ft; minimum discharge, 0.10 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	0100	*684	*9.60	Sept. 19	1100	160	8.01
June 10	0300	134	7.87				

Minimum daily discharge, 4.1 ft^3/s, June 2; minimum gage height, 5.26 ft, June 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	21	14	53	25	19	12	6.9	4.2	18	11	37
2	35	18	17	83	24	17	12	6.8	4.1	18	11	43
3	33	18	20	55	23	14	11	6.6	5.7	17	12	34
4	53	21	16	44	23	14	11	6.6	11	29	12	27
5	66	19	21	39	22	14	11	7.0	7.3	21	13	22
6	51	18	51	38	20	13	10	6.7	6.2	19	13	19
7	42	16	34	34	20	13	10	6.4	6.5	31	12	16
8	36	14	26	36	25	13	10	6.4	13	25	14	25
9	33	14	23	36	42	13	10	8.1	13	18	37	96
10	33	15	20	293	34	13	9.9	8.9	78	14	24	61
11	32	14	19	517	36	13	9.9	7.7	28	14	16	46
12	29	15	17	263	47	12	9.6	7.2	22	62	25	37
13	26	14	17	164	53	12	11	7.0	43	39	61	39
14	24	14	36	119	69	17	11	7.1	44	30	47	44
15	23	14	36	94	55	26	9.9	6.8	42	24	88	33
16	22	13	27	77	39	52	9.6	6.3	29	19	66	28
17	21	13	24	68	32	45	9.0	5.9	23	16	55	24
18	20	14	21	60	30	35	8.7	5.6	23	25	43	24
19	20	16	19	55	29	30	8.5	5.4	26	61	44	146
20	19	17	17	48	26	31	8.4	8.0	51	34	45	123
21	18	17	16	43	24	28	8.4	10	40	26	61	78
22	18	16	15	40	22	25	8.2	8.1	36	23	79	59
23	17	15	15	38	20	21	8.0	6.8	30	24	63	47
24	16	14	15	35	19	17	7.8	6.1	28	23	46	44
25	16	14	23	33	17	15	7.5	5.6	29	18	36	40
26	16	14	20	33	16	14	7.5	5.2	23	15	30	35
27	15	13	17	35	15	14	7.4	4.9	18	14	27	31
28	16	13	17	31	21	14	7.2	4.8	14	14	26	28
29	20	12	16	29	---	13	7.0	4.6	13	14	57	26
30	21	12	15	29	---	13	6.8	4.4	12	13	40	24
31	21	---	15	27	---	12	---	4.3	---	12	33	---
TOTAL	849	458	659	2549	828	602	278.3	202.2	723.0	730	1147	1336
MEAN	27.4	15.3	21.3	82.2	29.6	19.4	9.28	6.52	24.1	23.5	37.0	44.5
MAX	66	21	51	517	69	52	12	10	78	62	88	146
MIN	15	12	14	27	15	12	6.8	4.3	4.1	12	11	16
CFSM	1.01	.56	.79	3.03	1.09	.72	.34	.24	.89	.87	1.37	1.64
IN.	1.17	.63	.90	3.50	1.14	.83	.38	.28	.99	1.00	1.57	1.83

CAL YR 1985	TOTAL	7894.4	MEAN	21.6	MAX	298	MIN	2.5	CFSM	.80	IN.	10.84
WTR YR 1986	TOTAL	10361.5	MEAN	28.4	MAX	517	MIN	4.1	CFSM	1.05	IN.	14.22

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 mi^2.

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.--Records fair. Records include some flow diverted from Lake Mary Jane in the Kissimmee River Basin through Disston Canal.

AVERAGE DISCHARGE.--51 years, 264 ft^3/s, 14.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft^3/s, Mar. 18, 1960, gage height, 18.69 ft; minimum, 6.7 ft^3/s, June 11-13,15, 1945; minimum gage height, 0.08 ft, May 10, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,460 ft^3/s, Jan. 12, gage height, 14.31 ft; minimum discharge, 46 ft^3/s, June 2,3, gage height, 0.79 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	693	270	127	229	289	181	141	57	47	176	96	418
2	640	266	127	396	271	174	136	55	47	159	89	412
3	577	256	132	527	255	164	126	55	47	159	85	365
4	529	258	137	640	244	156	117	55	58	161	84	326
5	541	267	150	627	233	151	110	54	63	207	91	288
6	694	264	249	543	223	145	104	57	61	230	103	315
7	681	245	338	472	213	138	99	52	57	244	102	376
8	590	228	367	439	215	132	95	50	57	256	110	323
9	501	214	341	425	271	125	93	49	64	247	118	299
10	441	213	296	758	358	121	92	52	92	218	116	413
11	413	219	256	1870	463	120	89	58	91	184	119	538
12	388	223	227	4230	546	119	85	58	126	156	119	607
13	360	219	207	3720	552	114	85	57	126	155	173	611
14	332	208	269	2620	532	117	85	56	148	176	247	546
15	308	199	358	1860	493	137	88	55	188	172	308	471
16	287	194	368	1450	447	203	85	56	236	153	309	425
17	268	185	328	1230	399	305	81	55	236	148	299	379
18	259	178	285	1060	352	374	78	53	194	138	286	331
19	250	170	252	889	320	403	74	51	206	142	307	300
20	242	173	229	756	293	370	71	55	313	186	306	290
21	228	189	206	656	278	320	69	61	410	193	277	393
22	220	194	188	572	264	276	67	67	411	174	312	486
23	212	184	175	502	251	237	66	65	321	168	371	451
24	199	174	166	449	235	210	64	62	242	187	358	410
25	191	165	176	414	219	192	63	55	198	165	301	393
26	182	156	191	389	203	178	63	51	208	141	245	352
27	177	152	191	370	191	174	61	49	237	129	196	312
28	176	149	184	352	185	194	60	50	236	132	167	283
29	190	142	167	328	---	187	59	50	226	123	178	295
30	232	134	159	315	---	165	59	48	201	110	310	299
31	253	---	153	296	---	151	---	48	---	103	348	---
TOTAL	11254	6088	6999	29384	8795	6033	2565	1696	5147	5292	6530	11707
MEAN	363	203	226	948	314	195	85.5	54.7	172	171	211	390
MAX	694	270	368	4230	552	403	141	67	411	256	371	611
MIN	176	134	127	229	185	114	59	48	47	103	84	283
CFSM	1.51	.84	.94	3.93	1.30	.81	.35	.23	.71	.71	.88	1.62
IN.	1.74	.94	1.08	4.54	1.36	.93	.40	.26	.79	.82	1.01	1.81

CAL YR 1985	TOTAL	114888	MEAN	315	MAX	2920	MIN	48	CFSM	1.31	IN.	17.73
WTR YR 1986	TOTAL	101490	MEAN	278	MAX	4230	MIN	47	CFSM	1.15	IN.	15.67

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 mi^2.

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 available in files of the Orlando Subdistrict Office.

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

GAGE.--Water-stage recorder and electromagnetic meter recorder. 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 poor.

AVERAGE DISCHARGE.--5 years, 1,825 ft^3/s, 12.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 13,800 ft^3/s, Oct. 7, 1953, gage height, 10.05 ft; maximum gage height, 10.62 ft, Oct. 13, 1953; minimum discharge measured, 70 ft^3/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, 6,790 ft^3/s, Oct. 1, occurred on recession following crest of Sept. 20, 1985; maximum daily discharge for flood event whose crest occurred during year, 4,220 ft^3/s, Jan. 16; maximum gage height, 7.13 ft, Oct. 1; minimum daily discharge, 55 ft^3/s, May 29; minimum gage height, 0.46 ft, May 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6790	4290	2900	1640	2650	1100	547	255	64	518	368	1170
2	6690	4370	2820	1660	2550	1060	530	245	84	504	350	1360
3	6530	4400	2730	1670	2450	1010	508	252	95	502	337	1430
4	6340	4410	2670	1690	2360	969	483	236	105	519	354	1500
5	6180	4380	2650	1680	2270	924	456	216	126	508	412	1540
6	6170	4350	2670	1680	2170	876	430	215	163	520	409	1620
7	6040	4310	2640	1670	2080	833	409	204	198	521	405	1680
8	5920	4260	2620	1660	2030	786	398	190	228	516	401	1730
9	5770	4230	2580	1650	2010	732	402	187	228	510	397	1760
10	5690	4210	2550	2030	1970	688	393	191	245	502	387	1850
11	5700	4190	2510	2820	1940	652	371	174	233	493	374	1930
12	5660	4150	2470	3380	1910	615	352	193	237	472	384	1980
13	5570	4100	2430	3830	1880	574	343	208	224	458	418	2130
14	5450	4060	2430	4090	1860	550	336	201	233	442	444	2130
15	5330	4000	2410	4200	1830	546	327	181	259	427	502	2120
16	5210	3940	2390	4220	1790	563	336	168	298	428	527	2100
17	5070	3870	2360	4190	1740	578	353	161	343	430	537	2080
18	4950	3810	2330	4120	1690	584	340	152	380	402	564	2070
19	4850	3740	2280	4010	1640	580	317	135	395	385	586	2070
20	4720	3720	2230	3910	1580	578	298	143	468	374	613	2060
21	4600	3680	2170	3800	1530	580	298	151	536	372	642	2060
22	4460	3590	2110	3690	1470	590	317	140	546	377	690	2070
23	4330	3520	2050	3570	1400	587	329	128	539	408	740	2080
24	4200	3450	1990	3430	1350	588	318	118	532	413	781	2070
25	4070	3380	1950	3340	1290	577	311	110	535	402	809	2060
26	3960	3300	1890	3230	1230	559	308	95	541	400	813	2040
27	3970	3220	1850	3120	1180	558	310	81	530	405	813	2030
28	3930	3140	1790	3030	1140	566	297	58	518	406	816	2010
29	3930	3060	1720	2940	---	567	289	55	517	403	870	1990
30	4050	2980	1660	2850	---	561	278	58	527	391	954	1970
31	4200	---	1600	2750	---	557	---	61	---	381	1040	---
TOTAL	160330	116110	71450	91550	50990	21088	10984	4962	9927	13789	17737	56690
MEAN	5172	3870	2305	2953	1821	680	366	160	331	445	572	1890
MAX	6790	4410	2900	4220	2650	1100	547	255	546	521	1040	2130
MIN	3930	2980	1600	1640	1140	546	278	55	64	372	337	1170
CFSM	2.53	1.89	1.13	1.45	.89	.33	.18	.08	.16	.22	.28	.93
IN.	2.92	2.11	1.30	1.67	.93	.38	.20	.09	.18	.25	.32	1.03

CAL YR 1985	TOTAL	693256	MEAN	1899	MAX	7590	MIN	176	CFSM	.93	IN.	12.62
WTR YR 1986	TOTAL	625607	MEAN	1714	MAX	6790	MIN	55	CFSM	.84	IN.	11.39

ST. JOHNS RIVER

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 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.10	6.58	4.96	3.31	4.65	2.51	1.48	.86	.53	1.31	.88	1.97
2	7.08	6.63	4.86	3.34	4.53	2.44	1.44	.84	.58	1.27	.83	2.15
3	7.02	6.66	4.75	3.36	4.41	2.36	1.39	.87	.63	1.26	.79	2.22
4	6.94	6.67	4.67	3.38	4.29	2.29	1.32	.84	.66	1.31	.84	2.28
5	6.88	6.64	4.65	3.37	4.17	2.22	1.24	.80	.73	1.28	1.00	2.32
6	6.91	6.61	4.67	3.36	4.04	2.13	1.17	.81	.85	1.31	1.00	2.39
7	6.86	6.56	4.64	3.35	3.92	2.05	1.12	.79	.98	1.32	.98	2.44
8	6.82	6.51	4.61	3.34	3.85	1.96	1.09	.75	1.08	1.30	.97	2.48
9	6.77	6.48	4.57	3.33	3.82	1.86	1.10	.76	1.10	1.29	.96	2.51
10	6.75	6.46	4.53	3.84	3.77	1.76	1.08	.78	1.17	1.26	.94	2.62
11	6.79	6.43	4.48	4.86	3.73	1.68	1.02	.75	1.16	1.24	.90	2.72
12	6.80	6.39	4.42	5.53	3.70	1.60	.96	.81	1.19	1.18	.92	2.80
13	6.78	6.34	4.38	6.04	3.64	1.50	.95	.87	1.16	1.14	1.00	2.99
14	6.74	6.29	4.38	6.32	3.62	1.44	.93	.86	1.12	1.09	1.05	3.00
15	6.70	6.23	4.35	6.45	3.57	1.43	.90	.81	1.10	1.05	1.15	2.98
16	6.65	6.16	4.33	6.47	3.52	1.48	.93	.79	1.12	1.05	1.19	2.95
17	6.60	6.08	4.29	6.43	3.46	1.52	.99	.78	1.16	1.06	1.20	2.92
18	6.55	6.01	4.24	6.36	3.39	1.53	.95	.77	1.18	.98	1.25	2.92
19	6.52	5.94	4.18	6.24	3.31	1.53	.90	.73	1.13	.93	1.28	2.92
20	6.47	5.91	4.11	6.12	3.23	1.53	.85	.76	1.25	.90	1.32	2.90
21	6.42	5.87	4.04	6.00	3.15	1.53	.86	.80	1.36	.89	1.37	2.90
22	6.37	5.77	3.96	5.88	3.06	1.56	.93	.78	1.38	.91	1.43	2.92
23	6.31	5.68	3.88	5.75	2.97	1.56	.97	.74	1.36	.99	1.50	2.93
24	6.25	5.61	3.80	5.59	2.88	1.56	.96	.71	1.34	1.01	1.55	2.92
25	6.19	5.52	3.75	5.48	2.79	1.54	.95	.68	1.35	.98	1.59	2.90
26	6.14	5.43	3.67	5.35	2.70	1.50	.95	.63	1.37	.97	1.59	2.88
27	6.18	5.34	3.60	5.22	2.63	1.50	.97	.56	1.34	.99	1.59	2.86
28	6.18	5.24	3.52	5.12	2.57	1.52	.94	.51	1.31	.99	1.59	2.83
29	6.21	5.15	3.43	5.01	---	1.52	.93	.50	1.30	.98	1.66	2.80
30	6.34	5.05	3.34	4.89	---	1.51	.91	.51	1.33	.95	1.75	2.78
31	6.48	---	3.25	4.77	---	1.50	---	.52	---	.92	1.84	---
MEAN	6.61	6.07	4.20	4.96	3.55	1.73	1.04	.74	1.11	1.10	1.22	2.71
MAX	7.10	6.67	4.96	6.47	4.65	2.51	1.48	.87	1.38	1.32	1.84	3.00
MIN	6.14	5.05	3.25	3.31	2.57	1.43	.85	.50	.53	.89	.79	1.97

CAL YR 1985	MEAN	2.76	MAX	7.33	MIN	.40
WTR YR 1986	MEAN	2.92	MAX	7.10	MIN	.50

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 mi^2, 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.--Estimated daily discharges: Oct. 10 to Nov. 22, Jan. 2 to Feb. 6, Apr. 12 to May 5, July 28 to Aug. 25. Records fair except for estimated daily discharges 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 1982-86 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 ft^3/s, Sept. 21, 1985; maximum gage height, 9.99 ft, Sept. 21, 1985; no flow for many days in 1981 and 1985; creek dry at gage for many days in 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 14, 1964, reached a stage of 11.98 ft, from floodmarks, discharge, 2,630 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Combined flow, maximum daily discharge, 1,210 ft^3/s, Oct. 11; maximum gage height, 9.08 ft, Oct. 11; minimum daily discharge, .50 ft^3/s, June 6-8; minimum gage height, 1.32 ft, May 26.

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF DEEP CREEK AND DEEP CREEK DIVERSION CANAL
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	851	38	51	119	42	15	3.0	.77	4.9	42	80
2	636	722	36	47	114	41	13	3.5	.69	4.4	44	82
3	581	608	32	39	108	39	12	3.6	.70	4.3	45	75
4	527	561	31	34	103	38	11	3.0	.77	4.7	32	83
5	514	509	36	30	97	37	11	2.0	.55	6.9	28	90
6	536	467	55	27	91	36	10	1.5	.50	21	35	108
7	458	430	46	24	87	34	9.2	2.0	.51	12	44	148
8	410	401	43	23	94	32	8.3	2.4	.50	8.9	38	140
9	373	384	40	25	104	31	8.8	3.5	.56	7.9	32	148
10	650	373	38	244	109	31	7.6	4.7	1.8	7.2	26	258
11	1210	356	36	417	105	30	7.0	1.9	1.2	6.7	22	207
12	945	334	34	454	97	28	6.9	1.2	1.0	14	21	162
13	766	315	32	418	87	27	6.8	.95	1.1	16	28	169
14	667	291	40	355	82	27	6.1	.86	1.2	17	61	152
15	587	271	45	313	77	30	5.7	.88	2.6	28	83	138
16	532	251	46	283	73	41	5.3	1.3	2.4	27	96	129
17	479	229	43	257	69	40	5.1	2.1	22	22	83	120
18	441	205	42	235	69	37	5.0	2.2	13	21	78	119
19	414	185	38	218	67	35	4.8	5.4	8.2	30	62	118
20	385	175	35	205	62	32	5.3	7.4	11	26	56	112
21	357	161	32	195	59	33	6.7	3.8	7.2	24	48	109
22	328	143	31	186	56	31	4.8	2.1	7.0	24	45	105
23	307	119	28	183	55	27	4.4	1.6	6.6	31	40	98
24	285	107	27	179	52	25	3.7	1.2	6.6	33	47	93
25	264	94	28	179	49	23	3.5	.87	13	46	58	87
26	247	81	27	168	46	22	3.6	.66	12	73	49	81
27	295	70	25	158	44	20	3.0	.67	8.5	68	44	75
28	353	58	25	149	43	20	2.6	.95	7.4	72	40	69
29	516	50	23	143	---	18	2.5	.94	6.3	57	41	62
30	599	42	22	134	---	17	2.6	.88	5.2	45	53	56
31	722	---	21	125	---	17	---	.83	---	41	88	---
TOTAL	16000	8843	1075	5498	2218	941	201.3	67.89	150.85	803.9	1509	3473
MEAN	516	295	34.7	177	79.2	30.4	6.71	2.19	5.03	25.9	48.7	116
MAX	1210	851	55	454	119	42	15	7.4	22	73	96	258
MIN	247	42	21	23	43	17	2.5	.66	.50	4.3	21	56

CAL YR 1985 TOTAL 50971.46 MEAN 140 MAX 1930 MIN .06
WTR YR 1986 TOTAL 40780.94 MEAN 112 MAX 1210 MIN .50

ST. JOHNS RIVER

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.--70 mi^2, approximately.

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 ft^3/s; no flow observed June 24, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height recorded, 8.09 ft, Oct. 1, occurred on recession following peak of Sept. 20, 1985; minimum, 3.67 ft, part of each day June 1-4.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.98	---	5.17	5.11	---	4.67	4.34	3.87	3.70	3.76	4.64	4.46
2	8.06	---	5.13	---	---	4.69	4.32	3.90	3.69	3.75	4.51	4.43
3	7.93	---	5.07	---	---	4.68	4.29	3.90	3.69	3.73	4.37	4.32
4	7.69	---	5.01	---	---	4.65	4.26	3.90	3.70	3.75	4.30	4.61
5	7.57	---	5.09	---	---	4.64	4.25	3.83	3.70	3.78	4.24	4.87
6	7.59	---	5.49	---	---	4.63	4.24	3.80	3.70	4.15	4.53	5.21
7	7.26	---	5.34	---	5.10	4.61	4.22	3.84	3.70	4.01	4.42	5.88
8	6.96	---	5.27	---	5.14	4.59	4.18	3.87	3.70	3.89	4.32	5.79
9	6.72	---	5.21	---	5.31	4.55	4.20	3.88	3.70	3.84	4.23	5.71
10	6.76	---	5.14	---	5.42	4.54	4.17	3.96	3.88	3.82	4.13	5.68
11	---	---	5.08	---	5.38	4.53	4.15	3.85	3.83	3.81	4.07	5.66
12	---	---	5.02	---	5.34	4.51	4.14	3.78	3.81	3.89	4.10	5.45
13	---	---	4.97	---	5.22	4.49	4.14	3.75	3.78	4.04	4.40	5.41
14	---	---	5.15	---	5.15	4.49	4.11	3.74	3.82	4.21	5.02	5.40
15	---	---	5.28	---	5.10	4.51	4.09	3.73	3.82	4.58	5.24	5.23
16	---	---	5.29	---	5.04	4.65	4.07	3.80	3.79	4.47	5.03	5.18
17	---	---	5.23	---	4.99	4.68	4.06	3.90	4.03	4.28	4.91	5.14
18	---	---	5.18	---	4.99	4.65	4.05	3.92	4.08	4.18	4.94	5.02
19	---	---	5.11	---	4.99	4.63	4.03	3.92	3.89	4.27	4.64	4.91
20	---	---	5.04	---	4.95	4.60	4.05	4.14	3.98	4.17	4.50	4.83
21	---	---	4.98	---	4.91	4.60	4.11	4.00	3.89	4.08	4.47	4.84
22	---	5.44	4.92	---	4.88	4.60	4.02	3.90	3.85	4.07	4.55	4.83
23	---	5.82	4.87	---	4.86	4.57	4.00	3.86	3.83	4.14	4.50	4.76
24	---	5.73	4.83	---	4.83	4.53	3.95	3.82	3.81	4.20	4.42	4.69
25	---	5.64	4.86	---	4.80	4.51	3.94	3.78	3.89	4.55	4.35	4.61
26	---	5.54	4.84	---	4.75	4.49	3.95	3.75	3.89	5.15	4.25	4.53
27	---	5.45	4.79	---	4.71	4.47	3.91	3.73	3.79	4.95	4.16	4.46
28	---	5.37	4.76	---	4.68	4.45	3.87	3.77	3.77	4.77	4.10	4.40
29	---	5.29	4.74	---	---	4.43	3.86	3.77	3.77	4.61	4.14	4.34
30	---	5.22	4.71	---	---	4.40	3.86	3.74	3.76	4.58	4.37	4.28
31	---	---	4.68	---	---	4.38	---	3.73	---	4.54	4.50	---
MEAN	---	---	5.04	---	---	4.56	4.09	3.84	3.81	4.19	4.46	4.96
MAX	---	---	5.49	---	---	4.69	4.34	4.14	4.08	5.15	5.24	5.88
MIN	---	---	4.68	---	---	4.38	3.86	3.73	3.69	3.73	4.07	4.28

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, on 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 mi^2 .

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.--Records fair.

AVERAGE DISCHARGE.--12 years (water years 1973-79, 1982-86), 32.2 ft^3/s, 14.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 412 ft^3/s, June 28, 1974, gage height, 36.71 ft; minimum, 0.91 ft^3/s, May 18,19, 1985; gage height, 32.24 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 151 ft^3/s, Jan. 10, gage height, 34.69 ft; minimum, 1.6 ft^3/s, June 3-9, gage height, 32.26 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	32	21	31	37	25	24	3.7	1.8	20	14	87
2	69	33	20	32	36	24	23	3.3	1.7	19	15	80
3	65	30	18	33	36	22	21	3.0	1.9	18	15	74
4	66	28	17	33	35	21	20	2.9	1.6	17	17	66
5	72	25	21	35	34	19	18	2.8	1.6	17	21	62
6	83	24	28	35	33	19	17	2.7	1.6	18	21	60
7	78	24	27	35	33	18	15	2.7	1.6	16	29	56
8	73	26	27	36	37	16	16	2.7	1.6	17	31	55
9	68	24	26	37	44	16	15	2.7	1.7	16	33	87
10	66	22	26	94	44	15	13	2.8	2.0	16	34	99
11	61	23	26	123	46	14	12	2.7	2.0	15	34	96
12	59	22	25	120	44	14	11	2.6	2.3	16	34	90
13	56	21	24	113	42	14	12	2.5	2.7	15	39	83
14	54	23	32	105	39	17	11	2.5	3.2	15	43	75
15	51	22	30	96	38	21	11	2.4	7.3	15	44	67
16	49	22	30	91	36	27	10	2.3	15	14	42	60
17	45	23	28	85	35	27	9.4	2.3	14	14	40	54
18	43	23	27	80	34	28	8.9	2.3	14	13	39	49
19	44	30	25	77	34	27	8.3	2.1	14	13	37	45
20	42	44	24	72	33	29	7.9	2.3	19	12	39	42
21	41	42	23	66	32	28	7.7	2.6	20	11	43	42
22	37	39	21	62	31	26	7.7	2.5	21	11	51	39
23	37	36	21	58	30	24	7.2	2.4	22	11	50	36
24	34	34	21	55	30	22	6.6	2.2	21	11	48	33
25	33	32	23	52	29	20	5.3	2.2	19	10	46	31
26	30	30	21	51	27	19	4.6	2.1	19	14	43	29
27	28	29	21	51	27	23	4.4	2.0	20	17	41	27
28	26	27	20	46	25	27	4.4	2.0	21	16	40	25
29	25	24	20	43	---	27	4.3	1.9	21	15	52	23
30	26	22	18	41	---	26	3.9	1.8	21	14	66	21
31	30	---	18	39	---	25	---	1.8	---	14	84	---
TOTAL	1561	836	729	1927	981	680	339.6	76.8	315.6	460	1185	1693
MEAN	50.4	27.9	23.5	62.2	35.0	21.9	11.3	2.48	10.5	14.8	38.2	56.4
MAX	83	44	32	123	46	29	24	3.7	22	20	84	99
MIN	25	21	17	31	25	14	3.9	1.8	1.6	10	14	21
CFSM	1.73	.96	.80	2.13	1.20	.75	.39	.08	.36	.51	1.31	1.93
IN.	1.99	1.07	.93	2.45	1.25	.87	.43	.10	.40	.59	1.51	2.16

CAL YR 1985	TOTAL	11449.2	MEAN	31.4	MAX	132	MIN	1.0	CFSM	1.08	IN.	14.59
WTR YR 1986	TOTAL	10784.0	MEAN	29.5	MAX	123	MIN	1.6	CFSM	1.01	IN.	13.74

ST. JOHNS RIVER

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 mi^2.

PERIOD OF RECORD.--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).

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 at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 429 ft^3/s, July 19, 1978; maximum gage height, 14.41 ft, Sept. 13, 1973; minimum measured, 0.15 ft^3/s, June 25, 1981.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1985 to SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT			MAR		
18...	1102	9.0	25...	1425	6.6
DEC			MAY		
02...	0959	5.2	28...	2040	0.76
JAN			JUL		
10...	1400	369	22...	0800	5.0
FEB			SEP		
07...	1438	14	10...	1010	48

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 bank at 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 mi^2.

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

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 Aug. 11, 1985, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Mar. 16-25, and Apr. 27 to May 12. Records good except estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--8 years (water years 1973-79, 1986), 16.7 ft^3/s, 17.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 310 ft^3/s, July 19, 1978, maximum gage height, 14.69 ft, June 30, 1974; minimum discharge, 1.0 ft^3/s, June 8,9, 1986, minimum gage height, 5.56 ft, Dec. 5, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 10	1000	*199	*13.24	Aug. 31	2100	92	11.20
June 9	2000	122	11.85				

Minimum discharge, 1.0 ft^3/s, June 8,9, gage height 7.18 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	7.0	28	17	11	11	2.6	1.3	14	7.6	58
2	23	18	7.3	24	16	11	10	2.3	1.3	12	11	47
3	22	17	7.0	18	16	10	9.2	2.1	1.5	9.8	8.4	35
4	22	16	6.3	14	16	9.9	8.1	1.9	1.9	8.9	21	26
5	28	13	13	14	15	9.8	7.4	1.8	1.5	10	22	23
6	35	11	19	12	17	9.5	6.9	1.8	1.3	16	18	22
7	29	11	16	11	19	9.1	6.7	2.1	1.3	13	14	20
8	24	11	13	14	29	8.7	6.4	2.4	1.2	11	12	24
9	22	11	11	14	34	8.2	6.5	3.0	21	9.8	11	41
10	21	13	11	131	29	8.8	6.2	2.2	9.6	8.9	9.6	48
11	20	12	9.9	126	26	9.0	6.1	2.0	15	7.8	8.5	46
12	19	13	9.5	101	24	8.5	6.0	1.9	14	7.7	8.9	38
13	18	12	9.8	76	21	10	6.4	1.8	9.7	7.4	14	31
14	17	12	17	58	19	14	6.0	1.8	8.3	6.6	18	26
15	16	12	13	45	18	19	6.0	1.6	11	5.9	19	22
16	15	12	11	38	17	26	5.9	1.6	9.1	19	16	22
17	14	11	9.6	34	16	23	5.9	1.6	14	17	13	20
18	15	11	8.9	32	18	20	5.9	1.6	19	12	12	17
19	15	9.6	8.4	30	17	17	5.8	2.6	23	11	11	16
20	13	10	7.9	27	17	15	5.8	3.5	33	9.4	17	14
21	13	11	7.6	25	16	13	5.8	2.5	28	8.5	22	12
22	12	10	7.2	23	15	11	5.7	1.9	23	8.1	29	11
23	11	10	7.0	22	14	9.6	5.7	1.6	20	7.8	22	10
24	11	10	7.2	21	14	9.3	5.4	1.5	17	7.1	17	9.3
25	10	9.5	10	20	13	9.1	4.9	1.4	15	7.1	12	8.8
26	9.9	8.9	8.6	23	12	9.0	4.6	1.4	13	7.7	11	8.3
27	9.3	8.6	8.4	23	11	23	4.2	1.3	11	7.6	9.7	7.9
28	10	8.0	8.6	21	11	21	3.7	1.3	9.7	8.1	12	7.4
29	11	7.6	8.5	19	---	18	3.2	1.3	19	9.7	22	6.9
30	11	7.3	8.3	18	---	15	2.9	1.2	21	8.9	28	6.6
31	18	---	7.8	18	---	12	---	1.2	---	7.6	39	---
TOTAL	538.2	347.5	304.8	1080	507	407.5	184.3	58.8	374.7	305.4	495.7	684.2
MEAN	17.4	11.6	9.83	34.8	18.1	13.1	6.14	1.90	12.5	9.85	16.0	22.8
MAX	35	21	19	131	34	26	11	3.5	33	19	39	58
MIN	9.3	7.3	6.3	11	11	8.2	2.9	1.2	1.2	5.9	7.6	6.6
CFSM	1.36	.91	.77	2.72	1.41	1.02	.48	.15	.98	.77	1.25	1.78
IN.	1.56	1.01	.89	3.14	1.47	1.18	.54	.17	1.09	.89	1.44	1.99

WTR YR 1986 TOTAL 5288.1 MEAN 14.5 MAX 131 MIN 1.2 CFSM 1.13 IN. 15.37

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234990 LITTLE WEKIVA RIVER NEAR ALTAMONTE SPRINGS, FL

LOCATION.--Lat 28°41'13", long 81°23'50", in SE¼ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, on left bank 50 ft downstream from bridge on State Highway 434, 200 ft (corrected) 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 mi^2.

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). Feb. 11, 1981 to Nov. 28, 1985, at site 75 ft downstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--11 years (water years 1973-79, 1983-86), 35.1 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 592 ft^3/s, July 22, 1984, gage height, 27.34 ft; maximum gage height 27.55 ft, Aug. 4, 1986; minimum discharge, 1.9 ft^3/s, May 7, 1973; minimum gage height, 23.14 ft, Jan. 1, 1985, site then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 363 ft^3/s, Aug. 4, gage height, 27.55 ft; minimum, 13 ft^3/s, May 4,5,18,24,25, June 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	45	23	46	35	27	25	18	18	33	35	136
2	54	41	24	35	33	26	25	18	19	31	33	113
3	65	40	23	40	33	27	25	17	30	28	31	95
4	93	39	23	40	33	27	24	16	24	33	92	81
5	128	37	32	38	33	26	22	18	24	37	86	97
6	136	35	30	37	32	25	21	18	23	35	103	84
7	122	33	29	35	33	25	22	19	23	35	182	67
8	107	32	29	37	40	25	22	21	20	35	179	77
9	99	33	29	36	39	24	23	22	23	33	152	124
10	88	29	29	149	40	27	21	19	24	31	123	143
11	72	31	28	210	43	26	20	18	34	29	108	136
12	58	31	28	269	43	26	19	18	25	29	90	122
13	51	30	28	246	42	25	21	19	26	27	88	110
14	46	30	30	207	39	27	20	19	27	25	90	92
15	44	29	28	156	37	30	20	19	29	24	95	88
16	43	26	28	121	35	34	20	19	32	38	91	77
17	41	25	29	97	34	35	20	18	65	27	84	68
18	38	26	29	80	35	35	20	17	46	38	78	59
19	36	27	28	69	34	35	20	19	58	40	65	46
20	35	32	27	61	33	34	18	21	89	38	63	42
21	34	28	25	54	33	34	19	21	101	35	60	39
22	34	26	24	50	31	30	21	21	109	39	61	36
23	33	25	23	47	30	28	21	20	99	39	60	33
24	32	25	24	43	31	28	21	17	86	36	55	31
25	31	26	25	40	30	28	20	16	88	33	51	29
26	30	26	24	43	30	27	18	18	75	30	45	27
27	28	26	25	41	30	28	17	20	64	29	39	26
28	33	24	25	39	29	27	18	20	54	36	59	25
29	31	24	25	38	---	25	19	20	45	39	136	24
30	35	24	24	37	---	24	19	19	38	41	153	22
31	51	---	23	36	---	25	---	19	---	38	186	---
TOTAL	1790	905	821	2477	970	870	621	584	1418	1041	2773	2149
MEAN	57.7	30.2	26.5	79.9	34.6	28.1	20.7	18.8	47.3	33.6	89.5	71.6
MAX	136	45	32	269	43	35	25	22	109	41	186	143
MIN	28	24	23	35	29	24	17	16	18	24	31	22

CAL YR 1985	TOTAL	14328	MEAN	39.3	MAX	156	MIN	14
WTR YR 1986	TOTAL	16419	MEAN	45.0	MAX	269	MIN	16

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 mi^2.

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.--Estimated daily discharges: July 2-10. Records fair. Flow includes large ground-water inflow.

AVERAGE DISCHARGE.--51 years, 287 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,060 ft^3/s, Sept. 17, 1945; maximum gage height, 6.09 ft, Sept. 12, 1960; minimum discharge observed, 105 ft^3/s, June 5-13, 1939; minimum gage height, 1.75 ft, Mar. 13-16,18,19, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 942 ft^3/s, Jan. 12; maximum gage height, 3.67 ft, Jan. 11; minimum daily discharge, 201 ft^3/s, June 2; minimum gage height, 1.93 ft, July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	326	290	245	282	332	289	262	217	202	228	231	361
2	318	285	246	310	328	286	262	215	201	220	237	377
3	310	280	245	302	324	285	259	213	211	215	245	358
4	343	274	244	291	322	283	258	211	235	230	308	332
5	370	268	250	282	319	283	257	209	223	250	366	311
6	463	262	279	280	318	281	253	210	215	235	339	346
7	457	259	271	274	318	278	251	210	211	225	314	359
8	417	258	262	280	323	276	251	211	209	220	313	344
9	385	258	256	289	363	275	249	213	206	215	311	422
10	363	266	253	575	365	275	248	217	211	215	307	513
11	351	261	247	923	356	280	246	214	214	216	300	537
12	336	263	248	942	354	277	245	211	244	243	298	491
13	322	261	249	887	344	274	247	211	240	240	298	432
14	310	259	266	822	336	276	246	212	243	224	307	386
15	300	255	267	759	329	286	243	212	282	219	306	350
16	289	252	259	692	321	317	239	211	281	214	297	325
17	284	248	254	616	316	337	237	209	285	223	288	307
18	279	246	251	555	320	321	235	208	304	219	285	294
19	277	247	249	508	323	307	234	206	307	226	278	288
20	274	259	247	467	319	296	233	211	359	231	273	279
21	270	269	244	438	313	294	231	213	358	230	280	276
22	267	261	242	415	308	291	230	209	328	229	279	273
23	265	258	241	395	305	281	228	207	306	244	273	271
24	260	256	244	382	303	276	229	213	290	245	264	270
25	258	252	252	367	299	274	227	209	280	245	259	264
26	257	250	249	360	296	271	226	206	281	236	254	258
27	255	250	247	366	291	271	224	205	271	229	251	256
28	260	248	246	355	289	274	221	205	258	228	250	253
29	263	244	244	348	---	270	221	204	247	234	260	250
30	264	243	243	342	---	267	218	204	236	237	288	248
31	276	---	242	336	---	263	---	203	---	234	306	---
TOTAL	9669	7782	7782	14440	9034	8814	7210	6509	7738	7099	8865	10031
MEAN	312	259	251	466	323	284	240	210	258	229	286	334
MAX	463	290	279	942	365	337	262	217	359	250	366	537
MIN	255	243	241	274	289	263	218	203	201	214	231	248

CAL YR 1985	TOTAL	99316	MEAN	272	MAX	734	MIN	217
WTR YR 1986	TOTAL	104973	MEAN	288	MAX	942	MIN	201

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235192 TRACY CANAL NEAR PAISLEY, FL

LOCATION.--Lat 28°56'56", long 81°30'42", in SE¼ 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 mi^2.

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 discharge measured, 52 ft^3/s, Oct. 1, 1985; no flow observed July 10, Aug. 28, 1986.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT			MAY		
01...	1115	52	20...	1040	4.5
NOV			JUL		
19...	1240	14	10...	1252	0.0
APR			AUG		
12...	1730	8.8	28...	1450	0.0

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.

DRAINAGE AREA.--126 mi^2.

PERIOD OF RECORD.--Annual maximum, water years 1962-67, 1970-80; August 1967 to September 1969, March 1981 to September 1985 (fragmentary), October 1985 to current year.

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; Aug. 7, 1967 to Sept. 30, 1969 and 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.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 749 ft^3/s, Sept. 1, 1968, gage height, 9.93 ft; minimum recorded, 3.2 ft^3/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, 290 ft^3/s, Jan. 14, gage height, 8.02 ft; minimum, 11.0 ft^3/s, May 31, June 1,2,9,10; minimum gage height, 5.04 ft, June 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	103	48	55	109	76	61	24	12	23	14	25
2	192	103	47	58	105	73	58	24	12	23	14	27
3	180	98	46	59	101	71	55	22	14	22	13	28
4	175	95	44	59	98	70	53	21	15	21	14	29
5	168	90	45	58	95	69	51	20	15	23	21	30
6	163	83	47	56	92	67	49	19	14	31	30	31
7	170	78	45	55	90	66	48	19	12	28	30	32
8	181	74	44	58	88	63	46	18	12	26	28	33
9	188	71	43	59	91	62	45	19	12	25	27	37
10	200	73	43	116	93	60	43	18	11	23	25	47
11	215	72	42	234	95	59	42	17	14	20	24	49
12	216	72	41	272	98	58	40	16	16	20	23	59
13	218	72	40	284	100	56	41	15	17	22	25	74
14	217	70	54	288	101	56	41	19	25	19	26	87
15	212	68	54	283	101	61	39	19	27	17	28	96
16	206	66	52	271	100	73	37	18	27	16	27	100
17	196	63	51	257	98	78	36	16	26	16	26	100
18	184	61	50	244	100	80	35	15	25	17	26	97
19	174	59	48	231	103	79	33	15	26	16	25	94
20	163	58	47	215	101	78	33	18	30	14	24	87
21	154	57	46	202	97	80	32	20	30	13	24	80
22	145	56	44	188	95	82	31	19	30	14	25	73
23	136	55	44	176	92	82	31	18	29	17	24	71
24	127	54	43	166	90	82	30	17	28	18	23	68
25	118	53	45	155	88	80	29	15	27	17	22	62
26	111	52	43	148	84	78	28	14	28	15	21	57
27	105	51	42	143	81	75	27	13	27	19	19	52
28	105	50	42	133	78	73	27	13	26	21	20	50
29	102	49	41	124	---	70	26	12	25	17	19	47
30	99	48	41	118	---	67	25	12	24	15	19	44
31	100	---	41	113	---	65	---	11	---	14	19	---
TOTAL	5124	2054	1403	4878	2664	2189	1172	536	636	602	705	1766
MEAN	165	68.5	45.3	157	95.1	70.6	39.1	17.3	21.2	19.4	22.7	58.9
MAX	218	103	54	288	109	82	61	24	30	31	30	100
MIN	99	48	40	55	78	56	25	11	11	13	13	25
CFSM	1.31	.54	.36	1.25	.75	.56	.31	.14	.17	.15	.18	.47
IN.	1.51	.61	.41	1.44	.79	.65	.35	.16	.19	.18	.21	.52

WTR YR 1986 TOTAL 23729 MEAN 65.0 MAX 288 MIN 11 CFSM .52 IN. 7.01

ST. JOHNS RIVER

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 upsteam 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.--432 measurements, 160 ft^3/s, 103 mgd.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 214 ft^3/s, Nov. 1, 1960; minimum measured, 63 ft^3/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.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
NOV					JUL				
21...	1700	148	1300	310	14...	1540	170	--	--
JAN					SEP				
16...	1030	107	--	--	02...	1555	159	--	380
MAY									
20...	1350	162	--	--					

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 mi^2.

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 and electromagnetic current meter 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 Mar. 21, 1986, water-stage recorder for Lake Monroe near Sanford (station 02234499) used as auxiliary gage for this station.

REMARKS.--Records poor. Flow occasionally reversed as a result of tide and wind effect.

AVERAGE DISCHARGE.--53 years, 3,111 ft^3/s, 13.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,100 ft^3/s, Oct.15, 1953; maximum gage height, 6.06 ft, present datum, Oct. 11,12, 1953; maximum daily reverse flow, 3,030 ft^3/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, 7,340 ft^3/s, Oct. 7; maximum gage height, 3.58 ft, Oct. 3; maximum daily reverse flow, 466 ft^3/s, June 6; minimum gage height, 0.11 ft, July 19,21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7290	5230	5730	4180	5930	2300	581	1480	283	2540	1540	932
2	7280	5490	5590	4050	5850	2360	643	1440	357	2400	1550	890
3	7210	5750	5270	3880	5820	2720	870	808	324	2360	1520	592
4	6810	5810	5080	3760	5740	3070	1430	247	111	2330	1430	1130
5	7200	5990	5020	3460	5710	3060	1240	1220	-388	1560	1820	1690
6	7300	6310	4770	3280	5630	2980	900	1490	-466	2130	2090	1490
7	7340	6560	4580	3340	5540	2800	1430	1970	-148	1770	1500	1700
8	7330	6670	4580	3110	5410	2790	1780	2100	738	1820	1650	1440
9	7060	6660	4570	2700	5170	2610	1250	1390	1790	1880	1790	1580
10	6420	6660	4560	3380	4800	2420	1060	471	2500	1990	1830	2060
11	6370	6600	4490	3380	4480	2300	1070	-132	2000	1980	1920	2610
12	6430	6530	4480	3860	3990	2350	1780	355	2320	2370	1970	2870
13	6490	6400	4540	4260	3680	2640	895	1060	2360	2670	2090	1680
14	6480	6400	4160	4800	3680	2630	899	1000	2640	2520	2140	1350
15	6410	6390	4160	5450	3730	1980	1330	1300	2810	2570	2080	1160
16	6390	6380	4280	5980	3910	1870	1060	929	2470	2420	1880	1230
17	6330	6370	4270	6310	4020	1750	1100	933	2250	2830	1620	1810
18	6180	6360	4200	6570	3880	1940	1170	1620	2240	2710	1520	1630
19	6120	6350	4130	6640	3880	2170	821	1520	2170	2660	1550	1900
20	6040	6350	4190	6830	3870	2040	980	1700	1850	2290	1650	3020
21	6030	6340	4180	6950	3800	1210	1130	1580	1620	1590	1860	3170
22	6090	6250	4160	7070	3490	274	444	948	1150	1160	1660	2170
23	6140	6230	4340	7060	3370	350	369	1070	893	945	1680	539
24	6120	6280	4500	6920	3000	554	949	1310	1130	804	1530	499
25	5980	6140	4240	6590	2440	555	1090	1400	1590	1030	1550	486
26	5850	6000	4290	6210	2380	555	1200	1740	2180	1410	1450	1290
27	5650	5860	4640	5430	2620	539	1380	1470	1930	1580	1440	1950
28	5460	5780	4800	5430	2800	536	1120	1170	1950	1730	1770	3610
29	5260	5770	4660	5740	---	549	1070	495	2280	1950	1990	4030
30	4880	5810	4530	5910	---	549	1280	646	2510	1810	1570	1760
31	5020	---	4340	5950	---	585	---	485	---	1830	658	---
TOTAL	196960	185720	141330	158480	118620	55036	32321	35215	45444	61639	52298	52268
MEAN	6354	6191	4559	5112	4236	1775	1077	1136	1515	1988	1687	1742
MAX	7340	6670	5730	7070	5930	3070	1780	2100	2810	2830	2140	4030
MIN	4880	5230	4130	2700	2380	274	369	-132	-466	804	658	486
CFSM	2.07	2.02	1.49	1.67	1.38	.58	.35	.37	.49	.65	.55	.57
IN.	2.39	2.25	1.71	1.92	1.44	.67	.39	.43	.55	.75	.63	.63

CAL YR 1985	TOTAL	1104834	MEAN	3027	MAX	7490	MIN	-1130	CFSM	.99	IN.	13.41
WTR YR 1986	TOTAL	1135331	MEAN	3110	MAX	7340	MIN	-466	CFSM	1.01	IN.	13.78

NOTE.--Negative figures indicate reverse flow.

ST. JOHNS RIVER

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 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.41	3.21	2.04	1.05	2.06	1.32	1.13	.81	.66	.80	.32	1.25
2	3.39	3.18	2.01	1.05	1.99	1.31	1.03	.75	.68	.70	.34	1.35
3	3.39	3.13	2.01	1.08	1.91	1.20	.93	.73	.71	.61	.32	1.46
4	3.48	3.09	2.01	1.10	1.83	1.04	.86	.89	.83	.58	.31	1.53
5	3.38	3.02	2.02	1.15	1.74	.95	.83	.89	1.00	.65	.31	1.53
6	3.31	2.95	2.06	1.21	1.65	.86	.81	.80	1.14	.84	.37	1.59
7	3.25	2.88	2.08	1.21	1.58	.83	.75	.70	1.18	.87	.44	1.63
8	3.21	2.82	2.06	1.30	1.55	.79	.66	.61	1.13	.83	.42	1.68
9	3.21	2.79	2.03	1.47	1.58	.81	.60	.58	1.03	.74	.39	1.74
10	3.35	2.79	2.00	1.81	1.61	.78	.63	.72	.97	.65	.36	1.80
11	3.41	2.79	1.98	2.22	1.63	.74	.65	.91	.94	.55	.31	1.78
12	3.38	2.80	1.93	2.37	1.69	.69	.63	.93	.93	.47	.27	1.71
13	3.34	2.81	1.88	2.44	1.73	.56	.69	.86	.86	.39	.28	1.63
14	3.32	2.79	1.91	2.48	1.70	.47	.75	.87	.79	.33	.30	1.56
15	3.30	2.77	1.90	2.48	1.64	.59	.76	.86	.72	.25	.29	1.54
16	3.27	2.73	1.85	2.48	1.57	.68	.70	.84	.70	.20	.31	1.54
17	3.25	2.69	1.82	2.48	1.49	.74	.67	.82	.68	.18	.39	1.53
18	3.23	2.66	1.80	2.48	1.46	.74	.68	.76	.68	.16	.50	1.56
19	3.23	2.62	1.77	2.48	1.41	.64	.73	.72	.71	.15	.53	1.62
20	3.21	2.62	1.72	2.46	1.36	.60	.81	.75	.83	.14	.54	1.64
21	3.17	2.59	1.67	2.44	1.34	.75	.79	.68	.93	.17	.54	1.61
22	3.12	2.52	1.61	2.40	1.37	.96	.81	.71	1.02	.24	.65	1.56
23	3.06	2.44	1.53	2.36	1.38	1.12	.86	.72	1.12	.33	.68	1.48
24	3.01	2.38	1.43	2.33	1.40	1.14	.88	.70	1.15	.42	.72	1.41
25	2.98	2.34	1.35	2.34	1.47	1.13	.87	.66	1.09	.47	.77	1.34
26	2.98	2.31	1.31	2.38	1.49	1.13	.87	.61	1.03	.51	.83	1.23
27	3.00	2.28	1.19	2.40	1.40	1.17	.84	.58	1.01	.53	.85	1.10
28	3.03	2.23	1.08	2.40	1.32	1.17	.84	.57	1.00	.48	.78	.99
29	3.07	2.17	1.01	2.33	---	1.22	.84	.57	.92	.39	.71	.95
30	3.15	2.10	.98	2.23	---	1.24	.84	.56	.87	.34	.81	.98
31	3.21	---	.95	2.14	---	1.20	---	.59	---	.30	1.08	---
MEAN	3.23	2.68	1.71	2.02	1.58	.92	.79	.73	.91	.46	.51	1.48
MAX	3.48	3.21	2.08	2.48	2.06	1.32	1.13	.93	1.18	.87	1.08	1.80
MIN	2.98	2.10	.95	1.05	1.32	.47	.60	.56	.66	.14	.27	.95

CAL YR 1985 MEAN 1.28 MAX 3.48 MIN .03
WTR YR 1986 MEAN 1.42 MAX 3.48 MIN .14

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.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1985 to September 1986.
WATER TEMPERATURE: November 1985 to September 1986.

INSTRUMENTATION.--Water-quality monitor since November 1985. Digital recorder--60-minute interval.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 1,270 microsiemens, July 19; minimum daily mean, 407 microsiemens, June 7.
WATER TEMPERATURE: Maximum daily mean, 31.5°C, July 17; minimum daily mean, 11.5°C, Jan. 29.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	GAGE HEIGHT (FEET ABOVE DATUM) (00065)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
DEC 03...	2.02	590	7.60	23.0	2.1	4.4	130	33	11	73
JAN 28...	2.41	505	6.60	12.0	1.1	6.1	110	27	10	67
MAR 26...	1.12	860	7.70	20.0	1.8	7.7	180	45	16	93
MAY 28...	0.55	952	8.50	28.0	--	8.5	--	--	--	--
JUL 28...	0.47	1150	--	28.0	2.5	8.0	230	56	21	130
AUG 18...	0.55	1270	7.60	28.0	2.2	6.7	230	57	22	140

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)
DEC 03...	3.7	52	39	130	0.2	7.3	375	330	--	<0.01
JAN 28...	3.7	41	47	140	0.1	2.9	342	320	0.20	0.02
MAR 26...	4.1	79	68	190	0.2	4.9	486	470	--	<0.01
MAY 28...	--	111	--	--	--	--	--	--	--	<0.01
JUL 28...	5.4	--	100	250	0.1	8.9	656	620	--	<0.01
AUG 18...	6.1	69	110	270	0.1	8.9	704	660	--	<0.01

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)
DEC 03...	0.22	0.08	0.07	1.1	1.2	0.09	0.08	0.06	20	<1
JAN 28...	0.22	0.05	0.06	0.95	1.0	0.08	0.08	0.06	--	--
MAR 26...	0.34	0.09	0.09	0.71	0.8	0.10	0.09	0.07	30	<1
MAY 28...	<0.10	0.04	0.02	1.5	1.5	0.15	0.04	0.04	--	--
JUL 28...	<0.10	0.02	0.03	1.5	1.5	0.21	0.08	0.03	--	--
AUG 18...	<0.10	0.02	0.07	1.7	1.7	0.10	0.05	0.02	30	<1

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 DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	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)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
DEC										
03...	29	<0.5	<1	<1	<3	<1	230	<1	<4	9
JAN										
28...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	25	<0.5	<1	<1	<3	2	76	1	8	7
MAY										
28...	--	--	--	--	--	--	--	--	--	--
JUL										
28...	--	--	--	--	--	--	--	--	--	--
AUG										
18...	26	<0.5	2	<1	<3	2	21	<5	10	2

DATE	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-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC										
03...	<0.1	10	<1	<1	<1	750	<6	15	15	27
JAN										
28...	--	--	--	--	--	--	--	--	2	50
MAR										
26...	0.1	<10	1	<1	<1	810	<6	14	23	13
MAY										
28...	--	--	--	--	--	--	--	--	8	38
JUL										
28...	--	--	--	--	--	--	--	--	--	--
AUG										
18...	0.3	<10	1	<1	<1	1200	<6	14	14	36

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA 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 mi^2, approximately.

PERIOD OF RECORD.--October 1964 to September 1970, October 1970 to September 1982 (annual peak discharge only), October 1982 to current year (annual peak discharge and periodic discharge measurements only).

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 ft^3/s Aug. 29, 1968, gage height 11.23 ft; maximum discharge measured, 837 ft^3/s Oct. 19, 1968; no flow observed in 1967, 1968, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 213 ft^3/s, Jan. 11, gage height 8.91 ft.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT			MAY		
04...	1410	14	12...	0815	0.11
DEC			JUL		
04...	1115	11	09...	1445	0.08
JAN			AUG		
18...	0915	121	28...	1120	E0.1
APR					
02...	1430	10			

E Estimated

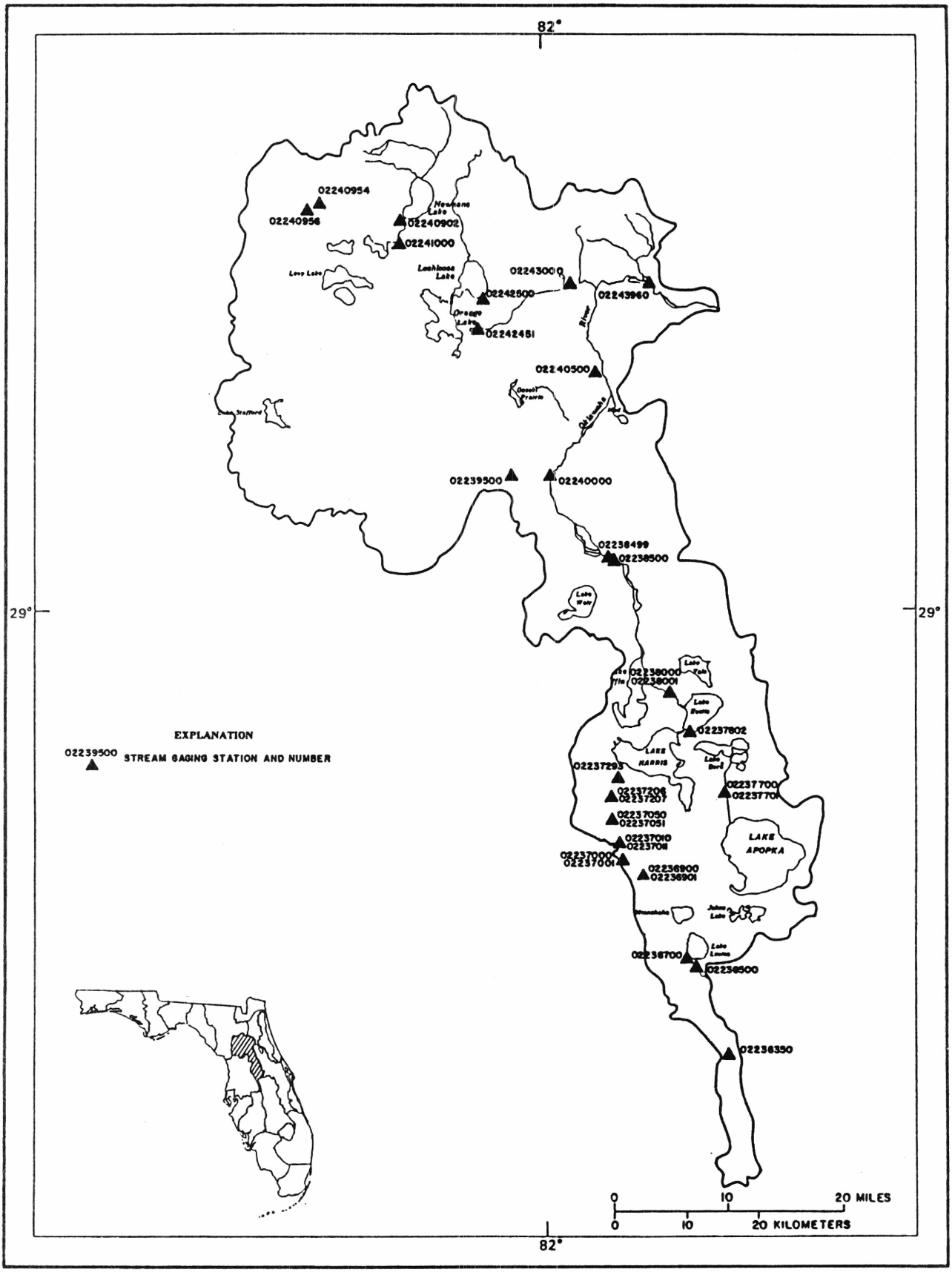

Figure 10. Location of stream gaging stations in the Oklawaha River basin.

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 mi^2, 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.--Records fair.

AVERAGE DISCHARGE.--7 years, 13.2 ft^3/s, 4.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 85 ft^3/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, 32 ft^3/s, Oct. 6,7; maximum gage height, 4.72 ft, Oct. 5,6; no flow Apr. 22 to Sept. 15, Sept. 26-30; minimum gage height, 2.38 ft, Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	8.5	.55	4.2	11	2.6	2.4	.00	.00	.00	.00	.00
2	21	8.0	.53	5.3	9.7	2.2	2.0	.00	.00	.00	.00	.00
3	21	7.5	.46	5.4	9.2	1.9	1.5	.00	.00	.00	.00	.00
4	29	7.0	.43	5.6	8.6	1.8	1.2	.00	.00	.00	.00	.00
5	31	6.2	1.2	6.1	8.0	1.8	.97	.00	.00	.00	.00	.00
6	32	5.5	2.2	6.3	7.5	1.6	.73	.00	.00	.00	.00	.00
7	32	4.7	2.2	6.4	7.1	1.4	.55	.00	.00	.00	.00	.00
8	31	4.1	2.2	6.9	7.2	1.2	.41	.00	.00	.00	.00	.00
9	30	3.8	2.2	6.8	7.7	1.1	.33	.00	.00	.00	.00	.00
10	29	3.5	2.2	13	7.5	1.1	.27	.00	.00	.00	.00	.00
11	27	3.2	2.1	20	7.9	1.1	.23	.00	.00	.00	.00	.00
12	25	3.0	2.0	22	8.2	.97	.19	.00	.00	.00	.00	.00
13	24	2.7	2.0	24	7.7	.85	.31	.00	.00	.00	.00	.00
14	22	2.5	3.9	24	7.2	1.0	.24	.00	.00	.00	.00	.00
15	21	2.3	3.7	23	6.5	2.1	.19	.00	.00	.00	.00	.01
16	19	2.1	3.5	22	6.0	6.5	.16	.00	.00	.00	.00	.14
17	18	1.8	3.2	22	5.7	7.9	.13	.00	.00	.00	.00	.31
18	17	1.6	3.1	20	5.8	8.1	.10	.00	.00	.00	.00	.41
19	16	1.5	2.9	20	5.6	8.1	.06	.00	.00	.00	.00	.59
20	15	1.5	2.6	20	5.2	7.8	.03	.00	.00	.00	.00	.56
21	15	1.4	2.5	23	4.9	7.7	.01	.00	.00	.00	.00	.53
22	14	1.4	2.2	22	4.5	7.0	.00	.00	.00	.00	.00	.38
23	13	1.3	2.1	20	4.2	6.2	.00	.00	.00	.00	.00	.25
24	12	1.2	2.1	18	3.9	5.6	.00	.00	.00	.00	.00	.14
25	11	1.1	2.7	15	3.5	4.9	.00	.00	.00	.00	.00	.06
26	10	.93	2.5	14	3.0	4.3	.00	.00	.00	.00	.00	.00
27	9.2	.80	2.3	14	2.7	3.9	.00	.00	.00	.00	.00	.00
28	8.5	.68	2.2	13	2.5	3.5	.00	.00	.00	.00	.00	.00
29	7.7	.62	2.2	13	---	3.2	.00	.00	.00	.00	.00	.00
30	7.1	.57	2.0	12	---	3.5	.00	.00	.00	.00	.00	.00
31	7.8	---	1.8	11	---	3.0	---	.00	---	.00	.00	---
TOTAL	597.3	91.00	67.77	458.0	178.5	113.92	12.01	.00	.00	.00	.00	3.38
MEAN	19.3	3.03	2.19	14.8	6.37	3.67	.40	.00	.00	.00	.00	.11
MAX	32	8.5	3.9	24	11	8.1	2.4	.00	.00	.00	.00	.59
MIN	7.1	.57	.43	4.2	2.5	.85	.00	.00	.00	.00	.00	.00
CFSM	.45	.07	.05	.34	.15	.09	.01	.00	.00	.00	.00	.00
IN.	.52	.08	.06	.40	.15	.10	.01	.00	.00	.00	.00	.00

CAL YR 1985	TOTAL	1485.01	MEAN	4.07	MAX	33	MIN	.00	CFSM	.09	IN.	1.28
WTR YR 1986	TOTAL	1521.88	MEAN	4.17	MAX	32	MIN	.00	CFSM	.10	IN.	1.32

ST. JOHNS RIVER

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 mi^2, 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.--Estimated daily discharges: Mar. 7-20, Apr. 4 to May 27. Records good except estimated daily discharges, which are fair. Some interconnection at high stages with Little Creek and Withlacoochee River basin.

AVERAGE DISCHARGE.--28 years (water years 1959-86), 26.7 ft^3/s, 5.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 691 ft^3/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, 147 ft^3/s, Jan. 14,15, gage height, 5.01 ft; no flow for many days; minimum gage height, 0.62 ft, June 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	14	10	25	53	29	26	.45	.00	3.3	4.9	25
2	8.4	16	10	31	50	29	24	.35	.00	3.0	6.1	23
3	8.0	17	9.6	33	47	28	21	.30	.02	2.7	5.6	20
4	10	18	9.1	35	45	27	19	.22	.10	2.9	5.9	17
5	9.0	18	10	37	43	26	18	.15	.08	2.9	6.0	15
6	9.2	17	13	39	42	25	16	.10	.04	3.5	8.5	13
7	8.9	17	14	40	40	24	15	.00	.05	3.2	8.5	13
8	8.8	17	15	43	43	23	13	.00	.03	2.9	7.5	17
9	9.0	16	16	43	46	22	12	.00	.02	2.6	6.5	22
10	9.7	17	17	77	47	21	10	.00	.09	2.4	5.4	24
11	11	16	17	114	49	20	9.0	.00	.27	2.6	4.5	23
12	11	16	18	126	50	19	8.0	.00	.64	2.7	4.7	21
13	12	16	18	138	48	18	9.4	.00	.50	5.4	9.4	19
14	12	16	23	146	46	17	9.6	.00	.63	5.5	12	17
15	12	15	24	146	45	17	8.0	.00	1.2	4.9	12	15
16	11	15	24	142	43	19	6.5	.00	.78	4.3	11	13
17	11	14	25	135	42	23	5.4	.00	.59	3.8	10	11
18	11	13	25	127	43	29	4.5	.00	.51	3.1	10	10
19	10	13	25	122	41	36	3.7	.00	.52	2.7	11	10
20	9.5	13	25	112	40	45	3.2	.00	.82	2.2	15	8.4
21	11	12	24	103	38	49	2.5	.00	.73	1.8	21	7.2
22	11	12	24	95	36	47	2.0	.00	.77	1.6	32	6.1
23	11	12	23	88	35	44	1.8	.00	1.7	1.7	37	5.3
24	11	12	22	82	34	42	1.5	.00	1.7	1.8	38	4.9
25	10	12	23	76	33	39	1.2	.00	5.4	1.7	37	4.3
26	9.9	11	22	73	30	36	1.0	.00	4.5	1.7	36	3.8
27	9.6	11	21	71	29	34	.90	.00	3.8	2.2	34	3.3
28	9.4	11	20	66	29	32	.74	.00	3.7	3.4	32	2.9
29	9.1	10	19	61	---	31	.62	.00	3.6	3.5	29	2.5
30	8.9	10	18	58	---	30	.52	.00	3.5	4.2	25	2.2
31	9.6	---	17	55	---	28	---	.00	---	4.4	24	---
TOTAL	311.4	427	580.7	2539	1167	909	254.08	1.57	36.29	94.6	509.5	378.9
MEAN	10.0	14.2	18.7	81.9	41.7	29.3	8.47	.05	1.21	3.05	16.4	12.6
MAX	12	18	25	146	53	49	26	.45	5.4	5.5	38	25
MIN	8.0	10	9.1	25	29	17	.52	.00	.00	1.6	4.5	2.2
CFSM	.15	.21	.27	1.20	.61	.43	.12	.00	.02	.04	.24	.19
IN.	.17	.23	.32	1.39	.64	.50	.14	.00	.02	.05	.28	.21

CAL YR 1985	TOTAL	2349.29	MEAN	6.44	MAX	32	MIN	.00	CFSM	.09	IN.	1.29
WTR YR 1986	TOTAL	7209.04	MEAN	19.8	MAX	146	MIN	.00	CFSM	.29	IN.	3.94

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, July 20,21, 1986; 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, 199 microsiemens, July 14; minimum daily mean, 59 microsiemens, June 4.
WATER TEMPERATURE: Maximum daily mean 27.5°C, July 20,21; minimum daily mean, 8.5°C, Dec. 27.
DISSOLVED OXYGEN: Maximum daily mean, 8.2 mg/L, Dec. 7; minimum daily mean, 2.3 mg/L, Aug. 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	89	88	85	77	74	74	---	73	97	89	79
2	90	88	88	83	76	74	74	77	71	96	90	80
3	90	88	87	82	76	74	74	85	67	94	87	81
4	91	88	87	84	76	74	74	117	59	92	89	81
5	91	88	86	84	76	73	74	126	64	92	88	82
6	90	88	87	84	76	73	74	131	75	93	89	83
7	91	89	86	84	76	73	74	130	78	92	89	84
8	90	89	87	85	76	72	74	124	77	91	90	83
9	90	88	87	85	76	72	75	117	79	91	90	83
10	90	88	87	81	76	73	75	109	75	91	90	83
11	90	88	87	75	76	74	75	98	71	93	90	84
12	89	88	87	78	76	74	75	95	76	98	88	84
13	89	87	87	79	75	74	75	95	86	184	91	84
14	88	87	87	78	76	74	76	91	88	199	90	84
15	88	87	86	78	76	74	75	89	91	117	91	84
16	88	87	86	77	75	74	75	88	96	127	91	84
17	88	87	86	77	75	74	76	86	96	107	91	84
18	88	87	86	77	75	74	76	82	98	94	91	83
19	88	87	86	77	75	75	76	80	95	90	90	85
20	88	87	86	77	75	75	76	81	95	92	90	85
21	89	87	86	77	75	74	76	82	97	91	88	86
22	88	88	86	77	75	74	76	84	96	90	87	85
23	88	87	86	77	75	74	76	85	99	89	86	86
24	88	87	86	77	74	74	76	86	107	88	86	86
25	87	87	86	77	75	74	76	81	104	90	84	85
26	88	87	85	77	75	74	76	87	95	90	83	86
27	88	87	86	76	75	74	76	84	97	89	81	86
28	88	87	86	77	75	74	---	78	98	89	80	86
29	88	88	85	77	---	74	---	74	98	88	81	86
30	87	87	85	77	---	74	---	72	99	88	81	91
31	88	---	85	77	---	74	---	74	---	89	80	---
MEAN	89	88	86	79	76	74	---	---	87	100	87	84
MAX	91	89	88	85	77	75	---	---	107	199	91	91
MIN	87	87	85	75	74	72	---	---	59	88	80	79

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

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

WTR YR 1986 MEAN 21.0 MAX 27.5 MIN 8.5

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	3.5	5.2	7.4	6.4	5.7	4.9		---	4.4	4.9	2.8
2	4.3	4.0	5.5	6.7	6.3	6.5	5.0		---	4.4	4.8	3.0
3	4.3	3.6	7.3	6.4	6.2	6.6	5.0		---	4.4	4.7	2.9
4	4.1	3.7	7.7	6.1	5.9	6.5	4.9		---	4.5	4.8	3.7
5	4.1	5.0	7.7	5.9	5.4	6.4	4.9		---	4.6	5.0	2.9
6	4.6	5.5	7.7	6.3	5.1	6.5	4.9		---	4.9	4.8	2.9
7	5.0	5.4	8.2	6.4	4.8	6.4	5.0		---	4.8	4.6	2.7
8	5.2	5.5	7.7	6.3	4.7	6.5	5.0		---	4.8	4.5	3.0
9	5.0	5.4	6.6	6.2	4.7	6.4	5.0		---	4.7	4.5	2.6
10	4.8	4.9	7.4	6.8	4.6	5.9	5.4		---	4.7	4.4	3.1
11	4.8	5.1	7.5	6.3	4.3	5.5	5.5		---	4.8	4.4	3.2
12	4.7	5.0	7.2	6.1	4.5	5.2	5.6		---	4.8	4.5	3.4
13	4.6	4.9	6.2	5.9	5.2	4.8	5.3		---	5.1	4.4	3.3
14	4.5	4.4	4.9	6.1	5.6	4.6	5.4		---	4.9	4.3	3.9
15	4.5	4.4	5.6	6.1	5.4	4.8	5.4		---	4.8	3.9	4.4
16	4.6	4.7	5.8	6.1	5.5	4.9	---		---	4.7	3.6	3.8
17	4.5	4.9	5.9	5.9	5.4	4.8	---		---	4.5	3.9	3.5
18	4.5	5.1	6.1	5.7	5.2	4.5	---		---	4.4	3.7	3.3
19	4.4	4.8	6.1	5.5	5.1	4.5	---		---	4.5	3.6	3.5
20	4.4	4.4	6.2	5.5	4.8	4.3	---		---	4.3	3.6	3.4
21	4.1	4.0	6.5	5.7	4.7	4.4	---		---	4.1	4.0	4.8
22	4.3	4.1	6.8	5.8	4.6	5.0	---		---	4.1	3.7	5.1
23	4.5	4.0	6.9	5.7	4.5	5.4	---		---	4.3	3.2	4.9
24	4.5	4.3	6.8	5.6	4.7	5.6	---		---	4.5	3.3	5.3
25	4.5	5.3	6.6	5.6	5.1	5.6	---		4.4	4.6	3.1	5.0
26	4.2	5.2	7.3	5.5	5.5	5.3	---		4.4	4.8	3.0	5.1
27	4.1	5.6	7.7	5.8	5.6	4.9	---		4.3	5.1	2.8	5.3
28	3.9	5.2	7.7	6.3	5.4	5.0	---		4.3	5.2	2.4	5.2
29	3.8	5.1	7.5	6.6	---	4.9	---		4.4	5.2	2.3	4.8
30	3.3	5.7	7.5	6.5	---	4.9	---		4.5	5.1	2.6	4.4
31	3.2	---	7.7	6.6	---	4.9	---		---	5.0	2.7	---
MEAN	4.4	4.8	6.8	6.1	5.2	5.4	---		---	4.7	3.9	3.8
MAX	5.2	5.7	8.2	7.4	6.4	6.6	---		---	5.2	5.0	5.3
MIN	3.2	3.5	4.9	5.5	4.3	4.3	---		---	4.1	2.3	2.6

ST. JOHNS RIVER

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, at 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 mi^2.

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.--Estimated daily discharges: Feb. 1 to Mar. 31. Records poor. Some interconnection at high stages with Big Creek is possible.

AVERAGE DISCHARGE.--7 years, 15.9 ft^3/s, 14.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 850 ft^3/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, 83 ft^3/s, Jan. 15,16, gage height, 8.61 ft; no flow May 16-June 12, July 25,26; minimum gage height, 6.24 ft, June 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.6	1.5	6.7	36	23	13	.62	.00	.27	.56	44
2	9.7	6.7	1.4	8.1	33	22	12	.53	.00	.17	.35	43
3	9.1	6.7	1.3	8.6	30	20	9.7	.51	.00	.11	.25	42
4	10	6.5	1.1	8.3	29	18	8.9	.48	.00	.10	.20	41
5	9.7	6.0	1.6	8.1	29	18	7.8	.41	.00	.23	.25	39
6	13	5.8	2.8	8.3	28	17	7.3	.33	.00	.31	.53	39
7	15	5.8	2.2	8.6	27	15	6.7	.31	.00	.37	.43	41
8	17	5.6	2.2	9.4	28	14	6.2	.27	.00	.27	.31	45
9	19	5.5	2.1	10	33	13	5.6	.25	.00	.20	.23	47
10	19	5.5	1.9	34	32	13	5.1	.23	.00	.19	.17	48
11	19	5.3	1.8	66	34	12	4.9	.20	.00	.25	.13	44
12	18	5.1	1.8	71	35	12	4.2	.14	.00	.20	.22	41
13	17	4.7	1.9	68	36	12	5.1	.11	.02	.37	1.3	39
14	16	4.2	6.9	76	35	12	5.3	.08	.19	.35	2.1	38
15	15	3.9	6.5	82	33	14	4.5	.03	.23	.27	2.2	34
16	14	3.7	6.3	82	32	26	4.0	.00	.20	.23	2.5	31
17	12	3.3	5.6	80	31	34	3.4	.00	.27	.27	3.6	27
18	11	3.1	4.5	76	30	33	3.0	.00	.29	.19	3.7	26
19	11	3.1	4.0	74	31	29	2.7	.00	.22	.16	4.0	30
20	10	2.9	3.6	71	31	28	2.4	.00	.19	.13	5.1	25
21	13	2.9	3.3	66	30	28	2.1	.00	.20	.06	5.8	20
22	11	2.8	3.0	63	29	25	1.8	.00	.33	.03	11	16
23	11	2.8	2.8	59	28	23	1.7	.00	3.0	.03	17	14
24	9.7	2.7	2.7	55	27	22	1.5	.00	2.0	.02	22	13
25	8.6	2.5	3.0	51	26	21	1.2	.00	2.9	.00	29	12
26	7.8	2.3	2.7	50	25	22	1.1	.00	4.0	.00	34	10
27	7.3	2.0	2.5	49	24	21	.90	.00	2.5	.13	35	9.7
28	7.1	1.8	2.4	47	23	19	.82	.00	1.2	.16	37	8.6
29	6.5	1.7	2.2	46	---	18	.78	.00	.65	.23	39	7.8
30	6.2	1.6	2.0	41	---	18	.71	.00	.39	.56	39	6.7
31	6.5	---	1.8	38	---	15	---	.00	---	.82	39	---
TOTAL	369.2	124.1	89.4	1421.1	845	617	134.41	4.50	18.78	6.68	335.93	881.8
MEAN	11.9	4.14	2.88	45.8	30.2	19.9	4.48	.15	.63	.22	10.8	29.4
MAX	19	7.6	6.9	82	36	34	13	.62	4.0	.82	39	48
MIN	6.2	1.6	1.1	6.7	23	12	.71	.00	.00	.00	.13	6.7
CFSM	.81	.28	.20	3.12	2.05	1.35	.30	.01	.04	.01	.73	2.00
IN.	.93	.31	.23	3.60	2.14	1.56	.34	.01	.05	.02	.85	2.23

CAL YR 1985	TOTAL	1653.43	MEAN	4.53	MAX	40	MIN	.00	CFSM	.31	IN.	4.18
WTR YR 1986	TOTAL	4847.90	MEAN	13.3	MAX	82	MIN	.00	CFSM	.90	IN.	12.27

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 mi^2.

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 daily discharges: Oct. 1-9. Records good above 10 ft^3/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.--29 years (water years 1958-86), 38.7 ft^3/s, 3.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 584 ft^3/s, Apr. 5, 1960; maximum gage height, 98.15 ft, Apr. 22, 1959; maximum daily reverse flow, 5.1 ft^3/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, 236 ft^3/s, Mar. 17; maximum gage height, 96.83 ft, Feb. 19; minimum daily discharge 1.5 ft^3/s, Dec. 4-13, 21-24, 26-31; minimum gage height, 95.29 ft, Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.2	1.7	2.0	3.9	4.2	4.0	3.3	2.3	2.9	3.0	3.6
2	2.0	2.2	1.7	2.1	3.9	4.2	4.0	3.3	2.3	2.9	3.0	3.6
3	2.0	2.2	1.6	2.1	3.9	4.2	3.9	3.3	2.4	2.9	2.9	3.6
4	1.9	2.1	1.5	2.2	3.9	39	4.0	3.2	2.4	2.9	2.9	3.6
5	2.0	2.0	1.5	2.2	4.0	58	3.9	3.2	2.4	3.1	2.9	3.6
6	2.0	1.9	1.5	2.2	4.0	57	3.9	3.2	2.3	3.2	3.0	3.7
7	2.0	1.8	1.5	2.2	4.0	57	3.9	3.2	2.3	3.1	3.1	3.7
8	2.0	1.9	1.5	2.3	4.1	56	3.8	3.1	2.4	3.0	3.1	3.7
9	1.9	1.9	1.5	2.3	4.1	56	3.8	3.1	2.4	3.0	3.0	3.8
10	1.8	1.9	1.5	2.7	4.2	55	3.8	3.1	2.4	2.9	3.0	3.8
11	1.9	2.0	1.5	2.9	4.2	55	3.8	3.0	2.6	2.9	3.0	3.8
12	2.0	2.0	1.5	3.0	4.2	55	3.8	3.0	2.5	2.9	3.0	3.8
13	2.0	2.0	1.5	3.0	4.2	54	3.8	3.0	2.5	3.0	3.2	3.8
14	2.0	2.0	1.8	3.1	4.2	54	3.8	2.9	2.6	3.0	3.2	3.8
15	2.0	2.0	1.7	3.1	4.2	85	3.8	2.9	2.7	3.0	3.2	3.8
16	2.0	2.0	1.6	3.2	4.2	182	3.8	2.9	2.7	3.0	3.2	3.8
17	2.0	2.0	1.6	3.3	4.2	236	3.7	2.8	2.7	3.0	3.2	3.8
18	1.9	1.9	1.6	3.3	4.3	229	3.7	2.8	2.6	3.0	3.2	3.8
19	1.9	1.9	1.6	3.4	23	223	3.7	2.7	2.7	3.0	3.2	3.8
20	1.8	1.9	1.6	3.4	123	218	3.7	2.7	2.8	2.9	3.3	3.8
21	1.9	2.0	1.5	3.5	92	216	3.6	2.7	2.8	2.9	3.3	3.8
22	1.9	2.0	1.5	3.6	41	214	3.6	2.7	2.8	2.9	3.4	3.8
23	2.0	1.8	1.5	3.6	41	210	3.6	2.7	2.8	2.9	3.4	3.8
24	2.0	1.8	1.5	3.6	21	115	3.5	2.6	2.9	2.9	3.4	3.8
25	1.9	1.8	1.6	3.7	4.2	3.8	3.5	2.6	3.1	2.9	3.4	3.7
26	1.8	1.8	1.5	3.7	4.2	3.9	3.5	2.6	3.1	2.8	3.5	3.7
27	1.8	1.8	1.5	3.7	4.2	3.9	3.4	2.6	3.0	2.8	3.6	3.7
28	1.9	1.8	1.5	3.7	4.2	3.9	3.4	2.5	3.0	2.8	3.6	3.7
29	1.9	1.7	1.5	3.8	---	4.0	3.4	2.4	3.0	2.9	3.5	3.7
30	2.1	1.7	1.5	3.8	---	4.0	3.4	2.4	2.9	2.9	3.6	3.7
31	2.2	---	1.5	3.8	---	4.0	---	2.3	---	2.9	3.6	---
TOTAL	60.4	58.0	48.1	94.5	431.5	2564.1	111.5	88.8	79.4	91.2	99.9	112.1
MEAN	1.95	1.93	1.55	3.05	15.4	82.7	3.72	2.86	2.65	2.94	3.22	3.74
MAX	2.2	2.2	1.8	3.8	123	236	4.0	3.3	3.1	3.2	3.6	3.8
MIN	1.8	1.7	1.5	2.0	3.9	3.8	3.4	2.3	2.3	2.8	2.9	3.6
CFSM	.01	.01	.01	.02	.09	.50	.02	.02	.02	.02	.02	.02
IN.	.01	.01	.01	.02	.10	.58	.03	.02	.02	.02	.02	.03

CAL YR 1985	TOTAL	342.48	MEAN	.94	MAX	2.4	MIN	.00	CFSM	.01	IN.	.08
WTR YR 1986	TOTAL	3839.5	MEAN	10.5	MAX	236	MIN	1.5	CFSM	.06	IN.	.87

ST. JOHNS RIVER

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 mi^2.

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 available in files of the Orlando Subdistrict Office. Prior to October 1968, published as Palatlakaha 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, 95.37 ft, Mar. 19,20; minimum, 93.19 ft, Oct. 2.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93.21	93.37	93.30	93.43	94.14	94.61	94.82	94.43	93.92	94.23	94.19	94.57
2	93.19	93.37	93.31	93.48	94.14	94.60	94.81	94.42	93.93	94.21	94.26	94.57
3	93.23	93.37	93.29	93.49	94.14	94.60	94.80	94.38	94.03	94.20	94.26	94.55
4	93.32	93.39	93.27	93.50	94.14	94.62	94.78	94.36	94.04	94.23	94.26	94.53
5	93.34	93.37	93.27	93.53	94.15	94.67	94.77	94.34	94.03	94.30	94.29	94.55
6	93.38	93.35	93.29	93.53	94.15	94.70	94.75	94.32	94.02	94.36	94.32	94.58
7	93.36	93.35	93.27	93.54	94.15	94.73	94.75	94.32	94.01	94.34	94.33	94.58
8	93.34	93.34	93.26	93.57	94.18	94.76	94.74	94.32	93.99	94.33	94.32	94.61
9	93.34	93.34	93.25	93.57	94.24	94.79	94.73	94.32	93.97	94.32	94.29	94.67
10	93.35	93.34	93.24	93.80	94.26	94.83	94.71	94.32	93.98	94.29	94.28	94.72
11	93.35	93.36	93.23	93.98	94.29	94.87	94.70	94.31	94.02	94.27	94.26	94.71
12	93.34	93.37	93.23	94.01	94.32	94.90	94.68	94.29	94.03	94.25	94.29	94.70
13	93.34	93.38	93.25	94.05	94.32	94.92	94.74	94.27	94.03	94.25	94.43	94.69
14	93.34	93.38	93.39	94.06	94.32	94.95	94.73	94.25	94.06	94.23	94.46	94.67
15	93.32	93.38	93.37	94.07	94.32	95.00	94.72	94.23	94.13	94.22	94.48	94.65
16	93.32	93.37	93.35	94.07	94.32	95.19	94.72	94.21	94.13	94.21	94.49	94.64
17	93.30	93.37	93.35	94.08	94.32	95.33	94.69	94.20	94.12	94.19	94.48	94.62
18	93.29	93.36	93.34	94.10	94.34	95.34	94.67	94.18	94.11	94.18	94.47	94.62
19	93.28	93.35	93.33	94.14	94.37	95.36	94.65	94.17	94.12	94.20	94.48	94.62
20	93.27	93.35	93.32	94.14	94.55	95.37	94.63	94.17	94.19	94.18	94.49	94.61
21	93.27	93.35	93.32	94.14	94.65	95.35	94.62	94.18	94.22	94.17	94.51	94.60
22	93.26	93.36	93.30	94.14	94.59	95.30	94.61	94.17	94.23	94.15	94.54	94.58
23	93.25	93.36	93.30	94.14	94.60	95.27	94.57	94.14	94.25	94.14	94.53	94.57
24	93.25	93.35	93.31	94.14	94.62	95.17	94.56	94.12	94.24	94.16	94.52	94.56
25	93.24	93.33	93.34	94.14	94.61	94.87	94.54	94.10	94.26	94.15	94.51	94.55
26	93.22	93.33	93.32	94.17	94.60	94.82	94.53	94.07	94.27	94.13	94.53	94.53
27	93.22	93.32	93.30	94.19	94.60	94.81	94.51	94.03	94.26	94.12	94.56	94.52
28	93.23	93.31	93.30	94.16	94.60	94.80	94.49	94.00	94.25	94.13	94.56	94.51
29	93.24	93.31	93.32	94.16	---	94.81	94.47	93.98	94.23	94.13	94.55	94.49
30	93.28	93.31	93.30	94.16	---	94.84	94.45	93.96	94.23	94.14	94.54	94.48
31	93.34	---	93.29	94.15	---	94.83	---	93.93	---	94.18	94.56	---
MEAN	93.29	93.35	93.30	93.93	94.36	94.94	94.66	94.21	94.11	94.21	94.42	94.59
MAX	93.38	93.39	93.39	94.19	94.65	95.37	94.82	94.43	94.27	94.36	94.56	94.72
MIN	93.19	93.31	93.23	93.43	94.14	94.60	94.45	93.93	93.92	94.12	94.19	94.48

CAL YR 1985 MEAN 92.91 MAX 93.48 MIN 91.96
WTR YR 1986 MEAN 94.11 MAX 95.37 MIN 93.19

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 mi^2.

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 ft^3/s, 7.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 458 ft^3/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, 94.82 ft, Mar. 13; minimum, 93.11 ft, Oct. 2,3.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93.13	93.28	93.22	93.34	94.06	94.49	94.73	94.33	93.84	94.13	94.09	---
2	93.12	93.27	93.21	93.39	94.06	94.48	94.72	94.31	93.85	94.12	94.17	---
3	93.13	93.28	93.19	93.40	94.06	94.48	94.72	94.28	93.94	94.10	94.15	---
4	93.21	93.28	93.18	93.41	94.07	94.49	94.71	94.26	93.95	94.15	94.14	---
5	93.24	93.26	93.18	93.42	94.07	94.51	94.69	94.25	93.94	94.23	94.17	---
6	93.27	93.24	93.18	93.42	94.07	94.54	94.68	94.24	93.93	94.29	94.21	---
7	93.26	93.24	93.17	93.43	94.06	94.57	94.66	94.22	93.91	94.27	94.24	---
8	93.25	93.24	93.16	93.45	94.10	94.60	94.65	94.21	93.90	94.25	94.21	---
9	93.24	93.24	93.16	93.47	94.15	94.65	94.63	94.21	93.88	94.23	94.19	---
10	93.25	93.24	93.15	93.67	94.17	94.70	94.61	94.23	93.89	94.21	94.18	---
11	93.25	93.27	93.15	93.84	94.20	94.73	94.60	94.21	93.93	94.18	94.16	94.62
12	93.25	93.29	93.15	93.90	94.20	94.77	94.59	94.19	93.94	94.17	94.20	94.61
13	93.24	93.29	93.15	93.93	94.20	94.76	94.64	94.18	93.94	94.17	94.34	94.60
14	93.23	93.29	93.26	93.95	94.21	94.66	94.64	94.16	93.98	94.15	94.36	94.59
15	93.23	93.29	93.25	93.97	94.20	94.67	94.62	94.14	94.04	94.13	94.38	94.58
16	93.22	93.28	93.24	93.98	94.21	94.29	94.60	94.12	94.04	94.12	94.38	94.55
17	93.21	93.28	93.23	94.00	94.21	93.90	94.57	94.10	94.02	94.10	94.38	94.54
18	93.20	93.27	93.23	94.01	94.23	94.39	94.56	94.09	94.01	94.10	94.37	94.53
19	93.19	93.27	93.22	94.03	94.24	94.27	94.54	94.07	94.03	94.10	94.38	94.54
20	93.18	93.27	93.21	94.03	94.28	94.15	94.53	94.07	94.10	94.08	94.39	94.53
21	93.18	93.29	93.21	94.03	94.38	94.02	94.52	94.08	94.14	94.06	94.40	94.51
22	93.17	93.27	93.20	94.04	94.45	94.01	94.49	94.06	94.14	94.04	94.43	94.50
23	93.16	93.26	93.20	94.04	94.48	93.97	94.47	94.04	94.18	94.03	94.42	94.49
24	93.15	93.26	93.20	94.03	94.50	94.19	94.45	94.03	94.16	94.05	94.40	94.47
25	93.14	93.25	93.21	94.04	94.48	94.68	94.43	94.00	94.18	94.04	94.39	94.45
26	93.13	93.25	93.20	94.06	94.49	94.74	94.42	93.98	94.19	94.03	94.41	94.44
27	93.13	93.24	93.20	94.06	94.49	94.73	94.40	93.96	94.18	94.02	---	94.42
28	93.14	93.24	93.20	94.05	94.49	94.72	94.38	93.93	94.16	94.04	---	94.41
29	93.14	93.23	93.19	94.06	---	94.72	94.36	93.90	94.15	94.04	---	94.39
30	93.19	93.22	93.19	94.06	---	94.75	94.34	93.87	94.15	94.04	---	94.38
31	93.25	---	93.19	94.06	---	94.75	---	93.85	---	94.07	---	---
MEAN	93.20	93.26	93.20	93.82	94.24	94.50	94.56	94.12	94.02	94.12	---	---
MAX	93.27	93.29	93.26	94.06	94.50	94.77	94.73	94.33	94.19	94.29	---	---
MIN	93.12	93.22	93.15	93.34	94.06	93.90	94.34	93.85	93.84	94.02	---	---

CAL YR 1985 MEAN 92.81 MAX 93.37 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 mi^2.

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, 92.48 ft, Mar. 17; minimum, 90.80 ft, Dec. 30,31.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91.27	91.61	91.12	90.93	91.48	91.32	91.68	91.40	90.94	91.19	91.23	91.52
2	91.25	91.61	91.11	90.96	91.48	91.31	91.67	91.39	90.99	91.18	91.33	91.52
3	91.25	91.61	91.08	90.96	91.48	91.30	91.66	91.38	91.17	91.17	91.31	91.51
4	91.32	91.61	91.06	90.95	91.46	91.30	91.66	91.37	91.17	91.20	91.31	91.50
5	91.37	91.59	91.06	90.96	91.46	91.31	91.65	91.35	91.16	91.25	91.33	91.53
6	91.43	91.57	91.06	90.95	91.47	91.30	91.64	91.33	91.14	91.38	91.35	91.59
7	91.42	91.55	91.03	90.95	91.47	91.29	91.63	91.33	91.12	91.38	91.49	91.59
8	91.42	91.52	91.01	90.98	91.48	91.29	91.63	91.32	91.09	91.36	91.49	91.59
9	91.42	91.50	90.99	90.98	91.52	91.27	91.61	91.33	91.07	91.35	91.48	91.64
10	91.43	91.49	90.97	91.19	91.56	91.28	91.60	91.37	91.05	91.33	91.46	91.77
11	91.43	91.49	90.96	91.34	91.58	91.29	91.59	91.35	91.05	91.31	91.45	91.78
12	91.43	91.47	90.94	91.36	91.61	91.29	91.58	91.34	91.05	91.29	91.50	91.78
13	91.43	91.46	90.93	91.38	91.60	91.31	91.65	91.32	91.05	91.27	91.65	91.78
14	91.43	91.44	91.02	91.39	91.59	91.56	91.65	91.31	91.06	91.25	91.67	91.77
15	91.42	91.42	91.01	91.39	91.59	91.73	91.64	91.30	91.07	91.23	91.69	91.77
16	91.42	91.40	91.00	91.40	91.59	92.00	91.62	91.28	91.07	91.21	91.69	91.75
17	91.41	91.38	90.98	91.41	91.58	92.30	91.60	91.26	91.07	91.20	91.69	91.74
18	91.40	91.36	90.96	91.41	91.61	91.81	91.59	91.24	91.07	91.21	91.70	91.73
19	91.40	91.34	90.95	91.46	91.60	91.70	91.58	91.22	91.10	91.21	91.72	91.73
20	91.38	91.32	90.93	91.47	91.49	91.72	91.57	91.21	91.20	91.19	91.76	91.62
21	91.38	91.30	90.91	91.46	91.31	91.87	91.56	91.22	91.22	91.17	91.80	91.51
22	91.38	91.28	90.89	91.47	91.30	91.85	91.55	91.19	91.21	91.15	91.81	91.41
23	91.38	91.28	90.88	91.47	91.31	91.81	91.53	91.18	91.22	91.14	91.72	91.39
24	91.36	91.26	90.87	91.47	91.31	91.75	91.52	91.16	91.21	91.14	91.62	91.39
25	91.34	91.24	90.89	91.46	91.30	91.67	91.50	91.13	91.22	91.13	91.53	91.38
26	91.33	91.22	90.87	91.48	91.28	91.68	91.49	91.10	91.21	91.11	91.44	91.36
27	91.31	91.20	90.85	91.51	91.27	91.68	91.48	91.08	91.20	91.12	91.41	91.36
28	91.33	91.18	90.85	91.49	91.30	91.69	91.46	91.05	91.18	91.16	91.48	91.34
29	91.48	91.16	90.83	91.49	---	91.69	91.44	91.03	91.17	91.20	91.49	91.33
30	91.52	91.14	90.80	91.49	---	91.69	91.43	91.00	91.20	91.20	91.50	91.32
31	91.57	---	90.80	91.48	---	91.69	---	90.97	---	91.23	91.51	---
MEAN	91.39	91.40	90.96	91.29	91.47	91.57	91.58	91.24	91.12	91.22	91.54	91.57
MAX	91.57	91.61	91.12	91.51	91.61	92.30	91.68	91.40	91.22	91.38	91.81	91.78
MIN	91.25	91.14	90.80	90.93	91.27	91.27	91.43	90.97	90.94	91.11	91.23	91.32

CAL YR 1985 MEAN 90.17 MAX 91.61 MIN 88.19
WTR YR 1986 MEAN 91.36 MAX 92.30 MIN 90.80

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237010 PALATLAKAHA 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 mi^2.

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, 92.45 ft, Mar. 17; minimum, 90.98 ft, Jan. 1.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91.45	91.78	91.32	91.13	91.63	91.48	91.83	91.57	91.11	91.35	91.40	91.69
2	91.44	91.78	91.30	91.15	91.63	91.48	91.83	91.56	91.15	91.34	91.49	91.68
3	91.45	91.77	91.28	91.15	91.63	91.47	91.83	91.54	91.33	91.33	91.48	91.67
4	91.52	91.77	91.26	91.15	91.63	91.48	91.82	91.52	91.32	91.36	91.47	91.66
5	91.57	91.76	91.25	91.14	91.63	91.48	91.81	91.51	91.32	91.42	91.50	91.69
6	91.61	91.74	91.24	91.13	91.63	91.47	91.80	91.50	91.30	91.54	91.52	91.76
7	91.60	91.73	91.22	91.13	91.63	91.46	91.79	91.49	91.28	91.54	91.66	91.76
8	91.60	91.71	91.20	91.14	91.67	91.43	91.79	91.49	91.25	91.52	91.65	91.75
9	91.60	91.69	91.18	91.15	91.71	91.44	91.78	91.49	91.23	91.51	91.64	91.80
10	91.60	91.68	91.17	91.36	91.72	91.44	91.76	91.52	91.21	91.49	91.63	91.93
11	91.61	91.68	91.15	91.50	91.74	91.45	91.75	91.51	91.21	91.47	91.61	91.94
12	91.61	91.67	91.13	91.52	91.76	91.45	91.74	91.50	91.22	91.45	91.66	91.94
13	91.62	91.65	91.11	91.53	91.76	91.47	91.81	91.48	91.21	91.43	91.81	91.94
14	91.62	91.62	91.19	91.53	91.75	91.72	91.81	91.47	91.22	91.41	91.83	91.93
15	91.62	91.60	91.17	91.54	91.74	91.86	91.80	91.45	91.24	91.39	91.85	91.93
16	91.62	91.58	91.15	91.55	91.74	92.07	91.78	91.43	91.23	91.37	91.86	91.92
17	91.62	91.56	91.13	91.57	91.73	92.30	91.77	91.42	91.23	91.36	91.86	91.90
18	91.61	91.54	91.12	91.58	91.75	91.87	91.75	91.40	91.23	91.37	91.86	91.89
19	91.60	91.51	91.10	91.62	91.74	91.75	91.73	91.38	91.26	91.37	91.89	91.88
20	91.59	91.50	91.09	91.62	91.64	91.75	91.73	91.37	91.36	91.35	91.93	91.77
21	91.59	91.49	91.07	91.62	91.46	91.88	91.72	91.38	91.38	91.33	91.96	91.67
22	91.58	91.47	91.06	91.63	91.46	91.87	91.71	91.36	91.37	91.31	91.97	91.57
23	91.58	91.45	91.05	91.64	91.46	91.85	91.69	91.34	91.38	91.31	91.87	91.56
24	91.55	91.43	91.04	91.64	91.47	91.83	91.67	91.32	91.37	91.31	91.78	91.55
25	91.53	91.41	91.06	91.64	91.46	91.84	91.66	91.30	91.38	91.29	91.68	91.54
26	91.51	91.40	91.05	91.67	91.45	91.84	91.65	91.27	91.37	91.28	91.60	91.53
27	91.50	91.38	91.04	91.69	91.46	91.84	91.63	91.24	91.36	91.28	91.57	91.52
28	91.53	91.36	91.03	91.67	91.46	91.84	91.62	91.22	91.34	91.33	91.65	91.51
29	91.67	91.34	91.02	91.67	---	91.84	91.60	91.19	91.33	91.37	91.65	91.49
30	91.70	91.33	91.01	91.66	---	91.84	91.59	91.16	91.37	91.37	91.66	91.48
31	91.76	---	91.01	91.65	---	91.84	---	91.13	---	91.39	91.67	---
MEAN	91.58	91.58	91.14	91.46	91.63	91.70	91.74	91.40	91.29	91.39	91.70	91.73
MAX	91.76	91.78	91.32	91.69	91.76	92.30	91.83	91.57	91.38	91.54	91.97	91.94
MIN	91.44	91.33	91.01	91.13	91.45	91.43	91.59	91.13	91.11	91.28	91.40	91.48

CAL YR 1985 MEAN 90.37 MAX 91.78 MIN 88.39
WTR YR 1986 MEAN 91.53 MAX 92.30 MIN 91.01

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 mi^2.

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, 91.26 ft, Mar. 17; minimum, 88.28 ft, June 2.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88.84	89.04	89.10	89.31	89.05	89.31	89.48	89.10	88.30	89.06	89.48	
2	88.83	89.06	89.10	89.34	89.06	89.34	89.47	89.08	88.39	89.05	---	
3	88.85	89.07	89.09	89.35	89.06	89.34	89.46	89.05	88.68	89.05	---	
4	88.89	89.09	89.08	89.37	89.07	89.35	89.44	89.03	88.66	89.07	---	
5	88.90	89.06	89.08	89.38	89.07	89.36	89.42	89.00	88.66	89.14	---	
6	88.90	89.04	89.09	89.38	89.08	89.35	89.40	88.98	88.66	89.31	---	
7	88.89	89.06	89.07	89.38	89.09	89.33	89.40	88.96	88.66	89.31	---	
8	88.88	89.07	89.05	89.40	89.14	89.32	89.39	88.94	88.65	89.30	---	
9	88.87	89.07	89.05	89.41	89.18	89.31	89.38	88.90	88.63	89.30	---	
10	88.87	89.08	89.04	89.61	89.20	89.31	89.37	88.89	88.62	89.30	---	
11	88.87	89.10	89.03	89.59	89.24	89.32	89.35	88.84	88.63	89.29	---	
12	88.86	89.10	89.02	89.33	89.28	89.31	89.34	88.81	88.62	89.28	---	
13	88.85	89.10	89.03	89.08	89.28	89.44	89.40	88.77	88.64	89.27	---	
14	88.84	89.10	89.12	88.89	89.29	89.92	89.41	88.74	88.66	89.25	---	
15	88.83	89.10	89.13	88.79	89.30	90.22	89.41	88.71	88.71	89.23	---	
16	88.82	89.10	89.16	88.78	89.31	90.56	89.40	88.68	88.72	89.21	---	
17	88.81	89.09	89.15	88.79	89.31	91.20	89.39	88.64	88.71	89.20	---	
18	88.80	89.08	89.15	88.81	89.33	91.10	89.37	88.61	88.69	89.23	---	
19	88.80	89.08	89.15	88.85	89.37	91.03	89.36	88.58	88.72	89.26	---	
20	88.79	89.08	89.15	88.85	89.61	91.04	89.35	88.58	88.86	89.24	---	
21	88.78	89.08	89.15	88.86	89.67	91.09	89.33	88.59	88.90	89.22	---	
22	88.78	89.07	89.14	88.86	89.33	91.10	89.33	88.56	88.90	89.21	---	
23	88.76	89.08	89.13	88.88	89.29	91.09	89.31	88.54	88.94	89.21	---	
24	88.75	89.08	89.14	88.89	89.30	90.82	89.29	88.51	88.94	89.19	---	
25	88.74	89.08	89.18	88.89	89.31	89.68	89.27	88.48	89.01	89.18	---	
26	88.72	89.08	89.18	88.93	89.29	89.55	89.25	88.44	89.05	89.21	---	
27	88.72	89.09	89.18	88.98	89.28	89.52	89.22	88.41	89.05	89.30	---	
28	88.80	89.09	89.17	89.00	89.31	89.52	89.19	88.39	89.05	89.41	---	
29	88.94	89.09	89.16	89.02	---	89.51	89.16	88.36	89.05	89.43	---	
30	88.96	89.10	89.17	89.03	---	89.51	89.13	88.34	89.06	89.44	---	
31	89.01	---	89.16	89.04	---	89.50	---	88.32	---	89.49	---	
MEAN	88.84	89.08	89.12	89.10	89.25	89.91	89.35	88.70	88.76	89.25	---	
MAX	89.01	89.10	89.18	89.61	89.67	91.20	89.48	89.10	89.06	89.49	---	
MIN	88.72	89.04	89.02	88.78	89.05	89.31	89.13	88.32	88.30	89.05	---	

CAL YR 1985 MEAN 87.91 MAX 89.18 MIN 86.10

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 mi^2.

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, 89.74 ft, Sept. 14,15; minimum, 87.26 ft, Mar. 20.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88.74	88.96	89.02	89.27	89.02	89.28	89.45	89.06	88.11	89.03	89.46	89.60
2	88.74	88.98	89.02	89.32	89.03	89.30	89.44	89.03	88.20	89.02	89.44	89.58
3	88.74	88.98	89.01	89.34	89.04	89.31	89.43	89.01	88.53	89.02	89.43	89.57
4	88.78	89.04	89.00	89.34	89.04	89.33	89.42	88.97	88.56	89.04	89.43	89.56
5	88.79	89.03	88.99	89.35	89.04	89.33	89.40	88.96	88.59	89.12	89.50	89.55
6	88.79	89.01	88.99	89.35	89.05	89.33	89.39	88.93	88.60	89.28	89.50	89.59
7	88.79	89.01	88.99	89.35	89.06	89.33	89.38	88.91	88.59	89.28	89.59	89.58
8	88.78	89.01	88.98	89.35	89.09	89.32	89.37	88.84	88.58	89.27	89.56	89.57
9	88.78	89.00	88.97	89.35	89.14	89.31	89.36	88.79	88.56	89.28	89.54	89.60
10	88.77	89.00	88.97	89.52	89.17	89.30	89.34	88.78	88.55	89.28	89.51	89.72
11	88.77	89.00	88.96	89.23	89.20	89.30	89.33	88.74	88.56	89.27	89.49	89.72
12	88.78	89.00	88.96	88.79	89.23	89.29	89.32	88.71	88.56	89.25	89.52	89.73
13	88.78	89.00	88.96	88.38	89.24	89.22	89.38	88.67	88.58	89.24	89.40	89.73
14	88.78	88.99	89.04	88.50	89.24	88.67	89.40	88.63	88.62	89.22	89.23	89.73
15	88.78	88.99	89.04	88.63	89.25	88.54	89.40	88.60	88.68	89.20	89.33	89.74
16	88.77	88.99	89.04	88.69	89.26	88.56	89.38	88.55	88.68	89.18	89.37	89.72
17	88.76	88.99	89.05	88.72	89.26	87.55	89.36	88.52	88.67	89.16	89.38	89.70
18	88.75	88.99	89.07	88.74	89.28	87.53	89.35	88.48	88.66	89.20	89.39	89.70
19	88.75	88.99	89.07	88.78	89.29	87.36	89.33	88.44	88.68	89.23	89.42	89.64
20	88.74	89.00	89.07	88.79	89.17	87.28	89.32	88.43	88.80	89.21	89.49	89.37
21	88.73	89.00	89.07	88.80	88.99	87.28	89.32	88.44	88.84	89.19	89.52	89.19
22	88.72	89.00	89.07	88.81	89.19	87.30	89.30	88.41	88.85	89.18	89.55	89.14
23	88.70	89.00	89.08	88.82	89.23	87.30	89.28	88.37	88.90	89.18	89.50	89.31
24	88.68	89.00	89.09	88.81	89.26	87.81	89.26	88.34	88.91	89.16	89.48	89.35
25	88.67	89.01	89.12	88.82	89.26	89.41	89.24	88.30	89.01	89.15	89.47	89.35
26	88.65	89.02	89.13	88.87	89.24	89.49	89.21	88.26	89.03	89.19	89.43	89.34
27	88.65	89.03	89.14	88.82	89.25	89.49	89.18	88.23	89.03	89.28	89.37	89.34
28	88.65	89.03	89.14	88.93	89.26	89.48	89.15	88.19	89.03	89.39	89.54	89.34
29	88.75	89.03	89.14	88.95	---	89.48	89.12	88.16	89.02	89.41	89.58	89.33
30	88.85	89.03	89.14	89.00	---	89.47	89.09	88.14	89.03	89.43	89.59	89.32
31	88.90	---	89.14	89.01	---	89.46	---	88.13	---	89.47	89.59	---
MEAN	88.75	89.00	89.05	88.98	89.17	88.79	89.32	88.58	88.70	89.22	89.47	89.52
MAX	88.90	89.04	89.14	89.52	89.29	89.49	89.45	89.06	89.03	89.47	89.59	89.74
MIN	88.65	88.96	88.96	88.38	88.99	87.28	89.09	88.13	88.11	89.02	89.23	89.14

CAL YR 1985 MEAN 87.09 MAX 89.14 MIN 84.81
WTR YR 1986 MEAN 89.04 MAX 89.74 MIN 87.28

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 mi^2.

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, 86.90 ft, Mar. 18; minimum, 84.24 ft, May 30.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.38	84.41	84.32	---	84.88	---	84.88	84.47	84.27	84.40	84.56	84.92
2	84.38	84.41	84.32	---	84.87	---	84.95	84.46	84.37	84.40	84.54	84.92
3	84.38	84.41	84.32	---	84.85	---	84.92	84.45	84.48	84.40	84.52	84.90
4	84.46	84.41	84.31	84.36	84.84	84.69	84.90	84.44	84.40	84.42	84.53	84.90
5	84.45	84.39	84.32	84.37	84.81	84.69	84.88	84.43	84.38	84.49	84.60	84.88
6	84.44	84.38	84.32	84.37	84.85	---	84.87	84.41	84.37	84.56	84.59	84.89
7	84.43	84.38	---	84.37	84.81	---	84.86	84.39	84.37	84.49	84.67	84.88
8	84.43	84.38	---	84.38	84.83	---	84.84	84.41	84.36	84.48	84.63	84.86
9	84.43	84.38	---	84.38	84.88	---	84.83	84.41	84.36	84.46	84.61	84.91
10	84.43	84.38	---	84.88	84.88	84.63	84.81	84.41	84.36	84.45	84.59	85.07
11	84.43	84.38	---	85.50	84.92	84.62	84.80	84.39	84.38	84.44	84.57	85.08
12	84.42	84.39	---	85.51	84.93	84.62	84.79	84.38	84.37	84.44	84.74	85.09
13	84.42	84.39	84.30	85.39	84.93	84.94	84.84	84.38	84.38	84.44	85.41	85.08
14	84.42	84.39	84.36	85.09	84.90	85.69	84.84	84.37	84.39	84.43	85.13	85.08
15	84.42	84.39	84.34	85.07	84.90	85.72	84.82	84.37	84.39	84.42	84.80	85.07
16	84.38	84.38	84.33	85.05	84.90	86.11	84.79	84.36	84.38	84.41	84.79	85.06
17	84.37	84.38	84.32	85.04	84.87	86.82	84.76	84.35	84.37	84.39	84.77	85.05
18	84.37	84.38	84.33	85.03	84.88	86.87	84.74	84.35	84.37	84.46	84.76	85.07
19	84.37	84.38	84.32	85.04	84.95	86.76	84.72	84.34	84.40	84.46	84.77	85.32
20	84.37	84.38	84.32	85.03	85.30	86.71	84.69	84.36	84.46	84.44	84.84	85.60
21	84.36	84.38	84.32	85.02	85.25	86.73	84.67	84.37	84.42	84.43	84.88	85.60
22	84.36	84.37	84.32	85.00	84.80	86.75	84.65	84.34	84.40	84.43	85.03	85.37
23	84.35	84.37	84.32	84.99	84.79	86.75	84.63	84.33	84.41	84.44	85.20	85.03
24	84.35	84.37	84.33	84.97	84.78	86.20	84.60	84.32	84.40	84.43	85.19	85.00
25	84.35	84.36	84.34	84.95	84.77	85.16	84.58	84.31	84.46	84.42	85.19	84.97
26	84.35	84.35	84.32	84.96	84.72	85.13	84.56	84.30	84.43	84.45	85.32	84.95
27	84.34	84.35	---	84.97	---	85.10	84.54	84.30	84.41	84.48	85.28	84.92
28	84.36	84.34	---	84.95	---	85.07	84.52	84.29	84.41	84.51	84.93	84.90
29	84.39	84.34	---	84.93	---	85.05	84.50	84.28	84.40	84.50	84.87	84.87
30	84.39	84.34	---	84.90	---	85.03	84.49	84.25	84.41	84.52	84.88	84.85
31	84.40	---	---	84.89	---	85.00	---	84.26	---	84.58	84.88	---
MEAN	84.39	84.38	---	---	---	---	84.74	84.36	84.39	84.45	84.84	85.04
MAX	84.46	84.41	---	---	---	---	84.95	84.47	84.48	84.58	85.41	85.60
MIN	84.34	84.34	---	---	---	---	84.49	84.25	84.27	84.39	84.52	84.85

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 mi^2.

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, 85.14 ft, Mar. 25; minimum, 83.57 ft, June 2.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.99	84.26	84.10	84.07	84.85	84.70	84.96	84.33	83.61	84.01	84.36	84.84
2	83.99	84.27	84.09	84.11	84.84	84.69	84.95	84.31	83.68	84.01	84.35	84.83
3	84.04	84.28	84.07	84.12	84.83	84.68	84.92	84.29	83.99	83.99	84.34	84.83
4	84.26	84.27	84.05	84.12	84.83	84.67	84.89	84.26	84.00	83.98	84.33	84.82
5	84.26	84.27	84.04	84.11	84.82	84.65	84.88	84.24	83.99	84.06	84.35	84.81
6	84.25	84.25	84.04	84.10	84.80	84.64	84.86	84.23	83.98	84.27	84.36	84.80
7	84.25	84.25	84.02	84.10	84.79	84.62	84.85	84.21	83.96	84.28	84.39	84.80
8	84.23	84.24	84.01	84.11	84.80	84.60	84.83	84.25	83.94	84.28	84.39	84.78
9	84.22	84.22	84.00	84.13	84.84	84.59	84.81	84.19	83.92	84.26	84.38	84.82
10	84.23	84.23	83.99	84.35	84.85	84.58	84.80	84.16	83.90	84.24	84.37	84.98
11	84.23	84.25	83.98	84.54	84.87	84.57	84.79	84.14	83.90	84.23	84.37	84.99
12	84.23	84.24	83.96	84.79	84.87	84.55	84.81	84.11	83.90	84.22	84.40	85.01
13	84.22	84.24	83.96	84.99	84.84	84.46	84.83	84.09	83.90	84.21	84.39	85.01
14	84.21	84.24	84.03	85.08	84.84	84.06	84.82	84.06	83.93	84.21	84.49	85.01
15	84.21	84.23	84.03	85.06	84.82	84.16	84.79	84.04	83.96	84.18	84.71	85.00
16	84.20	84.23	84.02	85.05	84.81	84.14	84.74	84.01	83.97	84.16	84.72	84.99
17	84.18	84.21	84.01	85.04	84.80	83.82	84.71	83.99	83.97	84.14	84.71	84.97
18	84.17	84.20	84.00	85.03	84.81	84.00	84.68	83.95	83.96	84.22	84.69	84.97
19	84.17	84.20	83.99	85.04	84.80	83.95	84.66	83.93	83.97	84.24	84.70	84.93
20	84.15	84.19	83.98	85.02	84.69	83.82	84.63	83.96	84.05	84.23	84.77	84.79
21	84.15	84.21	83.97	85.01	84.59	83.76	84.59	83.95	84.05	84.21	84.80	84.79
22	84.14	84.19	83.96	84.99	84.75	83.72	84.56	83.93	84.05	84.19	84.82	84.83
23	84.12	84.17	83.95	84.97	84.75	83.74	84.54	83.89	84.05	84.19	84.77	84.96
24	84.11	84.17	83.96	84.95	84.75	84.22	84.51	83.86	84.04	84.18	84.77	84.96
25	84.09	84.17	83.97	84.94	84.73	85.13	84.49	83.84	84.06	84.16	84.79	84.93
26	84.09	84.15	83.97	84.92	84.72	85.11	84.46	83.82	84.08	84.16	84.79	84.90
27	84.08	84.14	83.96	84.91	84.72	85.10	84.43	83.79	84.06	84.21	84.75	84.87
28	84.10	84.13	83.95	84.90	84.70	85.06	84.39	83.74	84.04	84.29	84.72	84.85
29	84.13	84.12	83.94	84.90	---	85.04	84.37	83.70	84.02	84.30	84.76	84.82
30	84.17	84.11	83.93	84.89	---	85.02	84.36	83.67	84.01	84.31	84.78	84.79
31	84.23	---	83.93	84.88	---	85.00	---	83.64	---	84.36	84.80	---
MEAN	84.16	84.21	84.00	84.68	84.79	84.48	84.70	84.02	83.96	84.19	84.58	84.89
MAX	84.26	84.28	84.10	85.08	84.87	85.13	84.96	84.33	84.08	84.36	84.82	85.01
MIN	83.99	84.11	83.93	84.07	84.59	83.72	84.36	83.64	83.61	83.98	84.33	84.78

CAL YR 1985 MEAN 82.55 MAX 84.28 MIN 80.10
WTR YR 1986 MEAN 84.39 MAX 85.13 MIN 83.61

ST. JOHNS RIVER

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 mi^2.

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, 83.73 ft, Mar. 18; minimum, 79.50 ft, Apr. 15.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.89	79.97	80.07	80.09	80.17	80.04	80.05	79.95	79.96	80.09	80.18	80.32
2	79.89	79.97	80.06	80.10	80.17	80.04	80.05	79.95	80.00	80.08	80.18	80.32
3	79.91	79.96	80.06	80.11	80.17	80.04	79.87	79.96	80.03	80.08	80.18	80.33
4	79.94	79.95	80.07	80.11	80.16	80.04	79.60	79.97	80.03	80.03	80.18	80.33
5	79.93	79.95	80.07	80.11	80.15	80.04	79.60	79.97	80.03	80.05	80.18	80.33
6	79.93	79.95	80.07	80.11	80.15	80.04	79.60	79.99	80.03	80.06	80.15	80.33
7	79.95	79.95	80.07	80.10	80.14	80.04	79.59	80.01	80.03	80.05	80.16	80.34
8	79.95	79.95	80.07	80.10	80.15	80.03	79.57	80.00	80.02	80.06	80.16	80.34
9	79.94	79.95	80.07	80.09	80.12	80.03	79.55	79.55	80.03	80.06	80.16	80.37
10	79.95	79.96	80.07	80.57	80.02	80.04	79.54	79.97	80.03	80.08	80.15	80.39
11	79.96	79.96	80.07	81.41	80.02	80.03	79.53	---	80.03	80.09	80.17	80.38
12	79.96	79.95	80.07	81.43	80.01	80.03	79.53	80.01	80.03	80.10	80.55	80.38
13	79.96	79.94	80.08	81.03	80.02	80.76	79.53	---	80.04	80.11	81.83	80.38
14	79.96	79.94	80.09	80.15	80.03	82.05	79.51	---	80.04	80.12	81.28	80.38
15	79.97	79.93	80.08	80.14	80.02	82.07	79.70	---	80.05	80.13	80.23	80.38
16	79.98	79.92	80.08	80.13	80.03	82.47	79.94	---	80.05	80.13	80.23	80.38
17	79.98	79.92	80.08	80.13	80.02	83.40	79.95	---	80.05	80.13	80.24	80.39
18	79.99	79.94	80.07	80.13	80.03	83.69	79.95	---	80.05	80.16	80.25	80.39
19	79.99	79.96	80.06	80.14	80.39	83.65	79.96	---	80.07	80.16	80.26	81.31
20	79.99	79.96	80.05	80.19	81.42	83.54	79.97	---	80.08	80.16	80.28	82.06
21	79.98	79.96	80.04	80.19	80.93	83.50	79.97	---	80.08	80.16	80.29	82.06
22	79.98	79.93	80.04	80.19	79.94	83.46	79.98	---	80.08	80.16	80.79	81.74
23	79.98	79.93	80.04	80.18	79.94	83.47	79.98	80.00	80.08	80.15	81.38	80.37
24	79.98	79.93	80.04	80.18	79.95	81.98	79.99	---	80.08	80.15	81.37	80.36
25	79.96	79.93	80.05	80.19	79.99	80.07	79.99	---	80.09	80.15	81.37	80.35
26	79.97	79.99	80.05	80.19	80.04	80.05	80.00	---	80.09	80.15	81.63	80.35
27	79.98	80.07	80.05	80.18	80.04	80.05	80.01	---	80.09	80.16	81.89	80.34
28	79.98	80.08	80.05	80.19	80.04	80.04	80.02	79.94	80.09	80.17	81.30	80.35
29	79.98	80.07	80.05	80.19	---	80.04	80.03	79.97	80.09	80.16	80.30	80.35
30	79.99	80.07	80.05	80.18	---	80.04	79.98	79.96	80.08	80.16	80.31	80.35
31	79.99	---	80.06	80.18	---	80.04	---	79.96	---	80.18	80.32	---
MEAN	79.96	79.96	80.06	80.27	80.15	81.12	79.82	---	80.05	80.12	80.58	80.55
MAX	79.99	80.08	80.09	81.43	81.42	83.69	80.05	---	80.09	80.18	81.89	82.06
MIN	79.89	79.92	80.04	80.09	79.94	80.03	79.51	---	79.96	80.03	80.15	80.32

CAL YR 1985 MEAN 79.43 MAX 80.09 MIN 78.80

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 mi^2.

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.--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.--15 years (water years 1971-75, 1977-86), 18.7 ft^3/s, 1.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 486 ft^3/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, 296 ft^3/s, Mar. 19; maximum gage height, 72.75 ft, Mar. 24; no flow, Apr. 5-8; minimum gage height, 66.54 ft, Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.3	3.2	3.6	5.6	3.7	5.8	5.8	3.1	5.9	3.2	8.3
2	2.9	3.2	3.1	3.6	5.6	3.6	7.0	4.9	3.1	5.9	3.1	6.7
3	3.0	3.0	3.0	3.5	5.2	3.5	10	4.1	6.1	5.8	3.0	5.8
4	5.0	3.0	3.0	3.4	5.0	3.5	.15	3.8	6.6	5.9	3.0	5.4
5	4.7	2.8	3.0	3.3	4.9	3.5	.00	3.7	5.6	8.3	3.0	4.5
6	3.7	2.7	3.1	3.2	4.6	3.5	.00	3.6	4.6	8.5	3.0	3.9
7	3.4	2.7	3.0	3.2	4.5	3.4	.00	3.6	4.1	7.0	2.9	3.8
8	3.2	2.7	3.0	3.2	5.2	3.4	.00	3.8	3.7	6.7	2.9	3.7
9	3.2	2.6	3.0	3.2	6.4	3.3	.14	3.7	3.7	6.1	2.8	4.1
10	3.1	2.7	3.0	12	5.8	3.4	.52	3.6	3.6	5.2	2.7	7.0
11	3.1	2.8	2.9	47	4.1	3.4	.84	3.4	3.7	3.5	2.6	5.9
12	3.1	2.8	2.9	48	3.8	3.4	1.0	3.3	3.7	3.2	2.9	5.2
13	3.1	2.8	3.0	46	3.6	6.2	1.4	3.2	4.3	3.1	28	4.3
14	3.1	2.7	3.4	12	3.6	91	1.5	3.2	6.7	3.0	40	3.8
15	3.0	2.6	3.3	8.1	3.6	97	1.5	3.3	6.7	3.0	9.8	3.7
16	3.0	2.6	3.2	7.4	3.5	91	2.1	3.3	6.7	2.9	5.6	3.7
17	2.9	2.6	3.1	7.2	3.5	171	3.1	3.2	7.0	2.9	4.1	3.6
18	2.9	2.5	3.1	7.2	3.6	293	3.4	3.2	6.4	3.1	3.7	3.6
19	2.9	2.6	3.0	7.4	3.8	296	3.6	3.2	6.7	3.3	3.6	7.9
20	2.9	2.6	3.0	7.0	42	280	3.8	3.3	7.4	3.2	4.6	49
21	2.9	2.8	3.0	6.7	67	271	4.9	3.6	7.0	3.0	6.7	50
22	2.9	2.8	3.0	6.7	8.3	266	5.9	3.6	7.0	3.0	7.4	50
23	2.9	2.7	3.0	6.7	6.1	267	6.1	3.5	7.0	3.1	26	13
24	2.9	2.6	3.0	6.4	4.6	211	6.1	3.5	6.7	3.1	28	6.4
25	2.8	2.6	3.1	6.1	3.8	13	6.1	3.4	6.7	3.0	28	5.4
26	2.8	2.5	3.0	7.0	3.6	8.1	6.7	3.3	6.7	2.9	30	5.9
27	2.9	2.6	3.0	6.7	3.7	7.2	6.7	3.2	6.1	3.0	44	4.5
28	3.0	2.9	3.0	5.8	3.6	6.7	6.7	3.2	6.1	3.3	43	3.8
29	3.0	3.0	3.0	5.8	---	6.1	6.7	3.1	6.1	3.2	7.2	3.6
30	3.2	3.0	2.9	5.8	---	5.9	6.4	3.1	6.4	3.2	6.7	3.5
31	3.2	---	2.9	5.8	---	5.8	---	3.1	---	3.4	6.4	---
TOTAL	97.6	82.8	94.2	309.0	228.6	2434.6	108.15	109.8	169.3	130.7	367.9	290.0
MEAN	3.15	2.76	3.04	9.97	8.16	78.5	3.60	3.54	5.64	4.22	11.9	9.67
MAX	5.0	3.3	3.4	48	67	296	10	5.8	7.4	8.5	44	50
MIN	2.8	2.5	2.9	3.2	3.5	3.3	.00	3.1	3.1	2.9	2.6	3.5
CFSM	.01	.01	.01	.05	.04	.36	.02	.02	.03	.02	.05	.04
IN.	.02	.01	.02	.05	.04	.41	.02	.02	.03	.02	.06	.05

CAL YR 1985	TOTAL	612.54	MEAN	1.68	MAX	19	MIN	.00	CFSM	.01	IN.	.10
WTR YR 1986	TOTAL	4422.65	MEAN	12.1	MAX	296	MIN	.00	CFSM	.05	IN.	.74

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 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.84	70.96	70.92	71.09	71.27	71.10	71.28	71.28	70.89	71.29	70.94	71.38
2	70.83	70.93	70.91	71.09	71.27	71.08	71.33	71.23	70.91	71.29	70.91	71.32
3	70.86	70.88	70.88	71.03	71.25	71.06	68.86	71.18	71.30	71.28	70.88	71.28
4	71.26	70.86	70.87	70.99	71.24	71.05	67.04	71.14	71.31	71.29	70.88	71.26
5	71.23	70.82	70.88	70.96	71.23	71.05	68.66	71.10	71.27	71.38	70.87	71.21
6	71.13	70.79	70.89	70.93	71.22	71.03	69.28	71.08	71.22	71.39	70.87	71.17
7	71.01	70.78	70.88	70.92	71.21	71.02	69.65	71.07	71.18	71.33	70.85	71.16
8	70.96	70.78	70.87	70.95	71.25	70.99	69.92	71.14	71.13	71.32	70.83	71.13
9	70.93	70.77	70.87	70.95	71.31	70.98	70.12	71.12	71.10	71.30	70.81	71.14
10	70.91	70.79	70.86	71.35	71.28	70.99	70.27	71.07	71.09	71.25	70.78	71.33
11	70.91	70.80	70.85	71.91	71.18	71.00	70.37	71.02	71.10	71.05	70.77	71.29
12	70.90	70.80	70.85	71.92	71.14	71.00	70.42	70.98	71.10	70.94	70.85	71.25
13	70.90	70.80	70.86	71.90	71.08	71.08	70.52	70.95	71.18	70.90	71.68	71.20
14	70.89	70.78	71.01	71.46	71.07	72.40	70.53	70.95	71.32	70.88	71.82	71.16
15	70.87	70.77	70.96	71.37	71.07	72.45	70.53	70.97	71.32	70.86	71.42	71.12
16	70.86	70.76	70.92	71.35	71.05	70.91	70.67	70.96	71.32	70.85	71.27	71.10
17	70.85	70.76	70.90	71.34	71.05	68.74	70.89	70.95	71.33	70.84	71.18	71.08
18	70.85	70.75	70.89	71.34	71.08	69.07	71.02	70.94	71.31	70.89	71.12	71.08
19	70.85	70.76	70.88	71.35	71.12	69.09	71.09	70.94	71.32	70.98	71.09	71.29
20	70.85	70.77	70.87	71.33	71.85	69.00	71.16	70.98	71.35	70.92	71.19	71.93
21	70.84	70.80	70.87	71.32	72.15	68.95	71.23	71.09	71.33	70.88	71.32	71.95
22	70.83	70.81	70.86	71.32	71.38	68.92	71.29	71.07	71.33	70.86	71.35	71.95
23	70.83	70.77	70.86	71.32	71.30	68.93	71.30	71.05	71.33	70.91	71.66	71.48
24	70.83	70.77	70.87	71.31	71.22	70.10	71.30	71.03	71.32	70.89	71.68	71.31
25	70.82	70.76	70.89	71.30	71.14	71.48	71.30	70.99	71.32	70.87	71.67	71.26
26	70.82	70.75	70.88	71.33	71.09	71.37	71.32	70.97	71.32	70.84	71.70	71.29
27	70.83	70.77	70.87	71.32	71.10	71.34	71.32	70.94	71.30	70.86	71.87	71.21
28	70.86	70.84	70.87	71.28	71.09	71.32	71.32	70.93	71.30	70.96	71.86	71.14
29	70.88	70.86	70.86	71.28	---	71.30	71.32	70.91	71.30	70.94	71.43	71.09
30	70.92	70.88	70.85	71.28	---	71.29	71.31	70.90	71.31	70.93	71.32	71.04
31	70.93	---	70.85	71.28	---	71.28	---	70.89	---	70.99	71.31	---
MEAN	70.91	70.80	70.88	71.29	71.24	70.69	70.55	71.03	71.24	71.04	71.23	71.29
MAX	71.26	70.96	71.01	71.92	72.15	72.45	71.33	71.28	71.35	71.39	71.87	71.95
MIN	70.82	70.75	70.85	70.92	71.05	68.74	67.04	70.89	70.89	70.84	70.77	71.04

CAL YR 1985 MEAN 68.55 MAX 71.40 MIN 66.27
WTR YR 1986 MEAN 71.01 MAX 72.45 MIN 67.04

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 mi^2.

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.--28 years (water years 1959-86), 79.1 ft^3/s, 57,310 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 754 ft^3/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, 471 ft^3/s, Jan. 13; maximum gage height, 67.67 ft, Feb. 11, affected by wind; minimum daily discharge, 30 ft^3/s, many days; minimum gage height, 65.17 ft, June 10, affected by wind.

REVISIONS.--Revised table of mean daily gage heights for water year 1985 is given on page 96. These figures supersede those for July 14 to September 30, 1985 published in the report for 1985.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	36	35	35	37	159	36	33	31	32	30	33
2	35	35	35	35	37	160	36	33	31	32	30	33
3	35	35	34	35	37	160	36	33	31	32	31	33
4	36	35	34	36	37	160	36	33	30	32	31	33
5	35	35	35	35	37	159	35	33	30	32	31	33
6	36	35	35	35	37	159	35	33	30	32	31	34
7	35	35	34	35	37	120	35	33	30	32	32	35
8	35	35	34	35	37	56	35	33	30	32	32	35
9	35	35	35	36	37	57	35	32	30	32	32	34
10	35	35	35	37	37	57	35	32	30	32	32	35
11	36	36	35	37	37	57	35	32	30	32	32	35
12	35	35	35	229	37	57	35	32	30	32	32	34
13	35	35	35	471	37	58	35	32	30	32	32	34
14	35	35	34	470	37	97	35	32	31	32	32	34
15	36	35	34	470	37	160	35	32	31	31	32	34
16	35	35	35	469	37	162	34	32	31	31	32	34
17	35	35	35	469	37	101	34	32	31	31	32	35
18	35	35	35	468	215	50	34	32	31	31	32	34
19	35	35	34	463	301	37	34	32	31	31	32	34
20	35	35	34	462	301	36	34	32	31	31	33	34
21	35	36	34	379	301	36	34	32	31	31	33	34
22	35	35	34	258	300	35	34	31	31	31	33	34
23	35	34	35	257	299	36	34	32	32	31	33	36
24	35	35	35	125	297	36	34	32	32	30	33	34
25	35	35	34	37	204	36	34	32	32	30	33	34
26	35	35	34	36	162	36	33	32	32	31	33	34
27	35	35	35	35	161	36	33	32	32	31	33	34
28	35	35	35	36	161	36	33	31	32	31	33	35
29	35	35	34	37	---	36	33	31	32	31	33	40
30	35	35	34	36	---	36	33	31	32	31	33	35
31	35	---	35	37	---	36	---	31	---	31	33	---
TOTAL	1089	1052	1071	5635	3331	2457	1034	995	928	973	996	1030
MEAN	35.1	35.1	34.5	182	119	79.3	34.5	32.1	30.9	31.4	32.1	34.3
MAX	36	36	35	471	301	162	36	33	32	32	33	40
MIN	35	34	34	35	37	35	33	31	30	30	30	33
AC-FT	2160	2090	2120	11180	6610	4870	2050	1970	1840	1930	1980	2040

CAL YR 1985	TOTAL	11597	MEAN	31.8	MAX	149	MIN	30	AC-FT	23000
WTR YR 1986	TOTAL	20591	MEAN	56.4	MAX	471	MIN	30	AC-FT	40840

ST. JOHNS RIVER

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

MAY	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	65.72	67.09
2	66.70	66.53	66.46	66.40	66.17	66.06	65.86	65.46	65.02	65.55	65.66	66.49
3	66.71	66.56	66.46	66.46	66.37	65.98	65.76	65.39	65.01	65.57	65.69	66.54
4	66.71	66.54	66.46	66.30	66.19	66.10	65.58	65.34	65.02	65.53	65.75	66.66
5	66.70	66.51	66.48	66.13	66.20	66.11	65.82	65.42	65.07	65.46	65.72	66.78
6	66.68	66.38	66.43	66.31	66.15	66.06	65.90	65.39	65.03	65.39	65.78	66.80
7	66.67	66.37	66.32	66.39	66.18	66.08	65.78	65.37	65.03	65.31	65.67	66.69
8	66.66	66.40	66.44	66.38	65.84	65.92	65.83	65.36	65.03	65.48	65.97	66.69
9	66.63	66.42	66.42	66.37	66.10	65.95	65.57	65.37	64.99	65.42	65.90	66.69
10	66.58	66.43	66.43	66.25	66.21	65.91	65.59	65.30	64.98	65.62	65.90	66.70
11	66.58	66.40	66.43	66.38	66.21	65.94	65.78	65.28	65.00	65.55	66.00	66.72
12	66.60	66.33	66.43	65.98	66.08	65.94	65.70	65.23	65.01	65.62	66.04	66.69
13	66.62	66.34	66.44	66.20	66.16	65.89	65.84	65.23	65.07	65.55	66.07	66.60
14	66.62	66.37	66.43	66.24	66.21	65.84	65.79	65.19	65.09	65.46	66.13	66.61
15	66.62	66.38	66.43	66.28	65.90	65.94	65.80	65.18	65.24	65.62	66.12	66.59
16	66.62	66.37	66.43	66.26	66.16	65.94	65.68	65.10	65.30	65.61	66.18	66.60
17	66.62	66.36	66.44	66.41	66.08	65.98	65.70	64.98	65.32	65.56	66.24	66.49
18	66.61	66.37	66.44	66.36	66.11	65.66	65.70	64.97	65.26	65.49	66.12	66.61
19	66.61	66.39	66.43	66.28	66.13	65.80	65.64	65.05	65.29	65.54	66.35	66.64
20	66.62	66.32	66.45	66.29	66.12	65.85	65.70	65.09	65.39	65.60	66.22	66.58
21	66.61	66.26	66.44	65.86	66.08	66.01	65.66	65.11	65.41	65.66	66.30	66.69
22	66.57	66.18	66.48	66.12	66.08	66.00	65.58	65.16	65.45	65.70	66.35	66.79
23	66.56	66.11	66.43	66.20	66.16	65.90	65.68	65.19	65.47	65.66	66.36	66.82
24	66.54	66.33	66.41	66.27	66.14	66.00	65.60	65.20	65.42	65.58	66.20	66.77
25	66.50	66.45	66.40	66.28	66.10	65.90	65.69	65.22	65.44	65.70	66.37	66.81
26	66.47	66.48	66.40	65.90	66.09	65.89	65.50	65.21	65.55	65.62	66.44	66.68
27	66.57	66.50	66.44	66.20	66.16	65.88	65.52	65.22	65.58	65.59	66.28	66.76
28	66.61	66.46	66.44	66.24	66.18	65.94	65.54	65.20	65.62	65.70	66.40	66.70
29	66.61	66.42	66.36	66.11	---	65.90	65.43	65.15	65.62	65.73	66.40	66.74
30	66.59	66.46	66.37	66.20	---	65.89	65.45	65.13	65.69	65.61	66.56	66.74
31	66.58	---	66.35	66.28	---	65.94	---	65.08	---	65.63	66.78	---
MEAN	66.62	66.40	66.43	66.25	66.14	65.95	65.68	65.23	65.25	65.57	66.12	66.69
MAX	66.71	66.56	66.48	66.46	66.46	66.11	65.90	65.47	65.69	65.73	66.78	67.09
MIN	66.47	66.11	66.32	65.86	65.84	65.66	65.43	64.97	64.98	65.31	65.66	66.49

CAL YR 1984 MEAN 66.51 MAX 66.94 MIN 65.84
WTR YR 1985 MEAN 66.03 MAX 67.09 MIN 64.97

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237700 APOPKA-BEAUCLAIR CANAL NEAR ASTATULA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.76	67.04	66.74	66.81	67.10	66.80	66.89	66.36	65.90	66.14	65.85	66.41
2	66.78	66.82	66.69	66.84	67.10	66.85	66.87	66.33	65.87	66.10	65.85	66.40
3	66.77	66.82	66.53	66.86	67.10	66.88	66.90	66.26	65.86	66.09	65.86	66.36
4	66.90	66.69	66.63	66.88	67.11	66.87	66.89	66.30	65.85	66.14	65.87	66.38
5	66.74	66.78	66.65	66.79	67.13	66.83	66.86	66.36	65.84	66.16	65.93	66.40
6	66.87	66.69	66.66	66.84	67.11	66.80	66.83	66.31	65.83	66.16	66.02	66.47
7	66.76	66.75	66.55	66.85	67.10	66.83	66.80	66.26	65.84	66.16	66.06	66.49
8	66.86	66.76	66.61	66.84	67.15	66.89	66.75	66.25	65.83	66.15	66.05	66.51
9	66.82	66.76	66.68	66.91	67.21	66.95	66.69	66.21	65.82	66.12	66.06	66.57
10	66.85	66.76	66.65	67.12	67.23	66.95	66.66	66.23	65.78	66.08	66.06	66.65
11	66.90	66.88	66.70	67.17	67.23	66.92	66.66	66.22	65.77	66.06	66.07	66.64
12	66.84	66.73	66.65	67.06	67.17	66.95	66.68	66.21	65.80	66.08	66.08	66.64
13	66.74	66.74	66.70	66.73	67.14	67.06	66.70	66.17	65.83	66.09	66.21	66.62
14	66.80	66.72	66.57	66.72	67.19	66.96	66.70	66.18	65.88	66.05	66.21	66.63
15	66.87	66.78	66.64	66.72	67.16	66.88	66.68	66.19	65.93	66.02	66.18	66.62
16	66.83	66.78	66.65	66.71	67.19	66.97	66.58	66.15	65.93	66.01	66.19	66.60
17	66.84	66.73	66.66	66.70	67.20	67.00	66.54	66.13	65.89	66.01	66.20	66.59
18	66.84	66.73	66.66	66.68	67.06	67.11	66.58	66.13	65.91	65.98	66.20	66.58
19	66.76	66.73	66.64	66.61	66.95	67.11	66.57	66.08	65.96	65.91	66.22	66.57
20	66.82	66.73	66.63	66.59	66.94	66.94	66.60	66.10	66.02	65.88	66.30	66.57
21	66.81	66.89	66.61	66.76	66.93	66.91	66.55	66.06	66.04	65.87	66.30	66.56
22	66.85	66.84	66.61	66.96	66.91	66.83	66.45	66.02	66.02	65.87	66.34	66.56
23	66.69	66.63	66.65	66.93	66.88	66.90	66.46	66.06	66.09	65.86	66.35	66.57
24	66.78	66.73	66.66	67.00	66.83	66.94	66.48	66.08	66.09	65.83	66.32	66.57
25	66.76	66.72	66.51	67.10	66.82	66.95	66.45	66.05	66.20	65.84	66.34	66.56
26	66.70	66.69	66.59	67.08	66.96	66.95	66.42	66.06	66.23	65.86	66.36	66.54
27	66.79	66.69	66.65	66.86	66.93	66.94	66.40	66.06	66.22	65.86	66.36	66.54
28	66.80	66.70	66.65	67.03	66.93	66.92	66.38	66.02	66.20	65.87	66.36	66.52
29	66.78	66.78	66.62	67.09	---	66.91	66.36	65.97	66.21	65.94	66.36	66.51
30	66.84	66.82	66.63	67.08	---	66.91	66.39	65.92	66.15	65.88	66.39	66.50
31	66.85	---	66.67	67.09	---	66.91	---	65.88	---	65.86	66.38	---
MEAN	66.81	66.76	66.64	66.88	67.06	66.92	66.63	66.15	65.96	66.00	66.17	66.54
MAX	66.90	67.04	66.74	67.17	67.23	67.11	66.90	66.36	66.23	66.16	66.39	66.65
MIN	66.69	66.63	66.51	66.59	66.82	66.80	66.36	65.88	65.77	65.83	65.85	66.36

CAL YR 1985 MEAN 66.09 MAX 67.09 MIN 64.97
WTR YR 1986 MEAN 66.54 MAX 67.23 MIN 65.77

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 3080102, 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 mi^2.

PERIOD OF RECORD.--January 1957 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and 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, 64.21 ft, Jan. 21; minimum, 62.22 ft, Dec. 31, June 2.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.38	62.40	62.33	62.38	63.01	63.49	62.95	62.58	62.28	62.61	62.49	62.85
2	62.37	62.44	62.37	62.40	63.00	63.46	62.94	62.57	62.27	62.61	62.47	62.87
3	62.37	62.42	62.37	62.40	62.99	63.45	62.94	62.59	62.27	62.60	62.46	62.88
4	62.42	62.44	62.33	62.40	62.98	63.42	62.92	62.55	62.30	62.63	62.46	62.88
5	62.44	62.41	62.32	62.44	62.98	63.43	62.90	62.49	62.34	62.83	62.46	62.87
6	62.47	62.39	62.35	62.43	62.99	63.40	62.89	62.47	62.29	62.99	62.46	62.89
7	62.44	62.36	62.33	62.44	63.00	63.35	62.89	62.48	62.30	62.95	62.45	62.92
8	62.40	62.37	62.30	62.48	63.02	63.23	62.89	62.50	62.31	62.91	62.42	62.98
9	62.40	62.36	62.29	62.47	63.06	63.18	62.90	62.54	62.30	62.87	62.41	63.02
10	62.38	62.36	62.27	62.74	63.08	63.14	62.88	62.55	62.31	62.85	62.39	63.11
11	62.40	62.36	62.27	62.98	63.11	63.14	62.84	62.49	62.35	62.83	62.36	63.07
12	62.41	62.37	62.27	63.36	63.14	63.12	62.83	62.46	62.37	62.81	62.40	63.05
13	62.41	62.37	62.27	64.04	63.13	63.09	62.86	62.46	62.40	62.78	62.54	63.04
14	62.39	62.37	62.42	64.07	63.08	63.16	62.83	62.44	62.42	62.76	62.55	63.04
15	62.38	62.36	62.39	64.10	63.09	63.33	62.81	62.43	62.43	62.74	62.57	63.01
16	62.38	62.36	62.36	64.12	63.09	63.39	62.81	62.41	62.42	62.71	62.58	62.98
17	62.38	62.37	62.34	64.14	63.07	63.34	62.80	62.39	62.42	62.70	62.57	62.95
18	62.37	62.36	62.33	64.14	63.43	63.24	62.78	62.38	62.42	62.75	62.56	62.95
19	62.35	62.35	62.32	64.16	63.65	63.19	62.76	62.37	62.41	62.71	62.57	62.95
20	62.35	62.34	62.30	64.17	63.69	63.33	62.71	62.39	62.43	62.68	62.62	62.93
21	62.35	62.30	62.30	64.01	63.71	63.21	62.71	62.43	62.45	62.64	62.63	62.91
22	62.34	62.33	62.29	63.71	63.73	63.18	62.72	62.43	62.46	62.61	62.67	62.89
23	62.33	62.37	62.27	63.69	63.75	63.10	62.71	62.41	62.45	62.59	62.69	62.88
24	62.32	62.36	62.27	63.48	63.76	63.04	62.67	62.40	62.45	62.57	62.69	62.86
25	62.32	62.35	62.32	63.27	63.63	63.01	62.65	62.39	62.56	62.56	62.70	62.86
26	62.30	62.34	62.32	63.22	63.50	62.99	62.64	62.36	62.59	62.54	62.74	62.84
27	62.28	62.33	62.28	63.20	63.47	62.98	62.64	62.34	62.57	62.54	62.75	62.83
28	62.29	62.33	62.27	63.14	63.48	62.99	62.63	62.32	62.56	62.54	62.75	62.83
29	62.32	62.33	62.27	63.08	---	62.99	62.62	62.31	62.60	62.51	62.75	62.83
30	62.34	62.33	62.28	63.06	---	62.98	62.60	62.29	62.62	62.50	62.74	62.81
31	62.36	---	62.26	63.03	---	62.96	---	62.29	---	62.51	62.77	---
MEAN	62.37	62.36	62.31	63.25	63.27	63.20	62.79	62.44	62.41	62.69	62.57	62.93
MAX	62.47	62.44	62.42	64.17	63.76	63.49	62.95	62.59	62.62	62.99	62.77	63.11
MIN	62.28	62.30	62.26	62.38	62.98	62.96	62.60	62.29	62.27	62.50	62.36	62.81

CAL YR 1985 MEAN 62.08 MAX 63.09 MIN 61.36
WTR YR 1986 MEAN 62.71 MAX 64.17 MIN 62.26

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 mi^2.

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 ft^3/s, Mar. 25, 1958; minimum measured, -74 ft^3/s, June 22, 1981.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1985 to SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT			MAR		
08...	1408	56	26...	1340	0.0
NOV			MAY		
26...	0810	0.0	22...	1245	0.0
JAN			SEP		
31...	1200	0.0	12...	1000	0.0

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 mi^2.

PERIOD OF RECORD.--July 1942 to September 1978, October 1978 to September 1985 (gage heights only), October 1985 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. 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.--Records fair. Since Dec. 23, 1956, flow regulated at station by manipulation of gates in spillway.

AVERAGE DISCHARGE.--14 years (water years 1943-56), 292 ft^3/s, 6.20 in/yr; 23 years (water years 1957-78, 1986), 244 ft^3/s, 176,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,350 ft^3/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; mimimum gage height, 56.84 ft, Jan. 20, 1957, former site and present datum; minimum discharge prior to closure of coffer dam, 66 ft^3/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 daily discharge, 1,220 ft^3/s, Mar. 18; maximum gage height, 63.19 ft, Feb. 27; minimum daily discharge, 8.3 ft^3/s, June 5; minimum gage height, 62.08 ft, Jan 1, affected by wind.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	52	42	51	54	402	47	56	18	54	58	142
2	35	47	38	57	55	403	46	53	11	58	61	145
3	35	48	30	60	56	404	45	52	9.4	57	59	142
4	43	36	33	60	58	399	43	42	9.7	58	51	142
5	48	36	35	54	60	386	40	43	8.3	74	52	142
6	40	33	32	54	59	387	40	40	9.1	109	53	145
7	32	32	33	55	58	345	47	41	17	111	50	145
8	32	31	34	53	62	308	55	45	14	111	48	111
9	31	33	33	62	71	311	52	47	10	192	46	62
10	30	38	36	117	82	196	43	40	13	266	47	82
11	42	38	38	154	72	94	41	39	18	259	39	85
12	43	40	38	520	56	97	45	35	20	257	45	85
13	43	41	42	1030	51	102	46	32	24	253	66	80
14	40	41	45	1010	57	169	41	32	30	240	72	78
15	37	41	36	988	58	272	40	31	28	235	74	175
16	44	44	37	446	58	292	40	28	26	268	76	338
17	40	45	34	70	61	845	32	33	25	305	85	331
18	42	39	35	74	63	1220	30	32	28	302	73	320
19	38	37	32	85	68	1060	28	26	27	299	74	320
20	37	38	33	88	69	859	32	30	31	292	92	320
21	33	44	30	91	71	844	28	29	37	282	90	314
22	28	45	30	93	73	815	24	28	36	270	101	121
23	28	38	32	95	73	805	19	27	35	265	103	36
24	28	40	35	94	63	320	17	35	37	262	101	34
25	24	40	31	103	51	52	18	32	49	262	97	33
26	27	43	29	109	56	53	18	31	49	263	98	31
27	26	42	33	73	64	52	17	22	47	257	108	30
28	28	43	33	43	206	49	14	19	52	137	110	28
29	31	43	31	48	---	49	37	17	55	63	110	25
30	40	42	31	49	---	48	56	15	53	62	110	26
31	46	---	33	50	---	45	---	17	---	60	115	---
TOTAL	1106	1210	1064	5936	1885	11683	1081	1049	826.5	5983	2364	4068
MEAN	35.7	40.3	34.3	191	67.3	377	36.0	33.8	27.6	193	76.3	136
MAX	48	52	45	1030	206	1220	56	56	55	305	115	338
MIN	24	31	29	43	51	45	14	15	8.3	54	39	25

WTR YR 1986 TOTAL 38255.5 MEAN 105 MAX 1220 MIN 8.3

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238000 HAINES CREEK AT LISBON, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.32	62.37	62.26	62.30	62.90	63.03	62.88	62.52	62.24	62.51	62.43	62.81
2	62.32	62.33	62.25	62.32	62.90	63.03	62.88	62.50	62.22	62.53	62.43	62.82
3	62.32	62.33	62.19	62.33	62.91	63.03	62.88	62.47	62.22	62.53	62.42	62.81
4	62.36	62.30	62.20	62.33	62.92	63.02	62.87	62.42	62.21	62.51	62.40	62.81
5	62.38	62.28	62.22	62.32	62.93	62.98	62.84	62.45	62.20	62.59	62.41	62.81
6	62.34	62.26	62.20	62.31	62.93	62.98	62.83	62.44	62.21	62.75	62.41	62.82
7	62.30	62.25	62.18	62.32	62.92	62.97	62.83	62.44	62.24	62.78	62.39	62.82
8	62.28	62.24	62.19	62.31	62.95	62.95	62.82	62.46	62.23	62.78	62.38	62.83
9	62.28	62.23	62.19	62.35	62.99	62.95	62.80	62.47	62.22	62.75	62.35	62.86
10	62.28	62.26	62.20	62.61	63.04	62.99	62.74	62.42	62.23	62.73	62.35	62.96
11	62.35	62.27	62.22	62.75	63.06	63.00	62.74	62.40	62.29	62.71	62.33	62.97
12	62.34	62.28	62.22	62.62	63.02	63.01	62.73	62.41	62.30	62.69	62.36	62.97
13	62.34	62.29	62.25	62.35	63.00	63.04	62.75	62.38	62.32	62.67	62.48	62.95
14	62.34	62.29	62.27	62.32	63.02	63.05	62.74	62.38	62.35	62.65	62.50	62.94
15	62.32	62.29	62.22	62.29	63.02	63.05	62.74	62.38	62.34	62.63	62.52	62.91
16	62.35	62.29	62.22	62.48	63.02	63.11	62.73	62.36	62.35	62.59	62.51	62.85
17	62.32	62.28	62.20	62.68	63.03	62.86	62.68	62.35	62.34	62.55	62.51	62.83
18	62.33	62.27	62.20	62.70	63.05	62.63	62.67	62.35	62.36	62.54	62.51	62.80
19	62.30	62.26	62.19	62.76	63.07	62.69	62.64	62.35	62.36	62.52	62.52	62.80
20	62.28	62.27	62.19	62.77	63.07	62.84	62.66	62.38	62.38	62.50	62.60	62.80
21	62.29	62.33	62.18	62.78	63.08	62.81	62.67	62.37	62.40	62.48	62.59	62.78
22	62.25	62.31	62.18	62.79	63.09	62.75	62.63	62.36	62.39	62.44	62.64	62.80
23	62.25	62.25	62.19	62.80	63.11	62.72	62.59	62.35	62.40	62.43	62.64	62.82
24	62.24	62.25	62.20	62.80	63.11	62.84	62.58	62.36	62.42	62.42	62.62	62.81
25	62.21	62.26	62.19	62.83	63.09	62.92	62.57	62.34	62.49	62.42	62.62	62.80
26	62.22	62.27	62.17	62.87	63.12	62.92	62.56	62.34	62.49	62.41	62.63	62.79
27	62.22	62.27	62.18	62.86	63.15	62.92	62.55	62.32	62.48	62.39	62.67	62.78
28	62.24	62.27	62.18	62.86	63.10	62.91	62.55	62.30	62.48	62.44	62.68	62.77
29	62.25	62.26	62.18	62.87	---	62.89	62.53	62.28	62.49	62.46	62.68	62.75
30	62.31	62.26	62.17	62.88	---	62.88	62.52	62.26	62.51	62.45	62.68	62.76
31	62.35	---	62.18	62.88	---	62.88	---	62.24	---	62.44	62.70	---
MEAN	62.30	62.28	62.20	62.59	63.02	62.92	62.71	62.38	62.34	62.56	62.51	62.83
MAX	62.38	62.37	62.27	62.88	63.15	63.11	62.88	62.52	62.51	62.78	62.70	62.97
MIN	62.21	62.23	62.17	62.29	62.90	62.63	62.52	62.24	62.20	62.39	62.33	62.75

CAL YR 1985 MEAN 61.96 MAX 62.38 MIN 61.29
WTR YR 1986 MEAN 62.55 MAX 63.15 MIN 62.17

ST. JOHNS RIVER

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 mi^2.

PERIOD OF RECORD.--March 1957 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and 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, 60.28 ft, Mar. 17; minimum, 57.98 ft, June 30, affected by wind.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.52	58.87	58.79	58.83	59.32	59.42	58.98	58.59	58.22	58.42	58.56	58.93
2	58.52	58.87	58.80	58.85	59.33	59.38	58.98	58.58	58.17	58.43	58.53	58.96
3	58.55	58.88	58.77	58.86	59.33	59.39	58.96	58.55	58.17	58.42	58.52	58.97
4	58.71	58.91	58.75	58.87	59.34	59.38	58.93	58.52	58.17	58.40	58.51	58.98
5	58.76	58.88	58.75	58.88	59.36	59.39	58.92	58.51	58.16	58.40	58.49	59.00
6	58.76	58.85	58.76	58.86	59.37	59.41	58.92	58.49	58.16	58.44	58.50	59.02
7	58.72	58.84	58.72	58.87	59.38	59.38	58.91	58.50	58.16	58.44	58.48	59.03
8	58.70	58.82	58.71	58.89	59.44	59.34	58.91	58.52	58.16	58.45	58.47	59.05
9	58.69	58.82	58.70	58.92	59.43	59.33	58.91	58.51	58.18	58.50	58.44	59.06
10	58.79	58.85	58.70	59.19	59.35	59.29	58.88	58.46	58.19	58.57	58.43	59.08
11	58.83	58.84	58.69	59.44	59.32	59.25	58.87	58.45	58.26	58.57	58.41	59.11
12	58.85	58.86	58.69	59.74	59.31	59.22	58.84	58.43	58.27	58.58	58.44	59.11
13	58.84	58.86	58.71	60.20	59.28	59.18	58.87	58.42	58.27	58.58	58.59	59.12
14	58.84	58.86	58.82	60.15	59.27	59.23	58.86	58.40	58.28	58.60	58.62	59.10
15	58.84	58.86	58.77	60.13	59.28	59.35	58.86	58.37	58.27	58.62	58.65	59.13
16	58.83	58.86	58.76	59.71	59.27	59.44	58.86	58.36	58.27	58.63	58.67	59.17
17	58.82	58.85	58.75	59.37	59.27	59.87	58.83	58.34	58.28	58.67	58.65	59.14
18	58.82	58.83	58.75	59.32	59.28	60.22	58.78	58.32	58.31	58.68	58.64	59.12
19	58.81	58.82	58.74	59.32	59.26	60.03	58.76	58.33	58.32	58.70	58.64	59.12
20	58.80	58.84	58.75	59.24	59.20	59.60	58.76	58.44	58.35	58.72	58.65	59.11
21	58.80	58.81	58.74	59.22	59.20	59.46	58.78	58.44	58.37	58.71	58.67	59.12
22	58.79	58.83	58.73	59.23	59.20	59.43	58.78	58.42	58.37	58.73	58.76	59.05
23	58.78	58.81	58.73	59.25	59.23	59.44	58.74	58.40	58.36	58.74	58.77	59.02
24	58.77	58.80	58.74	59.26	59.27	59.24	58.71	58.40	58.36	58.75	58.77	59.00
25	58.76	58.78	58.79	59.28	59.26	59.07	58.68	58.38	58.40	58.74	58.77	58.98
26	58.75	58.78	58.75	59.33	59.24	59.06	58.67	58.36	58.43	58.74	58.78	58.97
27	58.75	58.77	58.74	59.39	59.27	59.05	58.66	58.30	58.41	58.74	58.79	58.96
28	58.76	58.77	58.73	59.33	59.28	59.04	58.64	58.28	58.40	58.73	58.80	58.94
29	58.78	58.78	58.74	59.32	---	59.02	58.63	58.26	58.38	58.66	58.82	58.92
30	58.82	58.78	58.73	59.33	---	59.02	58.60	58.22	58.38	58.63	58.87	58.90
31	58.83	---	58.73	59.33	---	58.99	---	58.22	---	58.58	58.88	---
MEAN	58.76	58.83	58.74	59.29	59.30	59.35	58.82	58.41	58.28	58.60	58.63	59.04
MAX	58.85	58.91	58.82	60.20	59.44	60.22	58.98	58.59	58.43	58.75	58.88	59.17
MIN	58.52	58.77	58.69	58.83	59.20	58.99	58.60	58.22	58.16	58.40	58.41	58.90

CAL YR 1985 MEAN 58.01 MAX 58.91 MIN 57.07
WTR YR 1986 MEAN 58.84 MAX 60.22 MIN 58.16

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 mi^2.

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, 60.10 ft, present datum, Dec. 10, 1969; minimum, 45.45 ft, Mar. 6, 1973, result of dike failure.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 59.48 ft, Feb. 8; minimum, 57.02 ft, Mar. 21.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.39	58.82	58.69	58.72	59.23	59.02	58.86	58.48	58.09	58.32	58.42	58.79
2	58.39	58.75	58.63	58.73	59.23	59.08	58.86	58.46	58.05	58.33	58.42	58.82
3	58.44	58.78	58.56	58.74	59.24	59.12	58.87	58.35	58.04	58.33	58.40	58.81
4	58.62	58.75	58.59	58.78	59.26	59.15	58.83	58.36	58.03	58.33	58.38	58.84
5	58.63	58.74	58.62	58.69	59.28	59.11	58.82	58.41	58.00	58.30	58.37	58.86
6	58.58	58.72	58.54	58.73	59.27	59.15	58.80	58.40	58.02	58.32	58.38	58.88
7	58.56	58.72	58.55	58.73	59.26	59.12	58.78	58.37	58.04	58.32	58.37	58.88
8	58.57	58.69	58.57	58.66	59.27	59.10	58.81	58.39	58.05	58.32	58.37	58.90
9	58.52	58.69	58.57	58.76	59.17	59.14	58.73	58.32	58.08	58.33	58.33	58.89
10	58.65	58.72	58.59	59.01	59.07	59.17	58.71	58.28	58.09	58.37	58.33	58.95
11	58.72	58.72	58.61	59.14	59.14	59.10	58.72	58.30	58.15	58.37	58.31	58.99
12	58.72	58.73	58.62	59.13	59.12	59.10	58.72	58.32	58.17	58.39	58.36	58.98
13	58.69	58.74	58.67	58.97	59.12	59.14	58.70	58.27	58.17	58.40	58.53	58.96
14	58.70	58.74	58.60	58.97	59.18	59.10	58.72	58.26	58.18	58.40	58.52	58.95
15	58.71	58.73	58.61	58.95	59.16	59.07	58.74	58.25	58.17	58.42	58.54	58.92
16	58.70	58.75	58.62	59.07	59.18	59.17	58.72	58.23	58.18	58.43	58.54	58.89
17	58.67	58.73	58.61	59.14	59.20	58.83	58.67	58.22	58.17	58.44	58.54	58.89
18	58.65	58.70	58.62	59.09	59.15	58.46	58.63	58.21	58.19	58.45	58.55	58.86
19	58.67	58.70	58.61	59.07	59.07	58.29	58.60	58.22	58.20	58.47	58.53	58.88
20	58.68	58.72	58.61	59.06	59.07	57.52	58.65	58.36	58.23	58.49	58.57	58.91
21	58.68	58.87	58.60	59.08	59.11	57.93	58.68	58.34	58.24	58.52	58.53	58.92
22	58.68	58.77	58.60	59.11	59.11	58.72	58.62	58.28	58.23	58.55	58.63	58.92
23	58.67	58.67	58.63	59.12	59.12	58.85	58.56	58.29	58.25	58.54	58.63	58.92
24	58.65	58.67	58.63	59.07	59.13	58.93	58.57	58.28	58.24	58.52	58.63	58.91
25	58.62	58.67	58.59	59.15	59.05	58.92	58.57	58.25	58.28	58.56	58.67	58.90
26	58.62	58.67	58.58	59.20	59.15	58.90	58.55	58.24	58.33	58.54	58.62	58.87
27	58.65	58.67	58.62	59.17	59.19	58.88	58.53	58.23	58.31	58.55	58.67	58.86
28	58.67	58.68	58.62	59.19	59.08	58.87	58.51	58.19	58.33	58.58	58.66	58.85
29	58.65	58.68	58.61	59.23	---	58.85	58.49	58.17	58.33	58.58	58.67	58.82
30	58.75	58.68	58.58	59.21	---	58.86	58.50	58.14	58.29	58.52	58.75	58.82
31	58.84	---	58.63	59.22	---	58.88	---	58.11	---	58.43	58.71	---
MEAN	58.64	58.72	58.61	59.00	59.16	58.89	58.68	58.29	58.17	58.43	58.51	58.89
MAX	58.84	58.87	58.69	59.23	59.28	59.17	58.87	58.48	58.33	58.58	58.75	58.99
MIN	58.39	58.67	58.54	58.66	59.05	57.52	58.49	58.11	58.00	58.30	58.31	58.79

CAL YR 1985 MEAN 57.89 MAX 58.87 MIN 56.93
WTR YR 1986 MEAN 58.66 MAX 59.28 MIN 57.52

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 mi^2.

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.--Records fair. Flow regulated by manipulation of gates in spillway.

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

AVERAGE DISCHARGE.--31 years (water years 1944-55, 1968-86), 287 ft^3/s, 207,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,340 ft^3/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, 2,120 ft^3/s, Mar. 20; maximum daily gage height, 43.60 ft, Mar. 20; minimum daily discharge, 24 ft^3/s, many days; minimum daily gage height, 35.66 ft, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	24	50	27	38	250	82	33	55	24	217	54
2	24	39	24	28	44	248	80	35	26	33	141	24
3	28	36	24	28	27	246	81	42	26	29	154	24
4	24	24	28	38	27	247	85	52	24	44	61	27
5	38	26	24	27	28	248	102	31	30	50	26	24
6	49	24	26	24	29	246	104	29	29	44	28	35
7	24	28	26	24	28	246	48	26	46	26	29	53
8	26	26	35	24	282	269	28	29	49	31	32	24
9	26	30	24	24	729	273	29	36	24	29	49	28
10	24	43	29	24	843	283	29	46	34	25	57	28
11	26	30	29	155	328	306	28	40	31	29	24	27
12	41	28	24	646	24	303	44	26	26	35	29	25
13	47	25	24	1080	25	303	51	24	26	44	32	47
14	29	26	24	1080	24	351	27	24	45	30	38	54
15	26	29	24	1080	36	429	35	24	50	29	28	27
16	24	41	24	798	45	429	30	34	24	29	47	127
17	25	43	24	589	32	1160	25	50	28	29	52	298
18	33	28	24	587	427	1600	34	55	24	32	30	298
19	40	25	24	600	588	1820	46	26	25	45	26	224
20	50	24	26	287	196	2120	55	24	29	57	28	201
21	25	25	25	29	26	871	26	26	36	25	29	197
22	29	24	28	29	49	132	28	33	49	32	27	73
23	24	36	24	26	28	141	28	28	30	186	43	32
24	26	36	29	28	24	125	32	58	26	281	48	24
25	26	24	24	32	29	128	26	51	33	286	27	24
26	34	29	24	24	24	129	46	60	28	301	29	29
27	45	29	26	24	28	129	53	29	39	304	37	42
28	24	30	26	24	126	121	31	24	50	283	28	54
29	29	41	32	24	---	95	30	31	49	286	27	32
30	26	34	28	28	---	92	30	29	24	284	48	36
31	24	---	37	27	---	85	---	46	---	284	50	---
TOTAL	942	907	840	7465	4134	13425	1373	1101	1015	3246	1521	2192
MEAN	30.4	30.2	27.1	241	148	433	45.8	35.5	33.8	105	49.1	73.1
MAX	50	43	50	1080	843	2120	104	60	55	304	217	298
MIN	24	24	24	24	24	85	25	24	24	24	24	24
AC-FT	1870	1800	1670	14810	8200	26630	2720	2180	2010	6440	3020	4350

CAL YR 1985	TOTAL	10817	MEAN	29.6	MAX	55	MIN	24	AC-FT	21460
WTR YR 1986	TOTAL	38161	MEAN	105	MAX	2120	MIN	24	AC-FT	75690

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238500 OKLAWAHA RIVER AT MOSS BLUFF, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.46	36.42	36.17	35.94	36.30	37.32	36.63	36.01	35.81	35.80	37.24	35.98
2	36.45	36.42	36.14	35.92	36.28	37.45	36.58	36.02	35.76	35.81	36.68	36.59
3	36.48	36.39	36.12	35.90	36.26	37.51	36.53	36.06	35.73	35.77	36.62	36.50
4	36.93	36.38	36.12	35.89	36.23	37.58	36.51	36.07	35.72	35.83	36.33	36.33
5	37.12	36.37	36.09	35.89	36.21	37.63	36.50	36.04	35.76	35.95	36.02	36.20
6	37.14	36.38	36.12	35.84	36.29	37.62	36.49	36.01	35.73	36.04	35.88	36.18
7	37.00	36.36	36.07	35.96	36.31	37.58	36.43	35.99	35.75	35.92	35.78	36.15
8	36.84	36.33	36.07	36.00	37.10	37.60	36.35	35.99	35.81	35.87	35.72	36.07
9	36.75	36.35	36.03	35.92	39.20	37.60	36.32	36.00	35.79	35.83	35.74	36.06
10	36.68	36.37	36.01	36.96	39.95	37.58	36.27	36.00	35.79	35.79	35.77	36.12
11	36.68	36.34	35.98	38.73	39.07	37.68	36.25	36.00	35.82	35.77	35.72	36.46
12	36.64	36.32	35.98	39.63	37.85	37.67	36.27	35.95	35.83	35.80	35.76	36.42
13	36.62	36.30	35.98	40.90	37.23	37.64	36.33	35.91	35.82	35.82	35.83	36.32
14	36.55	36.28	36.12	41.12	36.86	37.81	36.28	35.89	35.82	35.80	35.87	36.25
15	36.50	36.28	36.05	41.13	36.69	38.52	36.32	35.88	35.87	35.77	35.87	36.38
16	36.46	36.30	35.98	40.55	36.58	38.99	36.27	35.89	35.80	35.75	35.88	37.45
17	36.60	36.30	36.03	39.62	36.47	40.72	36.20	35.92	35.81	35.73	35.87	37.64
18	36.62	36.28	36.06	39.47	37.32	42.49	36.17	35.96	35.76	35.76	35.83	37.79
19	36.60	36.29	36.03	39.42	38.72	42.93	36.19	35.94	35.82	35.81	35.85	37.52
20	36.56	36.31	35.98	38.80	38.27	43.60	36.21	35.94	35.99	35.84	35.80	37.06
21	36.50	36.25	35.95	37.65	37.28	41.48	36.17	35.88	35.98	35.77	35.78	36.90
22	36.45	36.24	35.92	37.10	36.85	38.76	36.18	35.87	35.93	35.78	35.83	36.49
23	36.40	36.25	35.88	36.78	36.58	38.15	36.13	35.82	35.84	36.45	35.80	36.01
24	36.37	36.25	35.90	36.62	36.46	37.78	36.11	35.86	35.76	37.29	35.81	35.83
25	36.35	36.19	35.97	36.53	36.39	37.57	36.09	35.89	35.75	37.43	35.88	35.74
26	36.36	36.19	35.91	36.51	36.30	37.45	36.12	35.89	35.73	37.58	36.03	35.72
27	36.38	36.18	35.88	36.58	36.27	37.28	36.14	35.83	35.75	37.58	35.92	35.72
28	36.36	36.17	35.87	36.48	36.53	37.14	36.10	35.75	35.78	37.61	35.95	35.73
29	36.38	36.18	35.88	36.41	---	36.89	36.06	35.75	35.80	37.62	35.92	35.69
30	36.35	36.16	35.86	36.37	---	36.77	36.04	35.74	35.82	37.52	35.92	35.66
31	36.33	---	35.87	36.32	---	36.68	---	35.78	---	37.47	35.98	---
MEAN	36.58	36.29	36.00	37.51	37.07	38.37	36.27	35.92	35.80	36.28	35.96	36.37
MAX	37.14	36.42	36.17	41.13	39.95	43.60	36.63	36.07	35.99	37.62	37.24	37.79
MIN	36.33	36.16	35.86	35.84	36.21	36.68	36.04	35.74	35.72	35.73	35.72	35.66

CAL YR 1985 MEAN 35.62 MAX 38.10 MIN 34.63
WTR YR 1986 MEAN 36.54 MAX 43.60 MIN 35.66

ST. JOHNS RIVER

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.--Estimated daily discharges: Dec. 13-18. 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 measurable. 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.--54 years (water years 1933-86), 811 ft^3/s, 524 mgd.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,290 ft^3/s, Oct. 7, 13-17, 20, 1960; maximum gage height observed, 5.50 ft, Sept. 6, 1933; minimum daily discharge, 539 ft^3/s, May 7, 1957; minimum gage height, -0.99 ft, June 22,23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 855 ft^3/s, Apr. 9; maximum gage height, 1.98 ft, Mar. 21; minimum daily discharge, 765 ft^3/s, July 22,23; minimum gage height, 0.50 ft, Jan. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	805	820	809	787	812	822	851	825	787	773	772	780
2	804	816	807	783	816	817	854	825	784	774	770	781
3	803	816	799	783	821	820	850	822	782	777	769	782
4	805	814	800	785	823	825	845	818	781	775	769	784
5	810	812	804	783	824	824	844	818	784	772	770	786
6	809	811	804	777	824	825	846	819	784	771	771	788
7	806	810	798	779	821	823	849	820	779	773	771	786
8	805	809	799	773	822	818	853	824	776	775	772	784
9	808	809	799	774	822	819	855	822	774	777	771	784
10	814	813	797	794	826	824	848	814	774	776	770	786
11	813	815	799	792	827	827	847	813	776	776	770	790
12	813	815	801	788	817	825	847	815	777	775	772	792
13	813	815	797	794	813	824	851	813	776	773	774	794
14	814	814	798	792	820	827	845	809	775	772	774	793
15	814	813	796	792	825	828	844	806	775	772	776	792
16	813	813	794	792	822	830	846	806	774	772	778	794
17	811	812	794	799	826	827	843	807	774	771	779	795
18	813	813	794	810	829	829	838	806	775	770	779	795
19	816	815	793	818	831	834	835	804	775	772	777	796
20	818	817	792	812	829	838	841	807	777	772	773	796
21	819	819	792	807	826	833	846	807	777	770	769	798
22	818	816	792	808	826	829	841	804	775	765	770	800
23	817	810	797	812	828	830	834	800	775	765	774	801
24	816	809	800	812	828	833	830	796	775	767	778	799
25	818	808	792	816	826	837	832	794	774	770	777	796
26	819	809	779	825	825	845	833	795	772	770	774	795
27	819	810	782	821	831	850	832	792	770	770	776	798
28	820	812	787	810	825	849	820	789	772	772	778	798
29	820	811	790	812	---	847	809	786	774	773	777	796
30	822	810	782	813	---	849	820	787	774	773	776	794
31	823	---	784	811	---	849	---	788	---	772	778	---
TOTAL	25218	24386	24651	24754	23065	25757	25229	25031	23297	23935	23984	23753
MEAN	813	813	795	799	824	831	841	807	777	772	774	792
MAX	823	820	809	825	831	850	855	825	787	777	779	801
MIN	803	808	779	773	812	817	809	786	770	765	769	780

CAL YR 1985 TOTAL 269648 MEAN 739 MAX 823 MIN 646
WTR YR 1986 TOTAL 293060 MEAN 803 MAX 855 MIN 765

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02239500 SILVER SPRINGS NEAR OCALA, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

MAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	.94	.77	.57	.83	.96	1.20	1.00	.78	.77	1.09	.97
2	.84	.97	.76	.55	.84	1.01	1.19	.99	.77	.77	1.05	.98
3	.84	.97	.74	.54	.83	1.03	1.18	.99	.76	.79	1.05	1.01
4	.95	.94	.73	.53	.83	1.05	1.17	.99	.76	.79	1.02	1.04
5	1.02	.91	.73	.53	.82	1.06	1.16	.98	.76	.84	.98	1.03
6	1.02	.90	.72	.51	.84	1.06	1.16	.97	.75	.86	.95	1.00
7	1.00	.89	.71	.52	.85	1.06	1.16	.96	.75	.84	.92	1.00
8	.96	.88	.70	.52	.89	1.06	1.14	.97	.74	.83	.90	.98
9	.94	.87	.69	.51	1.09	1.07	1.13	.96	.74	.82	.90	.98
10	.93	.87	.67	.87	1.26	1.08	1.12	.95	.73	.81	.90	.95
11	.93	.87	.66	1.50	1.38	1.08	1.11	.95	.74	.80	.90	.96
12	.92	.86	.66	1.48	1.25	1.09	1.11	.94	.73	.80	.91	1.00
13	.91	.86	.66	1.48	1.11	1.10	1.15	.93	.72	.81	.93	1.02
14	.90	.85	.67	1.52	1.03	1.12	1.13	.93	.74	.80	.92	1.00
15	.89	.84	.65	1.54	.98	1.33	1.12	.93	.78	.79	.93	.99
16	.90	.84	.64	1.52	.95	1.60	1.11	.91	.76	.78	.94	.97
17	.97	.84	.64	1.39	.93	1.58	1.10	.90	.75	.77	.94	1.03
18	.97	.84	.64	1.33	.95	1.73	1.09	.90	.75	.77	.93	1.09
19	.95	.84	.63	1.30	1.08	1.83	1.09	.90	.76	.76	.93	1.12
20	.93	.84	.62	1.28	1.17	1.92	1.10	.90	.81	.76	.93	1.13
21	.91	.85	.60	1.15	1.11	1.95	1.10	.89	.82	.81	.93	1.08
22	.90	.83	.59	1.04	1.03	1.65	1.09	.87	.81	.86	.93	1.05
23	.88	.82	.59	.97	.98	1.46	1.07	.85	.79	.90	.93	1.01
24	.87	.82	.59	.92	.94	1.38	1.06	.84	.78	1.00	.94	.95
25	.86	.81	.58	.89	.91	1.33	1.06	.84	.77	1.04	.93	.91
26	.87	.79	.57	.91	.89	1.31	1.05	.83	.76	1.07	.94	.88
27	.87	.79	.56	.90	.89	1.29	1.05	.82	.75	1.09	.95	.87
28	.87	.78	.56	.88	.88	1.27	1.04	.79	.75	1.11	.96	.86
29	.87	.78	.55	.87	---	1.24	1.02	.78	.76	1.12	.98	.86
30	.88	.78	.54	.86	---	1.22	1.01	.77	.78	1.10	.96	.84
31	.89	---	.54	.85	---	1.21	---	.77	---	1.09	.96	---
MEAN	.91	.86	.64	.98	.98	1.29	1.11	.90	.76	.88	.95	.99
MAX	1.02	.97	.77	1.54	1.38	1.95	1.20	1.00	.82	1.12	1.09	1.13
MIN	.84	.78	.54	.51	.82	.96	1.01	.77	.72	.76	.90	.84

CAL YR 1985	MEAN	.20	MAX	1.02	MIN	-0.61
WTR YR 1986	MEAN	.94	MAX	1.95	MIN	.51

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 mi^2.

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: Oct. 1-28, Jan. 5-7. Records good. Some effect from Moss Bluff Dam 13.3 mi upstream.

AVERAGE DISCHARGE.--25 years (water years 1931-46, 1978-86), 1,160 ft^3/s, 13.17 in/yr, 840,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,430 ft^3/s, Apr. 9, 1982; maximum gage height, 9.14 ft, Sept. 6, 1933; minimum discharge, 622 ft^3/s, Jan. 11, 1982; minimum gage height, 2.26 ft, Nov. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,920 ft^3/s, Mar. 20,21, gage height, 7.28 ft; minimum, 808 ft^3/s, Sept. 30, gage height, 3.86 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	940	957	908	866	948	1040	1000	882	840	842	1050	886
2	960	959	901	860	948	1090	989	882	837	841	975	954
3	960	956	890	857	948	1110	980	883	831	840	959	947
4	950	948	891	854	948	1130	975	888	830	845	926	923
5	940	943	891	852	948	1140	969	886	833	867	883	903
6	950	944	891	860	948	1140	966	882	830	885	857	897
7	970	940	888	869	948	1140	958	878	831	871	839	891
8	980	936	885	869	1000	1130	948	876	835	857	830	883
9	1000	936	881	855	1300	1140	947	875	840	848	829	878
10	1000	940	875	1080	1630	1140	927	876	839	843	832	886
11	1000	937	872	1610	1700	1140	921	876	842	840	831	940
12	1000	934	872	1710	1320	1150	923	871	844	842	836	937
13	990	930	874	2050	1150	1150	937	865	843	845	845	919
14	990	927	889	2200	1050	1160	932	862	842	844	846	906
15	980	926	881	2240	1000	1340	935	861	848	842	848	899
16	980	928	872	2140	979	1590	924	856	842	837	848	1010
17	980	929	879	1820	963	1710	913	860	843	835	848	1070
18	990	926	884	1700	1020	2350	909	866	839	835	848	1100
19	990	928	878	1650	1250	2590	910	865	849	838	846	1090
20	990	931	869	1570	1330	2840	912	868	879	841	842	1010
21	980	932	864	1280	1170	2760	912	855	875	838	838	980
22	970	925	858	1120	1050	1790	908	849	862	834	844	941
23	960	921	851	1030	984	1400	901	845	849	875	842	871
24	950	921	853	991	954	1270	898	848	838	991	844	841
25	940	915	861	970	948	1210	896	850	834	1030	859	828
26	920	913	853	969	948	1180	896	852	833	1070	867	824
27	920	911	851	969	948	1140	900	847	831	1070	857	821
28	930	910	852	958	953	1110	896	837	834	1090	859	823
29	946	911	850	950	---	1060	889	833	837	1110	856	820
30	944	909	848	948	---	1030	886	831	844	1080	866	811
31	944	---	848	948	---	1010	---	833	---	1070	870	---
TOTAL	29944	27923	27060	38645	30283	43180	27857	26738	25254	27996	26820	27489
MEAN	966	931	873	1247	1082	1393	929	863	842	903	865	916
MAX	1000	959	908	2240	1700	2840	1000	888	879	1110	1050	1100
MIN	920	909	848	852	948	1010	886	831	830	834	829	811
AC-FT	59390	55390	53670	76650	60070	85650	55250	53030	50090	55530	53200	54520

CAL YR 1985	TOTAL	300711	MEAN	824	MAX	1250	MIN	685	AC-FT	596500
WTR YR 1986	TOTAL	359189	MEAN	984	MAX	2840	MIN	811	AC-FT	712500

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	4.63	4.39	4.18	4.59	4.93	4.80	4.26	4.03	4.04	4.96	4.28
2	---	4.64	4.36	4.15	4.59	5.07	4.76	4.26	4.01	4.04	4.70	4.61
3	---	4.63	4.30	4.14	4.59	5.12	4.72	4.27	3.97	4.03	4.64	4.58
4	---	4.59	4.30	4.12	4.59	5.17	4.70	4.29	3.97	4.06	4.48	4.46
5	---	4.57	4.30	4.11	4.59	5.21	4.68	4.28	3.98	4.18	4.26	4.37
6	---	4.57	4.31	---	4.59	5.20	4.66	4.26	3.96	4.27	4.13	4.34
7	---	4.55	4.29	4.20	4.59	5.19	4.63	4.24	3.97	4.21	4.02	4.30
8	---	4.53	4.27	4.19	4.77	5.18	4.59	4.23	4.00	4.14	3.96	4.26
9	---	4.53	4.26	4.12	5.57	5.19	4.58	4.22	4.03	4.08	3.96	4.24
10	---	4.55	4.23	4.92	6.08	5.20	4.48	4.23	4.02	4.05	3.98	4.28
11	---	4.53	4.21	6.07	6.18	5.21	4.46	4.23	4.05	4.03	3.97	4.55
12	---	4.52	4.21	6.18	5.63	5.22	4.47	4.20	4.06	4.04	4.00	4.54
13	---	4.50	4.22	6.55	5.23	5.22	4.53	4.17	4.05	4.07	4.06	4.44
14	---	4.49	4.29	6.70	4.97	5.26	4.51	4.16	4.04	4.06	4.07	4.38
15	---	4.48	4.26	6.74	4.81	5.64	4.53	4.16	4.09	4.05	4.09	4.34
16	---	4.49	4.21	6.64	4.72	6.03	4.47	4.13	4.05	4.01	4.08	4.84
17	---	4.49	4.24	6.31	4.65	6.17	4.42	4.15	4.05	4.00	4.08	5.03
18	---	4.48	4.27	6.17	4.86	6.83	4.40	4.18	4.02	4.00	4.08	5.10
19	---	4.49	4.24	6.11	5.47	7.03	4.40	4.18	4.08	4.02	4.07	5.08
20	---	4.50	4.20	6.01	5.66	7.22	4.41	4.19	4.25	4.04	4.04	4.85
21	---	4.51	4.17	5.53	5.27	7.16	4.41	4.12	4.22	4.02	4.02	4.72
22	---	4.48	4.14	5.16	4.95	6.27	4.39	4.09	4.16	3.99	4.06	4.55
23	---	4.46	4.11	4.91	4.74	5.78	4.35	4.07	4.09	4.21	4.05	4.20
24	---	4.46	4.12	4.77	4.62	5.53	4.34	4.08	4.02	4.76	4.06	4.04
25	---	4.42	4.16	4.68	4.59	5.38	4.33	4.10	3.99	4.91	4.14	3.95
26	---	4.42	4.12	4.68	4.59	5.31	4.33	4.11	3.98	5.01	4.19	3.93
27	---	4.41	4.11	4.68	4.59	5.21	4.35	4.08	3.97	5.03	4.14	3.92
28	---	4.40	4.11	4.63	4.61	5.14	4.33	4.01	3.99	5.08	4.15	3.93
29	4.58	4.41	4.10	4.60	---	5.00	4.30	3.98	4.01	5.12	4.13	3.91
30	4.57	4.39	4.09	4.59	---	4.90	4.28	3.97	4.06	5.06	4.18	3.87
31	4.57	---	4.09	4.59	---	4.84	---	3.99	---	5.02	4.20	---
MEAN	---	4.50	4.22	---	4.95	5.54	4.49	4.16	4.04	4.31	4.16	4.40
MAX	---	4.64	4.39	---	6.18	7.22	4.80	4.29	4.25	5.12	4.96	5.10
MIN	---	4.39	4.09	---	4.59	4.84	4.28	3.97	3.96	3.99	3.96	3.87

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, 265 microsiemens, Jan. 13, 1986.
WATER TEMPERATURE: Maximum daily mean, 27.5°C, Aug. 21-24, 1983; minimum daily mean, 11.0°C, Jan. 1, 1984.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	398	391	401	411	403	---	402	411	413	415	398	409
2	395	391	404	412	403	---	403	411	414	415	399	402
3	391	395	404	411	405	---	403	410	414	415	400	403
4	375	396	405	411	405	---	403	409	414	414	406	397
5	366	397	406	412	404	---	403	410	414	412	417	404
6	370	396	406	412	402	---	403	411	414	413	423	415
7	382	398	406	410	403	---	405	411	414	417	418	415
8	375	398	407	410	398	---	407	412	414	417	416	413
9	375	399	407	410	377	---	409	411	414	417	415	414
10	375	400	408	391	330	---	409	410	414	416	416	408
11	377	399	414	303	340	---	410	410	414	416	417	400
12	383	397	410	280	379	---	409	411	414	415	415	411
13	391	398	410	265	390	---	408	411	413	415	415	409
14	397	398	409	309	395	---	409	411	413	415	415	414
15	395	397	406	333	398	---	406	411	411	415	413	411
16	398	396	409	347	400	---	408	412	413	416	415	384
17	385	397	407	364	400	---	409	410	414	416	419	370
18	388	399	407	370	387	---	409	409	414	416	418	374
19	394	399	408	370	363	---	410	410	416	415	418	378
20	388	398	408	368	368	---	412	410	418	415	418	387
21	393	397	408	385	399	332	412	412	418	416	417	391
22	393	401	409	395	406	363	411	412	415	417	415	402
23	393	402	410	405	413	383	411	412	417	410	416	407
24	394	403	411	407	414	401	411	411	418	397	418	410
25	395	404	412	408	---	401	411	411	417	400	418	411
26	394	403	411	405	---	396	410	411	417	398	416	410
27	393	402	410	403	---	405	410	413	417	407	414	411
28	393	402	410	400	---	403	411	414	416	396	412	411
29	391	402	411	400	---	401	411	413	415	393	418	412
30	392	402	411	402	---	402	410	413	414	403	419	413
31	394	---	410	403	---	402	---	413	---	389	414	---
MEAN	388	399	408	381	---	---	408	411	415	411	414	403
MAX	398	404	414	412	---	---	412	414	418	417	423	415
MIN	366	391	401	265	---	---	402	409	411	389	398	370

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	23.5	23.5	22.0	21.5	---	23.5	23.5	24.0	24.0	25.5	24.5
2	24.0	23.0	23.0	22.0	22.0	---	23.5	23.5	24.0	24.5	25.0	25.0
3	24.0	23.5	22.0	22.5	22.0	---	23.5	23.5	24.0	24.0	25.0	24.5
4	24.5	23.0	22.5	22.5	22.0	---	23.5	23.5	24.0	24.5	24.5	24.5
5	24.0	22.5	22.5	22.0	22.5	---	23.5	23.5	24.0	24.5	24.0	24.5
6	24.0	22.0	22.5	21.5	22.0	---	23.5	23.5	24.0	24.5	24.5	24.5
7	23.5	22.0	22.0	21.5	22.5	---	23.5	23.5	24.0	24.5	24.5	24.5
8	23.5	22.5	22.0	21.5	21.5	---	23.5	24.0	24.5	24.5	24.5	24.5
9	23.5	22.5	22.5	21.5	20.5	---	23.5	24.0	24.5	24.5	24.5	24.0
10	23.5	23.0	22.5	20.0	20.0	---	23.0	23.5	24.5	24.5	24.5	24.0
11	24.0	23.0	22.5	18.0	20.5	---	23.5	23.5	24.0	24.5	24.0	24.5
12	23.5	23.0	23.0	17.0	20.5	---	23.5	23.5	24.5	24.5	24.0	24.5
13	24.0	23.0	23.0	15.5	20.0	---	23.5	23.5	24.0	24.5	24.0	24.5
14	24.0	23.0	22.0	15.0	21.0	---	23.5	23.5	24.0	24.5	24.0	24.5
15	24.0	23.0	21.5	14.5	21.5	---	23.5	23.5	24.0	24.5	24.5	24.5
16	24.0	23.0	21.5	15.5	21.5	---	23.0	23.5	24.0	24.5	24.5	25.0
17	24.0	23.0	21.5	17.5	22.0	---	23.0	23.5	24.0	24.5	24.5	25.5
18	24.0	23.0	21.5	18.0	21.5	---	23.0	23.5	24.0	24.5	24.5	25.5
19	24.0	23.0	21.5	19.0	21.0	---	23.0	23.5	24.0	24.5	24.5	25.0
20	24.0	23.5	21.5	18.5	21.5	---	23.0	23.5	24.0	24.5	24.0	24.5
21	24.0	23.5	21.5	19.5	22.5	21.5	23.0	23.5	24.0	24.5	24.0	24.5
22	24.0	23.5	21.5	20.5	22.5	20.5	23.0	23.5	24.0	24.0	24.5	24.5
23	24.0	23.0	21.5	21.0	22.5	20.5	23.0	24.0	24.0	24.5	24.5	24.5
24	24.0	23.0	22.0	21.5	22.0	21.0	23.0	24.0	24.5	25.5	24.5	24.0
25	23.5	23.0	21.5	21.5	---	22.0	23.0	24.0	24.0	25.5	24.5	24.0
26	23.5	23.0	21.0	21.5	---	22.5	23.0	24.0	24.5	25.5	24.5	24.0
27	23.5	23.0	21.0	20.5	---	22.5	23.5	24.0	24.5	25.5	24.5	24.0
28	23.5	23.0	21.5	20.0	---	23.0	23.5	24.0	24.5	25.5	24.0	24.0
29	23.5	23.5	22.0	20.5	---	23.0	23.5	24.0	24.5	25.5	24.0	24.0
30	23.5	23.0	21.5	21.5	---	23.0	23.5	24.0	24.0	25.5	24.5	24.0
31	23.5	---	21.5	21.0	---	23.0	---	24.0	---	26.0	24.5	---
MEAN	24.0	23.0	22.0	20.0	---	---	23.5	23.5	24.0	24.5	24.5	24.5
MAX	24.5	23.5	23.5	22.5	---	---	23.5	24.0	24.5	26.0	25.5	25.5
MIN	23.5	22.0	21.0	14.5	---	---	23.0	23.5	24.0	24.0	24.0	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 1985 TO SEPTEMBER 1986

DATE	GAGE HEIGHT (FEET ABOVE DATUM) (00065)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	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)
OCT											
29...	4.57	944	380	7.40	24.5	3.0	5.3	200	64	9.2	6.6
JAN											
28...	4.63	957	388	7.50	21.0	1.4	7.4	200	64	9.2	6.2
MAR											
26...	5.32	1190	391	7.80	21.5	2.4	5.4	200	63	9.4	7.3
MAY											
28...	4.02	836	438	7.80	25.0	--	7.3	--	--	--	--
JUL											
28...	5.06	1080	395	7.70	25.0	2.0	5.7	190	58	10	8.6
AUG											
25...	4.10	844	380	7.80	23.5	1.0	4.7	210	68	10	6.4

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL 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)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT										
29...	0.9	161	53	10	0.2	10	254	250	0.76	0.01
JAN										
28...	0.9	147	55	9.6	0.2	9.4	249	250	0.75	0.02
MAR										
26...	1.4	141	55	11	0.3	8.1	250	240	--	<0.01
MAY										
28...	--	155	--	--	--	--	--	--	--	<0.01
JUL										
28...	2.1	171	50	14	0.2	9.1	248	260	0.59	0.02
AUG										
25...	1.1	178	55	11	0.2	9.7	272	270	--	<0.01

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	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)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
OCT										
29...	0.77	0.04	0.04	0.36	0.4	0.06	0.06	0.04	30	1
JAN										
28...	0.77	0.04	0.05	0.56	0.6	0.04	0.04	0.04	--	--
MAR										
26...	0.60	0.05	0.05	0.75	0.8	0.05	0.02	0.02	30	1
MAY										
28...	0.73	0.04	0.04	0.36	0.4	0.04	0.03	0.03	--	--
JUL										
28...	0.61	0.04	0.06	0.56	0.6	0.06	<0.01	<0.01	--	--
AUG										
25...	0.75	0.05	0.04	0.35	0.4	0.04	0.03	0.03	<10	1

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 1985 TO SEPTEMBER 1986

DATE	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)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
29...	16	<0.5	<1	<1	<3	1	79	2	8	4
JAN										
28...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	18	<0.5	<1	<1	<3	1	69	1	8	7
MAY										
28...	--	--	--	--	--	--	--	--	--	--
JUL										
28...	--	--	--	--	--	--	--	--	--	--
AUG										
25...	18	<0.5	<1	<1	<3	<1	14	<5	5	2

DATE	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-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT										
29...	<0.1	<10	2	<1	<1	560	<6	110	4	25
JAN										
28...	--	--	--	--	--	--	--	--	2	50
MAR										
26...	<0.1	<10	<1	<1	<1	510	<6	10	8	25
MAY										
28...	--	--	--	--	--	--	--	--	3	33
JUL										
28...	--	--	--	--	--	--	--	--	9	22
AUG										
25...	<0.1	<10	1	<1	<1	610	<6	8	4	50

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 mi^2.

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.--Records good.

AVERAGE DISCHARGE.--18 years (water years 1931-34, 1944-52, 1982-86), 1,369 ft^3/s, 13.59 in/yr, 991,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,230 ft^3/s, Sept. 7, 1933; maximum gage height, 26.52 ft, Apr. 11, 1982; minimum discharge, 626 ft^3/s, Feb. 2, 1933, gage height, 18.08 ft, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,440 ft^3/s, Mar. 22,23, gage height, 22.59 ft; minimum, 727 ft^3/s, July 19; minimum gage height, 19.00 ft, Dec. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	1030	855	871	1040	995	1120	915	929	756	1020	1060
2	1020	1040	853	884	1020	993	1080	920	923	761	1070	1180
3	1010	1030	853	875	1000	1010	1050	927	922	775	1080	1130
4	1010	1030	843	865	994	1050	1020	938	912	849	1050	1080
5	997	1010	839	867	983	1100	1000	943	898	876	1060	1040
6	1010	994	848	855	985	1130	988	949	871	986	1040	995
7	1020	981	845	856	1010	1140	977	956	838	997	976	975
8	1030	973	836	869	1030	1150	965	967	811	964	902	1090
9	1050	962	830	869	1080	1160	955	966	806	891	859	1120
10	1060	950	831	1050	1110	1150	942	969	802	826	845	1150
11	1080	940	829	1270	1190	1150	925	969	824	788	844	1190
12	1080	927	828	1490	1360	1150	915	968	827	786	864	1170
13	1070	917	828	1740	1530	1150	931	976	818	778	922	1140
14	1070	905	874	1790	1550	1170	930	985	817	763	939	1080
15	1050	901	881	1840	1470	1280	921	995	834	750	957	1020
16	1040	903	876	1920	1350	1400	916	1000	849	742	961	973
17	1050	899	864	1980	1240	1570	910	1010	823	738	947	954
18	1050	892	856	1950	1180	1710	902	1010	820	734	899	958
19	1060	891	852	1870	1130	1770	900	1020	838	730	863	972
20	1050	918	846	1760	1110	1940	898	1050	900	732	844	991
21	1040	911	840	1690	1150	2210	901	1050	942	738	836	998
22	1020	908	830	1630	1210	2400	908	1030	930	791	848	987
23	1010	906	818	1550	1260	2350	906	1020	880	849	845	962
24	992	898	814	1440	1230	2020	905	1000	822	919	842	917
25	981	891	829	1340	1170	1750	903	993	778	941	847	859
26	975	883	814	1260	1090	1560	905	986	757	955	876	814
27	973	876	808	1200	1030	1430	907	978	747	962	874	788
28	977	871	811	1150	999	1340	911	966	737	984	894	773
29	987	874	819	1110	---	1270	912	951	732	995	894	765
30	992	869	832	1090	---	1220	912	937	741	1000	901	753
31	996	---	832	1060	---	1170	---	929	---	1010	996	---
TOTAL	31760	27980	26014	40991	32501	43888	28315	30273	25128	26366	28595	29884
MEAN	1025	933	839	1322	1161	1416	944	977	838	851	922	996
MAX	1080	1040	881	1980	1550	2400	1120	1050	942	1010	1080	1190
MIN	973	869	808	855	983	993	898	915	732	730	836	753
AC-FT	63000	55500	51600	81310	64470	87050	56160	60050	49840	52300	56720	59270

CAL YR 1985	TOTAL	301130	MEAN	825	MAX	1510	MIN	630	AC-FT	597300
WTR YR 1986	TOTAL	371695	MEAN	1018	MAX	2400	MIN	730	AC-FT	737300

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 mi^2.

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.--Records good. Some regulation by stoplogs in control 50 ft upstream.

AVERAGE DISCHARGE.--8 years, 70.9 ft^3/s, 8.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 812 ft^3/s, Mar. 15,1948; maximum gage height observed, 8.02 ft, present datum, Mar. 15, 1948; minimum discharge measured, 0.37 ft^3/s, Apr. 23, 1956; minimum gage height, 1.65 ft, present datum, Apr. 23, 1956, June 15, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 305 ft^3/s, Feb. 15, gage height, 6.59 ft; minimum, 4.1 ft^3/s, July 20-22, gage height, 2.02 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	174	113	45	159	235	189	25	6.5	5.8	5.0	31
2	236	188	112	45	155	224	184	21	6.5	5.8	5.0	43
3	228	198	110	44	153	215	179	25	6.7	5.5	5.0	42
4	219	203	101	46	147	212	175	21	6.7	5.7	4.9	38
5	218	204	96	65	141	211	168	16	6.7	5.5	5.0	47
6	222	204	93	69	145	203	161	14	6.4	5.5	5.3	48
7	220	203	89	81	145	201	156	14	6.4	5.5	5.1	51
8	213	204	82	100	151	199	147	14	6.7	5.4	5.1	49
9	213	202	79	94	161	191	142	16	6.8	5.0	5.8	47
10	207	198	75	120	178	186	134	14	6.4	4.9	5.8	50
11	208	194	70	157	221	182	124	12	6.0	5.4	5.9	64
12	206	190	67	176	265	178	118	11	5.6	5.5	5.7	67
13	204	187	60	188	287	174	120	11	5.9	5.4	5.7	73
14	199	183	73	192	290	177	113	9.9	6.0	5.3	6.0	81
15	193	175	70	196	299	190	104	9.5	5.9	5.3	6.2	77
16	189	172	65	199	298	205	96	9.1	5.8	5.4	6.4	73
17	185	170	62	198	294	219	92	8.4	5.7	5.4	6.7	72
18	183	168	59	198	293	229	88	8.5	5.7	5.3	6.8	71
19	177	163	57	195	289	230	83	8.3	5.7	5.0	6.9	67
20	172	159	52	194	289	236	71	8.0	5.9	4.2	7.0	62
21	166	152	50	193	282	241	66	7.7	6.2	4.2	7.4	56
22	161	148	47	191	277	240	66	7.7	6.5	4.3	7.7	52
23	157	151	44	189	275	234	62	8.4	6.2	4.5	8.7	48
24	153	147	43	189	267	227	55	8.7	6.1	4.6	12	44
25	149	141	44	181	263	224	48	7.0	6.3	4.8	12	41
26	146	136	42	179	247	219	43	7.0	7.6	4.7	13	38
27	141	130	39	172	239	214	39	6.9	7.4	4.8	16	35
28	144	125	38	171	241	212	36	7.0	6.1	4.9	15	33
29	162	121	38	166	---	208	33	6.8	6.0	5.0	21	33
30	163	116	36	164	---	201	30	6.6	5.7	5.0	26	31
31	168	---	34	162	---	195	---	6.6	---	5.0	28	---
TOTAL	5846	5106	2040	4559	6451	6512	3122	356.1	188.1	158.6	282.1	1564
MEAN	189	170	65.8	147	230	210	104	11.5	6.27	5.12	9.10	52.1
MAX	244	204	113	199	299	241	189	25	7.6	5.8	28	81
MIN	141	116	34	44	141	174	30	6.6	5.6	4.2	4.9	31
CFSM	1.66	1.49	.58	1.29	2.02	1.84	.91	.10	.05	.04	.08	.46
IN.	1.91	1.67	.67	1.49	2.11	2.12	1.02	.12	.06	.05	.09	.51

CAL YR 1985	TOTAL	26390.40	MEAN	72.3	MAX	464	MIN	.60	CFSM	.63	IN.	8.61
WTR YR 1986	TOTAL	36184.9	MEAN	99.1	MAX	299	MIN	4.2	CFSM	.87	IN.	11.81

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240902 PRAIRIE CREEK NEAR GAINESVILLE, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.21	5.61	4.88	3.54	5.45	6.14	5.76	2.98	2.19	2.14	2.08	3.16
2	6.15	5.75	4.88	3.54	5.41	6.07	5.71	2.84	2.19	2.14	2.09	3.48
3	6.10	5.85	4.84	3.51	5.39	5.99	5.66	2.99	2.20	2.12	2.09	3.46
4	6.03	5.89	4.70	3.56	5.33	5.97	5.62	2.84	2.20	2.14	2.08	3.37
5	6.02	5.90	4.61	3.99	5.26	5.96	5.55	2.65	2.20	2.12	2.09	3.58
6	6.05	5.90	4.55	4.08	5.30	5.89	5.48	2.56	2.18	2.12	2.11	3.60
7	6.04	5.89	4.48	4.32	5.30	5.87	5.42	2.57	2.18	2.12	2.09	3.68
8	5.98	5.90	4.35	4.66	5.36	5.86	5.32	2.54	2.20	2.11	2.09	3.63
9	5.98	5.88	4.28	4.57	5.47	5.78	5.27	2.65	2.21	2.08	2.14	3.59
10	5.93	5.84	4.20	4.97	5.65	5.73	5.17	2.58	2.18	2.08	2.14	3.66
11	5.94	5.81	4.11	5.44	6.03	5.69	5.05	2.48	2.15	2.11	2.15	3.98
12	5.92	5.77	4.03	5.63	6.35	5.65	4.97	2.43	2.12	2.12	2.13	4.05
13	5.90	5.74	3.89	5.75	6.49	5.61	5.00	2.40	2.15	2.11	2.13	4.17
14	5.85	5.70	4.16	5.79	6.51	5.64	4.89	2.37	2.15	2.10	2.15	4.32
15	5.80	5.62	4.11	5.83	6.56	5.77	4.73	2.34	2.15	2.11	2.17	4.25
16	5.76	5.59	3.99	5.85	6.55	5.91	4.60	2.32	2.14	2.11	2.19	4.17
17	5.72	5.57	3.93	5.85	6.53	6.03	4.54	2.29	2.13	2.11	2.20	4.14
18	5.70	5.55	3.86	5.84	6.52	6.10	4.46	2.30	2.13	2.11	2.21	4.13
19	5.64	5.50	3.82	5.81	6.50	6.11	4.37	2.29	2.13	2.08	2.22	4.05
20	5.59	5.46	3.71	5.81	6.49	6.15	4.11	2.27	2.15	2.03	2.22	3.94
21	5.53	5.38	3.67	5.80	6.45	6.18	4.03	2.26	2.17	2.03	2.24	3.81
22	5.48	5.34	3.60	5.78	6.42	6.18	4.01	2.26	2.19	2.03	2.26	3.70
23	5.43	5.37	3.51	5.76	6.41	6.14	3.92	2.29	2.17	2.05	2.31	3.61
24	5.39	5.32	3.49	5.76	6.36	6.09	3.76	2.31	2.16	2.06	2.48	3.51
25	5.35	5.26	3.50	5.68	6.33	6.07	3.62	2.22	2.18	2.07	2.47	3.43
26	5.31	5.19	3.46	5.66	6.23	6.03	3.49	2.22	2.25	2.06	2.53	3.34
27	5.25	5.13	3.38	5.59	6.17	5.99	3.38	2.22	2.24	2.07	2.64	3.25
28	5.28	5.07	3.34	5.58	6.19	5.97	3.28	2.22	2.16	2.08	2.61	3.20
29	5.48	5.01	3.35	5.53	---	5.93	3.20	2.21	2.16	2.08	2.84	3.22
30	5.50	4.94	3.31	5.51	---	5.87	3.14	2.20	2.13	2.08	3.00	3.15
31	5.55	---	3.24	5.49	---	5.82	---	2.19	---	2.09	3.07	---
MEAN	5.74	5.56	3.98	5.18	6.04	5.94	4.58	2.43	2.17	2.09	2.30	3.69
MAX	6.21	5.90	4.88	5.85	6.56	6.18	5.76	2.99	2.25	2.14	3.07	4.32
MIN	5.25	4.94	3.24	3.51	5.26	5.61	3.14	2.19	2.12	2.03	2.08	3.15

CAL YR 1985 MEAN 3.24 MAX 7.36 MIN 1.66
WTR YR 1986 MEAN 4.13 MAX 6.56 MIN 2.03

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 mi^2.

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

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

REMARKS.--Records fair. Flow affected at times by backwater from Haile Sink.

AVERAGE DISCHARGE.--14 years (water years 1973-86), 19.5 ft^3/s, 6.43 in/yr, 14,130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 671 ft^3/s, Aug. 26, 1972, gage height, 60.11 ft; minimum, 1.2 ft^3/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, 189 ft^3/s, Feb. 11, gage height, 58.16 ft; minimum, 2.3 ft^3/s, June 8,9, gage height, 56.09 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	86	11	16	12	18	13	5.1	3.7	7.6	7.9	19
2	23	121	10	27	12	16	12	4.9	3.3	12	6.8	14
3	19	86	9.9	17	11	15	11	4.9	4.2	14	9.1	12
4	21	64	9.3	14	11	14	10	4.7	3.3	20	9.9	11
5	52	48	9.3	52	11	16	9.9	4.6	3.3	11	16	34
6	52	35	9.3	68	13	16	9.1	4.6	3.0	22	23	34
7	43	27	8.8	50	28	14	8.8	4.6	2.8	35	25	22
8	32	23	8.6	41	34	13	8.6	4.7	2.7	26	14	15
9	25	20	8.3	34	86	13	8.3	4.4	2.4	14	9.3	13
10	21	18	8.1	65	144	12	7.6	4.2	3.6	9.1	7.6	22
11	29	17	8.1	156	159	12	7.4	3.9	14	7.2	7.9	36
12	29	16	8.3	105	148	12	7.4	3.9	9.9	7.4	14	32
13	22	16	8.3	64	81	13	9.6	4.0	7.9	6.2	23	23
14	18	17	17	45	53	34	9.1	4.0	22	5.2	36	30
15	16	14	24	36	40	90	7.4	3.7	27	4.6	52	22
16	14	13	15	28	33	152	7.0	3.4	14	4.2	34	14
17	14	13	12	24	27	96	6.6	3.3	8.1	4.2	19	11
18	13	12	11	22	28	64	6.4	3.3	13	3.7	13	9.9
19	12	12	9.9	25	33	46	6.4	4.2	17	3.4	14	9.9
20	11	12	9.1	30	27	36	6.2	13	25	3.3	18	8.1
21	10	13	8.8	23	23	33	7.4	15	30	4.4	86	7.4
22	9.9	24	8.6	19	21	28	12	7.2	21	8.1	77	6.8
23	9.3	28	8.6	17	23	23	8.1	5.4	12	58	48	6.6
24	9.1	21	8.6	16	27	20	6.6	4.6	8.6	52	29	6.4
25	10	16	9.3	14	23	19	6.4	4.2	7.2	30	20	6.8
26	10	14	9.1	15	19	18	6.0	3.7	6.4	16	17	6.2
27	11	13	8.6	19	18	16	5.8	3.4	5.4	17	15	6.2
28	19	12	8.3	16	17	16	5.4	3.2	5.2	41	13	5.8
29	56	12	8.3	14	---	15	5.2	2.9	5.1	26	16	7.0
30	56	11	8.6	13	---	14	5.1	2.8	5.2	14	29	6.6
31	51	---	8.1	13	---	13	---	2.8	---	10	24	---
TOTAL	739.3	834	310.2	1098	1162	917	239.8	148.6	296.3	496.6	733.5	457.7
MEAN	23.8	27.8	10.0	35.4	41.5	29.6	7.99	4.79	9.88	16.0	23.7	15.3
MAX	56	121	24	156	159	152	13	15	30	58	86	36
MIN	9.1	11	8.1	13	11	12	5.1	2.8	2.4	3.3	6.8	5.8
CFSM	.58	.67	.24	.86	1.01	.72	.19	.12	.24	.39	.58	.37
IN.	.67	.75	.28	.99	1.05	.83	.22	.13	.27	.45	.66	.41
AC-FT	1470	1650	615	2180	2300	1820	476	295	588	985	1450	908

CAL YR 1985	TOTAL	7749.9	MEAN	21.2	MAX	543	MIN	1.6	CFSM	.51	IN.	7.00	AC-FT	15370
WTR YR 1986	TOTAL	7433.0	MEAN	20.4	MAX	159	MIN	2.4	CFSM	.50	IN.	6.71	AC-FT	14740

ST. JOHNS RIVER

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, 53.98 ft, Feb. 13; minimum, 46.92 ft, July 19.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.43	51.87	48.97	47.97	48.77	51.37	50.72	48.85	48.00	47.52	47.53	49.28
2	50.37	52.69	48.90	48.73	48.73	50.88	50.59	48.82	48.03	47.64	47.35	48.93
3	50.16	52.84	48.75	48.55	48.72	50.51	50.43	48.79	48.02	47.84	47.32	48.68
4	49.86	52.73	48.61	48.37	48.69	50.37	50.28	48.72	48.06	48.13	47.31	48.54
5	50.54	52.62	48.56	49.42	48.66	50.33	50.16	48.69	48.02	47.91	47.66	49.30
6	50.86	52.42	48.52	51.28	48.79	50.30	50.10	48.66	47.97	47.90	48.13	50.08
7	50.88	52.10	48.42	51.41	49.27	50.12	50.02	48.64	47.92	48.98	48.76	49.81
8	50.82	51.65	48.37	50.77	50.04	49.93	49.97	48.63	47.88	49.17	48.18	49.19
9	50.30	51.15	48.33	50.08	51.54	49.82	49.91	48.61	47.84	48.43	47.61	48.88
10	49.90	50.44	48.31	50.77	52.88	49.77	49.78	48.55	47.83	47.84	47.33	49.12
11	49.93	50.15	48.31	52.62	53.35	49.79	49.66	48.50	48.04	47.62	47.23	49.68
12	50.19	49.99	48.33	52.96	53.76	49.78	49.59	48.48	48.12	47.50	47.47	50.22
13	49.94	49.87	48.36	52.86	53.96	49.79	49.64	48.46	47.88	47.36	47.91	49.94
14	49.62	49.85	48.55	52.76	53.97	50.43	49.67	48.41	48.26	47.25	48.67	49.81
15	49.38	49.71	48.98	52.57	53.87	52.01	49.54	48.35	48.93	47.16	49.82	49.93
16	49.23	49.56	48.67	52.28	53.73	53.11	49.47	48.30	48.57	47.09	50.21	49.48
17	49.15	49.41	48.42	51.87	53.58	53.30	49.39	48.27	48.04	47.07	49.27	49.07
18	49.03	49.29	48.29	51.38	53.45	53.39	49.31	48.24	48.08	47.01	48.40	48.86
19	48.94	49.22	48.19	50.97	53.35	53.39	49.24	48.23	48.41	46.95	48.12	48.78
20	48.88	49.20	48.12	50.86	53.23	53.31	49.22	48.45	48.82	46.95	48.38	48.65
21	48.80	49.26	48.07	50.55	53.10	53.21	49.26	48.81	49.03	47.10	50.17	48.55
22	48.72	49.53	48.00	50.09	52.94	53.10	49.44	48.52	49.13	48.00	51.96	48.48
23	48.63	49.92	47.97	49.81	52.83	52.92	49.32	48.27	48.46	49.00	52.01	48.44
24	48.58	49.68	47.97	49.62	52.71	52.74	49.12	48.17	48.07	50.19	51.40	48.40
25	48.58	49.41	47.95	49.45	52.57	52.55	49.06	48.12	47.86	49.91	50.40	48.39
26	48.59	49.24	47.87	49.41	52.34	52.35	49.01	48.09	47.73	48.56	49.45	48.38
27	48.58	49.14	47.81	49.37	52.06	52.13	48.98	48.05	47.61	48.16	49.09	48.36
28	48.88	49.07	47.80	49.23	51.74	51.89	48.95	48.01	47.55	48.93	48.87	48.35
29	50.04	49.03	47.81	49.02	---	51.60	48.92	47.97	47.49	49.21	48.88	48.36
30	51.25	49.01	47.77	48.96	---	51.26	48.89	48.00	47.45	48.40	49.32	48.36
31	51.44	---	47.75	48.85	---	50.95	---	48.02	---	47.83	49.53	---
MEAN	49.69	50.33	48.28	50.41	51.88	51.50	49.59	48.41	48.10	48.02	48.83	49.01
MAX	51.44	52.84	48.98	52.96	53.97	53.39	50.72	48.85	49.13	50.19	52.01	50.22
MIN	48.58	49.01	47.75	47.97	48.66	49.77	48.89	47.97	47.45	46.95	47.23	48.35

CAL YR 1985 MEAN 47.76 MAX 56.18 MIN 44.36
WTR YR 1986 MEAN 49.49 MAX 53.97 MIN 46.95

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 mi^2, includes Paynes Prairie, a diked sinkhole area of 650 mi^2, 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.--Estimated daily discharges: Nov. 10-20, Feb. 3-6. 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.--11 years (water years 1958-60, 1979-86), 87.3 ft^3/s, 1.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft^3/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, 244 ft^3/s, Oct. 1, gage height, 9.98 ft, occurred on recession following peak of Sept. 7, 1985; maximum independent peak discharge, 210 ft^3/s, Feb. 18-21; maximum gage height, 9.74 ft, Feb. 18, 19; minimum discharge, 3.5 ft^3/s, July 21, 22, gage height 6.87 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	180	140	48	120	185	154	33	5.8	5.5	4.3	27
2	235	185	137	47	118	179	172	26	5.5	5.8	4.4	36
3	228	190	135	46	116	174	179	25	5.5	5.9	4.9	38
4	222	195	131	47	115	172	179	27	5.8	5.7	5.0	36
5	218	197	125	54	114	170	177	21	6.2	5.3	4.9	40
6	215	199	120	57	113	166	173	16	5.7	5.2	5.0	42
7	213	201	115	62	112	163	169	14	5.5	5.0	5.7	43
8	211	202	110	70	114	158	164	14	5.4	4.9	5.1	44
9	210	201	106	76	118	154	158	13	5.7	4.7	4.9	44
10	209	200	101	94	126	151	154	16	5.7	4.4	5.2	48
11	211	198	96	109	140	148	147	14	5.7	4.7	5.5	59
12	207	196	92	113	159	145	140	11	5.5	5.1	5.8	64
13	204	194	87	119	177	143	141	9.4	5.3	5.0	5.7	68
14	200	192	87	123	188	147	136	8.7	5.6	4.7	6.6	74
15	196	190	79	126	194	161	129	8.2	5.7	4.6	6.7	79
16	193	188	74	129	198	170	121	7.8	5.7	4.6	6.2	79
17	189	185	71	130	200	171	114	7.6	5.5	4.6	6.1	77
18	187	183	68	130	208	173	109	7.3	5.7	4.6	6.2	78
19	184	180	66	131	209	174	104	7.2	5.7	4.4	6.3	78
20	180	177	64	137	209	175	97	7.5	6.1	4.1	6.5	75
21	176	174	61	139	210	179	89	7.1	6.6	3.7	6.9	71
22	173	172	59	138	206	179	84	6.7	6.2	3.8	7.0	65
23	168	167	57	137	207	178	79	6.6	6.0	4.6	7.0	60
24	165	166	55	136	203	175	73	7.3	5.7	4.9	9.0	55
25	162	162	55	134	198	172	66	6.8	5.6	4.5	9.3	51
26	160	160	54	134	194	170	59	6.1	6.0	4.4	10	46
27	158	156	50	132	188	167	53	5.9	6.5	4.2	13	42
28	160	152	50	128	186	164	47	5.9	6.0	4.3	14	38
29	169	148	49	125	---	161	42	5.7	5.6	4.4	16	38
30	170	143	48	123	---	158	38	5.6	5.7	4.3	23	36
31	172	---	45	122	---	154	---	5.6	---	4.3	24	---
TOTAL	5986	5433	2587	3296	4640	5136	3547	363.0	173.2	146.2	250.2	1631
MEAN	193	181	83.5	106	166	166	118	11.7	5.77	4.72	8.07	54.4
MAX	241	202	140	139	210	185	179	33	6.6	5.9	24	79
MIN	158	143	45	46	112	143	38	5.6	5.3	3.7	4.3	27
CFSM	.25	.23	.11	.14	.21	.21	.15	.02	.01	.01	.01	.07
IN.	.29	.26	.12	.16	.22	.25	.17	.02	.01	.01	.01	.08

CAL YR 1985	TOTAL	26749.26	MEAN	73.3	MAX	472	MIN	.00	CFSM	.09	IN.	1.28
WTR YR 1986	TOTAL	33188.6	MEAN	90.9	MAX	241	MIN	3.7	CFSM	.12	IN.	1.59

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02241000 CAMPS CANAL NEAR ROCHELLE, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.95	9.46	9.10	8.17	9.03	9.50	9.23	7.86	7.05	7.02	6.94	7.75
2	9.91	9.50	9.07	8.21	9.01	9.45	9.39	7.74	7.02	7.04	6.94	7.90
3	9.86	9.54	9.05	8.20	---	9.41	9.45	7.71	7.02	7.05	6.98	7.93
4	9.81	9.59	9.01	8.21	---	9.39	9.45	7.75	7.04	7.04	6.98	7.90
5	9.77	9.61	8.96	8.36	---	9.37	9.43	7.61	7.07	7.01	6.98	7.96
6	9.75	9.62	8.91	8.40	---	9.34	9.40	7.49	7.04	7.00	6.99	7.99
7	9.74	9.64	8.86	8.45	8.96	9.31	9.37	7.45	7.02	6.98	7.04	8.00
8	9.72	9.65	8.81	8.54	8.98	9.27	9.32	7.43	7.02	6.97	6.99	8.02
9	9.71	9.64	8.76	8.61	9.01	9.23	9.27	7.42	7.04	6.96	6.98	8.02
10	9.70	---	8.71	8.79	9.08	9.20	9.22	7.49	7.04	6.94	7.00	8.07
11	9.72	---	8.66	8.92	9.19	9.17	9.17	7.44	7.04	6.96	7.02	8.23
12	9.69	---	8.61	8.97	9.36	9.15	9.10	7.36	7.02	7.00	7.05	8.28
13	9.66	---	8.56	9.02	9.50	9.13	9.11	7.31	7.01	6.98	7.04	8.34
14	9.63	---	8.56	9.06	9.59	9.17	9.06	7.27	7.03	6.96	7.10	8.41
15	9.60	---	8.47	9.08	9.63	9.30	9.00	7.23	7.04	6.95	7.11	8.47
16	9.57	---	8.41	9.10	9.65	9.37	8.92	7.20	7.04	6.95	7.08	8.47
17	9.54	---	8.38	9.11	9.67	9.38	8.85	7.18	7.02	6.95	7.07	8.45
18	9.52	---	8.34	9.11	9.72	9.40	8.79	7.15	7.04	6.95	7.08	8.46
19	9.50	---	8.31	9.12	9.73	9.41	8.74	7.15	7.04	6.94	7.09	8.46
20	9.46	---	8.29	9.17	9.70	9.42	8.67	7.17	7.06	6.91	7.10	8.43
21	9.43	9.41	8.25	9.19	9.71	9.45	8.58	7.14	7.11	6.88	7.13	8.37
22	9.40	9.39	8.22	9.18	9.68	9.45	8.53	7.11	7.08	6.89	7.13	8.30
23	9.36	9.35	8.20	9.17	9.68	9.44	8.47	7.10	7.06	6.95	7.13	8.24
24	9.33	9.34	8.18	9.16	9.66	9.42	8.40	7.15	7.04	6.98	7.29	8.18
25	9.30	9.30	8.18	9.15	9.61	9.39	8.32	7.12	7.03	6.94	7.31	8.11
26	9.28	9.28	8.16	9.15	9.58	9.37	8.23	7.07	7.06	6.94	7.33	8.06
27	9.27	9.25	8.11	9.13	9.53	9.35	8.14	7.05	7.10	6.92	7.43	7.99
28	9.29	9.21	8.10	9.09	9.51	9.32	8.06	7.05	7.06	6.93	7.45	7.93
29	9.36	9.18	8.09	9.08	---	9.29	7.98	7.04	7.03	6.94	7.50	7.93
30	9.37	9.13	8.08	9.06	---	9.27	7.93	7.03	7.04	6.93	7.68	7.90
31	9.39	---	8.04	9.05	---	9.23	---	7.03	---	6.93	7.70	---
MEAN	9.57	---	8.50	8.87	---	9.33	8.85	7.30	7.04	6.96	7.15	8.15
MAX	9.95	---	9.10	9.19	---	9.50	9.45	7.86	7.11	7.05	7.70	8.47
MIN	9.27	---	8.04	8.17	---	9.13	7.93	7.03	7.01	6.88	6.94	7.75

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 mi^2.

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: Nov. 6-21, Jan. 6-9, May 31 to June 12. 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.--13 years (water years 1946-55, 1983-86), 112 ft^3/s, 1.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 976 ft^3/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, 318 ft^3/s, Mar. 21, gage height, 5.02 ft; minimum, 7.3 ft^3/s, July 22; minimum gage height, 3.65 ft, July 22, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	119	82	45	85	150	217	54	15	18	8.7	15
2	56	117	83	45	83	139	212	52	15	18	8.9	15
3	57	115	77	45	83	129	197	48	15	17	10	15
4	59	130	71	45	81	131	179	41	15	18	13	14
5	66	116	70	50	83	139	173	39	15	17	13	15
6	71	120	77	55	92	137	172	37	14	17	13	15
7	61	125	68	70	100	133	168	36	14	16	13	14
8	60	130	66	86	109	122	167	35	14	16	13	14
9	59	132	62	80	112	117	161	33	14	15	13	13
10	68	135	61	78	117	116	152	29	14	14	12	15
11	70	140	58	84	124	121	142	28	14	13	12	15
12	69	147	55	81	123	114	132	28	14	12	12	15
13	68	145	58	91	118	107	138	27	14	11	12	15
14	68	140	77	82	114	130	133	26	14	11	13	15
15	68	138	61	83	119	191	131	24	14	10	14	15
16	74	136	56	83	113	233	133	24	14	9.5	14	15
17	90	134	56	82	116	248	121	23	13	9.0	14	14
18	87	132	54	82	122	244	110	22	16	8.5	14	14
19	87	130	52	99	137	260	101	22	18	8.1	14	14
20	85	120	51	97	137	276	98	22	21	7.9	16	13
21	85	112	50	87	137	304	99	22	24	7.7	17	13
22	83	102	46	86	138	287	98	22	23	8.1	17	12
23	79	95	43	89	141	269	89	21	22	8.9	17	12
24	79	92	41	85	144	261	82	20	21	8.6	17	11
25	77	86	51	94	148	250	78	19	21	8.2	16	11
26	74	84	41	106	139	248	75	18	20	7.9	15	11
27	79	82	37	136	141	248	71	17	19	8.1	15	11
28	87	84	37	103	126	242	67	16	18	8.2	15	10
29	104	84	37	88	---	235	63	16	18	8.1	15	10
30	101	83	36	87	---	235	57	15	17	8.1	15	10
31	95	---	34	87	---	227	---	15	---	8.3	15	---
TOTAL	2320	3505	1748	2511	3282	6043	3816	851	500	356.2	426.6	401
MEAN	74.8	117	56.4	81.0	117	195	127	27.5	16.7	11.5	13.8	13.4
MAX	104	147	83	136	148	304	217	54	24	18	17	15
MIN	54	82	34	45	81	107	57	15	13	7.7	8.7	10
CFSM	.07	.12	.06	.08	.12	.19	.13	.03	.02	.01	.01	.01
IN.	.09	.13	.06	.09	.12	.22	.14	.03	.02	.01	.02	.01

CAL YR 1985	TOTAL	8451.98	MEAN	23.2	MAX	147	MIN	.00	CFSM	.02	IN.	.31
WTR YR 1986	TOTAL	25759.8	MEAN	70.6	MAX	304	MIN	7.7	CFSM	.07	IN.	.95

ST. JOHNS RIVER

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: Nov. 6-21, Feb. 3-19, May 31 to June 12. Records good. Station does not represent the entire outflow of Lochloosa Lake as there is a natural diversion through Cross Creek into Orange Lake.

AVERAGE DISCHARGE.--13 years (water years 1947-55, 1983-86), 24.0 ft^3/s, 17,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 341 ft^3/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, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13 ft^3/s, Mar. 21, gage height, 6.59 ft; no flow for many days; slough dry at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.5	2.4	2.0	3.3	4.8	7.0	1.4	.00	.00	.00	.25
2	.00	2.8	2.4	2.0	3.2	4.7	6.7	1.3	.00	.00	.00	.39
3	.00	2.7	2.2	2.0	3.0	4.3	6.4	1.2	.00	.12	.00	.30
4	.04	3.0	2.1	1.9	2.8	4.4	6.0	1.1	.00	.70	.00	.22
5	.30	2.7	2.1	2.0	2.7	4.8	5.6	.95	.00	.41	.00	.70
6	.66	2.4	2.2	1.9	2.6	4.6	5.4	.84	.00	.27	.00	.53
7	.73	2.2	2.1	2.0	2.5	4.5	5.1	.77	.00	.10	.04	.36
8	.72	2.1	1.9	2.0	2.4	4.5	4.9	.71	.00	.00	.27	.26
9	.76	2.0	1.8	2.0	3.0	4.2	4.9	.60	.00	.00	.17	.76
10	.90	1.9	1.8	3.4	4.0	4.1	4.7	.48	.00	.00	.03	1.4
11	1.1	1.9	1.8	4.1	4.5	4.0	4.3	.38	.00	.00	.00	1.4
12	1.1	1.8	1.8	3.7	4.5	4.0	4.0	.30	.00	.00	.00	1.1
13	1.2	1.9	1.8	3.6	4.5	3.8	4.5	.23	.00	.00	.00	.86
14	1.2	2.0	2.1	3.6	4.5	3.5	4.2	.16	.00	.00	.05	.68
15	1.2	2.1	2.1	3.3	4.5	7.6	3.9	.08	.00	.00	.20	.45
16	1.3	2.2	1.9	3.3	4.6	10	3.8	.01	.00	.00	.14	.27
17	1.6	2.3	1.9	3.3	4.6	11	3.6	.00	.00	.00	.12	.13
18	1.4	2.5	1.8	3.4	4.6	11	3.4	.00	.00	.00	.22	.02
19	1.4	2.6	1.8	3.7	4.5	11	3.1	.01	.00	.00	.19	.00
20	1.4	2.8	1.6	3.7	4.8	11	2.9	.08	1.0	.00	.44	.00
21	1.4	2.5	1.5	3.6	4.7	12	2.8	.04	2.2	.00	.78	.00
22	1.4	2.7	1.6	3.4	4.7	12	2.7	.00	1.4	.00	.95	.00
23	1.4	2.7	1.6	3.3	4.7	10	2.6	.00	.94	.00	.72	.00
24	1.4	2.7	1.5	3.2	4.7	9.6	2.4	.00	.61	.00	.55	.00
25	1.4	2.6	1.6	3.3	4.8	9.0	2.2	.00	.35	.00	.34	.00
26	1.4	2.5	1.5	3.7	4.6	8.7	2.0	.00	.22	.00	.26	.00
27	1.5	2.4	1.5	3.8	4.3	8.4	1.9	.00	.07	.00	.25	.00
28	1.6	2.4	1.4	3.8	4.6	8.1	1.8	.00	.00	.00	.16	.00
29	1.8	2.4	1.4	3.6	---	7.8	1.7	.00	.00	.00	.16	.00
30	2.0	2.4	1.4	3.3	---	7.7	1.5	.00	.00	.00	.24	.00
31	2.1	---	1.4	3.2	---	7.3	---	.00	---	.00	.20	---
TOTAL	34.41	71.7	56.0	95.1	112.2	222.4	116.0	10.64	6.79	1.60	6.48	10.08
MEAN	1.11	2.39	1.81	3.07	4.01	7.17	3.87	.34	.23	.05	.21	.34
MAX	2.1	3.0	2.4	4.1	4.8	12	7.0	1.4	2.2	.70	.95	1.4
MIN	.00	1.8	1.4	1.9	2.4	3.5	1.5	.00	.00	.00	.00	.00

CAL YR 1985	TOTAL	182.82	MEAN	.50	MAX	3.0	MIN	.00
WTR YR 1986	TOTAL	743.40	MEAN	2.04	MAX	12	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 mi^2, includes Paynes prairie, a diked sinkhole area of 650 mi^2, 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.--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.--37 years (water years 1943-52, 1956-71, 1976-86), 162 ft^3/s, 2.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft^3/s, Sept. 13, 1964, gage height, 9.86 ft; minimum daily, 2.0 ft^3/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 ft^3/s, from rating curve extended above 1,500 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 15	1800	*639	*7.08	No other peak greater than base discharge.			

Minimum discharge, 14 ft^3/s, June 9, gage height, 1.78 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	105	119	70	126	181	293	73	19	38	27	76
2	57	121	113	80	128	176	287	66	18	43	35	77
3	57	120	107	74	120	173	277	61	18	47	36	56
4	56	135	105	71	115	176	270	57	17	78	32	44
5	60	139	101	73	114	186	263	52	16	140	30	41
6	63	141	112	72	120	180	251	47	16	136	27	39
7	60	140	102	75	136	175	243	43	16	75	24	39
8	58	136	97	76	161	169	233	42	16	58	36	34
9	56	129	91	70	192	163	226	40	15	43	46	32
10	63	125	84	136	190	163	221	38	16	33	39	38
11	87	123	85	194	188	156	212	36	16	29	38	52
12	76	121	81	192	184	152	203	33	15	28	41	56
13	91	126	82	173	174	157	220	33	17	25	47	48
14	75	123	92	161	170	237	207	32	19	22	48	46
15	71	120	92	146	169	423	195	31	24	22	53	41
16	75	119	92	134	162	508	189	29	21	19	45	38
17	81	116	86	135	158	451	180	28	24	18	36	33
18	82	114	84	125	161	414	173	27	43	17	33	31
19	79	113	74	132	162	386	167	28	42	16	27	31
20	80	114	68	139	166	367	160	38	43	16	26	28
21	78	123	64	135	164	366	154	33	116	16	29	26
22	74	120	61	130	166	364	150	29	117	44	50	24
23	73	119	59	127	168	355	139	26	93	43	53	23
24	67	128	56	122	167	348	132	25	62	38	44	23
25	63	125	59	119	169	338	124	23	46	40	38	22
26	63	120	57	137	167	334	115	22	39	28	33	21
27	63	117	60	143	170	328	106	21	33	33	32	21
28	64	115	53	142	173	321	96	20	30	40	36	21
29	70	114	51	147	---	314	88	19	29	29	39	22
30	72	112	48	142	---	310	81	18	37	23	49	21
31	79	---	46	135	---	300	---	18	---	20	87	---
TOTAL	2148	3673	2481	3807	4440	8671	5655	1088	1033	1257	1216	1104
MEAN	69.3	122	80.0	123	159	280	189	35.1	34.4	40.5	39.2	36.8
MAX	91	141	119	194	192	508	293	73	117	140	87	77
MIN	55	105	46	70	114	152	81	18	15	16	24	21
CFSM	.06	.11	.07	.12	.15	.26	.18	.03	.03	.04	.04	.03
IN.	.07	.13	.09	.13	.15	.30	.20	.04	.04	.04	.04	.04

CAL YR 1985	TOTAL	14646.6	MEAN	40.1	MAX	278	MIN	3.1	CFSM	.04	IN.	.51
WTR YR 1986	TOTAL	36573	MEAN	100	MAX	508	MIN	15	CFSM	.09	IN.	1.28

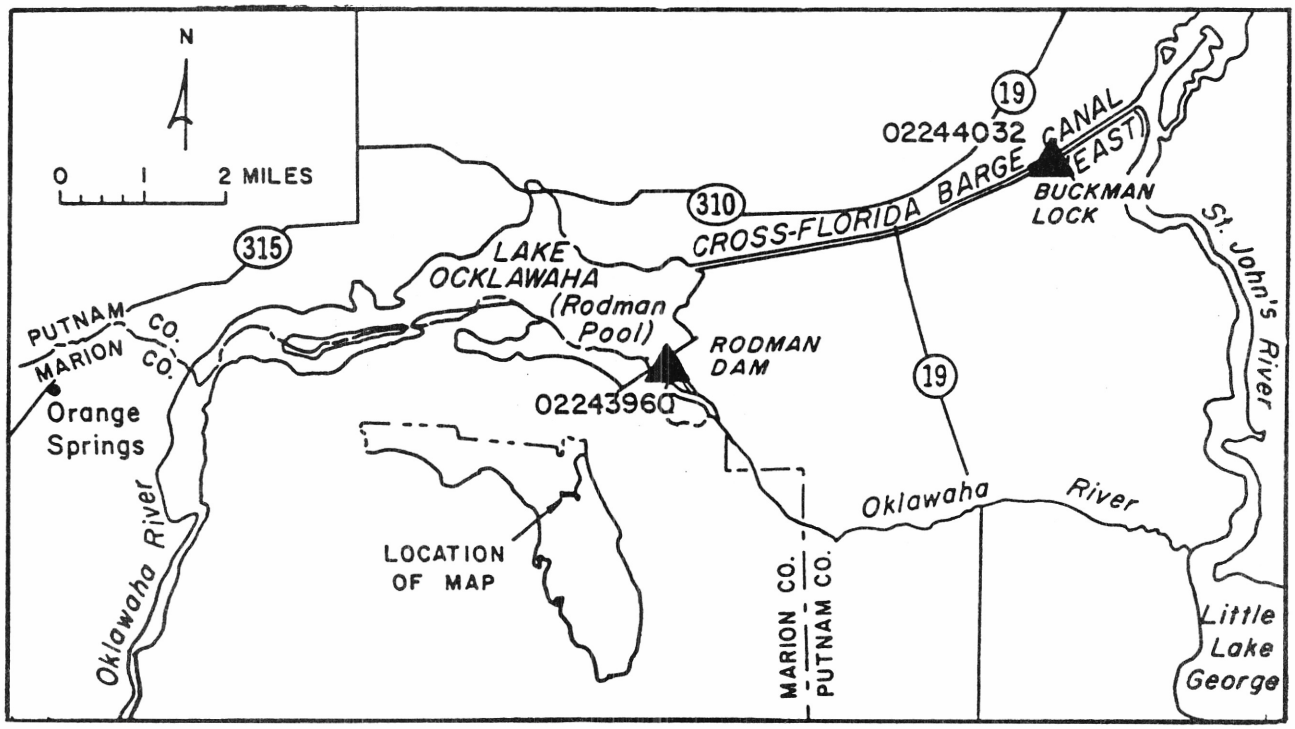

Figure 11. Location of stream gaging stations in the lower Oklawaha River basin.

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02243960 OKLAWAHA RIVER AT RODMAN DAM, 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 03080102, at downstream side of control structure of Rodman Dam, 8.4 mi east of Orange Springs, and 11.6 mi upstream from mouth.

DRAINAGE AREA.--2,747 mi^2, includes Paynes Prairie, a diked sinkhole area of 650 mi^2, approximately, which is noncontributing except for pumpage.

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

REVISED RECORDS.--WDR FL-77-1: Drainage area.

GAGE.--Dual water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Auxiliary gage at upstream side of control structure at same datum.

REMARKS.--Records fair. Flow regulated by manipulation of gates in spillway; dam completed and flow through spillway began on Sept. 30, 1968. Since November 1969, diversion above station from Lake Ocklawaha for boat lockages, through Cross-Florida Barge Canal (see station 02244032) to St. Johns River. Records of gage height for auxiliary station are published as elevations for Lake Ocklawaha (station 02243958) in the section of this report entitled LAKE ELEVATIONS.

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

AVERAGE DISCHARGE.--18 years, 1,500 ft^3/s, 7.42 in/yr, 1,087,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 9,560 ft^3/s, Feb. 5, 1970; maximum gage height, 9.64 ft, Apr. 12, 1982; gates closed and flow consists of unknown leakage Mar. 9, 1969; minimum gage height, 0.80 ft, June 3, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,290 ft^3/s, Mar. 17; maximum gage height, 7.22 ft, Mar. 18; minimum daily discharge, 187 ft^3/s, May 12; minimum gage height, 1.08 ft, May 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	1120	1090	808	1430	1430	1530	205	484	353	713	1510
2	1290	1140	1090	1040	1340	1290	1530	336	555	434	955	1420
3	1270	1140	1090	1250	1130	1080	1530	336	763	553	1100	1370
4	1270	1140	1010	1320	1130	1000	1510	340	845	746	1450	1090
5	1270	1140	874	1320	1210	1190	1380	340	845	835	1640	1090
6	1100	1120	830	980	1210	1670	1300	344	768	1180	1190	1090
7	830	1130	830	910	1470	1500	1110	344	650	1370	653	842
8	730	1130	830	1000	1590	1190	1000	344	592	1370	473	783
9	730	1130	830	1020	1650	1210	1130	344	520	1010	566	826
10	730	1130	750	1250	1860	1210	1210	344	1100	825	961	1200
11	730	1130	710	1940	1790	1420	1210	348	1100	825	861	1490
12	730	1120	710	2430	1650	1530	1210	187	549	825	835	1630
13	1080	1120	710	2040	1780	1310	1210	348	598	825	835	1290
14	1290	874	1110	1950	1790	1630	1210	348	671	749	1110	1090
15	1290	955	1670	2500	1830	2270	600	353	722	705	1200	1010
16	1290	1120	1950	2810	1870	3060	300	353	1030	629	1240	955
17	1290	1120	1970	2750	1840	4290	300	353	1240	512	1130	955
18	1190	966	1950	2550	1840	3000	300	357	1240	406	923	795
19	1120	1120	1930	2730	1840	2460	307	357	1240	353	826	705
20	1320	1120	1980	2650	1580	3650	312	435	1240	353	677	705
21	1320	1120	2090	2410	1180	2620	312	478	1470	353	585	705
22	1320	1120	2080	2180	1000	1600	316	484	1380	357	592	705
23	1080	1120	2060	2010	1120	3460	320	484	1050	827	592	705
24	940	1110	2030	1620	1360	4130	320	484	786	1470	592	705
25	890	1110	2170	1550	1530	4010	324	484	705	1630	592	713
26	754	1110	2170	1780	1530	2630	328	484	705	1180	818	705
27	700	1110	1770	2140	1530	2340	328	484	705	955	966	705
28	764	1110	1230	1900	1470	2430	332	484	560	955	966	705
29	943	1110	1420	1150	---	2010	300	484	395	819	966	705
30	1110	1110	1440	1060	---	1580	275	484	353	628	966	488
31	1110	---	920	1160	---	1470	---	484	---	664	1300	---
TOTAL	32561	33095	43294	54208	42550	65670	23344	12034	24861	24696	28273	28687
MEAN	1050	1103	1397	1749	1520	2118	778	388	829	797	912	956
MAX	1320	1140	2170	2810	1870	4290	1530	484	1470	1630	1640	1630
MIN	700	874	710	808	1000	1000	275	187	353	353	473	488
CFSM	.38	.40	.51	.64	.55	.77	.28	.14	.30	.29	.33	.35
IN.	.44	.45	.59	.73	.58	.89	.32	.16	.34	.33	.38	.39
AC-FT	64580	65640	85870	107500	84400	130300	46300	23870	49310	48980	56080	56900

CAL YR 1985	TOTAL	312006	MEAN	855	MAX	2860	MIN	353	CFSM	.31	IN.	4.23	AC-FT	618900
WTR YR 1986	TOTAL	413273	MEAN	1132	MAX	4290	MIN	187	CFSM	.41	IN.	5.60	AC-FT	819700

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02243960 OKLAWAHA RIVER AT RODMAN DAM, NEAR ORANGE SPRINGS, FL

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.64	5.02	4.85	4.15	5.12	5.16	5.21	1.94	3.07	2.90	3.70	5.06
2	4.98	5.14	4.84	4.30	5.12	5.09	5.21	2.27	3.13	2.89	4.03	5.10
3	5.02	5.13	4.84	4.70	4.96	4.89	5.20	2.25	3.56	3.00	4.46	5.10
4	5.02	5.12	4.82	4.90	4.76	4.64	5.20	2.30	3.97	3.43	4.83	5.00
5	5.01	5.15	4.74	4.80	4.87	4.66	5.12	2.65	4.03	3.82	5.25	4.85
6	4.98	5.15	4.67	5.03	4.88	5.00	4.97	2.90	4.03	4.30	5.13	4.86
7	4.78	5.14	4.62	4.32	5.00	5.26	4.79	2.87	3.94	4.83	4.48	4.66
8	4.54	5.12	4.60	4.54	5.26	4.97	4.51	2.85	3.82	4.87	3.60	4.50
9	4.51	5.12	4.60	4.56	5.22	4.90	4.58	2.82	3.63	4.69	3.54	4.59
10	4.56	5.12	4.51	4.88	5.22	4.89	4.74	2.85	3.37	4.35	3.98	4.75
11	4.61	5.12	4.36	5.46	5.45	5.00	4.76	2.90	3.36	4.26	4.27	5.05
12	4.58	5.12	4.23	5.85	5.31	5.16	4.76	2.10	3.36	4.25	4.27	5.30
13	4.78	5.12	4.06	5.85	5.35	5.06	4.78	2.29	3.36	4.25	4.29	5.21
14	5.00	4.72	4.60	5.63	5.52	5.13	4.76	2.35	3.56	4.10	4.39	5.00
15	5.03	4.57	5.32	5.91	5.52	5.65	3.76	2.36	3.84	3.91	4.61	4.91
16	5.05	4.82	5.70	6.15	5.57	6.12	2.57	2.36	4.17	3.78	4.72	4.78
17	5.06	4.87	5.81	6.22	5.57	6.70	2.50	2.35	4.60	3.47	4.75	4.75
18	4.98	4.65	5.81	6.10	5.58	6.61	2.52	2.33	4.68	3.10	4.62	4.60
19	4.91	4.84	5.83	6.12	5.56	5.91	2.59	2.64	4.73	2.78	4.37	4.34
20	5.09	4.87	5.85	6.13	5.46	6.43	2.64	2.92	4.73	2.76	4.12	4.29
21	5.10	4.88	5.90	6.00	5.12	6.30	2.66	2.97	4.91	2.78	3.78	4.26
22	5.10	4.93	5.90	5.85	4.70	5.39	2.62	2.96	5.11	2.82	3.75	4.24
23	5.07	4.96	5.92	5.71	4.64	6.23	2.62	2.98	4.87	3.55	3.72	4.21
24	4.93	4.94	5.89	5.52	4.85	6.91	2.66	3.00	4.48	4.67	3.70	4.20
25	4.75	4.95	5.93	5.28	5.14	6.93	2.67	3.00	4.15	5.14	3.74	4.19
26	4.52	4.95	5.98	5.40	5.19	6.37	2.67	2.99	4.06	5.01	3.93	4.16
27	4.12	4.95	5.82	5.56	5.20	5.83	2.65	3.03	4.02	4.68	4.20	4.14
28	4.18	4.94	5.24	5.56	5.19	5.90	2.65	3.06	3.69	4.61	4.23	4.12
29	4.55	4.92	5.17	5.13	---	5.71	2.57	3.06	3.18	4.38	4.24	4.12
30	4.86	4.87	5.18	4.68	---	5.40	2.49	3.05	2.97	3.82	4.27	3.78
31	4.90	---	4.58	4.95	---	5.20	---	3.07	---	3.65	4.64	---
MEAN	4.81	4.97	5.17	5.33	5.19	5.59	3.71	2.69	3.95	3.90	4.25	4.60
MAX	5.10	5.15	5.98	6.22	5.58	6.93	5.21	3.07	5.11	5.14	5.25	5.30
MIN	4.12	4.57	4.06	4.15	4.64	4.64	2.49	1.94	2.97	2.76	3.54	3.78

CAL YR 1985 MEAN 4.15 MAX 6.38 MIN 2.69
WTR YR 1986 MEAN 4.51 MAX 6.93 MIN 1.94

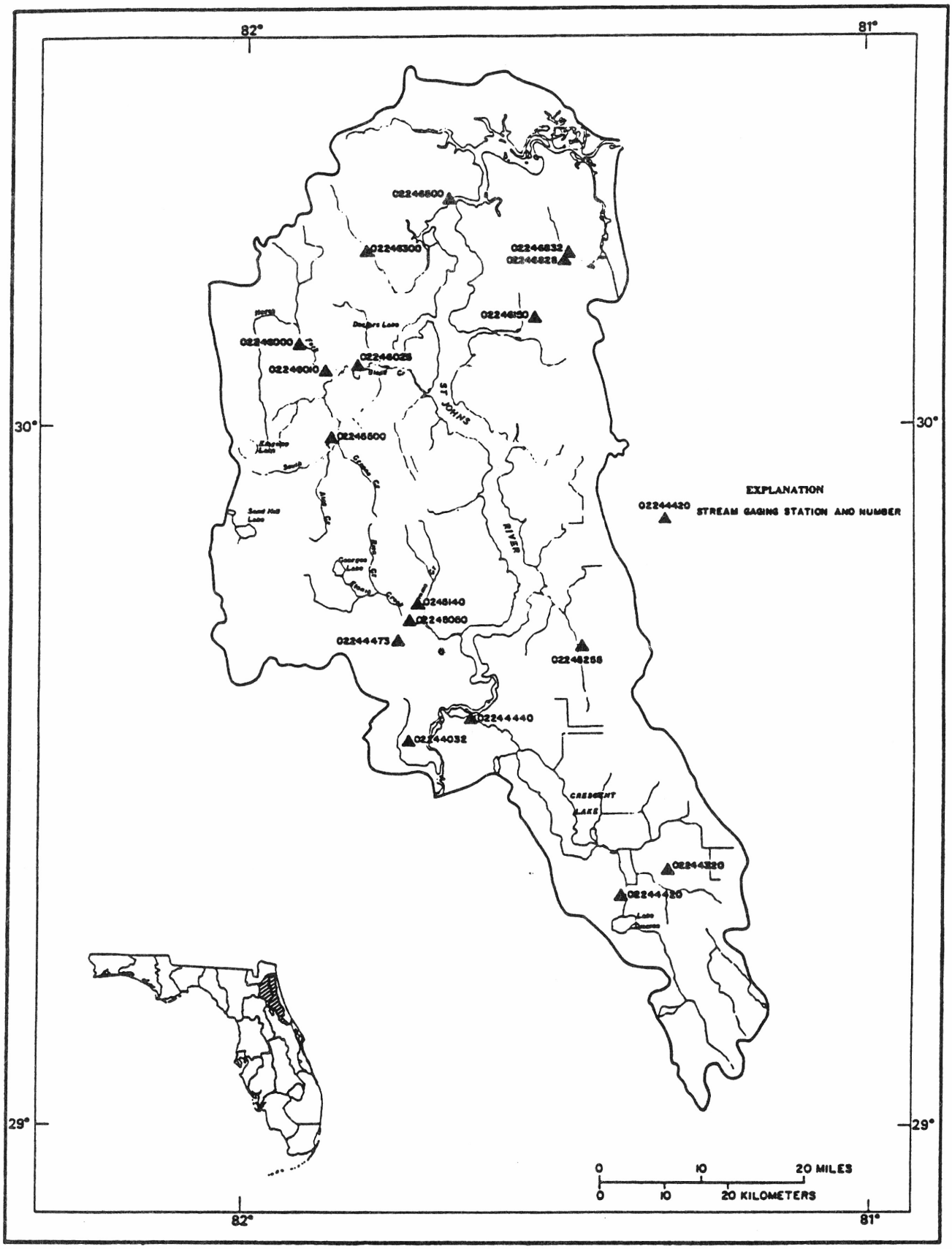

Figure 12. Location of stream gaging stations in the St. Johns River basin below the Oklawaha River basin.

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 ft^3/s, May 27, 1978; no flow for many days each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	28	18	38	58	.00	.00	15	61	19	20	132
2	.00	51	.00	52	45	66	26	25	19	19	57	.00
3	.00	50	17	54	13	53	23	85	22	30	.00	15
4	.00	38	.00	44	37	22	50	67	44	40	.00	37
5	.00	.00	21	45	13	30	66	56	40	85	.00	37
6	.00	17	28	.00	21	38	66	.00	39	89	29	81
7	.00	29	.00	12	20	61	65	20	153	11	40	47
8	.00	51	.00	13	37	52	36	17	94	18	6.0	.00
9	.00	1.1	38	.00	61	37	21	70	28	34	110	.00
10	.00	50	39	.00	50	27	28	90	19	52	63	.00
11	17	40	39	70	13	40	37	58	.00	42	.00	36
12	17	38	28	41	12	48	61	15	51	121	.00	48
13	50	17	18	32	20	.00	36	49	63	98	.00	103
14	.00	.00	.00	18	20	13	19	28	56	.00	17	122
15	.00	15	.00	20	42	20	.00	.00	60	.00	.00	27
16	16	38	16	73	52	37	.00	43	.00	30	97	21
17	38	57	.00	71	37	44	30	125	40	.00	61	37
18	15	38	17	64	13	20	65	94	.00	22	17	17
19	17	.00	17	72	60	21	56	39	.00	87	39	31
20	28	.00	27	28	34	.00	80	41	38	88	.00	120
21	20	16	56	35	43	.00	.00	40	139	.00	16	91
22	18	28	15	51	73	12	14	50	76	19	38	16
23	20	65	16	35	51	.00	16	78	18	32	106	.00
24	40	.00	.00	34	35	.00	61	96	.00	66	17	.00
25	29	7.0	.00	57	58	52	88	99	17	74	42	.00
26	59	.00	.00	33	27	29	77	98	.00	76	61	39
27	17	17	40	12	35	21	102	38	17	22	61	16
28	17	.00	65	.00	36	11	15	.00	118	20	22	72
29	.00	41	64	12	---	65	33	.00	32	61	.00	63
30	26	35	30	35	---	58	.00	16	22	.00	83	17
31	16	---	38	21	---	28	---	120	---	46	94	---
TOTAL	460.00	767.10	647.00	1072.00	1016	905.00	1171.00	1572.00	1266.00	1301.00	1096.00	1225.00
MEAN	14.8	25.6	20.9	34.6	36.3	29.2	39.0	50.7	42.2	42.0	35.4	40.8
MAX	59	65	65	73	73	66	102	125	153	121	110	132
MIN	.00	.00	.00	.00	12	.00	.00	.00	.00	.00	.00	.00
AC-FT	912	1520	1280	2130	2020	1800	2320	3120	2510	2580	2170	2430

CAL YR 1985	TOTAL	15029.10	MEAN	41.2	MAX	141	MIN	.00	AC-FT	29810
WTR YR 1986	TOTAL	12498.10	MEAN	34.2	MAX	153	MIN	.00	AC-FT	24790

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 mi^2.

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.--Records good.

AVERAGE DISCHARGE.--11 years, 80.5 ft^3/s, 13.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft^3/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, 678 ft^3/s, Jan. 11, gage height, 10.75 ft; no flow May 1 to June 9; minimum gage height, 4.45 ft, June 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	502	29	15	108	35	14	.00	.00	7.4	13	58
2	202	445	27	17	98	33	12	.00	.00	4.8	14	46
3	200	398	24	17	88	31	10	.00	.00	9.0	17	38
4	251	361	22	17	79	30	8.7	.00	.00	95	24	37
5	250	330	20	18	72	30	7.5	.00	.00	50	65	36
6	219	299	20	18	66	28	6.3	.00	.00	49	101	36
7	218	274	18	18	62	26	5.2	.00	.00	41	102	40
8	240	251	17	20	66	23	4.2	.00	.00	33	82	42
9	249	227	16	26	80	21	3.2	.00	.00	25	71	40
10	246	206	16	160	78	20	2.6	.00	.01	18	63	35
11	256	188	15	577	116	19	1.9	.00	.04	13	53	31
12	261	170	14	636	149	17	1.4	.00	.04	10	45	29
13	260	154	15	526	124	16	1.5	.00	.24	10	43	26
14	244	140	22	458	100	16	1.3	.00	.18	7.3	41	24
15	216	128	21	413	81	48	.96	.00	.09	4.8	51	26
16	188	117	22	388	69	126	.67	.00	.07	3.0	53	27
17	166	107	23	370	60	148	.51	.00	.05	1.8	45	23
18	147	97	23	349	55	126	.36	.00	.05	1.2	35	20
19	132	87	23	325	52	96	.28	.00	.05	2.2	28	21
20	118	77	22	298	49	72	.22	.00	.25	1.5	21	33
21	105	68	20	267	47	65	.14	.00	.28	1.0	17	44
22	93	61	19	239	44	55	.11	.00	.15	5.4	14	47
23	83	56	18	215	42	48	.08	.00	.12	19	12	47
24	72	51	17	195	40	41	.06	.00	.08	22	9.4	44
25	65	47	16	179	38	36	.05	.00	.12	53	7.7	41
26	61	43	15	170	36	32	.04	.00	1.1	62	6.3	38
27	220	40	14	164	34	28	.04	.00	3.2	42	5.0	34
28	417	37	13	152	35	24	.03	.00	5.0	27	4.4	31
29	514	34	13	140	---	21	.01	.00	6.2	17	4.5	27
30	542	32	12	129	---	18	.01	.00	9.9	12	4.4	23
31	553	---	11	118	---	16	---	.00	---	12	24	---
TOTAL	6993	5027	577	6634	1968	1345	83.37	.00	27.22	659.4	1075.7	1044
MEAN	226	168	18.6	214	70.3	43.4	2.78	.00	.91	21.3	34.7	34.8
MAX	553	502	29	636	149	148	14	.00	9.9	95	102	58
MIN	61	32	11	15	34	16	.01	.00	.00	1.0	4.4	20
CFSM	2.89	2.15	.24	2.73	.90	.55	.04	.00	.01	.27	.44	.44
IN.	3.32	2.39	.27	3.15	.93	.64	.04	.00	.01	.31	.51	.50

CAL YR 1985	TOTAL	30073.64	MEAN	82.4	MAX	553	MIN	.00	CFSM	1.05	IN.	14.29
WTR YR 1986	TOTAL	25433.69	MEAN	69.7	MAX	636	MIN	.00	CFSM	.89	IN.	12.08

ST. JOHNS RIVER

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 mi^2.

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 daily discharges: Oct. 27 to Nov. 24, Dec. 18 to Jan. 18. Records fair.

AVERAGE DISCHARGE.--35 years (water years 1952-86), 86.5 ft^3/s, 12.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,630 ft^3/s, Oct. 19, 20, 1968, gage height, 9.18 ft; no flow for many days in some years; minimum gage height, 0.14 ft^3/s, July 7, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 520 ft^3/s, Jan. 12; maximum gage height recorded, 6.37 ft, Jan. 19, but may have been higher during period of no gage-height record Dec. 18 to Jan. 18; minimum discharge, 0.41 ft^3/s, June 6,7, gage height, 0.72 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	480	71	22	194	54	39	2.7	.58	.87	1.2	9.5
2	286	440	67	25	182	51	36	2.6	.58	.83	1.2	7.7
3	278	410	60	26	169	48	33	2.4	.68	1.2	1.5	6.5
4	298	390	53	27	157	47	30	2.2	.61	2.1	2.4	5.9
5	296	370	50	28	146	52	28	2.1	.56	1.6	2.9	4.8
6	276	350	49	29	135	48	26	2.0	.47	2.2	5.6	9.3
7	249	330	44	30	129	46	24	1.9	.45	1.5	3.8	10
8	230	310	41	50	128	43	22	2.0	.71	1.4	2.5	7.9
9	219	290	39	70	157	41	21	2.0	.58	1.3	2.0	5.9
10	221	270	38	200	147	41	18	1.6	.64	1.2	1.8	5.9
11	243	250	37	410	179	40	16	1.5	.72	1.2	1.7	5.5
12	231	235	36	520	195	39	14	1.5	.62	1.6	1.7	4.5
13	216	220	39	470	167	38	17	1.4	.64	1.9	1.8	3.8
14	202	205	64	410	143	39	14	1.4	.88	1.5	1.7	3.6
15	189	190	52	380	127	71	13	1.3	.76	1.3	1.8	3.3
16	177	180	46	350	113	117	11	1.2	.76	1.3	1.7	3.0
17	166	170	43	330	104	133	9.7	1.2	.96	1.2	1.6	2.7
18	157	160	42	354	104	125	8.8	1.1	.89	1.2	1.5	3.0
19	148	150	40	365	100	114	8.1	1.1	1.2	1.0	1.7	3.3
20	144	140	37	358	93	105	7.4	1.2	1.5	.97	1.8	2.8
21	139	130	36	342	86	104	7.1	1.2	1.3	.96	1.9	2.5
22	133	124	34	329	80	89	6.7	1.1	1.1	1.8	1.8	2.4
23	126	118	32	318	77	73	5.8	.97	1.0	2.1	1.7	2.3
24	118	112	30	304	76	64	5.1	.94	.94	2.1	1.5	2.3
25	114	102	28	292	69	60	4.7	.88	.87	2.2	1.6	2.5
26	113	96	26	289	60	56	4.3	.82	.82	1.6	1.6	2.7
27	167	90	24	288	56	54	3.8	.78	.76	1.6	1.5	3.0
28	290	85	22	253	52	52	3.5	.73	.72	1.8	1.8	3.2
29	380	80	21	230	---	48	3.2	.68	.68	1.6	2.8	3.3
30	460	76	20	218	---	45	2.9	.64	.83	1.4	4.7	3.5
31	490	---	19	206	---	41	---	.60	---	1.3	5.4	---
TOTAL	7020	6553	1240	7523	3425	1978	443.1	43.74	23.81	45.83	68.2	136.6
MEAN	226	218	40.0	243	122	63.8	14.8	1.41	.79	1.48	2.20	4.55
MAX	490	480	71	520	195	133	39	2.7	1.5	2.2	5.6	10
MIN	113	76	19	22	52	38	2.9	.60	.45	.83	1.2	2.3
CFSM	2.43	2.34	.43	2.61	1.31	.69	.16	.02	.01	.02	.02	.05
IN.	2.81	2.62	.50	3.01	1.37	.79	.18	.02	.01	.02	.03	.05

CAL YR 1985	TOTAL	29585.47	MEAN	81.1	MAX	490	MIN	.00	CFSM	.87	IN.	11.83
WTR YR 1986	TOTAL	28500.28	MEAN	78.1	MAX	520	MIN	.45	CFSM	.84	IN.	11.40

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 mi^2.

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.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,650 ft^3/s, Feb. 19, 1983; maximum gage height, 13.40 ft, Oct. 30, 1985; maximum daily reverse flow, 4,520 ft^3/s, May 10, 1986; minimum gage height, 8.84 ft, June 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,400 ft^3/s, Jan. 28; maximum gage height, 13.40 ft, Oct. 30; maximum daily reverse flow, 4,520 ft^3/s, May 10; minimum gage height, 9.40 ft, Dec. 27, 28, July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	451	166	1170	-768	1760	464	-87	1710	28	-1250
2		---	-1350	-824	1690	1320	2130	1840	393	1640	573	-1610
3		---	-1260	-550	2020	3740	1610	-1330	148	1680	1260	-1840
4		---	-476	213	1920	3110	974	-1550	-1940	-91	1580	512
5		---	-325	-1430	1740	813	467	969	-2460	-1320	721	643
6		---	-325	368	1850	1210	797	1820	-2550	-3	849	895
7		---	578	57	1280	1250	1400	1920	738	883	918	-358
8		---	1220	-3480	197	-276	1780	1650	2060	1840	1480	-50
9		---	1180	-2050	-582	-127	-73	-911	2840	2290	1660	878
10		---	1160	330	-472	340	-1660	-4520	1300	2100	1300	1750
11		---	1780	-1040	-78	980	-367	-2210	171	1980	1130	3230
12		---	2250	2610	946	1030	295	786	1420	1860	1140	4440
13		---	2990	2830	1150	1680	-1480	401	1770	1320	857	4110
14		2210	1020	3440	3100	678	-835	-423	1870	1390	1590	1610
15		2420	896	3650	3400	330	176	70	1230	1390	1190	691
16		2390	27	2510	2270	1120	983	-67	1120	699	-191	658
17		2000	-48	2460	1770	852	-381	568	1240	503	-360	-248
18		2230	1350	2490	1870	2330	-783	1240	1330	350	544	-1960
19		1280	1000	1460	2220	2490	-1730	1040	111	329	421	-802
20		1820	1170	2150	1070	1760	-766	1630	-236	-162	281	369
21		4270	1380	2500	-53	-1640	826	1020	-207	-787	-139	1530
22		5410	1340	1820	651	-3970	-515	-384	-1730	-806	-81	1980
23		2170	1800	1860	295	-766	-767	-254	-926	-278	1	1510
24		-753	2130	-2450	-722	1640	-21	43	660	-236	-459	1270
25		-214	1030	-1640	-2060	1220	258	299	1520	-156	-362	2230
26		1030	1180	437	533	208	389	-44	819	632	-629	2460
27		2360	1460	2450	3940	349	62	-847	-13	1430	1630	1990
28		2850	1050	6400	1570	209	-279	-582	1010	2370	2770	876
29		2410	246	4910	---	-711	-255	-439	2040	2070	540	-931
30		1790	-493	3200	---	336	2	-280	2150	1620	-3670	-852
31		---	-390	1070	---	1110	---	-604	---	595	-2150	---
TOTAL		---	24021	35917	32685	21847	3997	1315	15791	26842	14422	23731
MEAN		---	775	1159	1167	705	133	42.4	526	866	465	791
MAX		---	2990	6400	3940	3740	2130	1920	2840	2370	2770	4440
MIN		---	-1350	-3480	-2060	-3970	-1730	-4520	-2550	-1320	-3670	-1960

NOTE.--Negative figures indicate reverse flow.

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 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.32	12.16	10.94	10.31	10.62	11.00	10.86	10.89	10.95	10.62	10.42	11.53
2	12.17	11.98	11.14	10.53	10.55	10.84	10.74	10.67	10.92	10.49	10.37	11.66
3	12.01	11.96	11.20	10.58	10.44	10.46	10.71	10.93	10.98	10.58	10.30	11.78
4	11.69	11.82	11.26	10.55	10.42	10.21	10.73	11.20	11.35	10.95	10.23	11.64
5	11.51	11.32	11.31	10.77	10.43	10.42	10.75	10.97	11.54	11.05	10.38	11.62
6	11.74	11.36	11.31	10.67	10.39	10.40	10.70	10.72	11.66	10.96	10.50	11.63
7	11.94	11.42	11.22	10.60	10.36	10.34	10.56	10.57	11.39	10.81	10.53	11.78
8	12.20	11.49	11.19	11.18	10.55	10.52	10.42	10.49	11.14	10.61	10.45	11.80
9	12.41	11.67	11.17	11.39	10.83	10.61	10.52	10.76	10.89	10.46	10.36	11.76
10	12.61	11.77	11.16	11.43	10.97	10.57	10.78	11.37	10.86	10.32	10.33	11.67
11	12.23	11.80	11.08	11.92	11.08	10.43	10.72	11.37	10.96	10.35	10.30	11.48
12	12.10	11.74	10.96	11.85	11.12	10.37	10.63	11.05	10.82	10.23	10.30	11.19
13	12.25	11.67	10.79	11.59	11.11	10.29	10.87	10.99	10.67	10.15	10.31	10.99
14	12.33	11.63	10.90	11.31	10.93	10.36	10.92	11.09	10.60	10.08	10.19	11.19
15	12.30	11.55	10.92	11.02	10.76	10.49	10.82	11.05	10.64	10.12	10.21	11.33
16	12.21	11.51	11.03	11.20	10.76	10.54	10.64	11.02	10.66	10.16	10.46	11.33
17	12.20	11.50	11.05	11.09	10.79	10.65	10.73	10.93	10.67	10.20	10.60	11.42
18	12.33	11.44	10.89	11.00	10.76	10.50	10.84	10.83	10.64	10.13	10.59	11.70
19	12.32	11.53	10.86	10.96	10.66	10.37	11.03	10.77	10.87	10.23	10.66	11.65
20	12.14	11.47	10.81	10.67	10.74	10.27	11.08	10.77	11.04	10.40	10.71	11.52
21	11.98	11.19	10.69	10.50	10.95	10.72	10.90	10.76	11.13	10.49	10.76	11.33
22	11.94	10.73	10.62	10.58	10.93	11.27	10.97	10.88	11.39	10.72	10.79	11.16
23	11.97	10.84	10.45	10.73	10.99	11.23	11.06	10.92	11.33	10.47	10.79	11.12
24	12.02	11.20	10.21	11.28	11.18	10.98	11.05	10.85	11.14	10.62	10.87	11.08
25	12.15	11.30	10.24	11.54	11.36	10.98	11.01	10.77	10.96	10.69	10.91	10.86
26	12.31	11.20	10.13	11.46	11.25	11.08	10.93	10.75	11.08	10.66	11.04	10.64
27	12.56	11.05	10.00	11.15	10.72	11.07	10.94	10.85	11.12	10.55	10.82	10.49
28	12.64	10.91	10.00	10.70	10.77	11.09	10.98	10.87	10.93	10.38	10.56	10.43
29	12.82	10.82	10.13	10.49	---	11.24	10.99	10.86	10.76	10.31	10.66	10.62
30	12.94	10.78	10.22	10.40	---	11.17	10.96	10.86	10.67	10.24	11.30	10.72
31	12.62	---	10.27	10.58	---	11.02	---	10.94	---	10.33	11.47	---
MEAN	12.22	11.43	10.78	10.97	10.80	10.69	10.83	10.90	10.99	10.46	10.59	11.30
MAX	12.94	12.16	11.31	11.92	11.36	11.27	11.08	11.37	11.66	11.05	11.47	11.80
MIN	11.51	10.73	10.00	10.31	10.36	10.21	10.42	10.49	10.60	10.08	10.19	10.43

WTR YR 1986 MEAN 11.00 MAX 12.94 MIN 10.00

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 mi^2.

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.--Records good.

AVERAGE DISCHARGE.--13 years, 45.2 ft^3/s, 14.21 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft^3/s, Aug. 1, 1978, gage height, 9.80 ft, from rating curve extended above 820 ft^3/s; minimum daily discharge, 2.2 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	1500	354	6.90	Sept. 11	0900	507	7.27
Mar. 16	0400	*963	*7.98				

Minimum daily discharge, 3.2 ft^3/s, May 30,31; minimum gage height, 2.28 ft, May 29-31, June 1,2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	212	11	24	27	32	17	3.8	3.3	6.6	30	96
2	34	233	17	35	25	34	15	3.8	3.3	5.9	42	77
3	27	212	27	33	24	30	13	3.8	3.8	6.8	28	61
4	22	202	25	28	23	28	12	3.8	3.9	16	24	50
5	20	162	21	30	21	38	11	3.8	3.9	16	31	44
6	21	129	21	34	27	40	9.7	3.8	3.6	57	136	39
7	18	104	19	34	39	33	9.1	3.8	3.4	42	182	31
8	16	79	17	39	67	28	8.5	4.5	3.4	20	118	25
9	14	50	17	40	117	24	8.0	5.0	4.0	11	76	42
10	14	37	16	104	119	22	7.3	4.3	5.7	7.8	48	151
11	18	31	16	300	126	20	6.8	3.9	6.2	7.0	40	449
12	20	28	15	261	153	18	6.4	3.7	5.7	14	45	283
13	18	27	15	195	120	17	6.8	3.8	5.1	76	37	178
14	16	24	20	160	86	60	6.8	3.8	4.9	35	40	173
15	14	23	22	131	70	284	6.3	3.7	5.3	14	69	130
16	17	21	19	110	56	708	5.9	3.5	6.1	8.7	120	93
17	48	19	17	92	46	303	5.5	3.5	6.1	7.3	113	64
18	75	18	16	74	46	230	5.2	3.5	6.5	6.1	95	41
19	68	16	15	62	45	190	5.2	4.0	8.4	5.4	80	29
20	52	16	14	52	42	157	5.1	10	13	5.1	86	22
21	40	17	13	42	36	147	5.4	9.6	38	7.4	114	17
22	31	16	13	36	32	139	5.7	6.5	45	13	113	14
23	25	15	13	31	30	119	5.3	5.0	25	35	99	11
24	20	15	13	28	31	91	4.9	4.3	13	36	89	9.7
25	18	14	16	26	28	62	4.8	3.9	8.9	24	64	8.6
26	21	13	15	33	24	47	4.6	3.6	7.2	18	41	7.9
27	35	13	14	46	22	38	4.5	3.5	5.9	15	26	7.5
28	69	12	14	42	23	32	4.2	3.4	5.2	14	21	7.0
29	134	12	14	35	---	27	4.0	3.3	4.7	12	30	6.6
30	177	12	14	32	---	23	3.8	3.2	5.0	9.5	40	6.1
31	193	---	13	29	---	20	---	3.2	---	13	84	---
TOTAL	1329	1782	512	2218	1505	3041	217.8	133.3	263.5	564.6	2161	2173.4
MEAN	42.9	59.4	16.5	71.5	53.8	98.1	7.26	4.30	8.78	18.2	69.7	72.4
MAX	193	233	27	300	153	708	17	10	45	76	182	449
MIN	14	12	11	24	21	17	3.8	3.2	3.3	5.1	21	6.1
CFSM	.99	1.37	.38	1.66	1.25	2.27	.17	.10	.20	.42	1.61	1.68
IN.	1.14	1.53	.44	1.91	1.30	2.62	.19	.11	.23	.49	1.86	1.87

CAL YR 1985	TOTAL	14063.5	MEAN	38.5	MAX	601	MIN	2.4	CFSM	.89	IN.	12.11
WTR YR 1986	TOTAL	15900.6	MEAN	43.6	MAX	708	MIN	3.2	CFSM	1.01	IN.	13.69

ST. JOHNS RIVER

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 mi^2.

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.--Estimated daily discharges: June 5-10. Records poor. Records include an appreciable amount of ground-water flow from Hudson Pulp and Paper Corporation production wells.

AVERAGE DISCHARGE.--13 years, 100 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,210 ft^3/s, May 12, 1979, gage height, 7.74 ft; minimum daily discharge, 35 ft^3/s, Apr. 7, 1982, estimated; minimum gage height, 0.70 ft, Apr. 7, 1982, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,080 ft^3/s, Mar. 16, gage height, 7.49 ft; minimum, 57 ft^3/s, June 2, gage height, 1.43 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	281	66	85	87	112	104	62	58	72	82	147
2	114	272	71	95	85	118	99	62	58	71	93	140
3	100	256	84	89	83	112	95	62	59	76	86	111
4	91	191	76	85	82	107	92	61	60	95	86	93
5	85	151	72	108	80	117	89	61	64	80	108	85
6	84	122	71	134	81	117	86	61	62	112	132	81
7	78	106	69	123	95	110	84	60	60	106	124	78
8	74	97	68	119	111	102	81	70	72	89	95	76
9	72	89	67	114	171	98	79	70	98	78	85	76
10	75	85	67	171	220	95	75	65	71	73	80	79
11	135	82	66	326	472	92	73	63	69	70	79	148
12	125	79	66	382	522	90	72	62	69	71	80	212
13	104	76	66	286	388	89	71	61	69	80	78	153
14	93	74	70	221	280	258	71	61	67	79	79	120
15	87	74	73	177	230	737	71	60	73	71	81	98
16	136	73	71	151	198	899	71	60	104	68	86	87
17	99	72	69	133	175	668	70	59	104	66	84	80
18	86	70	68	121	161	500	68	59	128	65	79	77
19	84	69	67	117	153	378	68	61	183	64	77	74
20	81	70	67	115	148	301	67	78	254	64	133	72
21	77	71	66	110	138	271	68	73	302	67	189	71
22	74	71	66	104	127	262	70	68	243	69	156	70
23	71	70	66	99	120	236	68	64	166	89	130	69
24	69	70	67	95	119	201	67	62	123	100	110	68
25	69	69	69	92	114	174	66	61	103	87	95	70
26	86	68	68	95	109	157	65	60	92	77	84	71
27	121	67	68	107	105	144	65	59	85	73	79	69
28	167	67	68	104	103	133	64	59	80	72	85	68
29	189	67	68	98	---	123	63	59	76	72	96	67
30	620	67	68	93	---	114	62	58	74	70	91	66
31	398	---	68	90	---	109	---	58	---	70	108	---
TOTAL	3855	3076	2136	4239	4757	7024	2244	1939	3126	2396	3050	2776
MEAN	124	103	68.9	137	170	227	74.8	62.5	104	77.3	98.4	92.5
MAX	620	281	84	382	522	899	104	78	302	112	189	212
MIN	69	67	66	85	80	89	62	58	58	64	77	66

CAL YR 1985	TOTAL	34963	MEAN	95.8	MAX	741	MIN	45
WTR YR 1986	TOTAL	40618	MEAN	111	MAX	899	MIN	58

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 mi^2.

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: Oct. 25 to Nov. 19. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--12 years (water years 1974-75, 1977-86), 48.9 ft^3/s, 14.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft^3/s, Dec. 7, 1979, gage height, 13.78 ft; minimum, 5.7 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 16	1000	*1,470	*13.76	No other peak greater than base discharge.			

Minimum discharge, 6.9 ft^3/s, May 31, gage height, 7.27 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	260	15	25	27	41	30	10	7.5	11	20	123
2	36	300	18	31	25	49	27	10	7.3	11	18	105
3	31	280	22	25	24	41	24	9.9	7.1	16	15	71
4	26	240	19	23	23	37	22	9.8	7.9	39	17	45
5	25	200	17	39	22	47	21	9.7	9.5	20	20	33
6	22	150	17	52	23	48	20	9.6	8.1	30	35	30
7	19	120	16	43	33	40	19	9.5	7.3	28	42	26
8	16	100	15	47	48	33	18	11	8.4	22	46	22
9	16	80	14	45	99	30	17	10	54	16	36	20
10	31	60	14	85	122	28	16	9.6	35	13	23	30
11	39	50	14	196	285	26	16	9.2	30	12	33	59
12	30	40	14	220	348	25	15	8.9	18	13	25	73
13	25	30	14	161	258	24	15	8.8	14	19	19	49
14	21	26	16	125	176	64	15	8.7	18	16	20	47
15	29	24	17	100	136	691	15	8.5	16	13	28	41
16	48	22	16	80	116	1230	14	8.2	13	11	39	29
17	40	21	15	65	100	691	14	8.0	13	11	32	22
18	41	20	15	56	86	388	13	8.0	35	9.9	25	20
19	42	19	14	53	79	251	13	8.9	64	9.6	38	19
20	34	19	14	49	71	179	13	28	84	9.4	46	17
21	28	19	14	43	61	146	13	21	113	9.3	111	16
22	23	19	14	38	53	135	14	14	83	11	275	14
23	19	19	14	34	48	120	13	11	43	25	260	13
24	20	18	14	31	47	98	13	9.7	27	29	149	13
25	31	17	15	29	42	80	12	9.0	20	21	98	12
26	50	17	15	34	36	66	12	8.4	16	16	54	12
27	70	16	14	47	33	57	12	7.9	13	13	34	12
28	110	16	14	40	31	50	11	7.6	12	12	31	12
29	170	16	14	34	---	44	11	7.3	11	11	51	11
30	200	15	14	31	---	38	11	7.0	11	11	79	11
31	230	---	14	28	---	34	---	6.9	---	11	89	---
TOTAL	1562	2233	472	1909	2452	4831	479	314.1	806.1	499.2	1808	1007
MEAN	50.4	74.4	15.2	61.6	87.6	156	16.0	10.1	26.9	16.1	58.3	33.6
MAX	230	300	22	220	348	1230	30	28	113	39	275	123
MIN	16	15	14	23	22	24	11	6.9	7.1	9.3	15	11
CFSM	1.07	1.57	.32	1.30	1.85	3.30	.34	.21	.57	.34	1.23	.71
IN.	1.23	1.76	.37	1.50	1.93	3.80	.38	.25	.63	.39	1.42	.79

CAL YR 1985	TOTAL	15875.4	MEAN	43.5	MAX	659	MIN	6.5	CFSM	.92	IN.	12.49
WTR YR 1986	TOTAL	18372.4	MEAN	50.3	MAX	1230	MIN	6.9	CFSM	1.06	IN.	14.45

ST. JOHNS RIVER

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 mi^2.

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: Oct. 1 to Nov. 20. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--11 years, 8.74 ft^3/s, 5.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 308 ft^3/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.--Maximum discharge, 131 ft^3/s, Mar. 15, gage height, 6.45 ft, no peak above base of 175 ft^3/s; minimum, 0.02 ft^3/s, June 9, gage height, 3.98 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	32	.61	1.7	2.0	6.9	4.8	2.2	.07	.08	4.8	30
2	12	28	.96	1.8	1.8	5.2	5.8	2.4	.10	.16	4.9	12
3	11	24	1.2	1.6	1.7	1.5	5.2	2.9	.24	1.9	3.6	6.1
4	10	22	.87	1.3	1.5	1.4	5.1	3.2	.22	1.9	26	3.9
5	9.6	20	.72	1.7	1.3	1.9	5.0	3.5	.18	2.5	44	14
6	11	18	.81	1.7	1.7	2.4	5.3	3.0	.10	2.9	18	20
7	9.2	15	.62	1.9	3.3	4.3	5.6	2.4	.06	.60	7.8	9.6
8	7.4	12	.52	3.4	8.0	3.7	4.8	1.3	.04	.32	3.8	4.9
9	6.8	10	.47	4.3	19	5.0	3.0	1.3	.03	.23	2.3	3.1
10	6.2	9.0	.42	65	15	6.2	3.9	.94	.10	.17	1.7	2.4
11	7.4	8.0	.40	91	18	8.6	4.7	.98	.13	.86	1.3	2.4
12	8.6	6.4	.42	48	19	6.9	4.9	.70	.15	.55	7.4	2.6
13	8.0	5.2	.43	26	12	4.8	2.5	.81	.35	.31	11	1.9
14	6.6	4.5	.78	16	8.4	2.3	1.7	1.1	.59	.22	13	1.5
15	5.4	4.0	.68	11	7.2	60	2.6	1.1	.35	.16	13	1.2
16	4.7	3.2	.56	7.9	5.8	57	3.8	1.0	.36	.14	16	.96
17	3.6	2.4	.50	6.2	4.5	34	3.5	1.3	.22	.13	8.0	.83
18	3.8	2.0	.44	5.1	4.5	21	3.6	1.3	.22	.12	4.9	.93
19	3.8	1.7	.40	4.9	4.8	13	2.9	6.3	.28	.11	3.2	.92
20	4.2	1.4	.40	4.4	3.8	9.5	4.0	6.5	.68	.11	2.5	.79
21	3.6	1.4	.38	3.3	3.1	8.9	2.7	1.0	1.7	.19	2.1	.62
22	3.2	1.4	.33	2.7	2.7	6.9	2.9	.56	1.1	.59	1.7	.53
23	2.8	1.4	.33	2.2	2.3	4.9	2.8	.33	.76	24	1.4	.50
24	2.5	1.1	.39	1.9	2.2	5.6	3.3	.25	.37	30	1.1	.48
25	2.3	.92	.74	1.9	1.9	8.2	3.6	.19	.25	7.1	.83	.45
26	6.0	.77	.62	3.6	2.1	7.9	3.4	.15	.20	2.1	.73	.42
27	35	.69	.55	5.8	1.4	9.1	3.2	.13	.16	21	.64	.43
28	48	.64	.52	3.8	4.2	8.6	3.0	.11	.14	19	.66	.42
29	44	.71	.53	3.1	---	7.7	2.6	.16	.12	5.0	15	.37
30	35	.68	.50	2.7	---	8.5	2.7	.15	.10	2.1	24	.34
31	33	---	.48	2.3	---	5.7	---	.09	---	4.8	14	---
TOTAL	368.7	238.51	17.58	338.2	163.2	337.6	112.9	47.35	9.37	129.35	259.36	124.59
MEAN	11.9	7.95	.57	10.9	5.83	10.9	3.76	1.53	.31	4.17	8.37	4.15
MAX	48	32	1.2	91	19	60	5.8	6.5	1.7	30	44	30
MIN	2.3	.64	.33	1.3	1.3	1.4	1.7	.09	.03	.08	.64	.34
CFSM	.57	.38	.03	.53	.28	.53	.18	.07	.01	.20	.40	.20
IN.	.66	.43	.03	.61	.29	.61	.20	.09	.02	.23	.47	.22

CAL YR 1985	TOTAL	5184.62	MEAN	14.2	MAX	207	MIN	.10	CFSM	.69	IN.	9.32
WTR YR 1986	TOTAL	2146.71	MEAN	5.88	MAX	91	MIN	.03	CFSM	.28	IN.	3.86

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 mi^2.

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 discharges: Feb. 3-11, Apr. 27 to May 19. Records good.

AVERAGE DISCHARGE.--47 years, 156 ft^3/s, 15.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft^3/s, Oct. 19, 1944, gage height, 26.33 ft, from floodmarks, from rating curve extended above 11,000 ft^3/s; minimum, about 9.4 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 11	1200	1,710	13.68	Mar. 16	1000	*2,270	*14.87

Minimum discharge, 19 ft^3/s, May 26, gage height, 0.39 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	320	56	113	73	50	73	29	34	65	48	310
2	100	426	54	117	70	57	68	28	39	79	50	190
3	98	393	52	90	69	80	64	27	89	58	57	107
4	93	333	51	80	68	104	60	26	69	50	51	84
5	86	272	50	297	67	155	57	26	83	60	86	94
6	80	197	53	340	94	142	54	25	57	140	187	108
7	74	152	50	251	190	115	53	25	45	86	151	129
8	70	122	47	260	300	97	51	27	40	65	110	185
9	73	103	47	219	600	88	48	28	48	54	78	108
10	75	92	47	327	900	82	46	29	74	47	261	108
11	115	85	47	778	1560	78	45	30	120	45	154	195
12	117	81	46	826	1310	74	43	26	171	44	93	246
13	116	77	54	497	807	73	43	25	110	41	85	170
14	110	73	178	315	445	417	42	24	135	38	84	119
15	95	72	117	236	327	1050	40	24	185	36	111	99
16	85	70	80	186	277	1980	40	23	97	34	89	82
17	81	65	68	153	222	1270	39	22	92	33	74	70
18	76	61	62	132	195	722	38	25	230	33	74	66
19	79	59	58	152	190	417	37	32	281	32	135	63
20	74	62	54	161	170	311	37	58	363	31	310	55
21	70	63	52	135	148	306	38	68	364	30	251	49
22	65	69	50	113	130	287	45	33	236	46	228	46
23	62	68	50	100	119	224	41	25	146	113	188	43
24	58	63	52	91	81	181	37	22	108	126	123	52
25	59	61	61	86	43	151	35	20	86	77	93	51
26	72	57	54	89	37	133	34	22	73	56	84	45
27	198	55	52	106	34	119	33	25	62	50	71	40
28	316	54	51	98	33	109	32	25	54	65	63	39
29	289	60	51	88	---	100	31	27	49	56	71	39
30	507	59	50	83	---	93	30	27	48	46	82	37
31	441	---	48	77	---	83	---	29	---	40	189	---
TOTAL	3928	3724	1842	6596	8559	9148	1334	882	3588	1776	3731	3029
MEAN	127	124	59.4	213	306	295	44.5	28.5	120	57.3	120	101
MAX	507	426	178	826	1560	1980	73	68	364	140	310	310
MIN	58	54	46	77	33	50	30	20	34	30	48	37
CFSM	.95	.93	.44	1.59	2.28	2.20	.33	.21	.90	.43	.90	.75
IN.	1.09	1.03	.51	1.83	2.38	2.54	.37	.24	.00	.49	1.04	.84

CAL YR 1985	TOTAL	45466	MEAN	125	MAX	2080	MIN	13	CFSM	.93	IN.	12.62
WTR YR 1986	TOTAL	48137	MEAN	132	MAX	1980	MIN	20	CFSM	.99	IN.	13.36

ST. JOHNS RIVER

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 mi^2.

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.--Records fair. Stage-discharge relation affected by tide on some days.

AVERAGE DISCHARGE.--55 years, 193 ft^3/s, 14.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft^3/s, May 3, 1964, gage height, 23.91 ft; minimum observed, 3.6 ft^3/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 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 16	2200	*1,520	*13.07	No other peak greater than base discharge.			

Minimum discharge, 14 ft^3/s, May 31, gage height, 0.66 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	247	56	96	80	100	68	22	15	34	44	570
2	123	316	56	142	76	114	62	21	15	41	59	587
3	116	287	88	121	74	103	56	21	15	42	72	417
4	96	324	84	110	70	99	51	21	19	42	85	311
5	109	372	72	194	67	151	49	20	30	44	88	389
6	125	240	63	309	96	156	46	19	34	156	121	709
7	113	172	60	258	194	131	44	18	29	181	147	902
8	100	135	56	302	270	111	42	19	22	199	181	1010
9	96	118	52	292	702	95	41	19	18	144	143	582
10	97	105	51	344	1060	84	39	22	17	88	102	449
11	89	98	49	699	1080	77	38	24	34	57	132	466
12	91	91	47	939	1210	73	35	20	36	46	230	471
13	91	87	46	694	925	74	36	18	29	44	190	283
14	95	82	116	434	546	498	37	18	43	44	197	195
15	89	79	215	313	369	963	34	18	84	40	228	146
16	79	75	174	235	297	1350	33	17	64	62	203	112
17	74	70	132	177	239	1300	33	16	87	49	151	92
18	81	64	104	149	213	869	32	16	169	40	145	100
19	83	64	86	146	226	484	31	15	146	36	446	87
20	76	71	78	144	206	326	31	32	104	33	837	71
21	67	98	71	130	180	339	31	51	128	32	1050	59
22	64	97	65	117	155	365	31	33	121	38	803	54
23	65	106	59	106	139	282	31	28	130	42	508	51
24	62	98	58	101	141	209	30	23	123	69	314	49
25	69	91	55	96	133	163	28	20	83	130	201	46
26	84	81	54	94	120	134	26	19	56	157	138	44
27	172	72	51	103	103	116	25	17	45	115	99	42
28	300	65	49	97	94	103	24	17	40	85	89	41
29	353	60	48	89	---	94	24	16	38	66	191	41
30	326	59	53	85	---	85	23	15	35	53	401	40
31	266	---	52	82	---	76	---	15	---	47	552	---
TOTAL	3766	3924	2300	7198	9065	9124	1111	650	1809	2256	8147	8416
MEAN	121	131	74.2	232	324	294	37.0	21.0	60.3	72.8	263	281
MAX	353	372	215	939	1210	1350	68	51	169	199	1050	1010
MIN	62	59	46	82	67	73	23	15	15	32	44	40
CFSM	.68	.74	.42	1.31	1.83	1.66	.21	.12	.34	.41	1.49	1.59
IN.	.79	.82	.48	1.51	1.91	1.92	.23	.14	.38	.47	1.71	1.77

CAL YR 1985	TOTAL	55146	MEAN	151	MAX	3660	MIN	13	CFSM	.85	IN.	11.59
WTR YR 1986	TOTAL	57766	MEAN	158	MAX	1350	MIN	15	CFSM	.89	IN.	12.14

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 upstream 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 mi^2.

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. Prior to Feb. 28, 1986, at site 50 ft downstream at present datum.

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, 13.45 ft, Oct. 30; minimum, 9.78 ft, Dec. 26.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.13	12.07	10.89	10.35	10.48	11.74	11.81	11.99	12.10	11.70	11.52	12.68
2	11.93	11.69	10.96	10.48	10.43	11.72	11.76	11.73	12.00	11.58	11.46	12.79
3	11.76	11.76	10.86	10.56	10.37	11.41	11.77	11.90	12.05	11.52	11.37	12.79
4	11.43	11.58	11.07	10.51	10.39	11.16	11.80	12.25	12.49	11.89	11.26	12.68
5	11.23	11.00	11.17	10.57	10.40	11.40	11.80	12.07	12.61	12.21	11.42	12.69
6	11.42	11.07	10.95	10.57	10.40	11.44	11.72	11.72	12.72	12.14	11.59	12.76
7	11.69	11.20	10.97	10.55	10.37	11.28	11.55	11.52	12.48	11.96	11.62	12.98
8	12.05	11.22	10.99	10.96	10.59	11.44	11.41	11.45	12.12	11.79	11.53	13.02
9	12.20	11.51	10.98	11.18	10.90	11.68	11.41	11.81	11.87	11.59	11.42	12.87
10	12.36	11.61	10.98	11.24	11.30	11.58	11.74	12.48	11.90	11.40	11.42	12.71
11	12.01	11.59	10.95	11.74	11.46	11.39	11.74	12.45	12.04	11.36	11.42	12.52
12	11.82	11.50	10.84	11.88	11.28	11.38	11.66	12.10	11.91	11.44	11.49	12.18
13	12.01	11.42	10.73	11.39	11.00	11.43	11.84	12.02	11.72	11.32	11.57	11.95
14	12.13	11.35	10.50	11.03	10.86	11.72	11.96	12.18	11.63	11.18	11.34	12.16
15	12.12	11.34	10.65	10.69	10.57	11.92	11.91	12.16	11.75	11.14	11.32	12.34
16	12.00	11.31	10.83	10.96	10.67	12.28	11.61	12.10	11.77	11.25	11.60	12.31
17	11.96	11.30	10.80	10.87	10.74	12.33	11.70	12.03	11.74	11.25	11.75	12.43
18	12.14	11.22	10.66	10.73	10.67	11.91	11.90	11.97	11.69	11.23	11.70	12.81
19	12.12	11.35	10.61	10.74	10.61	11.56	12.11	11.87	11.91	11.22	11.85	12.69
20	11.90	11.31	10.62	10.43	10.76	11.26	12.26	11.86	12.11	11.33	12.09	12.52
21	11.76	11.22	10.46	10.31	10.97	11.63	12.04	11.85	12.19	11.54	12.16	12.26
22	11.71	10.75	10.48	10.47	10.85	12.15	11.91	11.92	12.46	11.67	12.04	12.10
23	11.78	10.68	10.39	10.53	10.90	12.17	12.04	11.98	12.49	11.74	11.93	12.13
24	11.81	11.09	10.28	11.03	11.08	11.95	12.10	11.93	12.29	11.83	11.97	12.13
25	11.91	11.21	10.13	11.37	11.07	11.92	12.06	11.84	12.07	11.90	12.06	11.85
26	12.19	11.10	10.09	11.23	11.15	12.00	11.92	11.89	12.12	11.81	12.18	11.61
27	12.53	10.92	10.12	10.55	10.69	12.00	11.98	12.05	12.27	11.67	11.92	11.52
28	12.57	10.79	10.12	10.29	11.31	12.03	12.07	12.09	12.13	11.53	11.56	11.56
29	12.70	10.75	10.18	10.35	---	12.16	12.01	12.02	11.93	11.46	11.72	11.86
30	12.95	10.76	10.24	10.29	---	12.11	12.02	12.04	11.76	11.36	12.53	12.01
31	12.67	---	10.36	10.44	---	11.97	---	12.10	---	11.44	12.63	---
MEAN	12.03	11.26	10.64	10.78	10.80	11.75	11.85	11.98	12.08	11.56	11.72	12.36
MAX	12.95	12.07	11.17	11.88	11.46	12.33	12.26	12.48	12.72	12.21	12.63	13.02
MIN	11.23	10.68	10.09	10.29	10.37	11.16	11.41	11.45	11.63	11.14	11.26	11.52

CAL YR 1985 MEAN 10.95 MAX 13.75 MIN 9.59
WTR YR 1986 MEAN 11.57 MAX 13.02 MIN 10.09

ST. JOHNS RIVER

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 mi^2.

PERIOD OF RECORD.--October 1981 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 poor. Discharge computed using continuous velocity record obtained from recording electromagnetic current meter and represents net of much larger upstream and downstream discharges. Discharge for October through April 5, 14-16, and June 5-16 not published due to faulty velocity record.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,690 ft^3/s, Mar. 29, 1984; maximum gage height, 13.53 ft, Oct. 30, 1985; maximum daily reverse flow, 198 ft^3/s, Sept. 29, 1983; minimum gage height, 9.05 ft, Feb. 29, Mar. 1, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge for period April to September, 2,570 ft^3/s, Aug. 21; maximum gage height, 13.53 ft, Oct. 30; minimum daily discharge, 104 ft^3/s, May 9; minimum gage height, 9.40 ft, Dec. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	318	788	521	564	1750
2							---	363	784	672	573	1460
3							---	111	794	748	543	1100
4							---	305	713	638	402	936
5							---	325	---	780	579	983
6							420	361	---	1400	836	1520
7							472	320	---	936	762	1680
8							515	351	---	840	713	1960
9							407	104	---	785	585	1340
10							411	320	---	574	593	1030
11							562	760	---	346	650	1230
12							529	563	---	318	670	1300
13							358	297	---	535	536	830
14							---	524	---	384	645	576
15							---	437	---	212	737	573
16							---	417	---	418	780	448
17							572	450	1390	373	540	367
18							438	461	1350	386	874	537
19							306	420	1180	467	2110	654
20							533	660	1170	518	2410	599
21							508	702	1060	435	2570	518
22							368	526	771	715	1960	443
23							387	503	850	835	1360	456
24							349	796	753	708	1060	439
25							574	724	380	624	750	497
26							488	720	322	654	632	447
27							488	739	423	571	603	490
28							355	770	468	504	626	475
29							245	745	581	458	570	459
30							463	476	511	448	1130	416
31							---	718	---	403	1610	---
TOTAL							---	15286	---	18206	28973	25513
MEAN							---	493	---	587	935	850
MAX							---	796	---	1400	2570	1960
MIN							---	104	---	212	402	367
CFSM							---	1.22	---	1.46	2.32	2.11
IN.							---	1.41	---	1.68	2.67	2.36

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 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.23	12.14	11.15	10.33	10.52	10.74	10.81	10.98	11.07	10.67	10.49	11.57
2	12.04	11.76	11.07	10.55	10.45	10.72	10.75	10.72	10.98	10.57	10.44	11.69
3	11.86	11.86	10.97	10.64	10.37	10.40	10.74	10.88	11.02	10.49	10.33	11.71
4	11.53	11.65	11.20	10.56	10.39	10.15	10.78	11.23	11.47	10.87	10.22	11.61
5	11.33	11.05	11.27	10.62	10.40	10.39	10.78	11.05	11.58	11.19	10.38	11.61
6	11.53	11.18	11.08	10.61	10.36	10.58	10.75	10.70	11.70	11.08	10.54	11.64
7	11.82	11.32	11.10	10.58	10.30	10.40	10.63	10.51	11.45	10.91	10.57	11.82
8	12.18	11.35	11.12	11.04	10.55	10.52	10.45	10.44	11.09	10.74	10.47	11.83
9	12.33	11.64	11.11	11.27	10.86	10.77	10.40	10.78	10.83	10.55	10.37	11.76
10	12.49	11.74	11.10	11.31	11.13	10.67	10.54	11.45	10.87	10.36	10.37	11.63
11	12.11	11.70	11.07	11.73	11.22	10.45	10.81	11.44	11.00	10.33	10.36	11.42
12	11.93	11.61	10.96	11.79	11.00	10.46	10.70	11.09	10.87	10.41	10.43	11.09
13	12.13	11.51	10.83	11.36	10.88	10.58	10.68	11.00	10.68	10.29	10.52	10.88
14	12.24	11.44	10.52	11.09	10.88	10.63	10.88	11.15	10.59	10.98	10.29	11.11
15	12.22	11.45	10.72	10.75	10.59	10.55	10.87	11.12	10.70	10.11	10.27	11.31
16	12.10	11.42	10.94	11.06	10.73	10.65	10.69	11.08	10.73	10.22	10.56	11.26
17	12.07	11.41	10.91	10.96	10.82	10.70	10.67	11.00	10.70	10.23	10.70	11.39
18	12.25	11.33	10.77	10.83	10.76	10.80	10.88	10.95	10.64	10.21	10.65	11.76
19	12.24	11.48	10.71	10.85	10.68	10.27	11.10	10.86	10.87	10.20	10.71	11.63
20	12.01	11.43	10.73	10.48	10.82	10.20	11.24	10.83	11.06	10.31	10.87	11.46
21	11.88	11.31	10.53	10.33	11.05	10.55	11.02	10.82	11.14	10.51	10.89	11.21
22	11.84	11.00	10.54	10.55	10.95	11.07	10.90	10.90	11.42	10.63	10.85	11.06
23	11.90	10.85	10.43	10.62	10.98	11.12	11.02	10.96	11.45	10.69	10.82	11.09
24	11.93	11.34	10.20	11.18	11.18	10.94	11.08	10.90	11.24	10.79	10.91	11.09
25	12.03	11.42	9.99	11.49	11.17	10.91	11.04	10.80	11.04	10.86	11.01	10.79
26	12.31	11.28	9.95	11.31	11.26	11.01	10.90	10.86	11.09	10.77	11.14	10.56
27	12.63	11.07	9.95	10.60	10.70	11.01	10.97	11.02	11.25	10.63	10.88	10.49
28	12.65	10.97	9.96	10.25	10.67	11.01	11.05	11.06	11.11	10.50	10.52	10.55
29	12.79	10.91	10.08	10.31	---	11.10	11.00	10.99	10.91	10.43	10.69	10.85
30	13.02	10.98	10.18	10.19	---	11.08	11.00	11.02	10.74	10.33	11.48	10.98
31	12.73	---	10.36	10.48	---	10.93	---	11.09	---	10.42	11.53	---
MEAN	12.14	11.39	10.69	10.83	10.77	10.69	10.84	10.96	11.04	10.56	10.65	11.29
MAX	13.02	12.14	11.27	11.79	11.26	11.12	11.24	11.45	11.70	11.19	11.53	11.83
MIN	11.33	10.85	9.95	10.19	10.30	10.15	10.40	10.44	10.59	10.11	10.22	10.49

CAL YR 1985 MEAN 10.98 MAX 13.02 MIN 9.74
WTR YR 1986 MEAN 10.99 MAX 13.02 MIN 9.95

ST. JOHNS RIVER

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 mi^2.

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.--Records poor.

AVERAGE DISCHARGE.--15 years (water years 1967-69, 1975-86), 11.0 ft^3/s, 10.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft^3/s, Aug. 29, 1968, gage height, 10.47 ft; minimum, 0.05 ft^3/s, July 25, 1977, June 19, 1981, gage height, 3.80 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 29	1600	*310	*8.45	Mar. 15	1630	142	7.56

Minimum discharge, 2.3 ft^3/s, May 27-29; minimum gage height, 4.47 ft, July 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	77	5.1	9.8	8.2	11	9.5	4.2	3.1	6.7	5.3	11
2	36	61	4.8	9.8	8.2	11	8.6	3.8	5.6	5.7	4.3	7.6
3	28	50	4.6	8.5	8.3	9.3	7.8	4.1	6.8	5.6	4.2	6.5
4	23	51	4.7	8.4	8.0	11	7.6	3.6	5.2	5.1	11	5.7
5	19	43	4.6	17	8.0	18	7.3	3.8	4.4	15	23	5.7
6	14	35	4.6	12	13	14	6.9	2.7	4.0	26	22	6.0
7	11	29	4.4	13	15	12	6.6	3.1	3.8	11	9.7	4.5
8	9.2	24	4.9	18	36	9.6	6.5	4.4	3.4	7.2	7.9	6.1
9	9.5	20	5.0	14	56	9.6	6.0	4.1	3.3	5.9	6.5	6.9
10	12	17	4.8	30	52	9.4	5.8	3.6	4.2	4.8	5.4	8.7
11	17	15	6.3	45	54	8.4	4.6	3.7	3.6	3.7	4.4	18
12	15	13	6.6	35	52	8.1	3.7	3.6	3.7	4.1	4.8	9.2
13	12	11	7.9	27	42	15	4.8	3.0	4.6	3.1	4.7	7.6
14	11	11	20	23	35	109	6.4	3.5	4.2	3.4	6.4	7.1
15	9.2	9.7	16	20	32	121	5.8	3.1	3.7	3.6	5.8	6.1
16	9.1	8.9	12	18	27	109	4.0	2.6	4.2	4.5	7.1	5.4
17	17	8.1	10	16	23	75	4.0	2.4	9.8	4.5	6.0	5.0
18	15	7.6	8.7	16	23	56	5.3	2.6	21	4.4	5.5	12
19	21	7.3	7.6	17	22	45	5.3	2.7	9.3	4.0	4.4	9.8
20	17	7.4	6.9	17	19	41	4.6	5.0	9.6	3.2	5.3	6.8
21	14	8.7	6.5	14	16	45	4.7	5.3	9.8	3.9	6.3	6.3
22	12	8.7	6.8	12	14	38	4.7	3.4	12	7.8	8.3	5.1
23	10	7.7	7.5	11	13	32	4.4	2.8	14	9.6	6.8	4.8
24	9.2	7.2	7.7	11	13	28	4.4	2.5	8.9	7.8	4.9	4.5
25	15	6.9	7.6	10	12	24	4.4	2.7	7.0	7.7	3.9	4.7
26	27	6.7	5.8	11	10	21	4.1	2.6	5.0	6.8	3.4	4.5
27	57	6.1	6.4	12	9.7	18	4.0	2.4	3.6	11	3.9	4.5
28	123	5.7	6.6	10	9.6	16	4.0	2.4	2.9	8.2	6.3	4.6
29	220	5.5	5.3	9.4	---	14	4.1	2.4	2.8	6.6	13	4.3
30	198	5.4	5.0	9.1	---	12	3.9	3.1	4.0	5.1	12	5.8
31	115	---	6.9	8.5	---	10	---	3.0	---	5.2	18	---
TOTAL	1151.2	574.6	221.6	492.5	639.0	960.4	163.8	102.2	187.5	211.2	240.5	204.8
MEAN	37.1	19.2	7.15	15.9	22.8	31.0	5.46	3.30	6.25	6.81	7.76	6.83
MAX	220	77	20	45	56	121	9.5	5.3	21	26	23	18
MIN	9.1	5.4	4.4	8.4	8.0	8.1	3.7	2.4	2.8	3.1	3.4	4.3
CFSM	2.73	1.41	.53	1.17	1.68	2.28	.40	.24	.46	.50	.57	.50
IN.	3.15	1.57	.61	1.35	1.75	2.63	.45	.28	.51	.58	.66	.56

CAL YR 1985	TOTAL	4792.02	MEAN	13.1	MAX	299	MIN	.37	CFSM	.96	IN.	13.11
WTR YR 1986	TOTAL	5149.3	MEAN	14.1	MAX	220	MIN	2.4	CFSM	1.04	IN.	14.08

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 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements water years 1928, 1956, 1958-60. 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.--Records fair.

AVERAGE DISCHARGE.--20 years (water years 1966-83, 1985-86), 35.8 ft^3/s, 15.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,950 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 15	1545	*459	*36.11	June 20	2100	402	35.90

Minimum discharge, 0.30 ft^3/s, May 19, gage height, 29.91 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	77	7.4	24	17	22	11	1.7	.58	8.3	4.8	193
2	182	74	17	35	16	24	9.9	1.6	1.6	6.7	4.6	132
3	143	69	35	29	16	18	9.0	1.6	3.5	6.7	12	88
4	97	139	24	26	15	19	8.2	2.0	3.0	8.2	6.9	68
5	100	108	18	67	15	35	7.2	2.2	4.0	6.9	7.4	76
6	66	78	16	89	24	36	6.2	2.3	2.9	14	21	85
7	45	58	13	82	47	27	5.5	2.4	2.0	10	10	256
8	31	42	11	81	91	20	6.8	4.9	1.8	5.7	6.2	134
9	24	32	9.8	70	275	17	6.5	5.4	1.9	4.3	39	73
10	24	30	9.3	104	321	15	4.0	4.8	5.5	3.5	39	60
11	26	30	8.8	231	315	14	3.7	4.1	11	3.0	15	51
12	26	26	8.5	219	254	14	3.7	3.7	5.1	3.2	9.1	38
13	26	22	13	149	161	18	5.2	3.7	8.1	3.8	8.4	28
14	23	20	56	95	102	289	5.1	4.5	12	3.7	10	20
15	19	18	87	70	76	396	4.3	4.9	5.8	3.2	11	16
16	16	17	86	55	62	362	3.7	4.4	14	3.9	8.2	12
17	16	16	67	44	51	249	3.7	3.8	77	4.6	6.9	11
18	14	14	51	37	45	146	2.8	2.4	61	3.0	19	10
19	14	13	38	37	46	93	3.0	7.9	27	2.8	270	12
20	17	13	27	36	41	71	2.9	14	142	2.0	194	9.4
21	17	14	21	32	35	74	4.0	8.0	217	3.3	208	7.9
22	14	14	18	27	30	69	4.5	3.6	77	3.6	117	6.9
23	13	14	16	24	28	54	3.7	2.4	44	4.8	68	6.4
24	12	13	16	21	28	41	3.0	1.7	27	6.3	45	5.9
25	11	12	15	20	24	33	2.7	1.3	17	11	27	5.4
26	23	11	14	20	21	26	2.4	1.0	11	4.9	17	4.9
27	64	9.6	13	23	19	23	2.3	.84	8.4	5.6	12	4.5
28	116	8.7	13	22	19	19	1.9	.67	6.6	5.7	27	4.3
29	126	8.4	13	20	---	17	1.6	.64	5.2	9.4	60	4.3
30	111	7.6	14	19	---	15	1.6	.59	4.4	6.8	98	3.7
31	90	---	13	17	---	13	---	.56	---	5.0	188	---
TOTAL	1609	1008.3	768.8	1825	2194	2269	140.1	103.60	807.38	173.9	1569.5	1426.6
MEAN	51.9	33.6	24.8	58.9	78.4	73.2	4.67	3.34	26.9	5.61	50.6	47.6
MAX	182	139	87	231	321	396	11	14	217	14	270	256
MIN	11	7.6	7.4	17	15	13	1.6	.56	.58	2.0	4.6	3.7
CFSM	1.68	1.09	.80	1.91	2.54	2.37	.15	.11	.87	.18	1.64	1.54
IN.	1.94	1.21	.93	2.20	2.64	2.73	.17	.12	.97	.21	1.89	1.72

CAL YR 1985	TOTAL	12097.53	MEAN	33.1	MAX	970	MIN	.00	CFSM	1.07	IN.	14.56
WTR YR 1986	TOTAL	13895.18	MEAN	38.1	MAX	396	MIN	.56	CFSM	1.23	IN.	16.73

ST. JOHNS RIVER

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 mi^2, includes Paynes Prairie, a diked sinkhole area of about 650 mi^2, 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 ft^3/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, 5,280,000 ft^3, Sept. 10, 1964; maximum volume of flow upstream, 4,410,000 ft^3, Sept. 9, 1964.

Water years 1971-74: Maximum daily discharge, 64,000 ft^3/s, June 20, 1972; maximum daily reverse flow, 62,700 ft^3/s, Oct. 20, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.24 ft, Oct. 30; minimum, 8.33 ft, Dec. 26.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.46	12.75	11.40	10.73	10.90	11.11	11.15	11.26	11.36	11.02	10.91	11.77
2	12.33	12.00	11.39	10.99	10.86	11.10	11.09	11.09	11.23	10.88	10.85	11.86
3	12.15	12.17	11.20	10.99	10.76	10.99	11.08	11.16	11.35	10.93	10.69	11.81
4	11.95	12.07	11.43	10.92	10.78	10.54	11.10	11.37	11.77	11.45	10.69	11.89
5	11.65	11.32	11.58	11.02	10.87	10.83	11.13	11.28	11.69	11.57	10.92	11.90
6	11.30	11.55	11.25	10.96	10.90	10.94	11.09	11.03	11.98	11.39	10.99	11.93
7	12.00	11.64	11.38	10.95	10.79	10.68	10.97	10.87	11.65	11.31	11.00	11.99
8	12.38	11.65	11.45	11.28	11.16	10.92	11.03	10.98	11.39	11.19	11.02	12.03
9	12.38	12.05	11.48	11.52	11.30	11.08	10.99	11.43	11.21	11.11	10.89	11.99
10	12.42	12.07	11.49	11.60	11.53	11.03	11.22	11.69	11.23	10.88	10.72	11.92
11	12.45	12.05	11.53	12.01	11.53	10.78	11.16	11.68	11.25	10.76	10.86	11.66
12	12.33	11.99	11.41	12.04	11.14	10.89	11.08	11.58	11.27	10.79	10.97	11.40
13	12.51	11.98	11.32	11.80	11.13	10.96	11.18	11.27	11.09	10.63	11.04	11.21
14	12.59	11.79	11.23	11.41	11.22	11.06	11.22	11.35	11.00	10.55	10.79	11.58
15	12.60	11.78	11.13	11.14	11.21	10.93	11.16	11.33	11.02	10.56	10.89	11.62
16	12.50	11.76	11.25	11.36	11.00	10.68	11.05	11.27	11.02	10.88	11.19	11.64
17	12.38	11.70	11.16	11.27	11.12	10.91	10.90	11.21	11.07	10.78	11.22	11.89
18	12.51	11.60	11.11	11.09	11.04	10.94	11.02	11.21	11.09	10.78	11.14	12.06
19	12.48	11.77	11.02	11.17	11.02	10.89	11.29	11.17	11.41	10.89	11.19	11.93
20	12.26	11.65	11.04	10.97	11.15	10.41	11.53	11.19	11.56	11.06	11.33	11.75
21	12.13	11.71	10.78	10.68	11.39	10.86	11.61	11.24	11.59	11.06	11.32	11.54
22	12.13	11.80	10.88	10.92	11.32	11.32	11.28	11.41	11.79	11.07	11.20	11.33
23	12.21	11.16	10.91	11.00	11.48	11.27	11.52	11.47	11.82	11.11	11.14	11.35
24	12.17	11.50	10.70	11.55	11.58	11.20	11.53	11.30	11.68	11.09	11.19	11.41
25	12.31	11.64	10.49	11.78	11.66	11.27	11.47	11.27	11.44	11.14	11.26	11.15
26	12.75	11.57	10.39	11.81	11.67	11.38	11.45	11.31	11.35	11.13	11.30	10.79
27	12.99	11.39	10.46	11.32	11.64	11.39	11.35	11.34	11.53	11.01	11.15	10.80
28	12.85	11.29	10.43	10.69	11.06	11.42	11.40	11.43	11.49	10.96	10.80	10.94
29	13.13	11.20	10.55	10.80	---	11.43	11.39	11.33	11.31	10.78	11.15	11.27
30	13.24	11.25	10.70	10.65	---	11.45	11.30	11.29	11.12	10.73	11.63	11.25
31	13.14	---	10.89	10.87	---	11.34	---	11.34	---	10.99	11.64	---
MEAN	12.41	11.73	11.08	11.20	11.19	11.03	11.22	11.30	11.39	10.98	11.07	11.59
MAX	13.24	12.75	11.58	12.04	11.67	11.45	11.61	11.69	11.98	11.57	11.64	12.06
MIN	11.30	11.16	10.39	10.65	10.76	10.41	10.90	10.87	11.00	10.55	10.69	10.79

WTR YR 1986 MEAN 11.35 MAX 13.24 MIN 10.39

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 1985 TO SEPTEMBER 1986
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.15	10.93	9.76	9.08	9.15	9.24	9.44	9.81	10.11	9.57	9.49	10.40
2	10.93	10.64	9.91	9.42	9.01	9.31	9.54	9.59	9.89	9.39	9.40	10.53
3	10.75	10.70	9.54	9.31	9.00	8.93	9.58	9.59	9.91	9.35	9.19	10.38
4	10.48	10.37	9.94	9.32	9.00	8.97	9.56	10.04	10.40	9.81	8.74	10.49
5	10.32	9.98	10.01	9.16	9.00	9.16	9.57	9.88	10.38	10.13	9.30	10.50
6	10.50	10.08	9.65	9.15	9.00	9.10	9.42	9.47	10.59	9.86	9.30	10.40
7	10.66	10.20	9.73	9.13	8.80	8.88	9.19	9.25	10.21	9.74	9.35	10.62
8	11.20	10.01	9.70	9.09	8.87	8.79	9.11	9.24	9.87	9.52	9.23	10.62
9	11.30	10.34	9.74	9.67	9.32	9.24	8.85	9.53	9.70	9.31	9.13	10.59
10	11.40	10.38	9.59	9.60	9.55	9.24	9.43	10.33	9.82	9.17	9.12	10.45
11	10.91	10.22	9.54	10.01	9.54	9.00	9.56	10.27	9.94	9.16	9.08	10.22
12	10.70	10.11	9.48	10.31	9.35	8.93	9.51	9.82	9.78	9.27	9.17	9.89
13	10.74	9.95	9.35	9.76	9.30	9.07	9.74	9.93	9.63	9.12	9.31	9.59
14	10.94	9.96	8.99	9.75	9.71	9.10	9.78	10.07	9.55	8.92	9.07	9.86
15	10.89	10.00	9.04	9.50	9.32	9.17	9.91	10.03	9.67	8.84	8.96	10.01
16	10.73	10.00	9.48	9.79	9.79	9.40	9.57	10.01	9.60	8.96	9.35	9.99
17	10.60	10.10	9.67	9.66	9.77	9.45	9.79	10.00	9.49	8.94	9.44	10.11
18	10.90	10.05	9.42	9.70	9.62	9.65	10.00	9.91	9.37	8.78	9.29	10.48
19	11.00	10.33	9.45	9.61	9.62	8.98	10.00	9.80	9.67	8.79	9.41	10.37
20	10.79	10.19	9.32	9.30	9.60	9.13	10.24	9.60	9.70	9.03	9.61	10.24
21	10.68	10.24	9.22	9.02	9.93	9.29	9.89	9.57	9.80	9.19	9.49	10.03
22	10.69	9.35	9.18	9.29	9.75	9.79	9.66	9.57	10.09	9.36	9.57	9.89
23	10.76	9.19	9.28	9.28	9.60	9.81	9.71	9.61	10.05	9.44	9.59	9.94
24	10.78	9.87	9.02	9.59	9.88	9.59	9.66	9.47	9.83	9.62	9.74	10.05
25	10.79	10.02	8.65	10.17	9.71	9.39	9.64	9.44	9.81	9.74	9.85	9.72
26	11.03	9.94	8.33	9.76	10.02	9.48	9.50	9.67	9.89	9.69	10.09	9.54
27	11.52	9.76	8.52	8.74	9.23	9.50	9.66	9.90	10.17	9.56	9.85	9.46
28	11.47	9.68	8.49	8.83	9.23	9.50	9.89	9.94	9.99	9.47	9.48	9.49
29	11.39	9.52	8.63	8.87	---	9.76	9.79	9.92	9.82	9.35	9.63	9.87
30	11.93	9.59	8.67	8.71	---	9.70	9.84	10.00	9.59	9.26	10.30	9.92
31	11.68	---	9.00	9.12	---	9.58	---	10.09	---	9.39	10.37	---
MEAN	10.96	10.06	9.30	9.41	9.42	9.29	9.63	9.79	9.88	9.35	9.45	10.12
MAX	11.93	10.93	10.01	10.31	10.02	9.81	10.24	10.33	10.59	10.13	10.37	10.62
MIN	10.32	9.19	8.33	8.71	8.80	8.79	8.85	9.24	9.37	8.78	8.74	9.46

WTR YR 1986 MEAN 9.72 MAX 11.93 MIN 8.33

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 mi^2.

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.--Records good.

AVERAGE DISCHARGE.--12 years, 33.9 ft^3/s, 17.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft^3/s, Sept. 19, 1984, gage height, 8.06 ft; minimum, 1.6 ft^3/s, July 15, 1981, gage height, 3.21 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 29	1530	*1,010	*8.04	Mar. 14	1715	405	7.00

Minimum discharge, 4.1 ft^3/s, part of each day May 28 to June 2, gage height, 3.65 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	269	24	22	21	27	24	6.9	4.4	15	23	39
2	215	200	26	24	21	27	22	6.7	9.2	13	20	33
3	142	169	22	23	20	26	21	6.7	11	11	24	28
4	100	243	20	22	20	26	19	6.7	7.9	11	32	25
5	99	194	19	30	20	34	18	6.6	7.1	12	57	22
6	120	138	20	30	23	34	17	6.4	6.9	24	129	23
7	92	103	18	33	27	30	17	6.3	6.7	30	131	32
8	66	79	18	38	52	26	15	6.5	9.0	24	85	39
9	52	63	17	38	117	24	15	6.6	8.2	18	57	39
10	53	54	17	65	140	23	14	7.2	11	14	44	38
11	97	49	17	124	132	22	16	6.5	15	12	35	38
12	99	44	17	115	125	21	14	5.9	14	10	28	34
13	75	40	20	83	95	30	15	5.7	14	9.3	26	29
14	55	37	39	61	68	316	14	5.7	17	9.0	35	24
15	44	35	42	48	57	382	13	5.3	24	8.3	53	20
16	43	33	37	41	51	320	12	5.1	29	7.8	72	17
17	95	31	30	37	45	204	11	5.0	28	8.1	72	16
18	104	29	25	34	42	136	9.9	4.8	44	8.0	83	17
19	103	28	23	35	40	99	9.8	5.2	37	7.4	108	15
20	84	32	21	34	37	85	9.6	8.5	28	7.1	81	14
21	60	39	20	31	33	94	9.6	8.8	29	11	71	13
22	45	38	19	28	31	86	9.3	7.1	48	55	65	12
23	36	34	19	27	31	68	8.8	6.3	63	98	54	12
24	31	30	19	25	33	53	8.6	5.8	57	80	43	12
25	30	28	19	25	32	45	8.4	5.3	36	51	33	12
26	42	27	18	25	28	40	8.0	5.0	25	36	27	12
27	116	25	17	25	27	36	7.7	4.9	20	49	23	11
28	398	24	17	24	25	33	7.5	4.7	16	63	23	11
29	753	23	18	23	---	30	7.4	4.6	14	57	25	10
30	700	22	17	23	---	28	7.1	4.5	13	40	34	9.7
31	410	---	17	22	---	26	---	4.5	---	29	39	---
TOTAL	4622	2160	672	1215	1393	2431	388.7	185.8	652.4	828.0	1632	656.7
MEAN	149	72.0	21.7	39.2	49.8	78.4	13.0	5.99	21.7	26.7	52.6	21.9
MAX	753	269	42	124	140	382	24	8.8	63	98	131	39
MIN	30	22	17	22	20	21	7.1	4.5	4.4	7.1	20	9.7
CFSM	5.78	2.79	.84	1.52	1.93	3.04	.50	.23	.84	1.03	2.04	.85
IN.	6.66	3.11	.97	1.75	2.01	3.51	.56	.27	.94	1.19	2.35	.95

CAL YR 1985	TOTAL	16513.8	MEAN	45.2	MAX	785	MIN	5.6	CFSM	1.75	IN.	23.81
WTR YR 1986	TOTAL	16836.6	MEAN	46.1	MAX	753	MIN	4.4	CFSM	1.79	IN.	24.28

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 mi^2.

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.--Records fair.

AVERAGE DISCHARGE.--12 years, 7.92 ft^3/s, 31.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 270 ft^3/s, Sept. 26, 1979; maximum gage height, 5.57 ft, Aug. 5, 1974; minimum discharge, 0.14 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 29	1200	*202	*5.16	No other peak greater than base discharge.			

Minimum discharge, 0.40 ft^3/s, May 30, 31, gage height, 0.79 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	60	7.8	6.6	5.3	6.5	6.2	1.9	.42	3.3	3.7	8.6
2	52	40	7.0	6.2	5.3	6.3	5.9	1.6	1.3	3.5	4.8	6.8
3	30	35	6.8	5.3	5.5	5.7	5.5	1.5	2.7	2.8	11	5.8
4	18	61	5.8	5.2	4.9	6.5	5.2	1.7	1.6	2.8	8.6	5.2
5	39	38	5.5	8.0	5.1	9.7	4.9	2.0	2.3	3.0	12	4.8
6	35	23	5.7	7.0	6.7	7.5	4.6	2.0	1.5	12	23	41
7	18	17	5.3	8.4	7.1	6.7	4.4	2.0	.76	6.9	16	30
8	13	15	5.1	9.2	19	6.0	4.1	1.9	2.7	5.0	8.9	13
9	12	14	4.9	8.3	50	5.5	3.8	1.7	1.9	3.4	6.8	9.1
10	14	12	4.8	20	37	5.3	3.3	1.8	1.1	2.7	5.8	8.5
11	22	11	4.9	41	35	5.1	3.0	1.5	1.2	2.2	5.0	8.1
12	18	11	4.6	25	36	4.8	2.8	1.2	1.1	1.9	4.5	7.3
13	14	11	5.9	15	20	10	3.7	1.1	3.3	1.7	4.5	6.3
14	12	9.7	15	11	14	103	3.3	1.1	3.3	1.4	7.6	5.6
15	11	8.7	11	9.7	13	92	2.8	.98	3.4	1.1	8.1	5.1
16	14	8.3	8.4	9.3	11	79	2.6	.93	3.1	.98	8.8	4.6
17	13	7.9	6.8	8.6	9.7	48	2.7	.84	3.8	1.1	8.4	4.3
18	11	7.5	6.1	8.3	9.2	29	2.7	.77	7.0	1.2	37	4.4
19	16	8.6	5.7	8.5	8.8	19	2.7	.77	4.8	.76	35	4.1
20	12	10	5.4	8.0	8.2	18	2.5	2.0	3.6	.59	14	3.7
21	9.0	14	5.1	7.4	7.4	23	2.3	2.3	15	1.7	11	3.4
22	7.9	11	5.0	6.8	7.1	16	2.3	1.4	13	36	10	3.3
23	7.3	9.5	5.0	6.3	7.3	12	2.1	.95	9.3	20	8.2	3.1
24	6.7	8.5	4.9	6.3	7.8	11	2.0	.77	6.3	9.5	6.7	3.0
25	7.9	8.1	4.9	6.2	6.9	9.6	1.9	.60	5.0	6.8	5.7	2.8
26	13	7.7	4.5	6.5	6.3	9.0	2.0	.51	4.2	5.6	5.1	2.8
27	34	7.2	4.5	7.5	6.1	8.5	1.9	.51	4.5	8.8	4.6	2.6
28	100	6.9	4.4	6.4	6.0	8.1	1.7	.47	3.6	10	4.5	2.5
29	154	6.6	4.2	6.0	---	7.5	1.6	.43	2.8	7.2	5.2	2.3
30	125	6.4	4.2	5.6	---	6.9	1.7	.42	2.8	5.3	17	2.3
31	80	---	5.3	5.3	---	6.8	---	.41	---	4.3	12	---
TOTAL	983.8	494.6	184.5	298.9	365.7	592.0	96.2	38.06	117.38	173.53	323.5	214.4
MEAN	31.7	16.5	5.95	9.64	13.1	19.1	3.21	1.23	3.91	5.60	10.4	7.15
MAX	154	61	15	41	50	103	6.2	2.3	15	36	37	41
MIN	6.7	6.4	4.2	5.2	4.9	4.8	1.6	.41	.42	.59	3.7	2.3
CFSM	9.32	4.85	1.75	2.84	3.85	5.62	.94	.36	1.15	1.65	3.06	2.10
IN.	10.76	5.41	2.02	3.27	4.00	6.48	1.05	.42	1.28	1.90	3.54	2.35

CAL YR 1985	TOTAL	3191.34	MEAN	8.74	MAX	154	MIN	.34	CFSM	2.57	IN.	34.92
WTR YR 1986	TOTAL	3882.57	MEAN	10.6	MAX	154	MIN	.41	CFSM	3.12	IN.	42.48

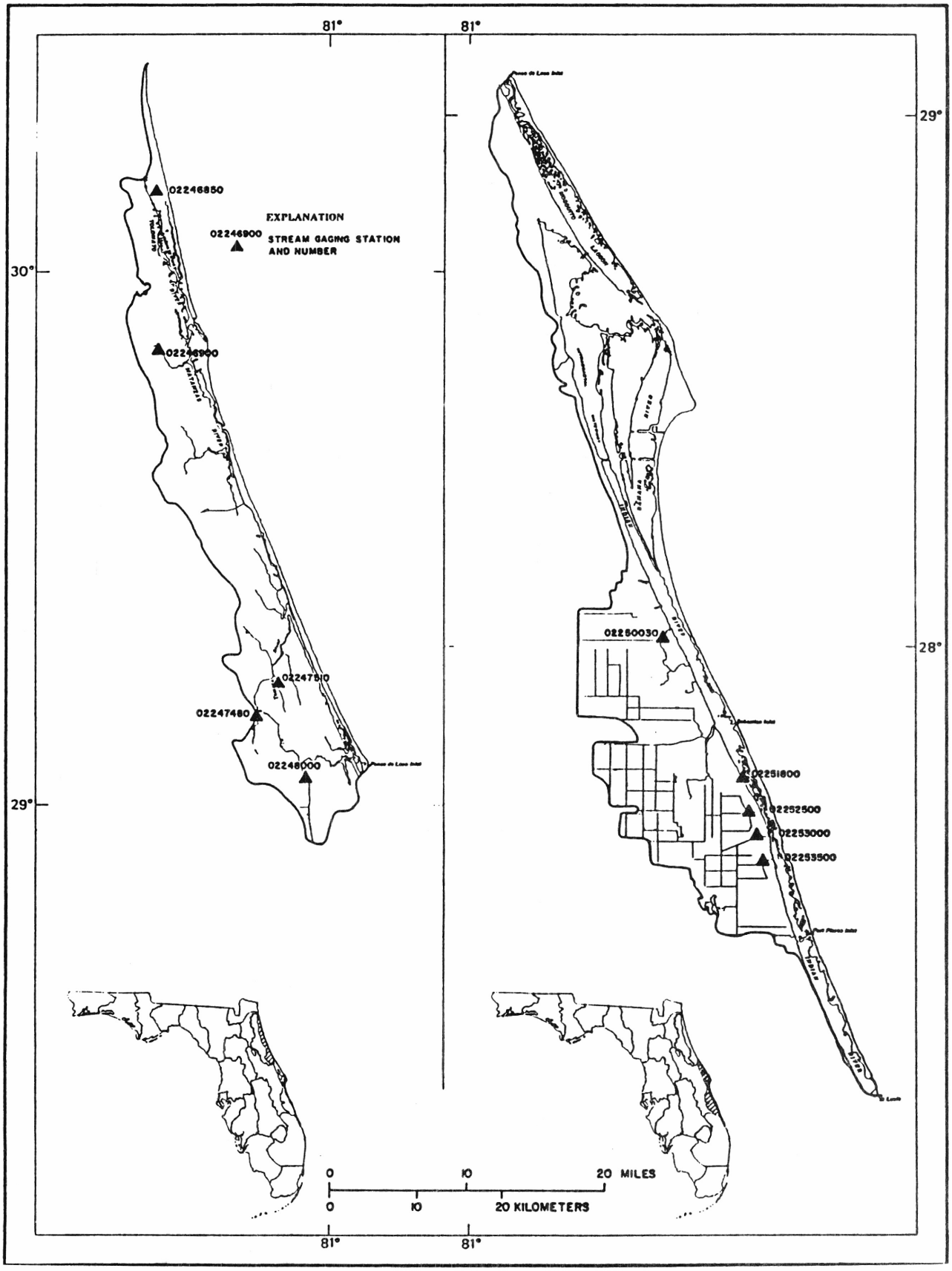

Figure 13. Location of stream gaging stations in the coastal area between the St. Johns and St. Lucie Rivers.

ST. JOHNS RIVER

COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET

02246850 DIEGO PLAINS SWAMP DRAIN AT MICKLER LANDING, FL

LOCATION.--Lat 30°09'39", long 81°21'37", in NW¼ sec.14, T.4 S., R.29 E., St. Johns County, Hydrologic Unit 03080201, on right bank 10 ft upstream from box culverts, at intersection of State Highway 203 and Mickler Landing Road, 0.2 mi west of Mickler Landing, 2.0 mi southeast of Palm Valley, and 4.5 mi south of Ponte Vedra Beach.

DRAINAGE AREA.--4.95 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 2.00 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 149 ft^3/s, Sept. 20, 1984; maximum gage height, 6.67 ft, Sept. 2, 1985; no flow many days each year; minimum gage height, 4.44 ft, June 28, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 56 ft^3/s, Nov. 1, gage height, 6.36 ft; no flow May 16-19; minimum gage height, 4.51 ft, May 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	55	6.2	4.9	6.9	7.9	7.5	.66	1.2	7.0	18	18
2	18	53	5.8	4.9	6.7	7.6	6.4	.58	1.2	6.6	17	20
3	19	51	5.4	5.0	6.3	7.2	5.5	.56	1.2	6.1	18	19
4	19	51	5.0	5.1	6.0	7.0	4.8	.47	1.5	5.8	20	18
5	19	45	4.7	6.4	5.9	7.4	4.2	.47	2.1	5.5	21	16
6	18	39	4.6	6.4	6.3	7.4	3.7	.40	2.1	5.9	21	14
7	16	34	4.2	6.9	6.6	7.2	3.3	.38	2.1	6.0	22	13
8	14	29	3.9	7.6	8.1	6.8	3.0	.38	2.2	6.0	21	12
9	13	26	3.8	8.1	11	6.5	2.7	.29	2.1	5.9	20	11
10	14	23	3.7	11	14	6.3	2.4	.28	1.9	5.7	19	12
11	15	19	3.7	17	18	6.0	2.1	.19	1.7	5.3	18	13
12	14	17	3.7	19	21	5.8	1.8	.19	1.9	5.1	16	13
13	13	15	3.8	20	22	5.7	1.6	.09	3.3	4.9	15	12
14	13	14	4.9	19	22	7.7	1.4	.09	4.8	4.8	15	11
15	12	13	4.9	18	21	11	1.4	.01	6.4	4.4	14	9.4
16	11	11	4.9	17	20	15	1.3	.00	8.2	4.2	14	8.3
17	11	10	4.8	15	19	19	1.3	.00	9.0	4.0	13	7.2
18	9.8	9.2	4.7	14	18	21	1.2	.00	9.2	3.9	14	6.5
19	9.7	8.4	4.7	14	17	22	1.2	.00	9.0	3.7	16	5.9
20	9.3	8.4	4.6	14	15	23	1.1	.16	9.0	3.5	16	5.2
21	8.9	9.4	4.7	12	14	25	1.1	.47	8.8	4.9	16	4.7
22	8.3	11	4.7	11	13	25	1.1	.51	9.7	6.8	17	4.1
23	7.6	12	4.7	11	12	23	1.0	.63	11	9.3	17	3.8
24	7.0	12	4.6	9.8	11	21	.96	.74	12	11	15	3.5
25	7.2	9.1	4.8	9.4	9.8	19	.95	.83	12	15	15	3.2
26	8.5	8.0	4.7	9.2	9.2	18	.87	.97	11	19	14	3.0
27	11	7.6	4.6	9.0	8.6	16	.85	1.1	9.9	21	13	2.9
28	18	7.1	4.6	8.4	8.1	13	.78	1.2	9.1	22	12	2.8
29	32	6.8	4.5	8.0	---	12	.72	1.2	8.3	21	12	2.6
30	47	6.3	4.5	7.6	---	10	.66	1.2	7.7	19	12	2.5
31	53	---	4.3	7.2	---	8.7	---	1.2	---	18	15	---
TOTAL	492.3	620.3	142.7	335.9	356.5	398.2	66.89	15.25	179.6	271.3	506	277.6
MEAN	15.9	20.7	4.60	10.8	12.7	12.8	2.23	.49	5.99	8.75	16.3	9.25
MAX	53	55	6.2	20	22	25	7.5	1.2	12	22	22	20
MIN	7.0	6.3	3.7	4.9	5.9	5.7	.66	.00	1.2	3.5	12	2.5

CAL YR 1985	TOTAL	3362.55	MEAN	9.21	MAX	79	MIN	.00
WTR YR 1986	TOTAL	3662.54	MEAN	10.0	MAX	55	MIN	.00

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 mi^2.

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.--Records fair.

AVERAGE DISCHARGE.--25 years, 18.5 ft^3/s, 12.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 860 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 28	0300	*317	*7.27	No other peak greater than base discharge.			

Minimum discharge, 0.02 ft^3/s, July 20, gage height, 2.17 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	153	7.4	3.2	9.8	16	8.7	.11	.19	.19	.13	.33
2	51	136	7.0	3.3	9.3	15	7.7	.11	.18	.18	.15	.23
3	45	119	6.5	3.0	8.8	13	6.7	.10	.22	.22	.42	.18
4	40	109	5.9	2.9	8.3	13	5.9	.11	.24	.47	.40	.15
5	39	92	5.5	4.5	8.4	16	5.2	.11	.23	.41	1.5	.14
6	45	77	5.1	4.5	12	14	4.5	.11	.20	.51	1.8	.17
7	38	65	4.4	4.9	14	13	3.9	.12	.18	.44	.94	.17
8	32	58	4.2	6.8	25	11	3.3	.11	.14	.35	.55	.15
9	30	51	4.0	7.5	43	11	2.8	.12	.10	.27	.38	2.5
10	33	45	3.7	42	56	9.8	2.4	.12	.17	.19	.28	1.8
11	45	41	3.6	82	77	9.1	2.0	.13	.19	.17	.23	1.1
12	38	38	3.3	60	76	8.4	1.7	.13	.22	.30	.20	.82
13	31	34	3.3	48	57	7.8	1.6	.13	.43	.23	.23	.53
14	27	30	3.8	39	48	8.5	1.5	.14	.72	.16	.30	.38
15	23	27	3.4	32	45	30	1.3	.14	.88	.09	.28	.34
16	21	25	3.1	27	40	49	1.0	.13	.74	.05	.25	.24
17	19	22	2.7	24	35	44	.82	.12	.54	.04	.17	.21
18	20	20	2.5	21	34	38	.65	.12	.51	.03	.12	2.6
19	22	18	2.5	21	33	32	.54	.35	.49	.03	.11	1.5
20	19	17	2.3	19	30	36	.46	1.6	.62	.03	.14	.78
21	18	16	2.2	17	26	48	.43	1.3	.64	.26	.17	.51
22	16	16	2.0	16	24	37	.40	.80	.63	.47	.17	.39
23	15	14	1.9	14	23	29	.32	.47	.60	.50	.16	.30
24	15	13	2.0	14	23	23	.26	.34	.51	.39	.11	.24
25	13	12	2.7	12	20	20	.22	.24	.44	.32	.10	.21
26	22	11	2.3	14	18	18	.18	.19	.37	.25	.09	.19
27	165	10	2.1	16	17	17	.17	.18	.31	.27	.09	.19
28	275	9.5	2.1	13	16	15	.14	.19	.22	.34	.07	.19
29	206	8.5	1.9	12	---	13	.12	.18	.16	.28	.17	.19
30	184	8.0	1.9	11	---	12	.11	.17	.15	.21	.33	.20
31	154	---	1.8	11	---	9.8	---	.18	---	.17	.42	---
TOTAL	1758	1295.0	107.1	605.6	836.6	636.4	65.02	8.35	11.22	7.82	10.46	16.93
MEAN	56.7	43.2	3.45	19.5	29.9	20.5	2.17	.27	.37	.25	.34	.56
MAX	275	153	7.4	82	77	49	8.7	1.6	.88	.51	1.8	2.6
MIN	13	8.0	1.8	2.9	8.3	7.8	.11	.10	.10	.03	.07	.14
CFSM	2.86	2.18	.17	.98	1.51	1.04	.11	.01	.02	.01	.02	.03
IN.	3.30	2.43	.20	1.14	1.57	1.20	.12	.02	.02	.01	.02	.03

CAL YR 1985	TOTAL	8068.12	MEAN	22.1	MAX	327	MIN	.02	CFSM	1.12	IN.	15.16
WTR YR 1986	TOTAL	5358.50	MEAN	14.7	MAX	275	MIN	.03	CFSM	.74	IN.	10.07

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 its intersection with U.S. Highway 92, and 8 mi west of Daytona Beach.

DRAINAGE AREA.--29 mi^2, approximately.

PERIOD OF RECORD.--January 1978 to current year.

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

REMARKS.--Estimated daily discharges: Mar. 12 to Apr. 6. Records fair.

AVERAGE DISCHARGE.--8 years, 23.2 ft^3/s, 16,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 263 ft^3/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, 159 ft^3/s, Jan. 12, gage height, 32.50 ft; no flow for many days; minimum gage height, 27.53 ft, June 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	138	21	17	29	14	2.6	.00	.00	.24	1.6	2.7
2	70	132	20	18	27	13	2.4	.00	.00	.23	1.2	2.0
3	65	125	19	20	26	12	2.2	.00	.00	.17	.89	1.4
4	59	116	18	20	24	11	2.0	.00	.00	.17	.78	.97
5	55	105	18	19	22	11	1.8	.00	.00	.19	.79	.71
6	55	94	20	18	21	10	1.6	.00	.00	.22	.67	.55
7	53	84	21	17	20	9.6	1.4	.00	.00	.12	.50	.47
8	49	74	21	18	20	9.1	1.3	.00	.00	.05	.39	.47
9	47	69	20	19	22	8.2	1.1	.00	.00	.00	.29	1.1
10	50	66	19	43	24	7.6	.94	.00	.00	.00	.21	1.9
11	54	63	18	131	24	7.4	.80	.00	.00	.00	.14	1.6
12	55	59	17	158	24	7.0	.65	.00	.00	.00	.59	1.2
13	51	55	17	151	23	6.8	.83	.00	.00	.00	2.1	1.2
14	48	49	22	137	22	6.9	.74	.00	.00	.00	4.0	1.7
15	44	47	24	124	20	8.2	.63	.00	.00	.00	4.1	1.3
16	41	43	25	112	19	9.6	.54	.00	.00	.00	3.5	.87
17	39	40	23	101	18	11	.43	.00	.17	.00	3.0	.64
18	36	37	22	92	18	9.8	.36	.00	1.6	.00	3.0	2.0
19	37	34	20	85	18	7.9	.29	.00	2.0	.00	2.7	2.3
20	36	33	19	76	18	7.1	.23	.00	3.3	.00	2.5	2.0
21	33	31	17	68	17	6.9	.19	.00	4.6	.00	2.4	1.6
22	30	30	17	60	17	6.7	.14	.00	3.5	.00	2.0	1.3
23	27	28	16	54	17	6.2	.09	.00	2.5	.00	1.5	1.0
24	26	27	15	49	17	5.7	.03	.00	1.9	.00	1.1	.80
25	24	26	16	46	17	5.1	.00	.00	1.3	.00	.79	.64
26	23	25	16	44	16	4.6	.00	.00	1.0	.31	.60	.51
27	27	23	16	43	15	4.1	.00	.00	.74	1.9	.46	.42
28	53	22	15	40	14	3.7	.00	.00	.53	2.6	.35	.32
29	105	21	14	37	---	3.4	.00	.00	.39	2.5	.40	.23
30	125	20	14	33	---	3.1	.00	.00	.28	2.1	.66	.16
31	133	---	13	31	---	2.8	---	.00	---	1.7	1.1	---
TOTAL	1625	1716	573	1881	569	239.5	23.29	.00	23.81	12.50	44.31	34.06
MEAN	52.4	57.2	18.5	60.7	20.3	7.73	.78	.00	.79	.40	1.43	1.14
MAX	133	138	25	158	29	14	2.6	.00	4.6	2.6	4.1	2.7
MIN	23	20	13	17	14	2.8	.00	.00	.00	.00	.14	.16
AC-FT	3220	3400	1140	3730	1130	475	46	.00	47	25	88	68

CAL YR 1985	TOTAL	10079.88	MEAN	27.6	MAX	154	MIN	.00	AC-FT	19990
WTR YR 1986	TOTAL	6741.47	MEAN	18.5	MAX	158	MIN	.00	AC-FT	13370

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 mi^2.

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.--Records good.

AVERAGE DISCHARGE.-22 years, 57.1 ft^3/s, 10.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft^3/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 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 31	2300	361	9.76	Jan. 11	1200	*930	*11.17

Minimum discharge, .64 ft^3/s, June 12; gage height, 6.00 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	342	33	27	65	28	9.0	1.5	.79	2.2	16	7.0
2	171	290	31	33	60	33	8.2	1.5	.79	11	16	13
3	153	246	29	29	56	26	7.3	1.4	.79	18	11	13
4	141	237	27	27	52	23	6.7	1.4	.79	39	13	11
5	131	200	28	28	49	22	6.1	1.2	.77	39	36	7.7
6	136	176	34	29	46	21	5.5	1.1	.74	24	30	9.0
7	130	159	32	30	43	19	5.0	1.3	.74	15	19	9.0
8	117	138	29	32	46	18	4.7	1.6	.72	12	14	6.8
9	109	122	27	38	59	17	4.5	1.8	.71	9.9	13	5.8
10	119	118	27	253	54	16	4.1	1.9	.71	7.4	8.7	5.8
11	139	115	25	831	50	15	3.7	1.8	.69	5.5	6.4	6.1
12	127	114	24	590	47	14	4.0	1.3	.69	4.3	5.8	5.2
13	114	120	23	413	44	13	4.9	1.1	1.6	3.6	7.0	4.5
14	104	115	42	321	41	14	5.3	1.2	2.4	3.1	12	5.0
15	96	100	46	281	40	21	4.0	1.1	8.0	3.2	21	3.7
16	91	89	38	249	38	33	3.3	.98	5.8	2.9	14	3.0
17	84	83	34	215	36	33	2.9	.93	3.3	3.1	9.0	2.7
18	77	80	34	194	39	28	2.6	.90	2.3	3.2	7.2	15
19	73	75	32	180	40	25	2.5	.91	2.1	3.3	6.5	35
20	71	76	29	165	36	23	2.3	1.9	2.9	2.9	7.2	21
21	67	67	27	149	33	23	2.3	2.7	7.2	2.8	7.5	14
22	60	60	25	135	32	21	2.3	1.9	6.5	13	6.2	10
23	55	55	23	124	36	19	2.2	1.3	3.5	66	5.4	7.9
24	52	50	22	116	38	17	2.0	1.0	2.3	39	4.5	6.2
25	48	47	24	111	34	16	2.0	.89	1.7	22	3.7	4.8
26	45	44	23	103	30	14	2.8	.84	1.4	14	4.2	3.8
27	44	40	22	102	27	14	2.0	.82	1.1	22	3.7	3.2
28	71	37	21	91	26	13	1.7	.80	1.1	37	3.3	2.7
29	209	34	20	82	---	12	1.7	.79	.89	34	3.3	2.4
30	320	32	19	76	---	11	1.6	.79	.92	30	3.9	2.2
31	346	---	19	70	---	9.9	---	.79	---	19	4.6	---
TOTAL	3678	3461	869	5124	1197	611.9	117.2	39.44	63.94	511.4	323.1	246.5
MEAN	119	115	28.0	165	42.8	19.7	3.91	1.27	2.13	16.5	10.4	8.22
MAX	346	342	46	831	65	33	9.0	2.7	8.0	66	36	35
MIN	44	32	19	27	26	9.9	1.6	.79	.69	2.2	3.3	2.2
CFSM	1.55	1.50	.36	2.15	.56	.26	.05	.02	.03	.21	.14	.11
IN.	1.78	1.68	.42	2.48	.58	.30	.06	.02	.03	.25	.16	.12

CAL YR 1985	TOTAL	22410.5	MEAN	61.4	MAX	712	MIN	1.0	CFSM	.80	IN.	10.86
WTR YR 1986	TOTAL	16242.48	MEAN	44.5	MAX	831	MIN	.69	CFSM	.58	IN.	7.87

ST. JOHNS RIVER

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 mi^2.

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.--Estimated daily discharges: June 20 to July 8, July 18 to Aug. 4. Records fair. Some diversions for irrigation above station.

AVERAGE DISCHARGE.--35 years, 33.0 ft^3/s, 13.42 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 28	2400	509	9.87	Jan. 11	0100	*761	*11.93

Minimum discharge, 0.68 ft^3/s, June 1,3,4, gage height, 1.04 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	275	9.2	11	15	6.8	2.9	1.1	.73	1.4	20	14
2	66	208	8.9	13	14	4.9	2.3	1.1	.73	1.2	15	14
3	50	135	8.8	13	12	2.3	2.3	1.0	.71	1.3	13	12
4	40	98	8.4	12	11	5.6	2.2	1.1	.77	1.5	19	10
5	32	67	9.9	12	12	5.4	2.4	1.1	.78	2.5	30	9.1
6	28	51	16	12	11	2.2	2.1	1.0	.80	4.5	30	9.1
7	24	40	16	11	11	5.6	1.4	.94	.78	3.4	22	9.9
8	21	33	15	13	12	5.3	2.5	1.0	.85	2.2	17	13
9	19	31	14	17	13	3.4	1.3	1.3	.76	2.1	13	21
10	62	48	13	381	13	2.2	1.3	1.2	.79	1.8	10	42
11	109	45	12	629	13	5.0	1.5	1.1	1.9	2.0	8.2	31
12	82	38	11	446	12	3.8	3.4	1.0	1.7	4.9	11	24
13	58	32	10	356	9.4	3.4	2.0	.99	2.2	11	26	42
14	42	28	12	275	13	4.5	1.6	.94	2.6	7.4	56	72
15	34	25	12	178	11	5.3	1.8	.96	1.8	9.3	81	63
16	29	22	11	100	9.2	7.4	1.3	.92	1.5	5.5	45	42
17	24	20	10	75	7.8	7.3	1.6	.91	1.7	4.0	30	28
18	22	19	9.7	60	8.4	6.7	1.9	.86	1.8	3.5	23	27
19	24	18	9.0	48	6.9	5.4	1.5	.92	3.2	2.7	19	33
20	23	16	8.4	39	6.3	5.0	1.4	1.9	2.9	2.2	20	26
21	21	16	7.8	31	6.3	5.6	1.5	1.6	2.4	2.0	16	21
22	18	15	7.3	26	7.4	5.4	1.6	1.1	1.9	10	13	17
23	16	14	7.1	24	9.1	2.7	1.4	1.0	1.8	50	12	14
24	15	13	6.9	21	5.6	5.4	1.3	.90	1.7	35	10	12
25	14	12	7.4	21	5.5	3.8	1.3	.88	3.5	28	8.7	11
26	13	12	7.1	22	6.1	3.5	1.3	.83	3.0	15	7.5	9.2
27	18	11	6.8	23	6.4	3.8	1.3	.81	2.5	20	6.5	8.1
28	148	11	6.6	20	7.4	3.2	1.3	.80	2.2	40	5.8	7.2
29	442	10	6.3	19	---	3.6	1.2	.80	1.9	35	5.9	6.4
30	362	9.6	6.1	17	---	2.8	1.2	.73	1.6	29	8.0	5.7
31	321	---	5.7	16	---	1.8	---	.76	---	24	14	---
TOTAL	2242	1372.6	299.4	2941	274.8	139.1	52.1	31.55	51.50	362.4	615.6	653.7
MEAN	72.3	45.8	9.66	94.9	9.81	4.49	1.74	1.02	1.72	11.7	19.9	21.8
MAX	442	275	16	629	15	7.4	3.4	1.9	3.5	50	81	72
MIN	13	9.6	5.7	11	5.5	1.8	1.2	.73	.71	1.2	5.8	5.7
CFSM	2.16	1.37	.29	2.84	.29	.13	.05	.03	.05	.35	.60	.65
IN.	2.50	1.53	.33	3.28	.31	.15	.06	.04	.06	.40	.69	.73

CAL YR 1985	TOTAL	13467.19	MEAN	36.9	MAX	684	MIN	.43	CFSM	1.10	IN.	15.00
WTR YR 1986	TOTAL	9035.75	MEAN	24.8	MAX	629	MIN	.71	CFSM	.74	IN.	10.06

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.--
WATER TEMPERATURE: Maximum daily mean, 28.5°C, Aug. 2; minimum daily mean, 8.5°C, Jan. 28,29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	30	133	552	153						---	290
2	45	30	137	552	158						---	288
3	51	---	202	550	162						---	274
4	50	---	312	547	180						---	248
5	50	---	470	552	181						---	233
6	50	---	502	551	186						---	224
7	51	---	318	555	190						---	220
8	53	---	269	555	190						---	222
9	55	---	343	546	192						---	224
10	55	---	278	239	189						---	221
11	46	---	253	57	186						---	202
12	41	---	305	64	185						---	184
13	43	60	383	45	207						---	172
14	44	62	446	45	186						---	152
15	47	65	483	47	192						---	134
16	45	69	534	43	206						---	132
17	44	74	554	45	224						---	138
18	45	72	560	47	225						---	145
19	45	53	564	54	158						---	157
20	45	54	565	70	134						---	153
21	48	67	559	54	157						---	155
22	51	63	555	55	214						---	154
23	54	65	556	60	232						---	163
24	58	74	554	67	158						---	168
25	113	87	553	68	114						---	175
26	65	110	553	64	326						244	171
27	59	125	554	60	115						252	185
28	29	130	553	110	182						274	204
29	29	126	553	141	---						287	210
30	30	125	551	147	---						288	208
31	37	---	552	148	---						289	---
MEAN	49	---	442	216	185						---	194
MAX	113	---	565	555	326						---	290
MIN	29	---	133	43	114						---	132

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)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

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

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 1985 TO SEPTEMBER 1986

DATE	GAGE HEIGHT (FEET ABOVE DATUM) (00065)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	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)
DEC											
03...	1.58	9.1	2	6.50	18.0	3.5	6.7	88	30	3.2	17
JAN											
28...	2.28	21	148	6.40	8.0	3.5	9.1	44	14	2.1	11
MAR											
27...	1.33	4.5	360	7.50	20.0	5.0	5.6	140	47	4.4	25
MAY											
28...	1.06	0.80	729	7.50	22.0	--	4.5	--	--	--	--
AUG											
04...	1.74	12	181	7.00	26.0	2.5	5.7	64	21	2.9	13
19...	2.13	19	126	6.90	26.0	2.0	7.6	47	15	2.3	10

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL 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)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
DEC										
03...	0.9	83	24	27	0.1	8.5	202	160	--	<0.01
JAN										
28...	1.0	20	19	20	<0.1	4.6	128	84	0.08	0.02
MAR										
27...	0.9	133	19	40	0.2	8.9	249	230	--	<0.01
MAY										
28...	--	281	--	--	--	--	--	--	0.33	0.14
AUG										
04...	1.5	69	29	21	<0.1	8.4	180	140	0.10	0.02
19...	1.0	94	31	18	<0.1	6.5	123	140	--	0.02

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	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)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
DEC										
03...	0.15	0.09	0.09	1.0	1.1	0.07	0.05	0.04	290	<1
JAN										
28...	0.10	0.05	0.06	0.75	0.8	0.05	0.04	0.04	--	--
MAR										
27...	<0.10	0.05	0.05	0.85	0.9	0.07	0.04	0.03	100	<1
MAY										
28...	0.47	0.70	0.69	0.7	1.4	0.13	0.02	0.02	--	--
AUG										
04...	0.12	0.15	0.14	1.4	1.6	0.19	0.09	0.08	--	--
19...	<0.10	0.09	0.05	1.7	1.8	0.16	0.12	0.10	610	1

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 1985 TO SEPTEMBER 1986

DATE	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)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
DEC										
03...	28	<0.5	<1	<1	<3	<1	1000	<1	<4	11
JAN										
28...	--	--	--	--	--	--	--	--	--	--
MAR										
27...	29	<0.5	<1	<1	<3	2	790	<1	9	11
MAY										
28...	--	--	--	--	--	--	--	--	--	--
AUG										
04...	--	--	--	--	--	--	--	--	--	--
19...	14	<0.5	<1	<1	<3	2	1100	<5	7	10

DATE	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-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC										
03...	<0.1	<10	<1	<1	<1	160	<6	16	14	29
JAN										
28...	--	--	--	--	--	--	--	--	12	50
MAR										
27...	<0.1	<10	2	<1	<1	250	<6	310	13	15
MAY										
28...	--	--	--	--	--	--	--	--	6	67
AUG										
04...	--	--	--	--	--	--	--	--	--	--
19...	<0.1	<10	1	<1	<1	99	<6	17	12	58

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 mi^2, 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 recorded, 895 ft^3/s, Mar. 1, 1983; maximum gage height, 4.73 ft, Sept. 21, 1985; minimum daily discharge recorded, 34 ft^3/s, Dec. 21, 1981, but may have been less during periods of low flow since water year 1983; minimum gage height, -0.38 ft, Apr. 5, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.69 ft, June 21; minimum, -0.29 ft, Mar. 13.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT			JUN		
30...	0900	182	11...	0920	34
DEC			JUL		
17...	1505	72	09...	1200	240
FEB			AUG		
13...	1130	127	05...	0915	182
APR			SEP		
15...	0935	48	24...	1105	122

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

MAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.23	1.73	.60	.20	.23	.61	.44	.60	.76	1.00	.45	.91
2	2.09	1.75	.71	.34	.22	.51	.34	.60	.79	.96	.34	1.05
3	1.94	1.61	.92	.37	.19	.33	.29	.75	.88	.84	.31	1.15
4	1.94	1.71	.70	.37	.17	.20	.31	.76	.91	.84	.35	1.18
5	1.88	1.54	.92	.49	.10	.30	.39	.64	1.13	.99	.49	1.11
6	2.01	1.39	1.25	.57	.08	.23	.37	.63	1.14	1.18	.66	1.17
7	1.91	1.29	1.13	.46	.08	.20	.33	.56	1.06	1.24	.74	1.26
8	1.77	1.26	1.01	.80	.21	.22	.28	.54	1.01	1.07	.65	1.35
9	1.86	1.30	.98	.74	.39	.10	.26	.67	.91	.86	.64	1.43
10	1.80	1.32	.89	.87	.26	.10	.50	.96	.89	.72	.52	1.54
11	1.76	1.48	.77	1.43	.26	.18	.44	.85	.84	.70	.43	1.49
12	1.76	1.48	.77	1.32	.52	.13	.42	.74	.88	.76	.44	1.38
13	1.81	1.47	.60	1.12	.62	.02	.56	.70	.83	.70	.47	1.25
14	1.86	1.34	.72	1.00	.37	-0.03	.72	.72	.73	.60	.54	1.17
15	1.86	1.26	.81	.83	.25	.29	.50	.72	.69	.48	.59	1.17
16	1.86	1.18	.68	.77	.30	.34	.46	.74	.69	.37	.55	1.12
17	1.86	1.19	.63	.71	.20	.42	.55	.73	.81	.31	.51	1.12
18	1.86	1.20	.59	.66	.21	.20	.59	.68	.76	.29	.52	1.16
19	1.81	1.23	.57	.69	.22	-0.04	.62	.57	.89	.24	.52	1.25
20	1.76	1.12	.36	.69	.31	.08	.41	.56	1.27	.23	.55	1.23
21	1.71	.81	.32	.59	.33	.57	.35	.65	2.46	.24	.66	1.21
22	1.62	.80	.33	.46	.38	.66	.58	.70	2.38	.35	.77	1.07
23	1.62	1.03	.21	.43	.46	.54	.79	.70	2.04	.44	.76	.98
24	1.62	.98	.18	.59	.62	.21	.77	.68	1.79	.55	.71	.93
25	1.68	.91	.34	.52	.74	.14	.62	.66	1.52	.65	.65	.87
26	1.66	.85	.34	.55	.62	.20	.58	.61	1.35	.64	.66	.73
27	1.64	.82	.16	.63	.33	.34	.61	.58	1.23	.59	.62	.63
28	1.76	.70	.12	.59	.57	.47	.67	.61	1.14	.53	.55	.57
29	1.90	.67	.08	.40	---	.47	.72	.71	1.04	.49	.64	.50
30	1.90	.60	.14	.40	---	.46	.69	.72	.95	.46	.68	.49
31	1.72	---	.07	.35	---	.45	---	.70	---	.47	.76	---
MEAN	1.82	1.20	.58	.64	.33	.29	.51	.68	1.13	.64	.57	1.08
MAX	2.23	1.75	1.25	1.43	.74	.66	.79	.96	2.46	1.24	.77	1.54
MIN	1.62	.60	.07	.20	.08	-0.04	.26	.54	.69	.23	.31	.49

WTR YR 1986 MEAN .79 MAX 2.46 MIN -0.04

ST. JOHNS RIVER

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 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, Jan. 20, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.17 ft, Oct. 9; minimum, -0.77 ft, Mar. 20.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.70	1.59	.59	.15	.29	.88	.82	.93	.92	.77	.33	1.16
2	1.73	1.73	.47	.35	.20	.80	.73	.71	.95	.78	.20	1.45
3	1.45	1.50	1.19	.48	.26	.56	.52	1.08	1.13	.80	.19	1.61
4	1.64	1.70	.76	.39	.24	.31	.48	1.07	1.27	.63	.28	1.50
5	1.29	1.48	1.22	.83	.05	.39	.55	.80	1.73	.95	.24	1.32
6	1.61	1.32	1.32	.97	.06	.45	.54	.66	1.54	.83	.39	1.31
7	1.67	1.22	1.32	.54	.16	.33	.51	.61	1.20	.76	.34	1.40
8	1.55	1.41	.97	1.03	.23	.42	.55	.60	1.20	.78	.43	1.56
9	2.17	1.34	1.11	.93	.48	.09	.44	.68	1.03	.71	.28	1.48
10	1.77	1.43	.96	.64	.26	.04	.92	1.17	.98	.47	.21	1.36
11	1.58	1.45	.71	1.87	.20	.16	.87	1.40	.94	.46	.09	1.18
12	1.66	1.46	.88	1.57	.73	.24	.78	1.12	1.01	.52	.15	1.20
13	1.76	1.38	.52	1.32	.88	-0.08	.81	.82	.95	.48	.25	1.16
14	1.82	1.29	.91	1.13	.75	.07	1.16	.87	.86	.27	.31	1.25
15	1.80	1.23	1.21	.84	.27	.52	.96	.86	.73	.19	.39	1.21
16	---	1.06	1.07	.82	.63	.61	.64	.87	.64	.14	.52	1.20
17	---	1.15	1.21	.68	.26	.52	.81	.88	.73	.16	.39	1.20
18	---	1.21	.88	.60	.23	.47	.89	.79	.77	.29	.43	1.31
19	---	1.12	.85	.52	.30	-0.20	.95	.77	.85	.23	.43	1.37
20	1.62	.80	.57	.59	.39	-0.08	.82	.92	.98	.38	.28	1.24
21	---	.52	.51	.58	.51	.92	.70	.82	1.16	.34	.45	1.37
22	---	.59	.73	.48	.63	1.48	1.10	1.05	.98	.48	.66	1.07
23	---	1.00	.35	.49	.82	1.27	1.37	.92	1.15	.47	.81	.99
24	---	1.04	.30	.91	1.00	.82	1.25	.83	1.10	.57	.77	1.01
25	---	.90	.68	.74	1.08	.40	.93	.92	1.05	.64	.66	.90
26	---	.82	.78	.65	1.46	.42	.87	.88	1.11	.57	.73	.61
27	---	.89	.38	.98	.68	.75	.82	.71	1.07	.49	.57	.69
28	---	.60	.31	.94	.90	.89	.92	.68	1.01	.41	.40	.66
29	2.00	.65	.16	.48	---	1.08	1.01	.84	.99	.35	.49	.54
30	1.90	.47	.56	.35	---	.83	1.01	.93	.78	.28	.69	.52
31	1.42	---	.26	.42	---	.81	---	.87	---	.36	.90	---
MEAN	---	1.14	.77	.75	.50	.52	.82	.87	1.03	.50	.43	1.16
MAX	---	1.73	1.32	1.87	1.46	1.48	1.37	1.40	1.73	.95	.90	1.61
MIN	---	.47	.16	.15	.05	-0.20	.44	.60	.64	.14	.09	.52

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 1985 TO SEPTEMBER 1986
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.19	.97	.11	-0.28	-0.24	.38	.25	.44	.36	.39	-0.04	.57
2	1.20	1.24	.18	-0.08	-0.22	.39	.23	.09	.50	.35	-0.29	.78
3	.94	.87	.68	-0.03	-0.09	.02	-0.08	.29	.55	.20	-0.30	.97
4	.96	1.10	.26	.03	-0.26	-0.22	-0.03	.54	.62	.25	-0.26	.96
5	.91	1.09	.29	-0.09	-0.45	-0.27	.01	.22	.91	.20	-0.28	.76
6	1.01	.87	.84	.38	-0.42	-0.10	.03	.17	.89	.34	-0.07	.82
7	1.27	.78	.75	-0.07	-0.37	-0.22	.00	.05	.65	.31	-0.17	.84
8	1.04	.68	.39	.37	-0.30	-0.12	-0.01	.07	.57	.25	-0.13	.97
9	1.18	.84	.56	.34	-0.09	-0.27	.01	.33	.34	.03	-0.16	.89
10	1.05	.85	.24	-0.04	-0.28	-0.27	.33	.72	.40	-0.04	-0.29	.89
11	1.08	.80	.06	.21	-0.24	-0.24	.16	.64	.35	-0.01	-0.30	.77
12	1.05	.85	.25	.97	.16	-0.28	.05	.39	.55	-0.01	-0.28	.75
13	1.00	.76	.01	.72	.42	-0.28	.25	.35	.40	-0.14	-0.30	.68
14	1.24	.71	.01	.50	-0.21	-0.44	.57	.40	.21	-0.03	-0.28	.72
15	1.17	.62	.61	.35	-0.23	-0.10	.02	.34	.20	-0.26	-0.08	.56
16	1.14	.54	.44	.22	-0.21	-0.11	.31	.38	.19	-0.27	-0.06	.69
17	1.06	.62	.52	.18	-0.23	.15	.41	.44	.24	-0.31	-0.13	.67
18	1.13	.53	.57	.22	-0.09	-0.13	.54	.37	.22	-0.28	-0.18	.65
19	1.03	.67	.48	.16	-0.20	-0.59	.51	.20	.22	-0.26	-0.10	.85
20	1.07	.45	.19	.23	-0.12	-0.77	.20	.08	.30	-0.25	-0.09	.76
21	1.01	-0.05	.08	.16	-0.05	-0.11	.10	.32	.50	-0.21	-0.03	.81
22	.91	-0.09	.09	.01	-0.01	.49	.35	.39	.42	-0.09	.16	.60
23	.96	.47	-0.12	-0.07	.01	.95	.59	.34	.49	.01	.24	.51
24	1.04	.56	-0.24	.04	.38	.16	.57	.33	.42	-0.04	.24	.49
25	1.10	.38	-0.21	.21	.31	-0.08	.26	.28	.58	.08	.19	.40
26	1.16	.31	.11	.17	.30	-0.08	.18	.10	.57	.06	.25	.26
27	.96	.20	-0.24	.72	-0.05	.09	.20	.07	.58	.05	.18	.21
28	1.06	.05	-0.31	.31	.12	.37	.36	.20	.56	-0.05	.07	.26
29	1.33	.05	-0.35	-0.05	---	.31	.51	.37	.51	-0.21	.09	.11
30	1.35	.01	-0.10	-0.11	---	.32	.40	.36	.38	-0.24	.14	.06
31	1.06	---	-0.33	-0.03	---	.27	---	.50	---	-0.04	.32	---
MEAN	1.09	.59	.19	.18	-0.10	-0.03	.24	.32	.46	-0.01	-0.06	.64
MAX	1.35	1.24	.84	.97	.42	.95	.59	.72	.91	.39	.32	.97
MIN	.91	-0.09	-0.35	-0.28	-0.45	-0.77	-0.08	.05	.19	-0.31	-0.30	.06

WTR YR 1986 MEAN .29 MAX 1.35 MIN -0.77

ST. JOHNS RIVER

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.--Estimated daily discharges: Apr. 7 to May 22. Records fair except for estimated daily discharges, 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.--35 years (water years 1951-86), 31.5 ft^3/s, 22,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft^3/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, 605 ft^3/s, Oct. 4, gage height, 8.93 ft; minimum, 6.4 ft^3/s, June 3,4, gage height, 1.67 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	22	18	26	39	12	15	11	6.9	11	37	18
2	77	19	17	30	33	10	17	11	8.7	18	21	17
3	112	18	16	24	29	22	17	12	6.5	14	9.2	20
4	283	18	18	23	28	64	18	14	6.6	17	50	20
5	365	17	32	24	26	12	16	20	12	50	23	19
6	152	16	100	29	25	9.5	16	18	13	43	8.5	21
7	91	16	46	29	23	8.1	14	13	12	16	8.3	21
8	69	15	42	75	26	8.0	13	10	11	11	9.7	81
9	60	29	36	12	31	8.6	11	12	17	11	15	60
10	53	43	34	119	30	13	12	30	18	11	18	128
11	47	129	30	48	30	21	12	44	13	88	19	56
12	43	96	26	15	27	21	11	32	14	102	21	26
13	40	27	23	15	24	20	15	20	12	75	20	9.4
14	27	29	21	22	23	19	20	15	17	39	85	17
15	15	30	19	27	21	20	17	14	26	20	35	19
16	14	30	20	28	19	14	16	13	35	8.9	25	23
17	14	30	20	27	19	11	18	12	84	8.8	27	22
18	19	37	19	28	19	13	14	12	131	10	34	20
19	24	93	19	31	19	15	12	14	120	16	40	87
20	24	35	21	29	19	16	13	13	70	17	36	44
21	26	17	19	27	17	14	15	19	95	16	38	30
22	30	16	18	24	15	12	18	24	47	15	36	33
23	28	15	19	23	17	11	22	15	24	36	27	35
24	47	15	20	22	17	12	20	12	9.7	86	23	33
25	38	15	16	24	16	13	16	12	85	55	18	18
26	32	15	11	18	16	13	13	11	50	75	9.5	7.7
27	27	17	25	11	17	36	12	11	20	40	9.4	7.4
28	29	17	50	11	14	22	14	10	8.4	47	9.7	7.4
29	29	17	35	50	---	14	16	8.9	8.2	61	14	7.7
30	28	18	27	73	---	13	11	6.7	10	43	18	10
31	24	---	23	46	---	12	---	6.6	---	48	18	---
TOTAL	1969	911	840	990	639	509.2	454	476.2	991.0	1108.7	762.3	917.6
MEAN	63.5	30.4	27.1	31.9	22.8	16.4	15.1	15.4	33.0	35.8	24.6	30.6
MAX	365	129	100	119	39	64	22	44	131	102	85	128
MIN	14	15	11	11	14	8.0	11	6.6	6.5	8.8	8.3	7.4
AC-FT	3910	1810	1670	1960	1270	1010	901	945	1970	2200	1510	1820

CAL YR 1985	TOTAL	14306.7	MEAN	39.2	MAX	657	MIN	7.2	AC-FT	28380
WTR YR 1986	TOTAL	10568.0	MEAN	29.0	MAX	365	MIN	6.5	AC-FT	20960

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: Nov. 7 to Dec. 11. 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.--37 years (water years 1950-86), 77.8 ft^3/s, 56,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft^3/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 discharge, 949 ft^3/s, Oct. 4; gage height, 12.13 ft; minimum daily discharge, 0.25 ft^3/s, July 9; minimum gage height, 8.09 ft, June 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	33	25	49	60	15	23	10	.75	123	152	37
2	107	30	24	105	47	21	27	18	9.4	225	83	40
3	203	32	25	40	43	53	26	17	14	89	74	46
4	464	33	35	39	41	226	27	14	21	93	326	45
5	571	33	80	43	37	97	27	25	19	140	229	45
6	240	35	106	55	35	3.8	27	33	20	87	57	46
7	144	38	52	53	33	4.6	28	27	20	29	4.3	139
8	111	40	44	164	47	7.1	23	19	25	.62	16	238
9	92	44	41	5.1	44	15	16	16	37	.25	36	118
10	87	80	38	325	45	27	14	59	36	5.5	40	260
11	63	130	35	84	45	41	14	75	26	248	43	136
12	42	70	33	4.4	42	38	14	50	22	280	202	40
13	38	33	28	15	39	35	17	39	40	299	346	3.0
14	19	34	26	31	36	35	23	30	43	160	195	8.9
15	6.1	34	26	38	34	84	22	30	50	57	96	29
16	5.9	34	29	38	32	87	20	24	133	2.2	84	36
17	8.8	44	29	36	32	23	22	18	461	13	85	36
18	24	70	27	41	31	28	17	19	321	26	105	164
19	33	70	33	46	32	31	15	23	162	32	269	368
20	35	40	36	43	30	31	17	22	156	34	178	116
21	44	25	29	37	28	27	23	23	245	32	155	77
22	51	21	27	33	28	24	26	25	112	50	141	78
23	45	21	31	32	30	24	23	16	112	253	88	81
24	52	21	32	31	30	26	19	11	158	647	68	72
25	51	22	22	102	29	24	20	11	267	273	37	26
26	45	22	11	13	28	25	22	16	126	313	3.3	4.1
27	41	23	42	4.3	25	375	21	20	56	234	3.5	4.4
28	43	24	89	3.6	18	212	21	16	.84	165	12	4.8
29	42	25	60	70	---	57	21	14	1.5	157	33	12
30	41	26	48	124	---	3.8	14	7.6	232	148	39	22
31	36	---	41	69	---	12	---	1.5	---	274	39	---
TOTAL	2944.8	1187	1204	1773.4	1001	1712.3	629	729.1	2926.49	4489.57	3239.1	2332.2
MEAN	95.0	39.6	38.8	57.2	35.8	55.2	21.0	23.5	97.5	145	104	77.7
MAX	571	130	106	325	60	375	28	75	461	647	346	368
MIN	5.9	21	11	3.6	18	3.8	14	1.5	.75	.25	3.3	3.0
AC-FT	5840	2350	2390	3520	1990	3400	1250	1450	5800	8910	6420	4630

CAL YR 1985	TOTAL	27731.99	MEAN	76.0	MAX	947	MIN	.14	AC-FT	55010
WTR YR 1986	TOTAL	24167.96	MEAN	66.2	MAX	647	MIN	.25	AC-FT	47940

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 micromsiemens July 17, 1981; minimum daily mean, 284 microsiemens 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 1985 TO SEPTEMBER 1986

DATE	GAGE HEIGHT (FEET ABOVE DATUM) (00065)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS (MG/L AS CACO3) (00900)	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)
OCT											
30...	8.67	41	1220	7.50	26.5	3.0	6.0	340	94	25	120
FEB											
05...	8.64	38	1660	--	20.0	1.3	7.4	440	110	40	190
APR											
02...	8.52	25	1390	7.60	24.0	1.4	7.2	390	110	27	130
MAY											
27...	8.45	20	1980	7.80	27.0	--	4.1	--	--	--	--
JUL											
29...	9.36	145	1120	--	29.0	2.5	3.7	310	83	24	100
AUG											
18...	8.99	85	1120	7.50	27.0	2.7	3.6	310	88	21	97

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL 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)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT										
30...	6.0	187	82	250	0.4	13	765	710	0.18	0.01
FEB										
05...	7.5	--	110	420	0.5	6.1	1010	990	--	<0.01
APR										
02...	6.6	200	110	290	0.4	7.7	837	810	0.14	0.03
MAY										
27...	--	157	--	--	--	--	--	--	--	<0.01
JUL										
29...	9.2	--	86	210	0.4	12	660	620	0.88	0.12
AUG										
18...	8.1	185	72	210	0.4	12	660	630	0.42	0.05

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	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)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
OCT										
30...	0.19	0.11	0.11	0.69	0.8	0.17	0.11	0.10	10	1
FEB										
05...	<0.10	0.04	0.04	0.66	0.7	0.06	0.04	0.04	--	--
APR										
02...	0.17	0.15	0.15	0.65	0.8	0.14	0.10	0.08	10	<1
MAY										
27...	<0.10	0.14	0.09	0.76	0.9	0.40	0.08	0.06	--	--
JUL										
29...	1.00	0.31	0.30	1.2	1.5	0.37	0.20	0.24	--	--
AUG										
18...	0.47	0.13	0.16	1.1	1.2	0.32	0.19	0.17	30	1

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 1985 TO SEPTEMBER 1986

DATE	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)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
30...	45	<0.5	<1	<1	<3	5	58	1	12	16
FEB										
05...	--	--	--	--	--	--	--	--	--	--
APR										
02...	48	<0.5	<1	<1	<3	3	62	2	15	31
MAY										
27...	--	--	--	--	--	--	--	--	--	--
JUL										
29...	--	--	--	--	--	--	--	--	--	--
AUG										
18...	41	<0.5	<1	3	<3	10	420	<5	11	28

DATE	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-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT										
30...	<0.1	<10	3	<1	1	3800	<6	27	5	40
FEB										
05...	--	--	--	--	--	--	--	--	1	1
APR										
02...	<0.1	<10	3	<1	<1	4100	<6	18	2	50
MAY										
27...	--	--	--	--	--	--	--	--	85	96
JUL										
29...	--	--	--	--	--	--	--	--	75	75
AUG										
18...	<0.1	<10	2	<1	<1	2900	<6	16	7	43

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: Oct. 1-13. Records poor. Considerable pumping into canal for drainage above station. Since Jan. 6, 1956, low flow regulated by control structure upstream.

AVERAGE DISCHARGE.--36 years, 40.1 ft^3/s, 29,050 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft^3/s, Sept. 24, 1963, gage height, 10.97 ft, from floodmarks; maximum gage height, 10.98 ft, Aug. 27, 1964; minimum discharge, 0.43 ft^3/s, May 24, 1978; minimum gage height, 0.64 ft, Aug. 15, 1984, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,020 ft^3/s, Oct. 4,5, maximum gage height, 7.97 ft, Oct. 4; minimum daily discharge, 6.9 ft^3/s, July 16; minimum gage height, 0.74 ft, Apr. 30, May 1,2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	32	14	24	31	10	13	8.3	8.6	7.0	82	16
2	112	32	16	24	24	10	14	8.7	8.8	149	29	25
3	205	29	17	20	22	22	14	8.5	11	63	9.5	28
4	345	32	17	20	20	155	13	12	16	125	271	28
5	616	30	27	24	18	49	13	15	21	229	154	24
6	300	27	115	30	17	9.3	12	15	24	79	40	26
7	150	25	49	26	16	8.7	12	12	19	26	9.3	25
8	115	23	36	146	22	8.4	11	8.2	16	8.0	9.5	142
9	96	28	33	22	22	8.1	9.4	9.2	25	7.2	15	75
10	80	38	30	236	21	13	9.9	35	23	7.3	16	192
11	56	183	25	58	21	18	10	42	16	241	16	72
12	42	60	23	32	19	15	9.0	27	16	237	22	33
13	37	27	21	23	18	13	9.5	18	26	348	17	15
14	44	24	18	25	17	13	15	15	24	89	155	14
15	41	22	18	25	15	14	12	16	30	7.8	93	19
16	38	22	21	24	14	8.3	9.7	12	26	6.9	128	23
17	35	24	21	24	13	8.9	11	9.5	25	7.0	79	24
18	41	69	19	25	13	10	9.6	9.4	7.7	11	72	35
19	42	110	21	28	13	11	9.8	11	89	13	146	222
20	41	35	22	25	13	11	10	9.8	61	13	82	86
21	42	17	18	22	14	14	11	10	83	13	84	60
22	41	15	16	20	13	10	14	13	44	18	79	58
23	39	15	17	19	14	13	16	11	22	34	48	57
24	42	17	18	20	17	11	15	8.6	10	50	40	57
25	48	17	13	20	16	9.1	13	8.5	101	187	26	29
26	49	17	11	16	18	9.8	11	11	44	613	9.4	13
27	43	16	27	14	11	35	9.5	11	21	519	8.6	12
28	43	15	43	12	9.0	13	11	8.1	9.5	162	8.8	11
29	48	14	32	40	---	15	12	7.9	7.8	107	13	11
30	55	14	25	56	---	13	10	8.5	8.0	139	15	12
31	41	---	21	35	---	12	---	8.0	---	243	15	---
TOTAL	3067	1029	804	1135	481.0	570.6	349.4	407.2	843.4	3759.2	1792.1	1444
MEAN	98.9	34.3	25.9	36.6	17.2	18.4	11.6	13.1	28.1	121	57.8	48.1
MAX	616	183	115	236	31	155	16	42	101	613	271	222
MIN	35	14	11	12	9.0	8.1	9.0	7.9	7.7	6.9	8.6	11
AC-FT	6080	2040	1590	2250	954	1130	693	808	1670	7460	3550	2860

CAL YR 1985	TOTAL	18363.0	MEAN	50.3	MAX	1250	MIN	5.7	AC-FT	36420
WTR YR 1986	TOTAL	15681.9	MEAN	43.0	MAX	616	MIN	6.9	AC-FT	31110

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 1986

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		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‡ 1968-86	9-12-86	13.03	199
		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	1985-86	1-11-86	6.16	216
		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 ditchs, 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	1966-86	3-15-86	21.80	46.0
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	1971-86[d/]	7-05-86	9.99	577

‡ Operated as a continuous record gaging station
d Discontinued

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1986

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		OKLAWAHA RIVER BASIN--Continued					
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	1971-86[d/]	3-15-86	7.34	123
		ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER					
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	1971-86	8-17-86	9.98	80.0
02246029	Bid Branch near Middleburg	Lat 30°07'08", long 81°49'52", in in SW¼ sec.29, T.4 S., R.25 E., Clay County, Hydrologic Unit 03080103, at bridge on Brannan Field Road 1.1 mi north of SR 21, 4.1 mi north of Middleburg, and 1.6 mi upstream from mouth. Datum of gage not determined.	6.55	1985-86	9-01-85 3-16-86	4.31 3.58	254 83.0
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	1975-86	10-29-85	22.68	676
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	1975-86	5-19-86	9.75	120
		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 southwest of Summer Haven. Datum of gage is 19.14 ft above National Geodetic Vertical Datum of 1929.	4.62	1962-86	8-05-86	2.73	17.0

d Discontinued

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1986

Station No.	Station name	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (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, 3.2 mi west of Baldwin, about 5.0 mi from mouth, and 5.5 mi east of Macclenny.	25	1965-67 1985	5-06-86	0.24
		COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVER				
02231065	Brandy Branch near Bryceville	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 1985	5-06-86	0.10
02231284	Thomas Creek near Callahan	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 1985	5-07-86	0.00
		ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER				
02231475	Bull Creek near Holopaw	Lat 28°01'53", long 81°02'21", in SE¼ sec.20, T.28 S., R.33 E., Osceola County, Hydrologic Unit 03080101, at bridge on U.S. Highway 441, 7.7 mi south of Holopaw.	31.7	1957 1965-67 1972	4-24-86 6-10-86	<.01 .04
*02234150	Cow Creek near Maytown	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 1985	5-06-86 7-03-86 9-03-86	.00 .00 17.7
		OKLAWAHA RIVER BASIN				
02240105	Daisy Creek near Fort McCoy	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 south of Fort McCoy and 3.5 mi upstream from mouth.	11.4	1981,1985	11-19-85 3-04-86 4-15-86 6-11-86 7-23-86 8-19-86	.00 [a].49 <.05 .00 15. [a]2.2
02240440	Eaton Creek near Eureka	Lat 29°20'15", long 81°53'00", in NE¼ sec.27, T.13 S., R.24 E., Marion County, Hydrologic Unit 03080102, 0.2 mi upstream from mouth, and 2.9 mi south of Eureka.	84.6	1968, 1984	3-27-85 8-20-86	48. 104
		ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER				
02245280	Moccasin Branch at Armstrong	Lat 29°46'30", long 81°27'10", in SW¼ sec.26, T.8 S., R.28 E., St. Johns County, Hydrologic Unit 03080103, at culvert on State Highway 207, 1.0 mi north of Armstrong.			5-06-86	3.14
02245325	Mill 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 1985	5-06-86	1.38

* Also a crest-stage partial-record station
a Discharge is an estimate
< Actual value is known to be less than the value shown

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1986

Station No.	Station name	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (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 1985	5-05-86	1.56
*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, 0.3 mi west of Maxville, and 5.5 mi upstream from mouth.	2.98	1965-67 1985	5-06-86	0.04
*02245900	Yellow Water Creek near Maxville	at 30°13'45", long 81°55'18", in NE¼ sec.20, T.3 S., R.24 E., Duval County, Hydrologic Unit 03080103, on right downstream wall of 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 1985	5-05-86 6-04-86	1.07 0.27
*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, 1.5 mi northeast of Greenland, and 11.0 mi upstream from mouth.	8.9	1965-66‡ 1967-84 1985	5-08-86	5.70
02246110	Sweetwater Creek at Greenland	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 1985	5-05-86	0.52
	Strawberry Creek at Lone Star Road at Jacksonville	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.		1985	5-05-86	0.78
02246199	Durbin Creek at U.S. Highway 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 1985	5-05-86	0.00
*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, 4.9 mi northwest of Durbin, and 6.1 mi upstream from mouth.	36.7	1961-85 1985	5-06-86	6.41
*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 1985	5-05-86	0.61
02246280	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, 1.2 mi northwest of Whitehouse and 4.3 mi upstream from mouth.		1977 1985	5-06-86	0.15

* Also a crest-stage partial-record station
‡ Operated as a continuous-record gaging station

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1986

Station No.	Station name	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER--Continued				
	Fishing Creek	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.		1985	05-06-86	2.27
	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.		1985	5-06-86	0.04
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 1985	5-06-86	4.95
*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* 1985	5-05-86	2.22
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 1985	5-05-86	6.11
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.	0.92	1971-85	5-05-86	0.08
*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.	3.51	1975-85	5-06-86	0.87
02246515	Pottsburg Creek near south Jacksonville	Lat 30°15'50", long 81°35'25", in land grant 56, T.3 S., R.27 E., Duval County, Hydrologic Unit 03080103, on downstream side of bridge on Bowden Road, 0.14 mi 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	5-05-86	3.36
*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	5-06-86	0.59
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	5-05-86	1.66

* 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 1986

Station No.	Station name	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER--Continued				
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 1985	5-05-86 5-31-85	3.10 .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, on right downstream side of bridge on Imeson Road, 1.0 mi west of Picketville, and 2.7 mi upstream from mouth.		1974-75 1985	5-05-86	0.21
*02246650	Sixmile Creek 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 1985	5-05-86	3.02
*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 1985	5-05-86	3.82
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 1985	5-06-86	0.41
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 1985	5-06-86	0.61
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 1985	5-06-86	0.12
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, 3.3 mi north of Eastport, and 3.7 mi upstream from Rushing Branch.	4.86	1965-67 1968 1985	5-06-86	4.03
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.		1964 1985	5-06-86	1.86

* 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 1986

Station No.	Station name	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER--Continued				
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 1985	5-05-86	1.32
02246820	Jones Creek near Arlington	Lat 30°19'21", long 81°32'23", in NW¼ sec.19, T.2 S., R.28 E., Duval County, Hydrologic Unit 03080103, at culvert on State Highway 10, 3.9 mi east of Arlington.			5-05-86	0.00
		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 1985	5-19-86 7-03-86 9-03-86	.10 .46 2.18

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1986

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER				
02234386 County Home Run	Soldier Creek	Lat 28°44'15", long 81°17;59", in NE¼ sec.22, T.20 S., R.30 E., Seminole County, Hydrologic Unit 03080101, 1.6 mi southeast of town of Lake Mary, 4.5 mi south of Sanford, and 1.7 mi upstream from mouth.	0.45	1983-85	10-17-85 1-10-86 2-07-86 7-21-86 8-11-86 9-10-86	.19 6.89 .26 .01 .01 .28
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.		1932-33 1936 1945-46 1956 1960-62 1969-80‡ 1981-85	5-07-86 9-05-86	64 67
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 1969-85	5-07-86 9-25-86	54 58
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 1973-85	5-07-86 9-23-86	3.7 5.5
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 1972-85	5-06-86 9-23-86	29 21
02234992 Little Wekiva River	Wekiva River	Lat 28°41'28", long 81°23'42", in SE¼NE¼ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, immediately downstream from Sanlando Springs, and 3.0 mi west of Longwood.		1978-80 1982 1984-85	5-06-86 9-23-86	46 51
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 1972-85	5-06-86 9-23-86	6.4 6.7
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 1972-85	5-07-86 9-23-86	9.2 12
02235250 Seminole Springs	Seminole Creek	Lat 28°50'44", long 81°31'22", in SW¼ 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 1985	5-06-86	35
02235255 Messant Springs[a/]	Seminole Creek	Lat 28°51'21", long 81°29'56", in Theresa Rodriquez 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 1985	5-06-86	15

‡ Operated as a periodic station
a Published as Messinger Springs in 1961 water year

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1986

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements: Date	Measurements: Discharge (ft^3/s)
		ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER--Continued				
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 1981-85	5-08-86 9-22-86	56 122
02236099 Alexander Springs Creek	St. Johns River	Lat 29°04'51", long 81°33'59", in Moses E. Levy Grant, T.16 S., R.27 E., Lake County, Hydrologic Unit 03080101, at bridge on State Highway 445, 1.4 mi downstream from Alexander Springs, and 6.2 mi southwest of Astor.	57.1	1933,1935-36 1956,1966-67 1969,1981	5-08-86	99
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‡ 1981-85	5-07-86 9-23-86	28 22
02236130 Juniper Springs	Lake George	Lat 29°11'01", long 81°42'45", in SE¼ 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 1981-85	5-09-86 9-23-86	8.8 9.6
02236132 Fern Hammock Springs [b]	Juniper Creek	Lat 29°11'00", long 81°42'29", in SE¼ 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 1981-85	5-09-86 9-23-86	13 14
02236147 Sweetwater Springs	Juniper Creek	Lat 29°13'07" long 81°39'36", in NE¼ 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 northwest of Astor Park.		1981-85	5-09-86 9-26-86	12 10
02236150 Juniper Creek Run	Lake George	Lat 29°12'47", long 81°39'17", in NE¼ of F.M. Arredondo Grant, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, at bridge on State Highway 19, 8.4 mi northwest of Astor.		1932-33 1935-36 1946,1966-67 1981	5-09-86	98
02236160 Silver Glen Springs	Lake George	Lat 29°14'40", long 81°38'34", in SE¼ sec.25, T.14 S., R.26 E., Marion County, Hydrologic Unit 03080101, 0.5 mi upstream from Lake George, and 9.1 mi northwest of Astor.		1931-33 1935-36 1946,1956 1961,1972 1981-82 1984-85	5-07-86 9-25-86	62 58
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 1981-85	5-08-86 9-25-86	66 79
291913081412200 Salt Springs Run	Lake George	Lat 29°19'13", long 81°41'22", in Joseph M. Hernandez Grant, T.13 S., R.26 E., Marion County, Hydrologic Unit 03080101, 0.6 mi upstream from Lake George, and 13.7 mi east of Eureka		1981	5-08-86	106

‡ Operated as a periodic station
b Also known as "The Aquarium"

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 1986.

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 1986

Station No.	Station name	Location	Miles above mouth	Drainage area (mi^2)	Period of record (calendar) years	Annual Maximum Date	Annual Maximum 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	1954-86	1986	<21.53
02231470	St. Johns River crest-stage gage No. 2 near Malabar	Lat 288°0'47", 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	1953-86	1986	<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	1953-86	1986	<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	1953-86	1986	<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 1986

Station No.	Station name	Location	Miles above mouth	Drainage area (mi^2)	Period of record (calendar) years	Annual Maximum Date	Annual Maximum 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	1961-86	1986	<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	1953-86	1986	<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 Preserve 8.8 mi southeast of Christmas. Datum of gage is National Geodetic Vertical Datum of 1929.	217	1,385	1953-86	1986	<11.36
02232700	St. Johns River crest-stage gage No. 9 near Christmas	Lat 28°36'36", long 80°57'54", in NE° 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	1953-86	1986	<8.19

[d/] Inlet of lake
[e/] Outlet of lake
< Actual value is known to be less than the value shown

ELEVATION AND WATER QUALITY OF LAKES

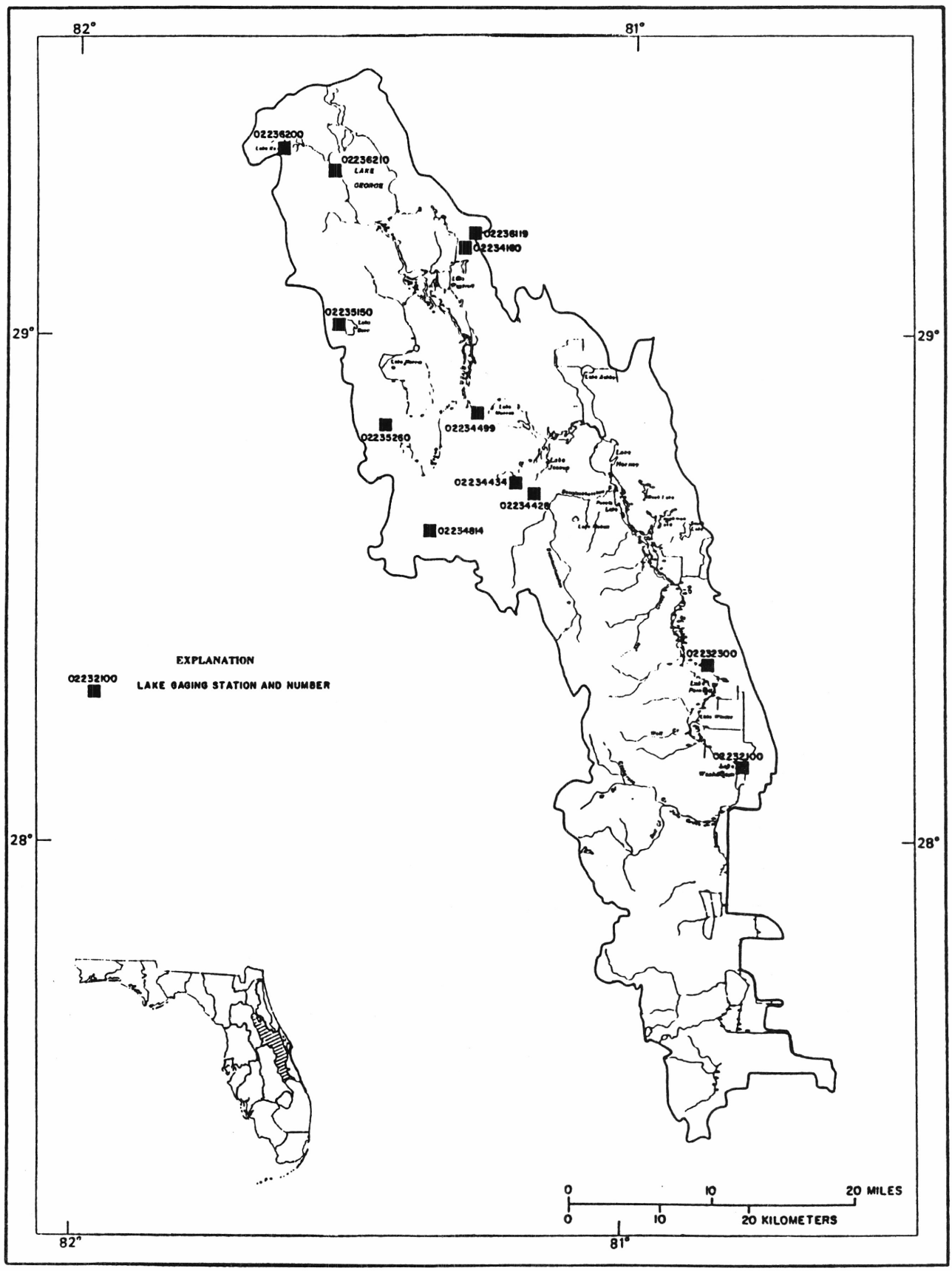

Figure 14. Location of lake gaging stations in the St. Johns River basin above the Oklawaha River.

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--1,025 mi^2.

PERIOD OF RECORD.--July 1942 to current year. Records of elevations prior to October 1960 are unpublished and 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.63	16.47	14.71	13.94	14.10	13.84	13.66	13.08	12.34	14.16	14.19	14.74
2	17.65	16.39	14.64	13.95	14.08	13.82	13.66	13.06	12.32	14.19	14.17	14.74
3	17.67	16.33	14.55	13.93	14.05	13.81	13.64	13.01	12.29	14.26	14.15	14.73
4	17.68	16.31	14.51	13.93	14.04	13.81	13.61	12.96	12.26	14.32	14.15	14.72
5	17.68	16.24	14.55	13.92	14.02	13.79	13.59	12.93	12.22	14.31	14.16	14.71
6	17.67	16.16	14.64	13.90	13.99	13.78	13.57	12.91	12.21	14.30	14.17	14.72
7	17.62	16.09	14.62	13.91	13.95	13.76	13.57	12.90	12.20	14.29	14.16	14.71
8	17.59	16.01	14.62	13.90	13.96	13.73	13.57	12.89	12.22	14.28	14.16	14.70
9	17.56	15.95	14.58	13.92	13.96	13.72	13.57	12.88	12.22	14.28	14.15	14.78
10	17.55	15.91	14.56	14.09	13.97	13.71	13.53	12.83	12.20	14.27	14.14	14.84
11	17.52	15.86	14.54	14.14	13.99	13.71	13.51	12.83	12.22	14.27	14.13	14.86
12	17.48	15.82	14.52	14.17	13.99	13.71	13.48	12.82	12.29	14.26	14.14	14.90
13	17.43	15.77	14.51	14.20	13.96	13.69	13.46	12.80	12.31	14.26	14.18	14.94
14	17.38	15.70	14.46	14.20	13.96	13.71	13.45	12.78	12.35	14.27	14.25	14.99
15	17.33	15.64	14.39	14.19	13.96	13.72	13.44	12.74	12.39	14.26	14.39	15.03
16	17.27	15.58	14.36	14.19	13.95	13.78	13.44	12.71	12.43	14.26	14.41	15.07
17	17.22	15.51	14.34	14.21	13.94	13.78	13.42	12.69	12.49	14.25	14.43	15.09
18	17.16	15.43	14.32	14.22	13.95	13.77	13.37	12.67	12.52	14.24	14.44	15.15
19	17.12	15.36	14.29	14.26	13.95	13.77	13.33	12.66	12.58	14.23	14.45	15.19
20	17.08	15.33	14.27	14.28	13.95	13.76	13.33	12.64	12.70	14.22	14.49	15.21
21	17.03	15.29	14.23	14.27	13.95	13.70	13.34	12.63	12.84	14.22	14.54	15.22
22	16.98	15.24	14.19	14.27	13.95	13.64	13.32	12.62	12.95	14.28	14.56	15.23
23	16.92	15.16	14.16	14.27	13.95	13.64	13.26	12.60	13.13	14.28	14.57	15.25
24	16.86	15.09	14.14	14.26	13.94	13.66	13.22	12.58	13.32	14.30	14.59	15.26
25	16.80	15.03	14.10	14.26	13.90	13.65	13.22	12.55	13.50	14.28	14.60	15.27
26	16.74	14.98	14.05	14.26	13.88	13.66	13.21	12.52	13.59	14.27	14.61	15.27
27	16.70	14.92	14.03	14.25	13.90	13.67	13.19	12.49	13.72	14.25	14.66	15.27
28	16.64	14.87	14.00	14.21	13.85	13.67	13.16	12.46	13.87	14.24	14.73	15.27
29	16.61	14.80	13.98	14.19	---	13.67	13.14	12.43	13.99	14.24	14.76	15.27
30	16.56	14.75	13.94	14.16	---	13.68	13.10	12.41	14.10	14.23	14.75	15.26
31	16.51	---	13.91	14.13	---	13.67	---	12.38	---	14.21	14.75	---
MEAN	17.21	15.60	14.35	14.13	13.97	13.73	13.41	12.72	12.73	14.26	14.39	15.01
MAX	17.68	16.47	14.71	14.28	14.10	13.84	13.66	13.08	14.10	14.32	14.76	15.27
MIN	16.51	14.75	13.91	13.90	13.85	13.64	13.10	12.38	12.20	14.16	14.13	14.70

CAL YR 1985 MEAN 14.51 MAX 17.68 MIN 13.23
WTR YR 1986 MEAN 14.30 MAX 17.68 MIN 12.20

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 mi^2).

DRAINAGE AREA.--1,272 mi^2.

PERIOD OF RECORD.--November 1941 to current year. Records of elevations prior to October 1960 are unpublished and 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.49	15.11	13.65	12.60	12.43	11.64	11.03	9.82	9.01	11.24	12.39	13.42
2	15.55	15.08	13.57	12.62	12.41	11.64	11.03	9.71	8.96	11.35	12.38	13.41
3	15.62	15.06	13.47	12.60	12.38	11.64	11.02	9.66	8.93	11.42	12.38	13.38
4	15.69	15.00	13.42	12.59	12.35	11.63	11.01	9.73	8.94	11.63	12.39	13.39
5	15.72	14.94	13.51	12.54	12.32	11.59	10.96	9.75	8.83	11.70	12.40	13.38
6	15.72	14.90	13.62	12.52	12.28	11.51	10.92	9.63	8.83	11.80	12.46	13.40
7	15.75	14.85	13.65	12.52	12.24	11.49	10.88	9.58	8.90	11.84	12.49	13.45
8	15.77	14.80	13.65	12.54	12.24	11.45	10.81	9.53	8.90	11.88	12.50	13.49
9	15.76	14.75	13.62	12.56	12.25	11.47	10.75	9.50	8.92	11.90	12.51	13.54
10	15.76	14.71	13.61	12.73	12.23	11.42	10.70	9.54	8.92	11.90	12.51	13.68
11	15.77	14.72	13.59	12.82	12.20	11.32	10.68	9.49	8.93	11.95	12.51	13.80
12	15.76	14.73	13.53	12.97	12.16	11.32	10.67	9.49	8.94	12.03	12.51	13.88
13	15.72	14.70	13.50	12.99	12.11	11.34	10.58	9.44	9.00	12.07	12.53	13.95
14	15.72	14.66	13.39	13.00	12.10	11.23	10.52	9.45	9.04	12.08	12.59	14.00
15	15.70	14.62	13.34	13.01	12.08	11.21	10.52	9.50	9.07	12.08	12.71	14.02
16	15.67	14.57	13.31	13.01	12.09	11.27	10.40	9.40	9.10	12.10	12.79	14.00
17	15.65	14.51	13.24	13.01	12.08	11.26	10.33	9.35	9.13	12.10	12.86	13.98
18	15.61	14.45	13.19	12.99	12.05	11.33	10.32	9.34	9.33	12.08	13.01	14.06
19	15.58	14.41	13.16	12.95	12.02	11.27	10.27	9.31	9.51	12.07	13.15	14.16
20	15.52	14.36	13.13	12.94	12.00	11.20	10.31	9.20	9.73	12.05	13.24	14.15
21	15.50	14.30	13.07	12.92	11.99	11.07	10.20	9.22	9.99	12.06	13.31	14.14
22	15.45	14.16	13.00	12.90	11.96	10.97	10.09	9.19	10.20	12.08	13.32	14.14
23	15.41	14.09	12.97	12.84	11.92	11.02	10.06	9.22	10.41	12.11	13.32	14.13
24	15.36	14.05	12.94	12.78	11.88	11.10	10.04	9.19	10.52	12.17	13.32	14.13
25	15.31	14.01	12.80	12.73	11.79	11.17	10.04	9.17	10.64	12.20	13.32	14.12
26	15.28	13.95	12.77	12.67	11.79	11.15	9.97	9.18	10.81	12.24	13.31	14.10
27	15.24	13.88	12.74	12.48	11.76	11.10	9.92	9.20	10.93	12.26	13.31	14.08
28	15.21	13.83	12.70	12.53	11.76	11.07	9.89	9.14	11.01	12.32	13.34	14.06
29	15.21	13.77	12.63	12.53	---	11.08	9.84	9.06	11.08	12.34	13.41	14.05
30	15.19	13.72	12.58	12.50	---	11.06	9.83	9.03	11.13	12.35	13.42	14.03
31	15.17	---	12.55	12.45	---	11.05	---	9.01	---	12.37	13.43	---
MEAN	15.54	14.49	13.22	12.74	12.10	11.29	10.45	9.39	9.59	11.99	12.87	13.85
MAX	15.77	15.11	13.65	13.01	12.43	11.64	11.03	9.82	11.13	12.37	13.43	14.16
MIN	15.17	13.72	12.55	12.45	11.76	10.97	9.83	9.01	8.83	11.24	12.38	13.38

CAL YR 1985 MEAN 12.18 MAX 15.77 MIN 9.52
WTR YR 1986 MEAN 12.30 MAX 15.77 MIN 8.83

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--1.10 mi^2.

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, 60.67 ft, Feb. 11,12; minimum daily recorded, 59.05 ft, June 8,24,25, but may have been lower during period of no gage-height record June 26 to July 14.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.96	60.34	60.23	60.13	60.56	60.51	60.25	59.71	59.17	---	59.54	60.00
2	59.97	60.34	60.23	60.15	60.55	60.45	60.24	59.68	59.16	---	59.53	60.00
3	59.96	60.34	60.21	60.15	60.55	60.42	60.22	59.65	59.15	---	59.53	59.99
4	59.98	60.35	60.19	60.14	60.55	60.42	60.20	59.63	59.13	---	59.57	59.98
5	59.97	60.32	60.21	60.14	60.55	60.41	60.18	59.60	59.11	---	59.57	59.96
6	59.97	60.30	60.23	60.13	60.55	60.40	60.17	59.58	59.09	---	59.56	59.98
7	59.94	60.29	60.20	60.14	60.55	60.38	60.16	59.57	59.07	---	59.54	60.04
8	59.93	60.28	60.19	60.16	60.58	60.37	60.15	59.55	59.05	---	59.52	60.10
9	59.93	60.28	60.18	60.16	60.62	60.36	60.13	59.55	59.08	---	59.51	60.16
10	60.05	60.31	60.17	60.40	60.66	60.35	60.10	59.52	59.17	---	59.48	60.20
11	60.11	60.31	60.17	60.61	60.67	60.35	60.07	59.49	59.16	---	59.46	60.20
12	60.12	60.31	60.16	60.61	60.67	60.35	60.05	59.47	59.15	---	59.47	60.20
13	60.12	60.31	60.16	60.62	60.65	60.34	60.06	59.45	59.16	---	59.53	60.29
14	60.12	60.31	60.24	60.62	60.64	60.36	60.04	59.43	59.16	---	59.60	60.41
15	60.12	60.30	60.21	60.61	60.63	60.41	60.03	59.41	59.16	59.42	59.64	60.40
16	60.12	60.30	60.19	60.62	60.62	60.47	60.01	59.37	59.16	59.40	59.63	60.40
17	60.11	60.29	60.18	60.62	60.61	60.48	59.97	59.35	59.16	59.38	59.62	60.38
18	60.10	60.29	60.16	60.62	60.63	60.46	59.93	59.33	59.16	59.36	59.61	60.38
19	60.11	60.28	60.15	60.63	60.63	60.45	59.91	59.32	59.16	59.34	59.62	60.37
20	60.10	60.29	60.13	60.63	60.63	60.45	59.89	59.42	59.15	59.31	59.66	60.36
21	60.09	60.29	60.12	60.62	60.62	60.44	59.91	59.43	59.15	59.29	59.68	60.34
22	60.08	60.29	60.10	60.62	60.61	60.41	59.91	59.41	59.15	59.28	59.70	60.33
23	60.06	60.28	60.09	60.62	60.61	60.37	59.87	59.38	59.09	59.28	59.69	60.32
24	60.04	60.28	60.09	60.61	60.61	60.34	59.85	59.34	59.05	59.32	59.67	60.30
25	60.03	60.27	60.10	60.61	60.58	60.33	59.84	59.31	59.05	59.39	59.66	60.29
26	60.03	60.25	60.09	60.62	60.56	60.32	59.82	59.29	---	59.37	59.65	60.27
27	60.14	60.23	60.07	60.62	60.54	60.31	59.80	59.27	---	59.39	59.63	60.26
28	60.19	60.24	60.06	60.59	60.54	60.30	59.78	59.24	---	59.44	59.61	60.25
29	60.24	60.23	60.06	60.58	---	60.29	59.76	59.23	---	59.44	59.62	60.23
30	60.27	60.23	60.05	60.57	---	60.27	59.74	59.19	---	59.46	59.70	60.21
31	60.33	---	60.04	60.56	---	60.26	---	59.17	---	59.49	59.80	---
MEAN	60.07	60.29	60.15	60.47	60.60	60.38	60.00	59.43	---	---	59.60	60.22
MAX	60.33	60.35	60.24	60.63	60.67	60.51	60.25	59.71	---	---	59.80	60.41
MIN	59.93	60.23	60.04	60.13	60.54	60.26	59.74	59.17	---	---	59.46	59.96

CAL YR 1985 MEAN 59.10 MAX 60.35 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 mi^2).

DRAINAGE AREA.--0.11 mi^2.

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, 47.28 ft, Jan. 12, 1986; minimum observed, 40.24 ft, July 14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 47.28 ft, Jan. 12; minimum observed, 45.52 ft, June 8.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.52	---	46.64	---	---	---	---	---	45.66	---	---	---
2	---	---	46.62	---	47.18	47.04	---	---	---	---	---	---
3	---	46.74	---	---	---	---	---	---	---	---	46.10	---
4	---	---	---	---	---	---	---	46.20	---	---	---	---
5	---	---	---	46.80	---	---	---	---	---	---	---	---
6	46.74	---	---	---	---	---	46.84	---	---	46.30	---	---
7	---	---	---	---	---	---	---	---	---	---	---	46.50
8	---	---	46.76	---	---	---	---	---	45.52	---	---	---
9	---	---	---	---	47.22	46.96	---	---	---	---	---	---
10	---	46.70	---	---	47.21	---	---	---	---	---	46.10	---
11	---	---	---	---	---	---	---	46.08	---	---	---	---
12	---	---	---	47.28	---	---	---	---	---	---	---	---
13	46.74	---	---	---	---	---	46.75	---	---	46.22	---	---
14	---	---	---	---	---	---	---	---	---	---	---	46.52
15	---	---	46.80	---	---	---	---	---	46.36	---	---	---
16	---	---	---	---	47.16	47.04	---	---	---	---	---	---
17	---	46.72	---	---	---	---	---	---	---	---	46.30	---
18	---	46.70	---	---	---	---	---	45.90	---	---	---	---
19	---	---	---	47.26	---	---	---	---	---	---	---	---
20	46.70	---	---	---	---	---	46.62	---	---	46.16	---	---
21	---	---	---	---	---	---	---	46.00	---	---	---	46.40
22	---	---	46.70	---	---	---	---	---	46.52	46.08	---	46.37
23	---	---	---	---	47.14	46.96	---	---	---	---	---	---
24	---	46.72	---	---	---	46.94	---	---	---	46.20	46.36	---
25	---	---	---	---	---	---	---	45.85	---	---	---	---
26	---	---	---	47.22	---	---	---	---	---	---	---	---
27	46.66	---	---	---	---	---	46.40	45.75	---	46.16	---	---
28	---	---	---	---	---	---	---	---	---	---	---	46.36
29	---	---	46.70	---	---	---	---	---	46.40	---	---	---
30	---	---	---	---	---	46.98	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	46.30	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234434 LAKE JESSUP NEAR SANFORD, FL

LOCATION.--Lat 28°42'04", long 81°14'17", in SE¼ sec.37, T.20 S., R.31 E., Seminole County, Hydrologic Unit 03080101, in boat canal on south shore, 5.4 mi east of the intersection of State Highway 434 and U.S. Highways 17 and 92, and 8 mi southeast of the courthouse in Sanford.

SURFACE AREA.--7,792 acres (12.2 mi^2).

DRAINAGE AREA.--156 mi^2.

PERIOD OF RECORD.--August 1941 to April 1943, September 1943 to July 1948, October 1977 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-81-1: Surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Apr. 30, 1943, nonrecording gage, and Sept. 1, 1943 to July 14, 1948, water-stage recorder at bridge 7.2 mi northeast at lake outlet at same datum (U.S. Army Corps of Engineers bench mark).

REMARKS.--Lake is one of St. Johns River chain of lakes. Elevation at gage subject to seiches caused by wind action and backwater at times from St. Johns River.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 7.75 ft, Sept. 26, 1945, site and datum then in use; minimum daily, -0.63 ft, Apr. 6, 1945, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation since at least 1871, 13.28 ft NGVD in fall of 1880 at Lake Monroe near Sanford (station 02234499), from information by former Sanford City Engineer. Lake Monroe, about 5 mi downstream and the next lake in the St. Johns River chain of lakes, reached an elevation of 8.50 ft, Oct. 15-17, 1953. Lake Jessup would have been at these elevations and probably higher on these dates.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 5.32 ft, Oct. 8; minimum observed, 0.49 ft, July 22.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---			---	---	---	---	---	---	---	---
2	---	---			---	---	1.52	---	---	---	---	1.72
3	---	4.10			---	---	---	---	---	1.22	---	---
4	---	---			---	---	---	1.16	.90	---	---	---
5	---	---			---	---	---	---	---	---	.73	---
6	---	---			---	---	---	---	---	---	---	---
7	---	---			---	---	---	---	---	---	---	---
8	5.32	---			---	---	---	---	---	---	---	---
9	---	---			---	---	.97	---	---	---	---	2.29
10	---	4.00			3.00	---	---	---	---	1.02	---	---
11	---	---			---	1.41	---	---	1.37	---	---	---
12	---	---			---	1.36	---	1.12	---	---	.78	---
13	---	---			---	---	---	---	---	---	---	---
14	---	---			---	---	---	---	---	---	---	---
15	---	---			---	---	---	---	---	.79	---	---
16	---	---			---	---	.90	---	---	---	---	2.28
17	5.09	---			---	---	---	---	---	---	---	---
18	---	---			---	1.28	---	---	1.27	---	.85	---
19	5.19	---			---	---	---	---	---	---	---	---
20	---	---			---	1.05	---	---	---	---	---	---
21	---	---			---	---	---	---	---	---	---	---
22	---	---			---	---	---	1.00	---	.49	---	2.26
23	---	---			---	---	---	---	---	---	---	2.26
24	---	3.68			---	---	1.29	---	---	---	---	---
25	---	---			---	1.62	---	---	---	---	---	---
26	---	---			---	1.56	---	---	1.42	---	1.30	---
27	---	---			---	---	---	.79	---	---	---	---
28	---	---			---	---	---	---	---	---	---	---
29	---	---			---	---	---	.90	---	---	---	---
30	---	3.30			---	---	1.20	---	---	.70	---	1.80
31	---	---			---	---	---	---	---	---	---	---

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 mi^2).

DRAINAGE AREA.--2,582 mi^2.

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 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.77	4.21	3.23	1.92	3.29	1.74	1.38	.96	.74	1.16	.57	1.49
2	4.75	4.24	3.16	1.90	3.21	1.74	1.32	.90	.77	1.07	.55	1.55
3	4.73	4.25	3.08	1.88	3.12	1.72	1.26	.86	.82	1.01	.63	1.63
4	4.73	4.22	3.04	1.87	3.03	1.64	1.21	.99	.93	.98	.69	1.73
5	4.72	4.20	3.03	1.84	2.94	1.55	1.13	1.05	1.05	.96	.57	1.76
6	4.75	4.20	3.01	1.85	2.84	1.44	1.07	.96	1.13	1.23	.58	1.79
7	4.71	4.19	2.99	1.86	2.75	1.38	1.02	.89	1.25	1.18	.62	1.85
8	4.66	4.17	2.97	1.90	2.69	1.33	.92	.81	1.29	1.15	.63	1.90
9	4.61	4.14	2.94	1.97	2.65	1.31	.85	.75	1.26	1.08	.62	1.96
10	4.60	4.14	2.91	2.45	2.60	1.24	.82	.83	1.27	1.01	.61	2.06
11	4.65	4.12	2.88	2.85	2.54	1.17	.83	.96	1.23	.91	.59	2.09
12	4.63	4.11	2.83	3.11	2.49	1.13	.84	1.03	1.22	.92	.65	2.10
13	4.61	4.10	2.80	3.27	2.44	1.08	.86	1.01	1.16	.99	.83	2.09
14	4.59	4.08	2.74	3.42	2.42	.98	.90	1.02	1.12	.75	.91	2.08
15	4.55	4.05	2.73	3.57	2.38	.95	.91	1.01	1.13	.63	.71	2.05
16	4.52	4.01	2.71	3.69	2.35	1.02	.84	.98	1.05	.55	.58	2.02
17	4.49	3.97	2.68	3.77	2.30	1.05	.82	.96	1.02	.50	.62	2.01
18	4.45	3.94	2.64	3.83	2.25	1.09	.85	.94	1.02	.46	.80	2.00
19	4.43	3.91	2.60	3.84	2.19	1.04	.87	.91	1.08	.43	.78	1.99
20	4.40	3.90	2.56	3.86	2.15	.97	.94	.97	1.16	.39	.88	2.00
21	4.36	3.87	2.51	3.87	2.10	.95	.93	.86	1.18	.39	1.02	2.00
22	4.32	3.79	2.46	3.86	2.05	1.03	.90	.84	1.22	.48	1.13	1.99
23	4.27	3.71	2.41	3.82	2.03	1.24	.97	.87	1.30	.53	1.07	1.96
24	4.22	3.66	2.36	3.76	1.97	1.34	1.04	.85	1.31	.52	1.08	1.92
25	4.16	3.60	2.22	3.70	1.91	1.36	1.02	.81	1.30	.57	1.10	1.88
26	4.13	3.54	2.20	3.65	1.92	1.35	1.01	.79	1.30	.63	1.13	1.84
27	4.10	3.48	2.16	3.49	1.88	1.37	.99	.74	1.27	.71	1.16	1.79
28	4.09	3.42	2.09	3.49	1.85	1.38	.98	.70	1.24	.78	1.16	1.72
29	4.08	3.36	1.99	3.49	---	1.40	.96	.68	1.23	.73	1.20	1.66
30	4.08	3.30	1.93	3.44	---	1.42	1.00	.68	1.24	.68	1.26	1.60
31	4.16	---	1.87	3.37	---	1.42	---	.69	---	.61	1.32	---
MEAN	4.46	3.93	2.64	3.05	2.44	1.28	.98	.88	1.14	.77	.84	1.88
MAX	4.77	4.25	3.23	3.87	3.29	1.74	1.38	1.05	1.31	1.23	1.32	2.10
MIN	4.08	3.30	1.87	1.84	1.85	.95	.82	.68	.74	.39	.55	1.49

CAL YR 1985 MEAN 1.86 MAX 4.79 MIN .26
WTR YR 1986 MEAN 2.02 MAX 4.77 MIN .39

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--13.4 mi^2.

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.

REVISIONS.--The maximum daily elevation for calendar and water year 1984 has been revised to 85.00 ft, July 23, 1984; revised daily elevations, in feet, for the period July 23-25, 1984, superceding those published in the report WDR-84-1A, are given below.

July 23....85.00
24....84.75
25....84.55

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.57	83.66	83.14	83.64	83.45	83.41	83.40	82.87	82.76	83.69	83.81	84.11
2	83.56	83.61	83.13	83.76	83.44	83.39	83.38	82.86	82.78	83.64	83.82	84.13
3	83.60	83.56	83.11	83.70	83.44	83.38	83.35	82.84	82.93	83.61	83.79	84.05
4	84.05	83.52	83.08	83.63	83.43	83.38	83.33	82.82	83.12	83.63	83.86	83.94
5	84.04	83.46	83.18	83.61	83.43	83.37	83.30	82.83	83.12	83.75	84.26	83.88
6	83.97	83.40	83.46	83.58	83.43	83.35	83.27	82.85	83.10	83.82	84.40	83.88
7	83.83	83.37	83.48	83.56	83.44	83.33	83.25	82.84	83.09	83.83	84.44	83.84
8	83.73	83.35	83.46	83.57	83.52	83.32	83.23	82.85	83.08	83.82	84.28	83.82
9	83.66	83.32	83.43	83.55	83.66	83.30	83.20	82.89	83.09	83.80	84.17	83.90
10	83.62	83.31	83.41	84.30	83.68	83.32	83.17	82.88	83.07	83.76	84.06	84.09
11	83.58	83.32	83.40	84.80	83.68	83.33	83.14	82.87	83.11	83.71	83.99	84.12
12	83.56	83.31	83.38	84.45	83.66	83.33	83.12	82.86	83.34	83.67	84.02	84.07
13	83.53	83.31	83.37	84.24	83.60	83.33	83.16	82.86	83.50	83.64	84.11	84.00
14	83.50	83.30	83.55	84.09	83.55	83.35	83.15	82.86	83.50	83.60	84.25	83.97
15	83.48	83.31	83.57	83.95	83.53	83.46	83.14	82.84	83.52	83.55	84.18	83.89
16	83.49	83.30	83.54	83.82	83.50	83.66	83.12	82.83	83.50	83.53	84.07	83.83
17	83.47	83.28	83.51	83.74	83.49	83.68	83.10	82.82	83.51	83.56	83.97	83.81
18	83.45	83.25	83.47	83.68	83.51	83.63	83.06	82.81	83.58	83.68	83.89	83.81
19	83.44	83.23	83.44	83.64	83.52	83.59	83.04	82.80	83.93	83.93	83.84	83.81
20	83.43	83.26	83.40	83.60	83.51	83.55	83.03	82.81	84.43	83.89	83.90	83.76
21	83.43	83.27	83.38	83.56	83.50	83.54	83.02	82.86	84.38	83.83	83.98	83.75
22	83.42	83.27	83.35	83.53	83.48	83.50	83.00	82.86	84.28	83.81	84.07	83.73
23	83.41	83.25	83.32	83.51	83.46	83.46	82.97	82.84	84.18	83.85	84.01	83.72
24	83.39	83.23	83.32	83.50	83.46	83.43	82.95	82.83	84.17	83.81	83.92	83.70
25	83.37	83.22	83.38	83.49	83.43	83.41	82.94	82.82	84.16	83.77	83.85	83.67
26	83.34	83.20	83.36	83.52	83.40	83.40	82.93	82.80	84.04	83.76	83.81	83.64
27	83.33	83.19	83.35	83.54	83.39	83.45	82.92	82.80	83.93	83.85	83.80	83.61
28	83.33	83.18	83.34	83.51	83.40	83.48	82.91	82.82	83.83	83.86	83.93	83.58
29	83.33	83.16	83.32	83.48	---	83.46	82.89	82.81	83.76	83.87	84.43	83.54
30	83.44	83.15	83.31	83.47	---	83.44	82.88	82.79	83.72	83.90	84.37	83.51
31	83.51	---	83.30	83.45	---	83.42	---	82.78	---	83.86	84.23	---
MEAN	83.54	83.32	83.36	83.72	83.50	83.43	83.11	82.84	83.55	83.75	84.05	83.84
MAX	84.05	83.66	83.57	84.80	83.68	83.68	83.40	82.89	84.43	83.93	84.44	84.13
MIN	83.33	83.15	83.08	83.45	83.39	83.30	82.88	82.78	82.76	83.53	83.79	83.51

CAL YR 1985 MEAN 83.30 MAX 84.45 MIN 82.65
WTR YR 1986 MEAN 83.50 MAX 84.80 MIN 82.76

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 mi^2).

DRAINAGE AREA.--26.5 mi^2.

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, 43.57 ft, Jan. 15; minimum observed, 42.51 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.40	---	---	43.12	---	---	---	---	---	---	---	---
2	43.48	---	---	---	---	---	43.30	42.79	---	---	---	---
3	---	---	---	---	---	---	---	---	---	42.68	---	43.12
4	---	---	43.12	---	---	---	---	---	42.52	---	---	---
5	---	---	---	---	43.50	43.38	---	---	---	---	---	---
6	---	43.25	---	---	---	---	---	---	---	---	42.68	---
7	---	---	---	---	---	---	---	42.72	---	---	---	---
8	---	---	---	43.07	---	---	---	---	---	---	---	---
9	43.47	---	---	---	---	---	43.18	---	---	42.67	---	---
10	---	---	---	---	---	---	---	---	---	42.65	---	43.30
11	---	---	43.02	---	43.52	---	---	---	---	---	---	---
12	---	---	---	---	---	43.31	---	---	42.51	---	---	---
13	---	43.22	---	---	---	---	---	---	---	---	42.70	---
14	---	---	---	---	---	---	---	42.64	---	---	---	---
15	---	---	---	43.57	---	---	---	---	---	---	---	---
16	43.50	---	---	---	---	---	43.10	---	---	42.58	---	---
17	---	---	---	---	---	---	---	---	---	---	---	43.36
18	---	---	43.04	---	---	---	---	---	42.58	---	---	---
19	---	43.22	---	---	43.47	43.48	---	---	---	---	---	---
20	---	43.20	---	---	---	---	---	---	---	---	42.62	---
21	---	---	---	43.53	---	---	---	42.67	---	---	---	---
22	---	---	---	43.52	---	---	---	---	---	---	---	---
23	43.42	---	---	---	---	---	42.87	---	---	42.64	---	---
24	---	---	---	---	---	---	---	---	---	---	---	43.24
25	---	---	---	---	---	---	---	---	42.72	---	---	---
26	---	---	43.01	---	43.42	43.37	---	---	---	---	---	---
27	---	43.17	---	---	---	---	---	---	---	---	42.57	---
28	---	---	---	---	---	---	---	42.62	---	---	42.53	---
29	---	---	---	43.44	---	---	---	---	---	---	---	---
30	43.32	---	---	---	---	---	---	---	---	42.62	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235260 MOUNT PLYMOUTH LAKE AT MOUNT PLYMOUTH, FL

LOCATION.--Lat 28°48'39", long 81°31'23", in NW¼ sec.28, T.19 S., R.28 E., Lake County, Hydrologic Unit 03080101, on west shore of northeast bay of lake, 0.7 mi east of Mount Plymouth.

SURFACE AREA.--86 acres (0.13 mi8^2.

DRAINAGE AREA.--1.30 mi^2.

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

GAGE.--Nonrecording gage. Datum of gage is 50.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 56.00 ft, Feb. 27, 1984; minimum observed, 52.17 ft, May 26, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 53.85 ft, on several days during January and February; minimum observed, 52.17 ft, May 16.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	53.19
2	---	---	53.18	---	---	---	---	---	52.40	---	---	---
3	---	---	---	---	53.85	53.72	---	---	---	---	---	---
4	---	53.18	---	---	---	---	---	---	---	---	53.20	---
5	---	---	---	---	---	---	---	52.63	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	53.30	---	---	---	---	---	---	---	---	52.90	---	---
8	---	---	---	---	---	---	---	---	---	---	---	53.19
9	---	---	53.18	---	---	---	---	---	52.46	---	---	---
10	---	---	---	---	53.85	53.64	---	---	---	---	---	---
11	---	53.16	---	---	---	---	---	---	---	---	53.12	---
12	---	---	---	---	---	---	---	52.60	---	---	---	53.25
13	---	---	---	53.85	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	52.90	---	---
15	---	---	---	---	---	---	---	---	---	---	---	53.18
16	---	---	53.20	---	---	---	---	---	52.90	---	---	---
17	---	---	---	---	53.85	53.74	---	---	---	---	---	---
18	---	53.16	---	---	---	---	---	---	---	53.38	53.15	---
19	---	---	---	---	---	---	---	52.38	---	---	---	---
20	---	---	---	53.82	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	53.36	---	---	53.12	---	---
22	---	---	---	---	---	---	---	52.35	---	---	---	53.18
23	---	---	53.20	---	---	---	52.96	---	53.00	---	---	---
24	---	---	---	---	53.85	53.42	---	---	---	---	---	---
25	---	53.16	---	---	---	---	---	---	---	---	53.12	---
26	---	---	---	---	---	53.59	---	52.17	---	---	---	---
27	---	---	---	53.85	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	52.60	---	---	53.00	---	---
29	---	---	---	---	---	---	---	---	---	---	---	53.18
30	---	---	53.20	---	---	---	---	---	53.00	---	---	---
31	---	---	---	---	---	53.38	---	---	---	---	---	---

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 mi^2).

DRAINAGE AREA.--1.33 mi^2.

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 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
07...	1110	27.54	13...	1325	27.40
DEC			JUL		
09...	1205	29.28	09...	1350	26.27
JAN			AUG		
21...	1345	30.21	28...	1210	25.50
APR					
02...	1515	28.95			

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--102 mi^2.

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 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 (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, 23.19 ft, Oct. 16,17; minimum daily, 21.78 ft, June 13.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.06	23.14	22.89	22.68	22.95	22.96	22.90	22.38	---	22.22	22.50	22.89
2	23.06	23.13	22.89	22.69	22.95	22.93	22.89	22.36	21.88	22.21	22.53	22.88
3	23.07	23.12	22.85	22.69	22.94	22.91	22.88	22.34	---	22.20	22.60	22.87
4	23.09	23.11	22.82	22.69	22.94	22.91	22.86	22.31	---	22.26	22.62	22.86
5	23.08	23.07	22.82	22.70	22.95	22.92	22.84	22.28	---	22.27	22.65	22.85
6	23.06	23.04	22.82	22.69	22.96	22.91	22.82	22.27	---	22.36	22.66	22.84
7	23.03	23.02	22.79	22.69	22.98	22.90	22.81	22.26	21.80	22.35	22.75	22.84
8	23.01	23.01	22.77	22.69	23.00	22.88	22.79	22.26	---	22.33	22.74	22.90
9	23.01	23.01	22.76	22.68	23.04	22.87	22.77	22.24	---	22.32	22.73	22.92
10	23.02	23.01	22.76	22.91	23.05	22.87	22.74	22.21	---	22.29	22.72	22.96
11	23.05	23.01	22.76	23.07	23.08	22.87	22.72	22.17	21.81	22.27	22.70	22.96
12	23.05	23.01	22.75	23.06	23.08	22.86	22.71	22.15	21.80	22.26	22.70	22.95
13	23.04	23.00	22.76	23.05	23.05	22.85	22.73	22.14	21.78	22.25	22.71	22.95
14	23.02	23.00	22.80	23.05	23.04	22.87	22.72	22.12	21.79	22.23	22.71	22.96
15	23.02	22.99	22.77	23.04	23.02	23.00	22.70	22.10	21.86	22.20	22.75	22.94
16	23.19	22.98	22.76	23.03	23.00	23.08	22.68	22.08	21.93	22.18	22.75	22.92
17	23.19	22.97	22.74	23.01	23.00	23.08	22.65	22.06	21.99	22.18	22.75	22.90
18	23.18	22.96	22.72	23.02	23.03	23.07	22.62	22.03	22.08	22.16	22.74	22.88
19	23.18	22.96	22.71	23.04	23.04	23.06	22.61	22.03	22.13	22.14	22.75	22.86
20	23.17	22.97	22.71	23.02	23.04	23.06	22.59	22.13	22.30	22.12	22.74	22.84
21	23.16	22.96	22.70	23.00	23.02	23.06	22.57	22.12	22.35	22.12	22.76	22.82
22	23.14	22.96	22.68	23.00	23.01	23.03	22.56	22.10	22.34	22.18	22.78	22.81
23	23.12	22.95	22.67	23.01	23.01	23.00	22.53	22.08	22.33	22.25	22.77	22.79
24	23.11	22.95	22.67	23.01	23.01	22.98	22.50	22.06	22.32	22.30	22.76	22.78
25	23.10	22.93	22.69	23.00	23.00	22.97	22.49	22.04	22.30	22.37	22.75	22.76
26	23.10	22.91	22.66	23.02	22.98	22.96	22.47	22.03	22.30	22.40	22.74	22.74
27	23.10	22.91	22.65	23.02	22.95	22.95	22.45	22.00	22.28	22.41	22.79	22.73
28	23.10	22.91	22.64	22.99	22.95	22.95	22.43	21.97	22.26	22.43	22.87	22.72
29	23.13	22.91	22.64	22.98	---	22.94	22.41	21.96	22.24	22.43	22.86	22.71
30	23.12	22.90	22.63	22.98	---	22.93	22.39	21.94	22.22	22.42	22.85	22.69
31	23.12	---	22.62	22.97	---	22.92	---	21.93	---	22.42	22.86	---
MEAN	23.09	22.99	22.74	22.92	23.00	22.95	22.66	22.13	---	22.28	22.73	22.85
MAX	23.19	23.14	22.89	23.07	23.08	23.08	22.90	22.38	---	22.43	22.87	22.96
MIN	23.01	22.90	22.62	22.68	22.94	22.85	22.39	21.93	---	22.12	22.50	22.69

CAL YR 1985 MEAN 23.06 MAX 24.00 MIN 22.29

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 mi^2).

DRAINAGE AREA.--3,721 mi^2.

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 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, Feb. 7, 1976.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.45	2.45	.92	.33	.81	.84	.93	.71	.62	.56	.17	1.17
2	2.37	2.28	1.00	.37	.77	.88	.80	.62	.62	.47	.18	1.26
3	2.26	2.15	1.12	.47	.70	.70	.71	.59	.67	.40	.19	1.37
4	2.13	2.03	1.22	.51	.63	.45	.68	.81	.81	.42	.15	1.42
5	1.95	1.86	1.28	.57	.56	.41	.67	.85	1.02	.56	.16	1.40
6	1.88	1.68	1.32	.69	.52	.39	.65	.71	1.16	.73	.23	1.41
7	1.97	1.62	1.33	.70	.49	.37	.57	.57	1.18	.75	.32	1.49
8	2.11	1.61	1.33	.84	.57	.41	.45	.46	1.04	.68	.30	1.55
9	2.29	1.69	1.31	1.19	.74	.51	.33	.46	.87	.55	.23	1.59
10	2.49	1.79	1.29	1.44	.84	.49	.42	.70	.74	.42	.21	1.61
11	2.48	1.86	1.26	1.73	.95	.44	.48	.89	.76	.30	.17	1.53
12	2.35	1.87	1.17	1.87	1.05	.40	.47	.87	.73	.25	.15	1.36
13	2.33	1.83	1.07	1.81	1.10	.28	.54	.77	.63	.15	.14	1.20
14	2.36	1.79	.97	1.68	1.06	.19	.64	.78	.51	.10	.10	1.15
15	2.37	1.74	1.00	1.52	.94	.35	.64	.80	.49	.02	.06	1.22
16	2.35	1.69	1.04	1.42	.86	.44	.52	.78	.48	.01	.14	1.23
17	2.32	1.64	1.07	1.39	.82	.51	.43	.74	.47	-0.01	.27	1.25
18	2.36	1.62	1.05	1.32	.79	.52	.53	.69	.47	-0.02	.36	1.36
19	2.40	1.61	1.00	1.22	.72	.39	.63	.60	.54	-0.03	.41	1.43
20	2.34	1.62	.95	1.14	.70	.26	.75	.61	.70	-0.03	.44	1.42
21	2.23	1.54	.88	1.01	.81	.45	.71	.57	.82	.06	.46	1.35
22	2.13	1.25	.81	.93	.88	.77	.66	.57	.95	.14	.51	1.22
23	2.08	1.12	.74	.91	.91	.96	.73	.64	1.06	.25	.55	1.10
24	2.07	1.18	.57	1.08	.99	.98	.79	.63	1.06	.33	.57	1.03
25	2.13	1.31	.43	1.36	1.09	.97	.79	.57	.95	.38	.62	.93
26	2.23	1.32	.41	1.43	1.14	.99	.75	.53	.87	.44	.73	.76
27	2.38	1.26	.32	1.34	.90	1.01	.72	.53	.89	.41	.72	.60
28	2.46	1.14	.20	1.24	.82	1.00	.72	.54	.87	.32	.59	.50
29	2.58	1.03	.16	1.05	---	1.07	.71	.53	.76	.21	.50	.55
30	2.72	.95	.20	.88	---	1.09	.73	.52	.64	.12	.72	.67
31	2.68	---	.25	.81	---	1.03	---	.56	---	.12	1.01	---
MEAN	2.30	1.62	.89	1.10	.83	.63	.64	.65	.78	.29	.37	1.20
MAX	2.72	2.45	1.33	1.87	1.14	1.09	.93	.89	1.18	.75	1.01	1.61
MIN	1.88	.95	.16	.33	.49	.19	.33	.46	.47	-0.03	.06	.50

CAL YR 1985 MEAN .88 MAX 2.72 MIN -0.22
WTR YR 1986 MEAN .94 MAX 2.72 MIN -0.03

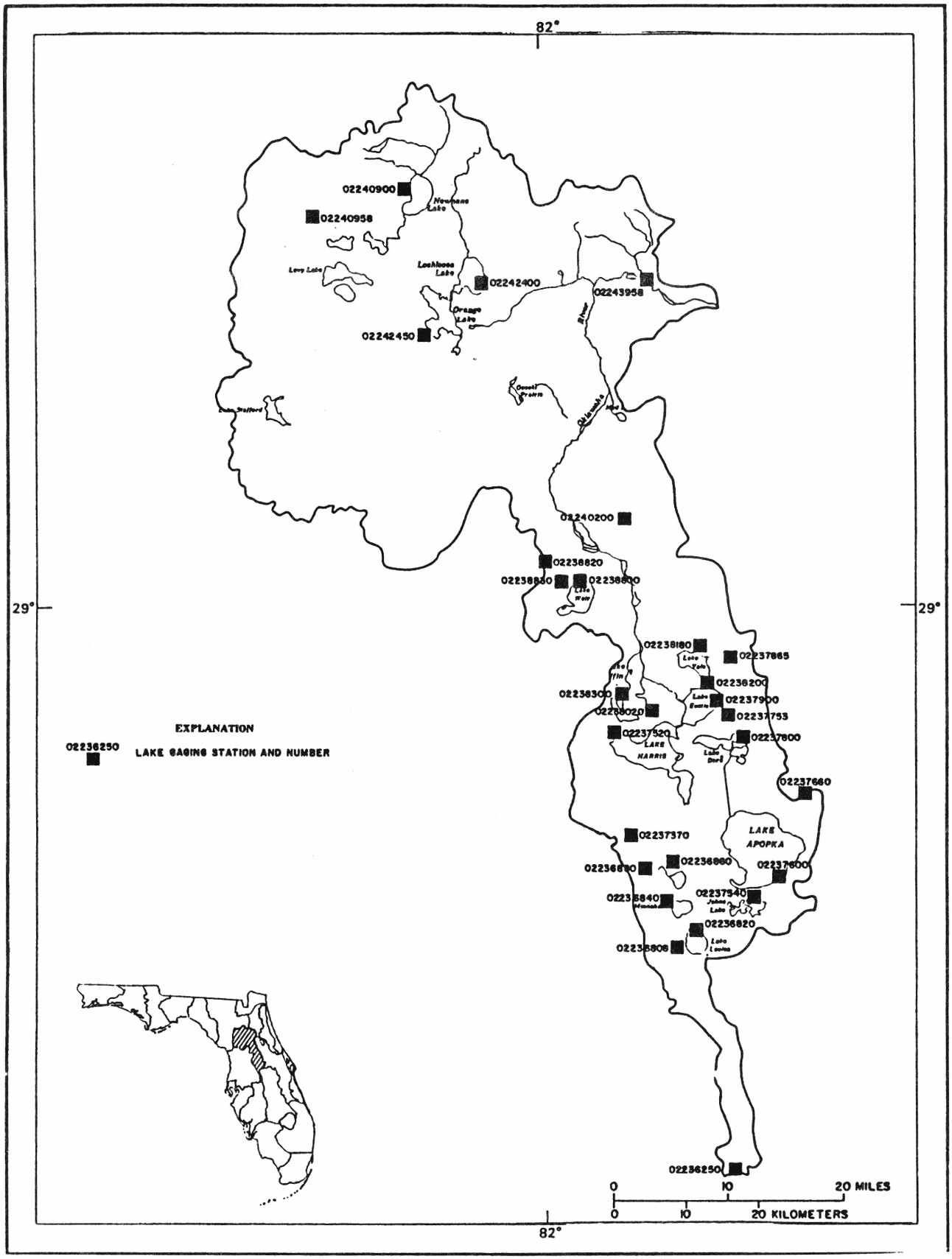

Figure 15. Location of lake gaging stations in the Oklawaha River basin.

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236250 LAKE LOWERY NEAR HAINES CITY, FL

LOCATION.--Lat 28°06'51" long 81°40'17", in SW¼ sec.24, T.27 S., R.26 E., Polk County, Hydrologic Unit 03080102, at southeast end of stub canal on south side of lake, at Fletcher's Fish Camp, 2.5 mi northwest of Haines City.

SURFACE AREA.--897 acres (1.40 mi^2).

DRAINAGE AREA.--5.4 mi^2, approximately.

PERIOD OF RECORD.--June 1960 to September 1975, October 1975 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is 122.86 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Aug. 28, 1974, at site 50 ft northeast at same datum.

REMARKS.--Lake is one of a group of lakes in the southern part of an extensive area of swampy flatlands and sandy ridges at relatively high elevation, called the Green Swamp. Streams that flow into five major drainage systems originate in or near the Green Swamp area.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 133.32 ft, Sept. 11, 1960, from floodmark; minimum observed, 125.12 ft, May 27, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 129.86 ft, Oct. 13; minimum observed, 128.16 ft, May 27.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	129.16	---	129.24	---	---	---		---	---	---
2	---	---	---	---	---	129.16	129.12	---		---	---	---
3	---	129.40	---	---	---	---	---	---		---	128.36	---
4	---	---	---	---	---	---	---	128.56		---	128.45	---
5	---	---	---	129.24	---	---	---	---		---	---	---
6	129.64	---	---	---	---	---	129.06	---		128.18	---	---
7	---	---	---	129.19	---	---	---	---		---	---	128.62
8	---	---	129.22	---	---	---	---	---		---	---	---
9	---	---	---	---	129.35	129.12	---	---		---	---	---
10	---	129.34	---	---	---	---	---	---		---	---	---
11	---	---	---	---	---	---	---	128.40		---	128.60	---
12	---	---	---	129.36	---	---	---	---		---	---	---
13	129.86	---	---	---	---	---	128.96	---		128.22	---	---
14	---	---	---	---	---	---	---	---		---	---	128.94
15	---	---	129.19	---	---	---	---	---		---	---	---
16	---	---	---	---	129.30	129.34	---	---		---	---	---
17	---	129.26	---	---	---	---	---	---		---	128.66	---
18	---	---	---	---	---	---	---	128.26		---	---	---
19	---	---	---	129.34	---	---	---	---		---	---	---
20	129.64	---	---	---	---	---	128.84	---		128.20	---	---
21	---	---	---	---	---	---	---	---		---	---	128.90
22	---	---	129.15	---	---	---	---	---		---	---	---
23	---	---	---	---	129.28	129.24	---	---		---	---	---
24	---	129.25	---	---	129.30	---	---	---		---	128.62	---
25	---	---	---	---	---	---	---	128.18		---	---	---
26	---	---	---	129.28	---	---	---	---		---	---	---
27	129.46	---	---	---	---	---	128.72	128.16		128.26	---	---
28	---	---	---	---	---	---	---	---		---	---	128.76
29	129.46	---	129.10	---	---	---	---	---		---	---	---
30	---	---	---	---	---	129.16	---	---		---	---	---
31	---	---	---	---	---	---	---	---		---	128.58	---

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--13.3 mi^2.

PERIOD OF RECORD.--July 1979 to September 1985 (weekly), incomplete; October 1985 to September 1986 (fragmentary).

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 Palatlakaha 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, Feb. 5, 1986; minimum observed, 95.72 ft, June 20, 1981.

ELEVATION, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
16...	1040	100.31	27...	1045	99.34
NOV			JUL		
27...	1317	100.12	15...	1550	99.56
FEB			SEP		
05...	0903	100.82	09...	0847	100.04
APR					
01...	1245	100.38			

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 mi^2).

DRAINAGE AREA.--121 mi^2.

PERIOD OF RECORD.--March 1957 to September 1975, October 1975 to current year (weekly). Records of elevations prior to October 1960 are unpublished and 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 Palatlakaha 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, 97.00 ft, Mar. 14, minimum observed, 95.39 ft, Dec. 8.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	96.69	96.92	---	---	---	---	---	---
2	---	95.57	---	---	---	---	---	---	---	---	96.06	---
3	---	---	---	---	---	---	---	96.17	---	---	---	---
4	---	---	---	95.60	---	---	---	---	---	---	---	---
5	95.56	---	---	---	96.65	---	96.59	---	---	96.00	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	95.66	---	---	---
8	---	---	95.39	---	96.84	96.87	---	---	---	---	---	---
9	---	95.50	---	---	---	---	---	---	---	---	95.98	96.53
10	---	---	---	---	---	---	---	95.89	---	---	---	---
11	---	---	---	96.18	---	---	---	---	---	---	---	---
12	95.53	---	---	---	---	---	96.58	---	---	95.98	---	---
13	---	---	---	---	---	---	---	---	---	---	---	96.58
14	---	---	95.50	---	---	---	---	---	95.82	---	---	---
15	95.50	---	---	---	96.89	97.00	---	---	---	95.96	---	---
16	---	95.49	---	---	---	---	---	---	---	---	96.11	---
17	---	---	---	---	---	---	---	95.86	---	---	---	---
18	---	---	---	96.52	---	---	---	---	---	---	---	---
19	95.54	---	---	---	---	---	96.40	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	96.54
21	---	---	95.44	---	---	---	---	---	95.82	---	---	---
22	---	---	---	---	96.95	96.84	---	---	---	---	---	---
23	---	95.46	---	---	---	---	---	---	---	---	96.28	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	96.61	---	---	---	---	---	---	---	---
26	95.49	---	---	---	---	---	96.27	---	---	95.92	---	---
27	---	95.46	---	---	---	---	---	95.67	---	---	---	96.44
28	---	---	---	---	---	96.67	---	---	95.96	---	---	---
29	---	---	---	---	---	96.66	---	---	---	---	---	---
30	---	95.41	---	---	---	---	---	---	---	---	96.38	---
31	---	---	---	---	---	---	---	95.60	---	---	---	---

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--131 mi^2.

PERIOD OF RECORD.--May 1945 to current year. Records of elevations prior to October 1960 are unpublished and 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 Palatlakaha 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.48	95.58	95.44	95.56	96.62	96.90	96.66	96.21	95.61	95.94	95.96	96.41
2	95.48	95.58	95.43	95.59	96.64	96.90	96.65	96.18	95.64	95.94	95.96	96.41
3	95.48	95.57	95.41	95.60	96.66	96.89	96.65	96.16	95.68	95.93	95.96	96.40
4	95.54	95.55	95.39	95.61	96.68	96.89	96.64	96.14	95.68	95.97	95.94	96.39
5	95.54	95.52	95.40	95.62	96.69	96.89	96.63	96.12	95.66	96.03	95.98	96.42
6	95.56	95.51	95.41	95.62	96.70	96.87	96.61	96.10	95.65	96.04	96.04	96.49
7	95.54	95.50	95.39	95.62	96.72	96.86	96.60	96.08	95.80	96.03	96.04	96.49
8	95.53	95.49	95.38	95.65	96.77	96.85	96.58	96.07	95.72	96.01	96.03	96.50
9	95.52	95.49	95.38	95.67	96.82	96.84	96.57	96.06	95.69	95.99	96.01	96.53
10	95.51	95.50	95.37	95.88	96.83	96.84	96.55	96.04	95.69	95.97	95.99	96.55
11	95.52	95.51	95.37	96.04	96.86	96.84	96.53	96.00	95.73	95.97	95.97	96.56
12	95.52	95.51	95.37	96.06	96.89	96.84	96.52	95.98	95.73	95.98	96.01	96.56
13	95.52	95.51	95.38	96.08	96.88	96.84	96.55	95.96	95.76	96.03	96.14	96.55
14	95.51	95.51	95.46	96.11	96.88	96.85	96.55	95.95	95.81	96.00	96.15	96.55
15	95.51	95.51	95.45	96.14	96.89	96.90	96.53	95.94	95.85	95.99	96.15	96.54
16	95.50	95.51	95.44	96.17	96.89	96.97	96.50	95.91	95.84	95.99	96.14	96.53
17	95.50	95.50	95.43	96.21	96.90	96.96	96.48	95.89	95.82	96.00	96.14	96.51
18	95.56	95.49	95.42	96.26	96.93	96.94	96.46	95.87	95.80	95.99	96.14	96.51
19	95.56	95.49	95.41	96.31	96.94	96.91	96.44	95.85	95.81	95.98	96.16	96.55
20	95.56	95.49	95.41	96.34	96.95	96.87	96.42	95.84	95.84	95.96	96.17	96.54
21	95.55	95.50	95.40	96.37	96.94	96.85	96.40	95.85	95.86	95.94	96.18	96.53
22	95.55	95.48	95.39	96.41	96.93	96.79	96.38	95.84	95.86	95.92	96.25	96.52
23	95.53	95.48	95.38	96.43	96.93	96.74	96.36	95.82	95.92	95.92	96.27	96.51
24	95.52	95.48	95.39	96.46	96.93	96.70	96.34	95.80	95.94	95.93	96.27	96.50
25	95.50	95.47	95.42	96.49	96.91	96.67	96.32	95.78	96.06	95.91	96.26	96.49
26	95.48	95.46	95.41	96.53	96.90	96.65	96.30	95.76	96.04	95.90	96.33	96.48
27	95.49	95.46	95.40	96.55	96.90	96.65	96.28	95.74	96.02	95.90	96.36	96.47
28	95.48	95.45	95.40	96.56	96.91	96.65	96.26	95.71	96.00	95.93	96.36	96.46
29	95.48	95.45	95.40	96.57	---	96.65	96.24	95.69	95.98	95.94	96.37	96.44
30	95.48	95.44	95.40	96.59	---	96.67	96.23	95.66	95.96	95.94	96.38	96.42
31	95.57	---	95.40	96.60	---	96.66	---	95.63	---	95.96	96.40	---
MEAN	95.52	95.50	95.40	96.12	96.84	96.82	96.47	95.92	95.81	95.97	96.15	96.49
MAX	95.57	95.58	95.46	96.60	96.95	96.97	96.66	96.21	96.06	96.04	96.40	96.56
MIN	95.48	95.44	95.37	95.56	96.62	96.65	96.23	95.63	95.61	95.90	95.94	96.39

CAL YR 1985 MEAN 95.07 MAX 95.69 MIN 94.05
WTR YR 1986 MEAN 96.08 MAX 96.97 MIN 95.37

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236860 LAKE APSHAWA NEAR MINNEOLA, FL

LOCATION.--Lat 28°36'13", long 81°46'36", in NE¼ sec.2, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, on northwest shore of south portion of lake, 2.8 mi northwest of Minneola.

SURFACE AREA.--110 acres (0.17 mi^2).

DRAINAGE AREA.--1.48 mi^2.

PERIOD OF RECORD.--April 1953 to December 1984 (weekly) incomplete, January 1985 to current year (once-daily). Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Surface area, drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1968, nonrecording gage at site 1,500 ft northwest at datum 86.16 ft higher. Feb. 9, 1968 to Jan. 19, 1985, non-recording 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.54	84.55	84.42	84.50	84.90	84.96	84.94	84.56	84.01	84.60	84.84	85.29
2	84.54	84.55	84.40	84.51	84.91	84.96	84.93	84.53	84.09	84.57	84.84	85.28
3	84.56	84.56	84.38	84.51	84.91	84.94	84.92	84.51	84.12	84.56	84.81	85.26
4	84.57	84.53	84.36	84.51	84.91	84.94	84.91	84.48	84.11	84.70	84.82	85.33
5	84.63	84.50	84.39	84.50	84.91	84.94	84.89	84.47	84.10	84.83	84.90	85.48
6	84.60	84.49	84.36	84.52	84.92	84.93	84.88	84.45	84.11	84.82	84.96	85.48
7	84.59	84.48	84.35	84.54	84.92	84.92	84.87	84.45	84.10	84.81	84.95	85.47
8	84.57	84.47	84.35	84.55	85.00	84.91	84.85	84.44	84.08	84.80	84.94	85.48
9	84.57	84.47	84.34	84.73	85.01	84.93	84.84	84.41	84.07	84.79	84.92	85.48
10	84.56	84.52	84.34	84.88	85.01	84.93	84.81	84.37	84.30	84.77	84.90	85.48
11	84.56	84.52	84.33	84.88	85.03	84.94	84.80	84.36	84.30	84.75	84.87	85.48
12	84.55	84.53	84.34	84.89	85.02	84.94	84.86	84.35	84.29	84.92	85.06	85.47
13	84.54	84.52	84.45	84.88	85.00	84.94	84.86	84.33	84.30	84.91	85.11	85.46
14	84.54	84.52	84.43	84.88	84.99	84.92	84.84	84.32	84.33	84.90	85.13	85.45
15	84.53	84.52	84.42	84.88	84.99	84.97	84.83	84.30	84.33	84.89	85.13	85.43
16	84.52	84.51	84.40	84.88	84.99	85.07	84.80	84.28	84.32	84.90	85.12	85.41
17	84.48	84.49	84.39	84.89	85.01	85.08	84.78	84.27	84.31	84.90	85.11	85.39
18	84.47	84.48	84.38	84.91	85.01	85.08	84.77	84.25	84.29	84.89	85.17	85.42
19	84.45	84.48	84.37	84.91	85.01	85.07	84.74	84.24	84.33	84.87	85.15	85.40
20	84.45	84.50	84.36	84.90	85.01	85.07	84.74	84.24	84.39	84.84	85.15	85.39
21	84.44	84.49	84.35	84.90	85.02	85.08	84.71	84.23	84.38	84.82	85.21	85.38
22	84.43	84.47	84.34	84.91	85.01	85.05	84.68	84.21	84.48	84.81	85.26	85.37
23	84.42	84.47	84.33	84.90	85.02	85.02	84.67	84.20	84.47	84.82	85.25	85.36
24	84.40	84.47	84.38	84.90	85.00	85.01	84.65	84.18	84.68	84.81	85.24	85.35
25	84.39	84.46	84.36	84.90	84.98	85.01	84.64	84.15	84.68	84.79	85.32	85.35
26	84.37	84.45	84.35	84.93	84.97	84.99	84.63	84.13	84.67	84.78	85.32	85.34
27	84.39	84.44	84.35	84.90	84.97	84.98	84.62	84.11	84.66	84.78	85.31	85.34
28	84.39	84.44	84.35	84.90	84.99	84.96	84.60	84.09	84.65	84.77	85.31	85.32
29	84.43	84.44	84.34	84.90	---	84.97	84.58	84.06	84.63	84.75	85.30	85.31
30	84.51	84.43	84.34	84.90	---	84.96	84.57	84.05	84.61	84.79	85.31	85.30
31	84.57	---	84.49	84.90	---	84.95	---	84.03	---	84.79	85.30	---
MEAN	84.50	84.49	84.37	84.79	84.98	84.98	84.77	84.29	84.34	84.80	85.10	85.39
MAX	84.63	84.56	84.49	84.93	85.03	85.08	84.94	84.56	84.68	84.92	85.32	85.48
MIN	84.37	84.43	84.33	84.50	84.90	84.91	84.57	84.03	84.01	84.56	84.81	85.26

WTR YR 1986 MEAN 84.73 MAX 85.48 MIN 84.01

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 mi^2).

DRAINAGE AREA.--165 mi^2.

PERIOD OF RECORD.--September 1956 to current year. Records for Palatlakaha River at Cherry Lake Outlet, near Groveland (station 02236900). Records of elevations prior to October 1960 are unpublished and 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 Palatlakaha 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, 96.82 ft, Feb. 19; minimum daily, 95.30 ft, Dec. 7-13, 22,26,30.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	95.51	95.36	95.44	96.50	96.77	96.57	96.13	95.55	95.87	95.90	96.30
2	---	95.51	95.36	95.48	96.52	96.76	96.56	96.11	95.57	95.86	95.92	96.30
3	---	95.50	95.34	95.49	96.53	96.77	96.55	96.08	95.62	95.83	95.87	96.29
4	---	95.47	95.32	95.50	96.55	96.76	96.57	96.06	95.61	95.88	95.86	96.28
5	---	95.43	95.32	95.53	96.57	96.75	96.55	96.05	95.59	95.97	95.88	96.34
6	---	95.41	95.32	95.53	96.58	96.72	96.53	96.04	95.56	96.01	95.95	96.40
7	---	95.40	95.30	95.53	96.60	96.71	96.52	96.02	95.58	95.97	95.97	96.38
8	---	95.41	95.30	95.55	96.65	96.70	96.49	95.99	95.61	95.94	95.96	96.40
9	95.42	95.41	95.30	95.57	96.70	96.70	96.48	95.97	95.62	95.92	95.93	96.42
10	95.40	95.41	95.30	95.75	96.72	96.71	96.46	95.96	95.63	95.88	95.92	96.45
11	95.43	95.44	95.30	95.87	96.75	96.72	96.44	95.93	95.69	95.87	95.90	96.46
12	95.43	95.43	95.30	95.92	96.75	96.72	96.43	95.91	95.67	95.89	95.92	96.46
13	95.43	95.43	95.30	95.94	96.75	96.72	96.48	95.90	95.67	95.95	96.06	96.45
14	95.43	95.43	95.38	95.97	96.75	96.74	96.47	95.87	95.72	95.93	96.07	96.45
15	95.43	95.43	95.36	96.00	96.76	96.77	96.45	95.86	95.77	95.90	96.06	96.45
16	95.43	95.43	95.35	96.03	96.76	96.72	96.42	95.85	95.76	95.90	96.05	96.44
17	95.43	95.43	95.34	96.08	96.78	96.53	96.37	95.82	95.75	95.90	96.05	96.43
18	95.42	95.42	95.34	96.12	96.80	96.46	96.36	95.80	95.73	95.90	96.05	96.42
19	95.41	95.42	95.33	96.17	96.82	96.42	96.36	95.78	95.74	95.90	96.06	96.45
20	95.40	95.42	95.33	96.19	96.76	96.37	96.35	95.76	95.79	95.88	96.08	96.45
21	95.41	95.44	95.32	96.23	96.70	96.33	96.33	95.77	95.82	95.86	96.11	96.44
22	95.42	95.43	95.30	96.27	96.77	96.26	96.30	95.76	95.81	95.85	96.14	96.43
23	95.44	95.40	95.30	96.29	96.78	96.18	96.27	95.74	95.83	95.86	96.16	96.43
24	95.43	95.40	95.32	96.33	96.79	96.20	96.25	95.73	95.85	95.87	96.16	96.42
25	95.42	95.40	95.33	96.36	96.77	96.42	96.25	95.72	95.97	95.86	96.16	96.41
26	95.40	95.40	95.30	96.40	96.77	96.50	96.22	95.70	95.97	95.83	96.25	96.40
27	95.40	95.40	95.31	96.40	96.78	96.53	96.19	95.67	95.95	95.82	96.27	96.39
28	95.41	95.38	95.32	96.41	96.80	96.56	96.17	95.66	95.93	95.83	96.28	96.37
29	95.42	95.37	95.31	96.44	---	96.57	96.15	95.63	95.91	95.85	96.26	96.36
30	95.47	95.37	95.30	96.48	---	96.58	96.14	95.60	95.89	95.87	96.27	96.35
31	95.50	---	95.31	96.49	---	96.57	---	95.57	---	95.89	96.31	---
MEAN	---	95.42	95.32	95.99	96.71	96.59	96.39	95.85	95.74	95.89	96.06	96.40
MAX	---	95.51	95.38	96.49	96.82	96.77	96.57	96.13	95.97	96.01	96.31	96.46
MIN	---	95.37	95.30	95.44	96.50	96.18	96.14	95.57	95.55	95.82	95.86	96.28

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237370 CHURCH LAKE NEAR GROVELAND, FL

LOCATION.--Lat 28°38'40", long 81°50'47", in SE¼ sec.19, T.21 S., R.25 E., Lake County, Hydrologic Unit 03080102, on west shore of lake, 0.8 mi south of U.S. Highway 27, and 5.7 mi north of Groveland.

SURFACE AREA.--155 acres (0.24 mi^2).

DRAINAGE AREA.--1.66 mi^2.

PERIOD OF RECORD.--March 1970 to current year (weekly).

REVISED RECORD.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Lake is one of the Oklawaha River headwaters chain of lakes. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 87.66 ft, Aug. 26, 1970; minimum observed, 80.72 ft, May 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 85.34 ft, Feb. 14; minimum observed, 84.50 ft, June 4.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	84.88	---	---	---	---
2	---	---	---	---	---	---	---	---	---	84.62	---	---
3	---	---	---	---	---	---	85.30	---	---	---	---	---
4	85.12	---	---	84.96	---	---	85.30	---	84.50	---	---	---
5	---	---	84.88	---	---	---	---	---	---	---	---	84.96
6	---	---	---	---	---	---	---	---	---	---	84.78	---
7	---	---	---	---	85.32	85.28	---	84.82	---	---	---	---
8	---	85.08	---	---	---	---	---	---	---	---	---	---
9	85.18	---	---	---	---	---	---	---	---	84.60	---	---
10	---	---	---	85.26	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	84.56	---	---	85.09
12	---	---	---	---	---	---	85.30	---	---	---	---	85.04
13	---	---	---	---	---	---	---	---	---	---	84.82	---
14	---	---	84.90	---	85.34	85.24	---	84.74	---	---	---	---
15	---	85.00	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	84.69	---	---
17	85.10	---	---	85.30	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	85.20	---	84.62	---	84.88	85.00
19	---	---	---	---	---	85.26	---	---	---	---	---	---
20	---	---	84.86	---	---	---	---	---	---	---	---	---
21	---	---	---	---	85.32	---	---	84.68	---	---	84.92	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	85.04	84.96	---	---	---	---	85.00	---	---	84.66	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	84.96	---	85.30	---	---	---	---	84.68	---	---	84.96
26	---	---	---	---	---	85.28	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	84.84	---	85.30	---	---	84.60	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	85.06	84.92	---	85.29	---	---	---	---	---	84.74	---	---
31	---	---	---	85.28	---	---	---	---	---	---	---	---

ST. JOHNS RIVER

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 mi^2), includes Little Lake Harris.

DRAINAGE AREA.--357 mi^2, 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 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 on 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.46	62.44	62.40	62.36	63.00	63.30	63.04	62.72	62.46	62.64	62.62	62.80
2	62.46	62.44	62.40	62.34	63.00	63.28	63.04	62.70	62.46	62.66	62.60	62.80
3	62.44	62.42	62.40	62.34	63.00	63.26	63.04	62.70	62.46	62.66	62.60	62.86
4	62.44	62.42	62.40	62.34	63.00	63.24	63.02	62.68	62.44	62.68	62.58	62.88
5	62.44	62.42	62.40	62.34	63.00	63.22	63.02	62.68	62.44	62.68	62.58	62.88
6	62.44	62.42	62.40	62.38	63.00	63.20	63.02	62.66	62.44	62.70	62.56	62.90
7	62.42	62.40	62.40	62.46	63.02	63.18	63.02	62.66	62.44	62.70	62.56	62.92
8	62.42	62.40	62.40	62.50	63.02	63.16	63.02	62.64	62.46	62.68	62.54	62.94
9	62.42	62.40	62.40	62.60	63.04	63.14	62.98	62.64	62.48	62.68	62.54	62.96
10	62.40	62.40	62.40	62.75	63.04	63.16	62.98	62.62	62.48	62.70	62.56	62.98
11	62.40	62.38	62.40	62.88	63.04	63.18	62.96	62.62	62.50	62.70	62.56	62.98
12	62.40	62.38	62.40	62.96	63.06	63.18	62.96	62.62	62.50	62.72	62.58	63.00
13	62.40	62.38	62.40	62.98	63.06	63.20	62.94	62.60	62.52	62.74	62.58	63.02
14	62.40	62.38	62.40	62.96	63.08	63.24	62.94	62.60	62.52	62.74	62.60	63.04
15	62.40	62.38	62.40	62.94	63.08	63.30	62.92	62.60	62.54	62.76	62.60	63.06
16	62.40	62.38	62.40	62.92	63.10	63.30	62.92	62.58	62.56	62.76	62.62	63.06
17	62.40	62.40	62.40	62.90	63.12	63.28	62.90	62.59	62.58	62.78	62.64	63.06
18	62.38	62.40	62.40	62.86	63.14	63.26	62.90	62.58	62.60	62.78	62.66	63.04
19	62.38	62.40	62.40	62.84	63.16	63.24	62.88	62.56	62.62	62.80	62.68	63.04
20	62.38	62.40	62.40	62.86	63.18	63.22	62.88	62.56	62.64	62.78	62.70	63.04
21	62.38	62.40	62.40	62.88	63.20	63.20	62.86	62.56	62.66	62.76	62.74	63.02
22	62.40	62.40	62.38	62.90	63.22	63.18	62.86	62.54	62.64	62.76	62.78	63.02
23	62.40	62.40	62.38	62.92	63.24	63.16	62.84	62.54	62.64	62.74	62.80	63.02
24	62.40	62.40	62.38	62.94	63.26	63.14	62.84	62.54	62.64	62.74	62.80	63.02
25	62.40	62.40	62.38	62.96	63.28	63.12	62.82	62.52	62.62	62.72	62.80	63.02
26	62.40	62.40	62.38	62.98	63.28	63.10	62.80	62.52	62.62	62.72	62.80	63.02
27	62.42	62.40	62.38	62.98	63.30	63.10	62.78	62.50	62.62	62.70	62.82	63.02
28	62.42	62.40	62.38	63.00	63.30	63.08	62.76	62.50	62.60	62.70	62.82	62.98
29	62.42	62.40	62.36	63.00	---	63.08	62.74	62.48	62.62	62.68	62.82	62.98
30	62.42	62.40	62.36	63.00	---	63.06	62.72	62.48	62.64	62.66	62.82	62.96
31	62.44	---	62.36	63.00	---	63.06	---	62.46	---	62.64	62.80	---
MEAN	62.41	62.40	62.39	62.78	63.11	63.19	62.91	62.59	62.55	62.71	62.67	62.98
MAX	62.46	62.44	62.40	63.00	63.30	63.30	63.04	62.72	62.66	62.80	62.82	63.06
MIN	62.38	62.38	62.36	62.34	63.00	63.06	62.72	62.46	62.44	62.64	62.54	62.80

CAL YR 1985 MEAN 62.12 MAX 62.60 MIN 61.46
WTR YR 1986 MEAN 62.72 MAX 63.30 MIN 62.34

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237540 JOHNS LAKE AT OAKLAND, FL

LOCATION.--Lat 28°32'28", long 81°38'32", 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 mi^2).

DRAINAGE AREA.--40.1 mi^2.

PERIOD OF RECORD.--September 1959 to current year (twice weekly), incomplete. Records of elevations prior to October 1960 are unpublished and 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 on 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, 92.99 ft, Mar. 18; minimum observed, 91.38 ft, Aug. 9.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---			---	---	---	---	---	---	---	---
2	---	---			---	---	92.93	---	---	---	91.41	---
3	---	---			---	---	---	92.29	---	---	---	91.55
4	---	---			---	---	92.85	---	91.55	91.65	---	---
5	---	---			92.85	---	---	---	---	91.61	91.43	---
6	---	---			---	---	---	92.25	---	---	---	91.69
7	---	---			---	---	---	---	91.51	---	---	---
8	---	---			---	---	92.81	---	---	91.63	---	---
9	---	---			---	---	---	---	---	---	91.38	91.77
10	---	---			---	---	---	92.09	91.39	---	---	---
11	---	---			---	---	92.73	---	---	---	---	---
12	---	---			---	---	---	---	---	91.65	91.47	---
13	---	---			---	---	---	91.99	---	---	---	91.73
14	---	---			---	---	---	---	91.43	---	---	---
15	---	---			---	---	92.71	---	---	91.61	---	---
16	91.83	---			---	---	---	91.97	---	---	91.47	91.69
17	---	---			---	---	---	---	91.43	---	---	---
18	---	---			---	92.99	---	---	---	---	---	---
19	---	---			---	---	92.63	---	---	91.57	---	---
20	---	---			---	---	---	91.85	91.55	---	91.49	91.67
21	---	---			---	92.93	---	---	---	---	---	---
22	---	---			---	---	92.49	---	---	91.51	---	---
23	---	---			---	---	---	---	---	---	91.57	91.65
24	---	---			---	---	---	91.83	91.57	---	---	---
25	---	---			---	92.93	---	---	---	91.43	---	---
26	---	---			---	---	92.45	---	---	---	91.61	---
27	---	---			---	---	---	91.71	---	---	---	91.61
28	---	---			---	92.91	---	91.69	91.69	---	---	---
29	---	91.68			---	---	92.33	---	91.65	91.48	---	---
30	---	---			---	---	---	---	91.67	---	91.59	91.55
31	---	---			---	92.93	---	91.55	---	---	---	---

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 mi^2).

DRAINAGE AREA.--128 mi^2.

PERIOD OF RECORD.--December 1935 to August 1942 (monthly), September 1942 to current year. Records of elevations prior to October 1960 are unpublished and 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.83	66.92	66.78	66.90	67.20	67.27	67.00	66.47	65.94	66.24	65.96	66.51
2	66.83	66.93	66.83	66.96	67.20	67.16	66.99	66.48	65.93	66.24	65.94	66.52
3	66.81	66.92	66.84	66.97	67.21	67.08	66.96	66.48	65.93	66.22	65.89	66.53
4	66.90	67.03	66.76	66.97	67.20	67.07	66.93	66.42	65.97	66.17	65.95	66.50
5	66.93	66.99	66.78	67.07	67.19	67.09	66.92	66.34	66.00	66.20	66.05	66.52
6	67.06	66.90	66.90	67.01	67.20	67.07	66.92	66.34	65.98	66.22	66.05	66.58
7	67.03	66.86	66.83	67.01	67.22	67.04	66.90	66.35	65.96	66.22	66.13	66.61
8	67.00	66.86	66.79	67.04	67.26	67.01	66.90	66.34	65.93	66.21	66.12	66.63
9	67.01	66.85	66.79	67.02	67.31	66.96	66.92	66.40	65.90	66.20	66.12	66.65
10	67.02	66.86	66.77	67.24	67.31	66.97	66.89	66.33	65.90	66.21	66.08	66.71
11	66.99	66.87	66.77	67.53	67.36	67.02	66.84	66.31	65.90	66.18	66.04	66.73
12	66.99	66.87	66.76	67.46	67.42	66.98	66.81	66.29	65.89	66.12	66.04	66.74
13	66.98	66.87	66.75	67.48	67.39	66.90	66.84	66.27	65.93	66.17	66.21	66.75
14	66.96	66.87	67.02	67.42	67.32	66.99	66.82	66.26	65.93	66.16	66.26	66.74
15	66.95	66.86	66.90	67.38	67.33	67.09	66.81	66.21	65.98	66.15	66.32	66.71
16	66.94	66.85	66.86	67.35	67.30	67.13	66.86	66.21	65.98	66.08	66.34	66.70
17	66.93	66.85	66.85	67.33	67.30	67.17	66.83	66.20	65.99	66.08	66.32	66.67
18	66.93	66.84	66.83	67.33	67.32	67.10	66.73	66.16	65.96	66.05	66.31	66.66
19	66.92	66.81	66.82	67.36	67.33	67.10	66.70	66.14	66.00	66.06	66.31	66.68
20	66.92	66.81	66.81	67.33	67.32	67.15	66.67	66.13	66.08	66.05	66.28	66.66
21	66.90	66.70	66.83	67.27	67.30	67.26	66.67	66.19	66.09	65.99	66.33	66.68
22	66.89	66.83	66.79	67.25	67.28	67.26	66.73	66.19	66.12	65.95	66.44	66.67
23	66.88	66.87	66.75	67.26	67.27	67.16	66.66	66.14	66.11	65.96	66.46	66.66
24	66.87	66.84	66.75	67.26	67.27	67.07	66.59	66.12	66.16	65.96	66.47	66.64
25	66.88	66.82	66.96	67.24	67.31	67.04	66.58	66.10	66.32	65.95	66.45	66.63
26	66.85	66.81	66.84	67.30	67.16	67.04	66.57	66.06	66.30	65.92	66.43	66.62
27	66.82	66.79	66.76	67.49	67.15	67.05	66.57	66.02	66.28	65.94	66.44	66.63
28	66.83	66.78	66.77	67.26	67.17	67.05	66.56	66.00	66.26	65.94	66.43	66.61
29	66.85	66.79	66.78	67.19	---	67.04	66.53	65.99	66.23	65.92	66.48	66.58
30	66.84	66.78	66.78	67.20	---	67.04	66.49	65.97	66.27	65.95	66.45	66.57
31	66.84	---	66.75	67.21	---	67.01	---	65.95	---	65.97	66.48	---
MEAN	66.92	66.85	66.81	67.23	67.27	67.08	66.77	66.22	66.04	66.09	66.24	66.64
MAX	67.06	67.03	67.02	67.53	67.42	67.27	67.00	66.48	66.32	66.24	66.48	66.75
MIN	66.81	66.70	66.75	66.90	67.15	66.90	66.49	65.95	65.89	65.92	65.89	66.50

CAL YR 1985 MEAN 66.22 MAX 67.06 MIN 64.92
WTR YR 1986 MEAN 66.68 MAX 67.53 MIN 65.89

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 mi^2).

DRAINAGE AREA.--0.67 mi^2.

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 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 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
25...	0712	58.31	28...	1825	57.48
JAN			JUL		
27...	--	59.14	18...	0855	57.88
MAR			SEP		
26...	1202	58.56	22...	1250	58.49

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--0.67 mi^2, 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, 64.12 ft, Jan. 27, Feb. 9,21; minimum observed, 62.85 ft, June 1.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	62.85	63.00	---	---
2	---	---	---	---	64.10	---	---	---	---	---	62.90	---
3	---	---	---	63.68	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	62.90	---
7	63.97	---	---	---	---	---	---	63.24	---	---	---	62.90
8	---	---	---	---	---	64.00	---	---	---	---	---	---
9	---	---	---	---	64.12	---	63.85	---	---	---	---	---
10	---	63.78	---	---	---	---	---	---	---	---	---	---
11	64.00	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	63.32
15	---	---	63.68	64.10	---	---	---	---	---	---	---	---
16	63.94	---	---	---	---	---	---	63.10	---	---	---	---
17	---	---	---	---	---	---	63.70	---	---	---	63.08	---
18	---	---	---	---	---	---	---	---	---	63.15	---	---
19	---	---	---	---	---	---	---	---	---	63.20	---	---
20	---	63.81	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	64.12	---	---	63.08	---	---	---	63.24
22	---	---	---	---	---	---	---	63.07	---	---	---	---
23	---	---	---	64.10	---	64.10	63.52	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	63.04	---
25	---	63.75	---	---	---	---	---	---	---	---	---	---
26	63.85	---	---	---	---	64.05	---	---	---	---	---	---
27	---	---	---	64.12	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	63.45	---	---	63.00	---	---
29	---	---	---	---	---	64.02	---	---	---	---	---	63.10
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

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 mi^2).

DRAINAGE AREA.--236 mi^2.

PERIOD OF RECORD.--November 1935 to June 1942 (monthly), July 1942 to current year. Records of elevations prior to October 1960 are unpublished and 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 on 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.38	62.42	62.38	62.44	63.04	63.38	62.98	62.60	62.28	62.66	62.52	62.84
2	62.40	62.46	62.38	62.42	63.04	63.36	62.98	62.60	62.30	62.64	62.52	62.88
3	62.36	62.46	62.36	62.44	63.02	63.34	62.98	62.58	62.28	62.64	62.56	62.90
4	62.42	62.48	62.34	62.44	63.00	63.32	62.96	62.54	62.28	62.68	62.54	62.90
5	62.44	62.48	62.32	62.44	63.00	63.32	62.92	62.52	62.30	62.80	62.52	62.88
6	62.44	62.40	62.36	62.46	63.02	63.30	62.94	62.50	62.34	62.86	62.52	62.92
7	62.42	62.38	62.30	62.46	63.02	63.30	62.94	62.50	62.34	62.90	62.46	62.94
8	62.40	62.38	62.32	62.46	63.02	63.26	62.94	62.50	62.38	62.94	62.44	62.96
9	62.38	62.36	62.32	62.48	63.08	63.24	62.94	62.54	62.36	62.90	62.44	62.98
10	62.40	62.36	62.30	62.68	63.12	63.22	62.92	62.56	62.32	62.88	62.40	63.08
11	62.42	62.38	62.30	62.92	63.14	63.18	62.90	62.52	62.36	62.86	62.38	63.08
12	62.42	62.38	62.30	63.00	63.16	63.16	62.88	62.50	62.40	62.84	62.36	63.08
13	62.42	62.38	62.30	63.12	63.14	63.12	62.86	62.48	62.42	62.82	62.54	63.06
14	62.40	62.36	62.30	63.16	63.12	63.14	62.86	62.46	62.44	62.80	62.56	63.04
15	62.40	62.38	62.32	63.22	63.14	63.18	62.84	62.44	62.50	62.78	62.60	63.02
16	62.38	62.36	62.32	63.20	63.14	63.22	62.86	62.44	62.46	62.76	62.60	63.00
17	62.38	62.36	62.34	63.24	63.16	63.24	62.84	62.42	62.44	62.72	62.64	62.98
18	62.38	62.34	62.34	63.28	63.16	63.28	62.80	62.46	62.44	62.76	62.62	62.94
19	62.36	62.34	62.34	63.34	63.22	63.24	62.76	62.44	62.44	62.72	62.60	62.98
20	62.36	62.34	62.32	63.38	63.28	63.22	62.80	62.42	62.44	62.68	62.64	62.94
21	62.34	62.34	62.32	63.40	63.32	63.22	62.78	62.46	62.48	62.66	62.64	62.94
22	62.34	62.40	62.32	63.40	63.36	63.16	62.76	62.46	62.48	62.64	62.68	62.92
23	62.32	62.38	62.30	63.40	63.36	63.08	62.74	62.44	62.46	62.64	62.72	62.90
24	62.34	62.36	62.30	63.38	63.36	63.06	62.70	62.44	62.44	62.60	62.72	62.88
25	62.32	62.36	62.32	63.30	63.40	63.04	62.68	62.40	62.56	62.60	62.74	62.90
26	62.30	62.34	62.32	63.26	63.40	63.00	62.68	62.38	62.62	62.64	62.76	62.88
27	62.30	62.36	62.30	63.20	63.40	63.00	62.68	62.38	62.58	62.60	62.76	62.86
28	62.32	62.36	62.30	63.16	63.38	63.00	62.66	62.34	62.56	62.58	62.78	62.84
29	62.32	62.36	62.28	63.12	---	62.98	62.66	62.32	62.60	62.56	62.76	62.82
30	62.36	62.36	62.28	63.08	---	62.98	62.64	62.30	62.62	62.54	62.76	62.80
31	62.36	---	62.28	63.06	---	62.98	---	62.30	---	62.54	62.80	---
MEAN	62.37	62.38	62.32	62.98	63.18	63.18	62.83	62.46	62.43	62.72	62.60	62.94
MAX	62.44	62.48	62.38	63.40	63.40	63.38	62.98	62.60	62.62	62.94	62.80	63.08
MIN	62.30	62.34	62.28	62.42	63.00	62.98	62.64	62.30	62.28	62.54	62.36	62.80

CAL YR 1985 MEAN 62.06 MAX 62.48 MIN 61.38
WTR YR 1986 MEAN 62.70 MAX 63.40 MIN 62.28

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--2.46 mi^2.

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, 68.19 ft, Jan. 17; minimum observed, 67.06 ft, Aug. 9.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	67.86	---	---	68.04	67.98	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	67.16	---
3	---	---	---	---	---	---	---	67.54	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	67.78	---	---	67.46	---	---
6	---	---	---	67.70	---	---	---	---	---	---	---	67.43
7	67.84	---	67.70	---	---	---	---	---	---	---	---	---
8	---	---	---	---	68.08	67.88	---	---	---	---	---	---
9	---	67.76	---	---	---	---	---	67.38	67.25	---	67.06	---
10	---	---	---	68.10	---	---	---	---	---	---	---	---
11	---	---	---	68.18	---	---	---	---	---	---	---	---
12	67.95	---	---	---	---	---	67.76	---	---	67.44	---	---
13	---	---	67.68	---	---	---	---	---	---	---	---	67.60
14	---	---	---	---	---	---	---	---	67.52	---	---	---
15	---	---	---	---	68.04	---	---	---	---	---	---	---
16	---	---	---	---	---	68.00	---	---	---	---	67.13	---
17	---	67.82	---	68.19	---	---	---	67.22	---	67.33	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	67.90	---	---	---	---	---	67.68	---	---	---	---	---
20	---	---	---	---	---	---	---	---	67.56	---	---	67.62
21	---	---	67.66	---	---	---	---	---	---	67.26	---	---
22	---	---	---	---	---	67.96	---	67.41	---	---	---	---
23	---	67.79	---	---	68.04	---	---	---	---	---	67.10	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	68.11	---	---	---	67.35	---	---	---	---
26	67.94	---	---	---	---	67.90	67.56	---	---	67.22	---	67.50
27	---	---	---	68.12	---	---	---	---	67.48	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	67.62	---	---	67.88	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	67.32	---
31	---	---	---	---	---	---	---	67.24	---	---	---	---

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 mi^2).

DRAINAGE AREA.--646 mi^2.

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 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 on 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, 63.34 ft, Feb. 27,28; minimum observed, 62.30 ft, Dec. 7,8, June 5.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.40	62.60	62.44	62.48	63.06	63.30	63.00	62.68	62.34	62.76	62.56	62.94
2	62.40	62.46	62.46	62.48	63.04	63.24	63.00	62.68	62.32	62.72	62.56	62.96
3	62.42	62.48	62.36	62.46	63.04	63.24	63.04	62.66	62.36	62.68	62.54	62.94
4	62.50	62.50	62.36	62.48	63.06	63.24	62.96	62.50	62.32	62.64	62.52	62.92
5	62.56	62.46	62.36	62.44	63.10	63.16	62.96	62.56	62.30	62.68	62.50	---
6	62.50	62.44	62.36	62.46	63.08	63.22	62.96	62.56	62.36	62.88	62.50	---
7	62.42	62.40	62.30	62.46	63.06	63.14	62.98	62.58	62.40	62.86	62.50	---
8	62.36	62.38	62.30	62.44	63.06	63.08	63.02	62.60	62.38	62.86	62.50	62.94
9	62.34	62.40	62.32	62.46	63.10	63.08	63.00	62.62	62.38	62.88	62.50	62.96
10	62.48	62.40	62.34	62.72	63.18	63.14	62.92	62.45	62.38	62.88	62.46	62.96
11	62.46	62.38	62.38	62.86	63.26	63.16	62.92	62.56	62.50	62.88	62.46	63.06
12	62.46	62.42	62.40	62.96	63.18	63.12	62.90	62.56	62.42	62.90	62.50	63.10
13	62.46	62.40	62.40	62.90	63.14	63.14	62.90	62.54	62.54	62.86	62.62	63.08
14	62.42	62.42	62.46	62.84	63.16	63.20	62.86	62.52	62.54	62.84	62.66	63.08
15	62.44	62.40	62.40	62.80	63.16	63.20	62.90	62.48	62.52	62.82	62.66	63.02
16	62.44	62.40	62.38	62.78	63.18	63.28	62.84	62.46	62.50	62.76	62.72	63.00
17	62.38	62.40	62.38	62.78	63.18	63.26	62.84	62.50	62.48	62.72	62.62	62.98
18	62.36	62.34	62.38	62.84	63.18	63.18	62.82	62.48	62.48	62.70	62.60	62.96
19	62.40	62.34	62.36	62.96	63.24	63.20	62.74	62.48	62.46	62.76	62.64	62.96
20	62.44	62.40	62.34	62.96	63.20	63.24	62.80	62.50	62.56	62.70	62.72	62.96
21	62.40	62.46	62.38	62.90	63.22	63.14	62.90	62.50	62.50	62.64	62.68	62.92
22	62.40	62.50	62.36	62.94	63.24	63.00	62.86	62.48	62.52	62.60	62.78	62.92
23	62.36	62.40	62.36	62.94	63.28	63.00	62.74	62.46	62.50	62.58	62.76	62.92
24	62.38	62.40	62.38	62.96	63.26	63.00	62.70	62.46	62.52	62.60	62.76	62.92
25	62.36	62.44	62.42	63.00	63.20	63.00	62.72	62.46	62.62	62.64	62.72	62.90
26	62.32	62.40	62.38	63.18	63.28	62.98	62.70	62.46	62.64	62.62	62.76	62.92
27	62.34	62.40	62.40	63.10	63.34	63.04	62.72	62.38	62.60	62.66	62.84	62.88
28	62.36	62.40	62.34	63.00	63.34	63.04	62.70	62.42	62.60	62.64	62.84	62.88
29	62.40	62.40	62.38	63.04	---	63.00	62.70	62.38	62.64	62.60	62.80	62.86
30	62.44	62.42	62.38	63.02	---	63.00	62.68	62.38	62.64	62.60	62.84	62.88
31	62.60	---	62.34	63.04	---	63.04	---	62.36	---	62.58	62.80	---
MEAN	62.42	62.42	62.37	62.80	63.17	63.13	62.86	62.51	62.48	62.73	62.64	---
MAX	62.60	62.60	62.46	63.18	63.34	63.30	63.04	62.68	62.64	62.90	62.84	---
MIN	62.32	62.34	62.30	62.44	63.04	62.98	62.68	62.36	62.30	62.58	62.46	---

CAL YR 1985 MEAN 62.11 MAX 62.60 MIN 61.48

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238020 SILVER LAKE NEAR LEESBURG, FL

LOCATION.--Lat 28°50'26", long 81°48'38", in NE¼ sec.16, T.19 S., R.25 E., Lake County, Hydrologic Unit 03080102, on private pier, on west shore of lake, 3.5 mi northeast of Leesburg.

SURFACE AREA.--382 acres (0.60 mi^2).

DRAINAGE AREA.--1.50 mi^2.

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, 65.28 ft, June 10, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 66.56 ft, Mar. 17; minimum observed, 65.52 ft, June 2.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	65.90
2	---	---	66.07	---	---	---	---	---	65.52	---	---	---
3	---	---	---	---	66.48	66.47	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	65.62	---
5	---	66.22	---	---	---	---	---	65.90	---	---	---	---
6	---	---	---	66.06	---	---	---	---	---	---	---	---
7	66.25	---	---	---	---	---	66.33	---	---	66.00	---	---
8	---	---	---	---	---	---	---	---	---	---	---	65.88
9	---	---	66.00	---	---	---	---	---	65.58	---	---	---
10	---	---	---	---	66.48	66.44	---	---	---	---	---	---
11	---	66.27	---	---	---	---	---	---	---	---	65.55	---
12	---	---	---	---	---	---	---	65.80	---	---	---	---
13	---	---	---	66.48	---	---	---	---	---	---	---	---
14	66.30	---	---	---	---	---	66.28	---	---	65.77	---	---
15	---	---	---	---	---	---	---	---	---	---	---	65.90
16	---	---	66.04	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	66.56	---	---	---	65.86	---	---
18	---	66.15	---	---	66.50	---	---	---	65.67	---	---	---
19	---	---	---	---	---	---	---	65.70	---	---	65.58	---
20	---	---	---	66.53	---	---	---	---	---	---	---	---
21	66.26	---	---	---	---	---	66.12	---	---	65.72	---	---
22	---	---	---	---	---	---	---	---	---	---	---	65.85
23	---	---	66.00	---	---	---	---	---	65.70	---	---	---
24	---	---	---	---	66.47	66.47	---	---	---	---	---	---
25	---	66.10	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	65.60	---	---	65.80	---
27	---	---	---	---	---	66.47	---	---	---	---	---	---
28	66.20	---	---	66.50	---	---	66.00	---	---	65.65	---	---
29	---	---	---	---	---	---	---	---	---	---	---	65.68
30	---	---	66.07	---	---	---	---	---	65.78	---	---	---
31	---	---	---	---	---	66.40	---	---	---	---	---	---

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 mi^2).

DRAINAGE AREA.--0.78 mi^2.

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, 57.67 ft, Aug. 10, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 59.70 ft, Feb. 22; minimum observed, 57.67 ft. Aug. 10.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	58.82	59.10	---	---	---	---	---	---
2	---	58.78	---	---	---	---	---	---	---	---	57.87	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	58.42	---	---	---	---	58.38	---	---	---	---
5	58.75	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	58.75	---	---	---	---	---
7	58.75	---	58.52	---	---	---	---	---	58.12	58.20	---	58.06
8	---	---	---	---	58.87	58.70	---	---	---	---	---	---
9	---	58.65	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	57.67	---
11	---	---	---	58.58	---	---	---	58.22	---	---	---	---
12	58.77	---	---	---	---	---	---	---	---	58.00	---	---
13	---	---	---	---	---	---	58.68	---	---	---	---	---
14	---	---	58.50	---	---	---	---	---	58.09	---	---	58.10
15	---	---	---	---	59.50	58.76	---	---	---	---	---	---
16	---	58.68	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	57.80	---
18	---	---	---	58.66	---	---	---	58.00	---	---	---	---
19	58.80	---	---	---	---	---	---	---	---	58.07	---	---
20	---	---	---	---	---	---	58.50	---	---	---	---	---
21	---	---	58.48	---	---	---	---	---	---	---	---	58.08
22	---	---	---	---	59.70	58.82	---	58.14	58.10	---	---	---
23	---	58.63	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	57.87	---
25	---	58.58	---	58.80	---	---	---	---	---	---	---	---
26	---	---	---	---	---	58.87	---	---	---	57.87	---	---
27	58.78	---	---	58.78	---	---	58.40	---	---	---	---	---
28	---	---	58.46	---	---	---	---	---	---	---	---	57.80
29	---	---	---	---	---	58.85	---	---	58.17	---	---	---
30	---	58.50	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	57.96	---	---	57.90	---

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--67.6 mi^2.

PERIOD OF RECORD.--September 1959 to current year. Records of elevations prior to October 1960 are unpublished and 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, 59.49 ft, Mar. 21, minimum daily, 58.39 ft, Dec. 31.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.60	58.69	58.56	58.52	59.21	59.37	59.34	58.96	58.87	59.32	59.04	59.03
2	58.59	58.68	58.58	58.53	59.21	59.32	59.33	58.95	58.86	59.32	59.02	---
3	58.59	58.68	58.56	58.54	59.22	59.30	59.32	58.94	58.87	59.30	59.00	---
4	58.67	58.70	58.53	58.54	59.22	59.30	59.30	58.92	58.92	59.28	59.01	---
5	58.67	58.64	58.52	58.57	59.22	59.31	59.28	58.89	58.93	59.28	59.02	---
6	58.68	58.61	58.54	58.54	59.23	59.30	59.28	58.87	58.92	59.33	59.01	---
7	58.64	58.58	58.50	58.55	59.24	59.29	59.27	58.86	58.92	59.31	58.99	---
8	58.62	58.57	58.48	58.59	59.29	59.28	59.26	58.94	58.90	59.31	58.97	59.24
9	58.62	58.58	58.47	58.58	59.34	59.26	59.26	58.94	58.88	59.29	58.96	---
10	58.72	58.61	58.46	58.86	59.35	59.26	59.23	58.97	58.94	59.28	58.94	---
11	58.76	58.61	58.46	59.09	59.37	59.28	59.20	58.94	59.11	59.26	58.92	---
12	58.77	58.62	58.46	59.12	59.39	59.27	59.18	58.92	59.11	59.24	58.94	59.28
13	58.77	58.62	58.47	59.16	59.37	59.26	59.21	58.91	59.11	59.23	59.04	59.28
14	58.76	58.62	58.59	59.15	59.34	59.29	59.19	58.90	59.15	59.21	59.05	59.32
15	58.75	58.62	58.53	59.16	59.35	59.39	59.18	58.88	59.14	59.20	59.09	59.31
16	58.75	58.61	58.51	59.17	59.33	59.45	59.19	58.86	59.13	59.17	59.09	59.29
17	58.75	58.61	58.50	59.17	59.33	59.47	59.15	58.84	59.14	59.14	59.07	59.27
18	58.74	58.60	58.48	59.19	59.35	59.45	59.11	58.83	59.15	59.14	59.06	59.25
19	58.72	58.59	58.47	59.23	59.37	59.45	59.09	58.81	59.14	59.14	59.05	59.24
20	58.72	58.61	58.46	59.23	59.37	59.47	59.07	58.98	59.15	59.14	59.03	59.23
21	58.70	58.58	58.46	59.22	59.37	59.49	59.10	59.03	59.16	59.12	59.02	59.22
22	58.70	58.61	58.44	59.22	59.37	59.48	59.12	59.04	59.16	59.11	59.03	59.20
23	58.68	58.61	58.43	59.23	59.39	59.43	59.09	59.02	59.14	59.09	59.03	59.19
24	58.67	58.60	58.42	59.23	59.40	59.40	59.06	59.00	59.17	59.08	---	59.18
25	58.67	58.59	58.49	59.23	59.40	59.38	59.04	58.98	59.36	59.08	59.03	59.16
26	58.64	58.58	58.44	59.26	59.35	59.38	59.03	58.96	59.35	59.06	---	59.15
27	58.64	58.58	58.41	59.32	59.35	59.38	59.02	58.95	59.34	59.05	---	59.14
28	58.66	58.57	58.40	59.23	59.34	59.38	59.01	58.93	59.33	59.08	---	59.12
29	58.66	58.57	58.41	59.20	---	59.37	59.00	58.91	59.34	59.07	---	59.10
30	58.66	58.56	58.41	59.21	---	59.36	58.98	58.90	59.33	59.06	---	59.09
31	58.67	---	58.39	59.21	---	59.35	---	58.88	---	59.05	---	---
MEAN	58.69	58.61	58.48	59.00	59.32	59.36	59.16	58.93	59.10	59.19	---	---
MAX	58.77	58.70	58.59	59.32	59.40	59.49	59.34	59.04	59.36	59.33	---	---
MIN	58.59	58.56	58.39	58.52	59.21	59.26	58.98	58.81	58.86	59.05	---	---

CAL YR 1985 MEAN 58.48 MAX 59.02 MIN 57.69

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 mi^2).

DRAINAGE AREA.--775 mi^2

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 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 on 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.46	58.80	58.68	58.76	59.28	59.16	58.94	58.54	58.16	58.34	58.50	58.85
2	58.46	58.80	58.68	58.76	59.28	59.26	58.94	58.52	58.14	58.34	58.48	58.85
3	58.44	58.78	58.68	58.78	59.28	59.26	58.92	58.52	58.12	58.34	58.44	58.90
4	58.60	58.78	58.68	58.78	59.28	59.24	58.90	58.50	58.12	58.32	58.42	58.90
5	58.60	58.78	58.66	58.80	59.28	59.24	58.90	58.50	58.14	58.32	58.40	58.90
6	58.66	58.78	58.66	58.80	59.28	59.22	58.88	58.48	58.12	58.36	58.40	58.90
7	58.66	58.76	58.66	58.82	59.28	59.22	58.88	58.46	58.10	58.36	58.40	59.00
8	58.70	58.76	58.68	58.82	59.30	59.22	58.86	58.46	58.10	58.36	58.40	59.00
9	58.70	58.76	58.68	58.84	59.38	59.16	58.86	58.44	58.12	58.38	58.40	59.00
10	58.74	58.78	58.70	58.96	59.36	59.16	58.84	58.42	58.10	58.38	58.38	59.00
11	58.74	58.78	58.70	59.36	59.30	59.14	58.80	58.40	58.20	58.40	58.36	59.02
12	58.76	58.78	58.70	59.36	59.30	59.14	58.78	58.40	58.18	58.40	58.35	59.02
13	58.78	58.78	58.70	59.36	59.30	59.12	58.80	58.38	58.20	58.40	58.45	59.02
14	58.78	58.78	58.72	59.34	59.30	59.10	58.80	58.38	58.22	58.42	58.50	59.00
15	58.76	58.78	58.72	59.34	59.30	59.22	58.78	58.36	58.22	58.46	58.60	59.02
16	58.76	58.78	58.72	59.34	59.28	59.30	58.78	58.32	58.22	58.50	58.60	59.00
17	58.76	58.76	58.72	59.34	59.26	59.30	58.76	58.32	58.22	58.52	58.60	59.00
18	58.74	58.76	58.72	59.32	59.26	59.28	58.74	58.28	58.22	58.54	58.60	58.98
19	58.74	58.76	58.72	59.32	59.26	59.26	58.70	58.26	58.24	58.54	58.58	58.98
20	58.74	58.76	58.72	59.30	59.16	59.02	58.68	58.34	58.26	58.56	58.58	58.98
21	58.74	58.76	58.72	59.30	59.16	58.96	58.70	58.34	58.30	58.56	58.56	58.96
22	58.72	58.76	58.70	59.24	59.16	59.00	58.70	58.38	58.30	58.58	58.58	58.96
23	58.72	58.74	58.70	59.24	59.16	59.00	58.68	58.34	58.32	58.58	58.58	58.94
24	58.70	58.74	58.70	59.20	59.16	59.00	58.66	58.34	58.34	58.60	58.70	58.94
25	58.70	58.74	58.70	59.20	59.16	59.00	58.64	58.32	58.36	58.60	58.70	58.92
26	58.70	58.72	58.68	59.22	59.16	59.00	58.64	58.30	58.40	58.58	58.70	58.92
27	58.70	58.72	58.68	59.22	59.16	59.00	58.60	58.28	58.38	58.58	58.70	58.90
28	58.70	58.70	58.68	59.24	59.16	58.98	58.58	58.26	58.34	58.58	58.70	58.88
29	58.74	58.70	58.66	59.24	---	58.98	58.56	58.22	58.32	58.58	58.70	58.86
30	58.74	58.68	58.66	59.26	---	58.96	58.56	58.20	58.30	58.56	58.80	58.84
31	58.76	---	58.66	59.28	---	58.96	---	58.18	---	58.54	58.80	---
MEAN	58.69	58.76	58.69	59.13	59.25	59.12	58.76	58.37	58.23	58.47	58.55	58.95
MAX	58.78	58.80	58.72	59.36	59.38	59.30	58.94	58.54	58.40	58.60	58.80	59.02
MIN	58.44	58.68	58.66	58.76	59.16	58.96	58.56	58.18	58.10	58.32	58.35	58.84

CAL YR 1985 MEAN 57.95 MAX 58.80 MIN 57.00
WTR YR 1986 MEAN 58.74 MAX 59.38 MIN 58.10

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 mi^2).

DRAINAGE AREA.--53.8 mi^2.

PERIOD OF RECORD.--April 1936 to October 1942 (monthly), November 1942 to current year. Records of elevations prior to October 1960 are unpublished and 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 (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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56.11	56.00	55.86	55.71	56.08	56.33	56.39	56.04	55.66	56.03	55.79	55.84
2	56.10	56.01	55.85	55.71	56.09	56.30	56.39	56.03	55.65	56.02	55.78	55.83
3	56.11	56.00	55.82	55.71	56.09	56.30	56.38	55.99	55.63	56.01	55.75	55.82
4	56.20	56.03	55.80	55.71	56.09	56.30	56.36	55.97	55.63	56.00	55.73	55.81
5	56.19	55.97	55.80	55.73	56.09	56.30	56.35	55.95	55.65	55.99	55.72	55.85
6	56.21	55.93	55.79	55.71	56.10	56.30	56.34	55.95	55.63	56.01	55.72	55.87
7	56.15	55.92	55.75	55.72	56.11	56.28	56.33	55.94	55.63	56.01	55.70	55.89
8	56.13	55.90	55.74	55.72	56.19	56.27	56.32	55.95	55.64	56.01	55.69	55.94
9	56.12	55.89	55.73	55.73	56.24	56.27	56.30	55.93	55.71	56.00	55.67	55.93
10	56.10	55.91	55.71	55.96	56.27	56.27	56.27	55.90	55.76	55.98	55.67	55.93
11	56.13	55.90	55.71	56.14	56.37	56.27	56.25	55.88	55.79	55.97	55.68	55.98
12	56.13	55.91	55.71	56.15	56.36	56.27	56.24	55.87	55.79	55.96	55.68	55.98
13	56.12	55.91	55.73	56.14	56.34	56.28	56.27	55.85	55.80	55.96	55.77	55.98
14	56.11	55.90	55.81	56.13	56.32	56.29	56.26	55.86	55.80	55.95	55.76	55.96
15	56.11	55.90	55.78	56.12	56.32	56.40	56.25	55.87	55.81	55.93	55.78	55.95
16	56.09	55.90	55.76	56.11	56.30	56.49	56.24	55.86	55.81	55.91	55.79	55.93
17	56.08	55.89	55.72	56.11	56.30	56.53	56.20	55.84	55.82	55.89	55.78	55.91
18	56.07	55.89	55.71	56.12	56.34	56.53	56.17	55.83	55.82	55.87	55.77	55.90
19	56.07	55.87	55.71	56.14	56.34	56.53	56.15	55.82	55.85	55.86	55.76	55.89
20	56.05	55.90	55.70	56.14	56.35	56.53	56.15	55.85	55.93	55.84	55.75	55.88
21	56.05	55.91	55.69	56.12	56.35	56.53	56.17	55.84	55.96	55.82	55.74	55.87
22	56.04	55.91	55.66	56.11	56.35	56.49	56.17	55.82	55.95	55.81	55.79	55.85
23	56.02	55.90	55.65	56.11	56.37	56.47	56.14	55.80	55.96	55.81	55.78	55.85
24	56.02	55.89	55.66	56.10	56.38	56.45	56.12	55.80	55.99	55.81	55.78	55.85
25	56.00	55.89	55.68	56.11	56.35	56.44	56.11	55.78	56.02	55.79	55.82	55.89
26	56.00	55.89	55.64	56.14	56.35	56.43	56.10	55.77	56.01	55.78	55.82	55.88
27	56.00	55.88	55.63	56.13	56.33	56.43	56.08	55.75	56.00	55.77	55.81	55.86
28	56.00	55.87	55.63	56.10	56.33	56.42	56.07	55.73	56.01	55.77	55.82	55.85
29	56.00	55.88	55.61	56.10	---	56.41	56.06	55.71	56.01	55.77	55.85	55.84
30	56.00	55.87	55.61	56.09	---	56.40	56.05	55.69	56.03	55.76	55.84	55.83
31	56.01	---	55.60	56.09	---	56.40	---	55.67	---	55.77	55.83	---
MEAN	56.08	55.91	55.72	56.00	56.27	56.38	56.22	55.86	55.82	55.90	55.76	55.89
MAX	56.21	56.03	55.86	56.15	56.38	56.53	56.39	56.04	56.03	56.03	55.85	55.98
MIN	56.00	55.87	55.60	55.71	56.08	56.27	56.05	55.67	55.63	55.76	55.67	55.81

CAL YR 1985 MEAN 55.91 MAX 56.62 MIN 55.21
WTR YR 1986 MEAN 55.98 MAX 56.53 MIN 55.60

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 mi^2)

DRAINAGE AREA.--5.01 mi^2.

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, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			APR		
24...	1000	54.55	14...	0755	54.36
NOV			23...	0930	54.20
18...	0810	54.40	MAY		
20...	0900	54.40	21...	1000	53.80
DEC			JUN		
19...	1150	54.17	09...	0930	53.35
JAN			25...	0900	53.68
06...	1035	54.15	JUL		
15...	1000	54.60	21...	0825	53.29
FEB			AUG		
18...	1100	54.60	18...	0855	53.28
MAR			20...	1200	53.35
03...	0845	54.54	SEP		
14...	0900	54.47*	07...	1000	53.65

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--8.48 mi^2.

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, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
18...	0825	55.72	20...	0745	55.60
JAN			JUN		
06...	1050	55.65	23...	0715	55.70
FEB			JUL		
21...	1120	56.35	23...	0815	55.46
MAR			AUG		
03...	0900	56.30	21...	0725	55.40
21...	0630	56.45	SEP		
APR			23...	0730	55.40
14...	0810	56.15			
24...	0730	56.00			

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 mi^2), does not include North Lake.

DRAINAGE AREA.--9.86 mi^2.

PERIOD OF RECORD.--April 1936 to April 1950, July 1972 to current year (monthly). Records of elevations prior to July 1972 are unpublished and available in files of the Orlando Subdistrict Office.

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, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			APR		
18...	1055	52.00	14...	1140	51.88
JAN			JUN		
06...	1210	51.93	09...	1150	51.14
28...	1300	52.25	JUL		
FEB			21...	1035	50.98
20...	1300	52.20	AUG		
MAR			18...	1110	51.55
03...	1555	52.10			
31...	1000	52.00			

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240900 NEWNANS LAKE NEAR GAINESVILLE, FL

LOCATION.--Lat 29°39'04", long 82°14'22", in SE¼, sec.6, T.10 S., R.21 E., Alachua County, Hydrologic Unit 03080102, on west shore of lake, 5 mi east of Gainesville.

SURFACE AREA.--7,350 acres (11.5 mi^2).

DRAINAGE AREA.--114 mi^2.

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 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, 68.24 ft, March 1; minimum observed, 65.78 ft, July 22.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	67.62	---	66.64	---	68.24	---	66.54	---	65.94	---	66.52
2	68.14	---	---	---	---	---	67.69	---	---	---	---	---
3	---	---	67.04	---	---	---	---	---	66.17	---	65.84	---
4	---	---	---	---	67.34	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	67.86	---	---	---	---	---	---
7	---	---	---	---	---	67.84	---	---	---	---	---	---
8	---	---	---	---	---	---	---	66.49	---	---	---	---
9	67.94	67.66	---	66.88	---	---	---	---	---	---	---	---
10	---	---	---	67.14	67.56	---	---	---	---	---	66.14	66.84
11	---	---	---	---	---	---	67.19	---	---	---	---	---
12	---	---	---	---	---	---	---	---	65.89	---	---	---
13	---	---	66.36	---	---	---	---	---	65.89	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	67.69	---	---	---	67.74	---	---	---	---	---	---
16	67.69	---	---	67.79	---	---	---	---	---	---	66.14	---
17	---	---	---	---	67.65	---	66.92	66.19	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	66.84
19	---	---	---	---	---	---	66.84	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	67.43	---	---	---	---	---	---	66.04	---	66.18	---
22	---	---	66.64	---	---	---	---	---	---	65.78	---	---
23	67.44	---	---	67.69	---	68.04	---	66.14	---	---	---	---
24	---	---	---	---	---	---	---	---	---	65.83	66.34	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	66.74	---	---	---	---	---
27	---	---	---	---	68.14	---	---	---	66.09	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	66.62
29	67.44	---	---	---	---	---	---	---	---	---	---	---
30	---	66.89	---	---	---	---	66.59	---	---	---	---	---
31	---	---	66.59	---	---	67.69	---	66.09	---	65.83	66.49	---

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 mi^2).

DRAINAGE AREA.--8.65 mi^2.

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, 53.19 ft, Feb. 20; minimum observed, 51.07 ft, June 12.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	51.30	---
2	---	---	---	51.80	---	---	---	51.70	---	---	---	---
3	---	52.70	---	---	---	---	56.28	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	51.20	---	---
5	---	---	---	---	---	---	---	---	---	---	---	52.00
6	---	---	51.90	---	---	52.17	---	---	51.20	---	---	---
7	---	52.40	---	---	53.00	52.18	---	---	---	---	---	---
8	---	---	---	51.90	---	---	52.50	51.60	---	---	51.70	---
9	---	---	---	51.87	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	51.30	---	---
12	---	---	---	---	---	---	---	---	51.07	---	---	---
13	---	---	51.80	---	52.95	---	---	---	---	---	---	52.00
14	---	---	---	---	---	52.74	---	---	---	---	---	---
15	---	---	---	51.70	---	---	---	51.45	---	---	---	---
16	---	52.05	---	---	---	---	---	---	---	---	51.82	---
17	---	---	---	---	---	---	51.90	---	---	---	---	---
18	53.00	---	---	---	---	---	---	---	---	51.20	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	51.78	---	53.19	---	---	---	51.37	---	---	51.90
21	---	51.98	---	---	---	53.16	---	---	---	---	51.93	---
22	---	---	---	52.23	---	---	---	51.40	---	---	---	---
23	---	52.50	---	---	---	---	---	---	---	---	52.10	---
24	52.90	---	---	---	---	---	---	---	---	51.36	---	---
25	---	---	---	---	---	---	---	---	---	51.30	---	---
26	---	---	---	---	52.45	---	---	---	---	---	---	---
27	---	---	---	---	---	---	51.80	---	---	---	---	---
28	---	---	---	---	---	52.40	---	---	---	---	---	51.70
29	---	51.90	---	52.00	---	---	---	51.30	51.22	---	---	---
30	---	---	---	---	---	---	---	---	---	---	52.00	---
31	---	---	---	---	---	---	---	---	---	---	---	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02242400 LOCHLOOSA LAKE AT LOCHLOOSA, FL

LOCATION.--Lat 29°30'07", long 82°06'12", in SW¼ sec.27, T.11 S., R.22 E., Alachua County, Hydrologic Unit 03080102, on east shore of lake at Lochloosa.

SURFACE AREA.--8,800 acres (13.7 mi^2).

DRAINAGE AREA.--88.0 mi^2.

PERIOD OF RECORD.--April and May 1936 (monthly), July 1942 to December 1952, April 1956 to September 1960, October 1960 to May 1961 (about twice weekly), July 1961 to March 1962 (weekly), April 1962 to July 1965 (fragmentary), August 1965 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-80-1: Drainage area. WDR FL-74-3: Surface area.

GAGE.--Nonrecording gage. Datum of gage is 48.83 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to July 8, 1981, at several sites within 0.3 mi south at following datums: April 1936, to July 9, 1942, 6.55 ft higher; July 10, 1942, to Dec. 31, 1952, 7.00 ft higher; and Jan. 1, 1953, to July 7, 1981 at present datum.

REMARKS.--Outflow from lake is through Cross Creek to Orange Lake; some overflow occurs through Lochloosa Slough (station 02242500) to Orange Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.94 ft, Mar. 16, 1948; minimum observed, 53.88 ft, Aug. 18, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 62.0 ft was reached in October 1941, from floodmark.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 59.03 ft, Mar. 22; minimum observed, 57.45 ft, Sept. 27.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	58.37	58.57	---	---	---	---	---	---
2	---	58.39	---	---	---	---	---	---	---	---	57.61	---
3	---	---	---	---	---	---	---	58.17	---	---	---	---
4	---	---	---	58.15	---	---	---	---	---	---	---	---
5	58.03	---	---	---	---	---	58.73	---	---	57.79	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	58.07	---	---	---	---	58.56	---	---	57.53	---	---	---
8	---	---	58.21	---	58.53	58.51	---	---	---	---	---	---
9	---	58.33	---	---	---	---	---	---	---	---	57.61	---
10	---	---	---	58.27	---	---	---	58.03	---	---	---	---
11	---	---	---	58.35	---	---	---	---	---	57.69	---	---
12	58.13	---	---	---	---	---	58.57	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	58.23	---	---	59.01	---	---	57.61	---	---	---
15	---	---	---	---	58.51	---	---	---	---	---	---	---
16	---	58.33	---	---	---	---	---	---	---	---	57.59	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	58.50	---	---	---	---	---
19	58.19	---	---	58.41	---	---	58.47	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	57.55
21	---	---	58.11	---	---	---	---	---	57.93	---	---	---
22	---	58.37	---	---	---	59.03	---	---	---	---	---	---
23	---	58.33	---	---	---	---	---	---	---	---	57.63	---
24	---	---	---	---	---	---	---	57.83	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	58.21	---	---	---	---	---	58.37	---	---	57.51	---	---
27	---	---	---	---	---	---	---	---	---	---	---	57.45
28	---	---	58.09	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	58.89	---	---	---	---	---	---
30	---	58.31	---	58.41	---	---	---	---	---	---	57.57	---
31	---	---	---	---	---	---	---	57.65	---	---	---	---

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 mi^2).

DRAINAGE AREA.--1,012 mi^2, includes drainage area of Paynes Prairie, a diked sinkhole area of 650 mi^2, 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 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.35	58.51	58.45	58.14	58.31	58.51	58.82	58.23	57.50	57.65	57.36	57.47
2	58.35	58.51	58.45	58.14	58.30	58.51	58.79	58.23	57.48	57.65	57.40	57.47
3	58.35	58.50	58.45	58.14	58.30	58.48	58.79	58.23	57.47	57.65	57.44	57.47
4	58.34	58.50	58.45	58.13	58.30	58.42	58.79	58.19	57.46	57.68	57.48	57.47
5	58.34	58.50	58.45	58.13	58.34	58.49	58.79	58.07	57.48	57.67	57.50	57.47
6	58.34	58.50	58.45	58.16	58.36	58.55	58.78	58.05	57.44	57.65	57.50	57.47
7	58.37	58.49	58.44	58.21	58.36	58.55	58.72	58.02	57.42	57.64	57.51	57.50
8	58.43	58.49	58.44	58.24	58.35	58.54	58.67	58.00	57.42	57.62	57.51	57.53
9	58.43	58.47	58.40	58.24	58.35	58.54	58.67	58.01	57.41	57.60	57.51	57.52
10	58.43	58.48	58.33	58.24	58.38	58.51	58.67	57.99	57.40	57.55	57.50	57.54
11	58.43	58.47	58.33	58.23	58.42	58.49	58.67	57.93	57.39	57.51	57.49	57.56
12	58.42	58.47	58.33	58.23	58.42	58.49	58.67	57.90	57.42	57.51	57.46	57.58
13	58.42	58.48	58.33	58.33	58.42	58.49	58.66	57.88	57.49	57.51	57.43	57.57
14	58.42	58.49	58.32	58.39	58.42	58.49	58.66	57.87	57.50	57.49	57.43	57.56
15	58.41	58.49	58.32	58.39	58.41	58.49	58.66	57.85	57.51	57.47	57.43	57.56
16	58.41	58.48	58.31	58.39	58.41	58.48	58.58	57.83	57.49	57.47	57.43	57.55
17	58.41	58.47	58.30	58.39	58.44	58.71	58.49	57.80	57.50	57.47	57.43	57.54
18	58.41	58.49	58.30	58.38	58.48	58.86	58.48	57.76	57.59	57.45	57.43	57.53
19	58.40	58.51	58.30	58.38	58.48	58.86	58.48	57.75	57.62	57.42	57.43	57.52
20	58.40	58.50	58.30	58.38	58.48	58.86	58.47	57.75	57.69	57.36	57.45	57.50
21	58.42	58.50	58.29	58.38	58.48	58.86	58.47	57.74	57.79	57.32	57.47	57.50
22	58.46	58.50	58.29	58.38	58.47	58.86	58.47	57.73	57.79	57.32	57.47	57.48
23	58.46	58.49	58.24	58.38	58.47	58.85	58.41	57.71	57.77	57.32	57.47	57.46
24	58.46	58.49	58.18	58.38	58.47	58.87	58.36	57.69	57.74	57.40	57.47	57.44
25	58.46	58.48	58.17	58.37	58.47	58.88	58.36	57.66	57.72	57.43	57.47	57.42
26	58.45	58.46	58.17	58.37	58.50	58.88	58.36	57.64	57.71	57.42	57.47	57.41
27	58.45	58.46	58.18	58.34	58.52	58.88	58.35	57.62	57.68	57.40	57.47	57.40
28	58.45	58.46	58.17	58.32	58.52	58.88	58.27	57.59	57.67	57.37	57.47	57.38
29	58.49	58.46	58.17	58.32	---	58.88	58.23	57.57	57.65	57.35	57.47	57.37
30	58.51	58.45	58.16	58.32	---	58.87	58.23	57.53	57.64	57.34	57.47	57.37
31	58.51	---	58.14	58.31	---	58.87	---	57.51	---	57.34	57.47	---
MEAN	58.42	58.48	58.31	58.29	58.42	58.67	58.56	57.85	57.56	57.48	57.46	57.49
MAX	58.51	58.51	58.45	58.39	58.52	58.88	58.82	58.23	57.79	57.68	57.51	57.58
MIN	58.34	58.45	58.14	58.13	58.30	58.42	58.23	57.51	57.39	57.32	57.36	57.37

CAL YR 1985 MEAN 57.18 MAX 58.51 MIN 55.78
WTR YR 1986 MEAN 58.08 MAX 58.88 MIN 57.32

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02243958 LAKE OCKLAWAHA 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 mi^2), at elevation 20.0 ft above NGVD, from data furnished by U.S. Army Corps of Engineers.

DRAINAGE AREA.--2,747 mi^2, includes Paynes Prairie, a diked sinkhole area of 650 mi^2, 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 of contents given herein 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, 67,200 acre-ft, Oct. 14, elevation, 19.27 ft; minimum, 15,900 acre-ft, Feb. 19, elevation, 12.73 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 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.18	19.25	18.09	13.19	13.00	13.05	13.02	16.52	18.55	18.04	18.12	18.13
2	19.12	19.23	18.07	13.28	12.98	12.95	13.05	16.71	18.57	18.13	18.20	18.07
3	19.08	19.22	18.01	13.28	13.06	12.94	13.00	16.75	18.55	18.19	18.18	18.02
4	19.04	19.25	17.95	13.18	13.07	13.02	12.91	16.83	18.52	18.18	18.18	17.95
5	19.02	19.17	17.94	13.14	13.08	13.18	12.85	16.97	18.45	18.21	18.07	17.95
6	19.00	19.10	17.97	12.98	13.11	13.20	12.85	17.07	18.42	18.27	17.95	17.93
7	18.94	19.02	17.93	13.08	13.01	13.02	12.88	17.17	18.36	18.19	17.93	17.89
8	18.94	18.95	17.93	13.09	13.03	12.97	13.02	17.28	18.32	18.11	18.04	17.96
9	18.94	18.88	17.92	13.12	13.10	13.02	13.10	17.30	18.28	18.05	18.13	18.05
10	19.03	18.76	17.92	13.31	13.06	13.08	13.06	17.32	18.28	18.02	18.16	18.18
11	19.15	18.72	17.93	13.44	13.05	13.13	13.04	17.40	18.31	18.01	18.10	18.22
12	19.21	18.67	17.95	13.31	13.06	13.02	13.03	17.52	18.36	18.03	18.08	18.13
13	19.26	18.60	18.02	13.20	13.05	12.99	13.04	17.65	18.37	17.99	18.11	18.05
14	19.27	18.61	18.11	13.32	13.11	13.18	13.03	17.73	18.37	17.95	18.15	18.04
15	19.23	18.63	17.77	13.35	13.06	13.24	13.27	17.80	18.38	17.93	18.15	18.02
16	19.21	18.62	17.47	13.21	13.04	13.47	13.56	17.90	18.40	17.90	18.09	17.98
17	19.22	18.56	17.19	13.06	12.98	13.31	13.81	17.99	18.28	17.90	18.01	17.97
18	19.19	18.54	16.88	13.02	12.89	12.79	14.04	18.07	18.22	17.88	17.94	17.92
19	19.22	18.50	16.59	13.12	12.73	13.13	14.28	18.17	18.18	17.88	17.91	17.96
20	19.17	18.48	16.25	13.02	12.74	13.13	14.58	18.27	18.20	17.98	17.90	17.97
21	19.13	18.47	15.86	12.93	12.89	12.88	14.87	18.32	18.15	18.03	17.95	17.98
22	19.07	18.52	15.47	12.92	13.03	13.49	15.08	18.37	18.00	18.11	18.07	17.99
23	18.99	18.43	15.08	12.92	13.17	13.84	15.25	18.36	17.90	18.28	18.07	18.02
24	18.95	18.37	14.76	12.91	13.15	13.59	15.44	18.38	17.90	18.32	18.11	18.05
25	18.93	18.32	14.24	13.06	13.10	13.22	15.63	18.40	17.93	18.17	18.11	18.06
26	18.95	18.28	13.54	13.12	13.12	12.93	15.80	18.40	17.92	18.05	18.12	18.04
27	19.01	18.25	13.39	13.17	13.08	13.11	15.93	18.38	17.88	18.03	18.11	18.02
28	19.10	18.20	13.20	12.89	13.00	13.02	16.07	18.41	17.86	18.03	18.11	18.01
29	19.14	18.17	13.33	13.04	---	12.90	16.18	18.47	17.93	17.96	18.10	17.97
30	19.16	18.12	13.10	13.08	---	12.88	16.30	18.50	17.99	18.00	18.13	17.96
31	19.15	---	13.03	13.05	---	12.98	---	18.54	---	18.05	18.16	---
MEAN	19.10	18.66	16.42	13.12	13.03	13.12	14.07	17.77	18.23	18.06	18.08	18.02
MAX	19.27	19.25	18.11	13.44	13.17	13.84	16.30	18.54	18.57	18.32	18.20	18.22
MIN	18.93	18.12	13.03	12.89	12.73	12.79	12.85	16.52	17.86	17.88	17.90	17.89

CAL YR 1985 MEAN 18.20 MAX 19.27 MIN 13.03
WTR YR 1986 MEAN 16.49 MAX 19.27 MIN 12.73

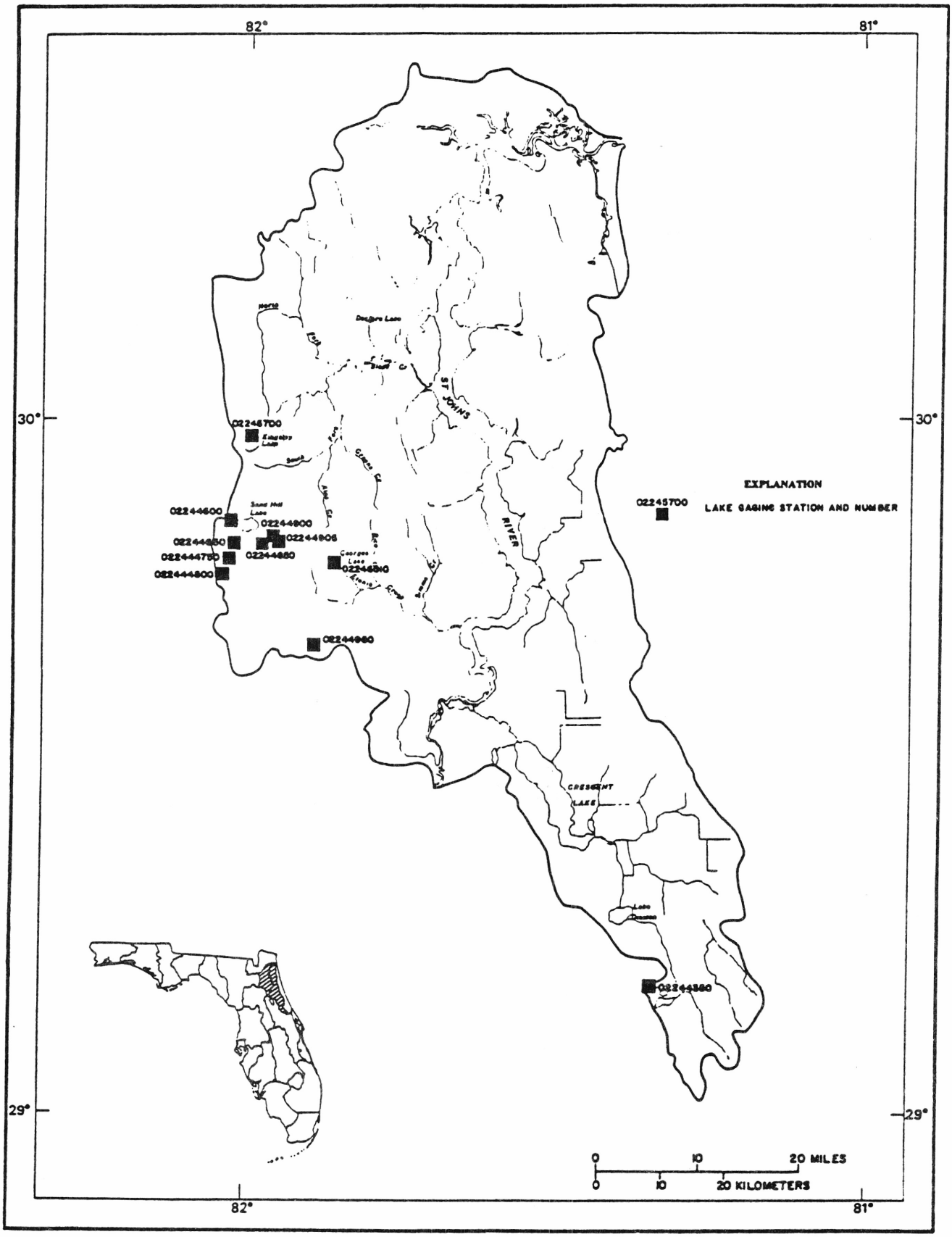

Figure 16. Location of lake gaging stations in the St. Johns River basin below the Oklawaha River.

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--1.35 mi^2.

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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.92	35.30	35.12	34.90	35.30	35.31	35.26	34.69	34.20	34.07	33.82	33.84
2	34.91	35.29	35.11	34.90	35.30	35.28	35.25	34.67	34.19	34.09	33.80	33.82
3	34.91	35.29	35.09	34.90	35.30	35.26	35.23	34.65	34.18	34.08	33.79	33.82
4	34.99	35.28	35.07	34.90	35.29	35.25	35.21	34.62	34.17	34.08	33.79	33.83
5	34.99	35.25	35.06	34.90	35.29	35.26	35.19	34.60	34.16	34.12	33.80	33.81
6	34.98	35.23	35.07	34.88	35.29	35.25	35.18	34.58	34.14	34.19	33.79	33.80
7	34.96	35.21	35.05	34.88	35.29	35.23	35.16	34.57	34.12	34.16	33.77	33.80
8	34.94	35.20	35.04	34.89	35.32	35.22	35.15	34.55	34.10	34.13	33.75	33.80
9	34.94	35.20	35.02	34.90	35.35	35.20	35.13	34.53	34.09	34.11	33.73	33.79
10	34.98	35.21	35.01	35.14	35.36	35.20	35.10	34.50	34.11	34.10	33.71	33.80
11	35.00	35.20	35.01	35.39	35.37	35.20	35.08	34.48	34.12	34.09	33.69	33.78
12	35.00	35.20	35.00	35.39	35.37	35.19	35.06	34.45	34.11	34.08	33.65	33.77
13	35.02	35.20	35.02	35.40	35.35	35.18	35.07	34.43	34.11	34.08	33.62	33.75
14	35.02	35.19	35.12	35.39	35.33	35.19	35.06	34.41	34.12	34.06	33.65	33.74
15	35.01	35.19	35.10	35.39	35.32	35.30	35.05	34.39	34.11	34.04	33.67	33.72
16	35.00	35.18	35.08	35.38	35.31	35.39	35.03	34.37	34.09	34.02	33.66	33.70
17	35.00	35.18	35.06	35.38	35.30	35.40	34.99	34.35	34.07	33.99	33.68	33.68
18	34.99	35.17	35.05	35.38	35.32	35.39	34.97	34.32	34.05	33.97	33.81	33.71
19	34.99	35.16	35.04	35.39	35.33	35.39	34.95	34.33	34.05	33.94	33.84	33.72
20	34.98	35.18	35.02	35.39	35.33	35.39	34.93	34.43	34.07	33.91	33.83	33.70
21	34.97	35.18	35.01	35.38	35.33	35.41	34.92	34.42	34.06	33.89	33.82	33.68
22	34.95	35.18	34.99	35.37	35.33	35.39	34.90	34.40	34.05	33.91	33.82	33.66
23	34.94	35.17	34.97	35.37	35.35	35.36	34.87	34.38	34.04	33.95	33.81	33.65
24	34.92	35.16	34.96	35.37	35.36	35.34	34.84	34.36	34.02	33.94	33.80	33.63
25	34.91	35.16	34.97	35.37	35.34	35.33	34.82	34.34	34.05	33.94	33.79	33.61
26	34.92	35.15	34.93	35.39	35.32	35.32	34.80	34.31	34.15	33.92	33.79	33.60
27	35.03	35.14	34.90	35.39	35.31	35.31	34.78	34.29	34.14	33.90	33.78	33.58
28	35.14	35.13	34.88	35.36	35.30	35.31	34.76	34.26	34.12	33.88	33.78	33.56
29	35.26	35.13	34.86	35.33	---	35.30	34.74	34.24	34.09	33.86	33.79	33.54
30	35.27	35.12	34.86	35.32	---	35.28	34.72	34.21	34.06	33.85	33.82	33.52
31	35.29	---	34.84	35.31	---	35.27	---	34.20	---	33.84	33.82	---
MEAN	35.00	35.19	35.01	35.23	35.32	35.29	35.01	34.43	34.10	34.01	33.76	33.71
MAX	35.29	35.30	35.12	35.40	35.37	35.41	35.26	34.69	34.20	34.19	33.84	33.84
MIN	34.91	35.12	34.84	34.88	35.29	35.18	34.72	34.20	34.02	33.84	33.62	33.52

CAL YR 1985 MEAN 34.97 MAX 36.43 MIN 33.99
WTR YR 1986 MEAN 34.67 MAX 35.41 MIN 33.52

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 mi^2).

DRAINAGE AREA.--11.0 mi^2.

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 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.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER, 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			APR		
03...	0900	132.62	01...	0830	132.32
NOV			18...	0930	132.02
04...	1300	132.52	MAY		
22...	1200	132.32	02...	0830	131.90
DEC			JUN		
02...	1330	132.22	05...	0900	131.80
JAN			12...	1055	131.76
03...	1500	132.56	JUL		
10...	1135	132.20	01...	0900	132.12
FEB			25...	1155	131.84
03...	0930	132.12	AUG		
MAR			04...	1100	131.76
01...	0900	132.34	26...	1055	131.93
07...	1020	132.30	SEP		
			02...	0900	131.92

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244650 MAGNOLIA LAKE NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°49'12", long 82°00'55", in NE¼ sec.8, T.8 S., R.23 E., Clay County, Hydrologic Unit 03080103, on southeast shore of lake, at east side of pier at Magnolia Lake State Park, 2.5 mi north of Keystone Heights.

SURFACE AREA.--201 acres (0.31 mi^2).

DRAINAGE AREA.--14.4 mi^2.

PERIOD OF RECORD.--March 1958 to April 1960 (fragmentary), May 1960 to September 1966, October 1966 to June 1968 (about thrice weekly), July 1968 to March 1969 (fragmentary), April 1969 to July 1978, August 1978 to current year (weekly). Records of elevations prior to October 1960 are unpublished and available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 117.00 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. Temporary earthen dam at lake outlet from Sept. 9-12, 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 125.91 ft, Sept. 12, 1973, caused by temporary earthen dam at lake outlet; minimum observed, 122.30 ft, Nov. 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 125.42 ft, Nov. 3; minimum observed, 124.34 ft, June 7.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	125.18	---	---	---	---	---	---	---	---	---
2	---	---	---	---	124.83	125.16	---	---	---	---	124.80	---
3	---	125.42	---	---	---	---	---	124.69	---	---	---	---
4	125.25	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	124.96	---	---	---	---	---	125.08	---	---
6	---	---	---	---	---	---	125.02	---	---	---	---	124.90
7	---	---	---	---	---	125.14	---	---	124.34	---	---	---
8	---	---	125.00	---	---	---	---	---	---	---	---	---
9	---	---	---	---	124.89	125.08	---	---	---	---	124.92	---
10	---	125.32	---	125.14	---	---	---	124.59	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	125.10	---	---	124.86	---	---	125.10	---	---
13	125.34	---	---	---	---	---	---	---	124.38	---	---	124.78
14	---	---	---	---	---	---	---	---	124.49	---	---	---
15	---	---	125.02	---	125.28	---	---	---	---	---	---	---
16	---	---	---	---	---	125.40	---	---	---	---	124.98	---
17	---	125.30	---	---	---	---	---	124.47	---	---	---	---
18	---	---	---	---	---	---	124.80	---	---	---	---	---
19	---	---	---	124.94	---	---	124.80	---	---	124.94	---	---
20	125.38	---	---	---	---	---	---	---	---	---	---	124.74
21	---	---	---	---	---	---	---	---	125.20	---	---	---
22	---	125.28	124.92	---	---	---	---	---	---	---	---	---
23	---	---	---	---	125.20	125.29	---	---	---	---	124.99	---
24	---	125.26	---	---	---	---	---	124.50	---	---	---	---
25	---	---	---	---	---	---	---	---	---	124.89	---	---
26	---	---	---	124.84	---	---	124.76	---	---	124.90	124.99	---
27	125.37	---	---	---	---	---	---	---	---	---	---	124.62
28	---	---	---	---	---	---	---	---	125.10	---	---	---
29	---	---	124.88	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	125.15	---	---	---	---	124.97	---
31	---	---	---	---	---	---	---	124.40	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244750 BROOKLYN LAKE AT KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°47'46", long 82°01'21", in SW¼ sec.17, T.8 S., R.23 E., Clay County, Hydrologic Unit 03080103, near middle of span on east side of bridge on State Highway 21 across east bay of lake, 0.9 mi northeast of Keystone Heights.

SURFACE AREA.--635 acres (0.99 mi^2).

DRAINAGE AREA.--17.4 mi^2.

PERIOD OF RECORD.--July 1957 to September 1959, October 1959 to September 1960 (thrice weekly), October 1960 to March 1961 (weekly), April 1961 to July 1965 (fragmentary), August 1965 to current year (weekly). Records of elevations prior to October 1960 are unpublished and available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 93.06 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, 117.43 ft, Oct. 1, 1960; minimum observed, 97.23 ft, Feb. 24,25, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 118.2 ft was reached in 1948, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 110.27 ft, Mar. 31; minimum observed, 107.56 ft, Oct. 7.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	108.95
2	---	---	108.56	---	---	---	---	---	109.08	---	---	---
3	---	---	---	---	108.96	109.56	---	---	---	---	---	---
4	---	108.23	---	---	---	---	---	---	---	---	108.96	---
5	---	---	---	---	---	---	---	109.70	---	---	---	---
6	---	---	---	108.60	---	---	---	---	---	---	---	---
7	107.56	---	---	---	---	109.63	110.25	---	---	109.28	---	---
8	---	---	---	---	---	---	---	---	---	---	---	108.83
9	---	---	108.42	---	---	---	---	---	108.82	---	---	---
10	---	---	---	108.78	109.23	109.61	---	---	---	---	---	---
11	---	108.28	108.45	---	---	---	---	---	---	---	108.97	---
12	---	---	---	---	---	---	---	109.52	---	---	---	---
13	---	---	---	108.83	---	---	---	---	108.81	---	---	---
14	107.76	---	---	---	---	---	110.03	---	---	109.28	---	---
15	---	---	---	---	---	---	---	---	---	---	---	108.78
16	---	---	---	---	---	---	---	---	108.70	---	---	---
17	---	---	---	---	109.38	110.07	---	---	---	---	---	---
18	---	108.38	---	---	---	---	110.07	---	---	---	108.99	---
19	---	---	---	---	---	---	---	109.43	---	---	---	---
20	---	---	---	108.85	---	---	---	---	---	---	---	---
21	107.88	---	---	---	---	---	110.11	---	---	109.09	---	---
22	---	108.44	---	---	---	---	---	---	---	---	---	108.58
23	---	---	108.42	---	---	---	---	---	109.35	---	---	---
24	---	---	---	---	109.52	110.21	---	---	---	---	---	---
25	---	108.47	---	---	---	---	---	---	---	109.04	109.01	---
26	---	---	---	---	---	---	---	109.27	---	---	108.97	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	108.08	---	---	---	---	---	109.91	---	---	108.99	---	---
29	---	---	---	108.80	---	---	---	---	---	---	---	108.42
30	---	---	108.36	---	---	---	---	---	109.31	---	---	---
31	---	---	---	---	---	110.27	---	---	---	---	---	---

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--35.5 mi^2.

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 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, 100.25 ft, Mar. 19; minimum observed, 99.20 ft, June 13.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	99.43	---	---	---	---	---	---	---	---
2	99.71	---	---	---	---	---	100.09	---	---	---	---	99.59
3	---	---	---	---	---	---	---	---	---	99.45	---	---
4	---	---	99.45	---	---	---	---	---	99.29	---	---	---
5	---	---	---	---	99.59	99.91	---	---	---	---	---	---
6	---	99.69	---	---	---	---	---	---	---	---	99.47	---
7	---	---	---	---	---	99.90	---	99.51	---	---	---	---
8	---	---	---	99.45	---	---	---	---	---	---	---	---
9	99.63	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	99.61	---	---	---	---	---	99.33	---	99.53
11	---	---	99.37	---	---	---	---	---	99.27	---	---	---
12	---	---	---	---	100.01	99.87	---	---	---	---	---	---
13	---	99.57	---	---	---	---	---	---	99.20	---	99.53	---
14	---	---	---	---	---	---	99.93	99.43	---	---	---	---
15	---	---	---	99.63	---	---	---	---	---	---	---	---
16	99.63	---	---	---	---	---	99.87	---	---	99.47	---	---
17	---	---	---	---	---	---	---	---	---	---	---	99.45
18	---	---	99.35	---	---	---	99.81	---	---	---	---	---
19	---	---	---	---	99.97	100.25	---	---	---	---	---	---
20	---	99.55	---	---	---	---	---	---	---	---	99.57	---
21	---	---	---	---	---	---	---	99.51	---	---	---	---
22	---	99.57	---	99.65	---	---	---	---	---	---	---	---
23	99.59	---	---	---	---	---	99.77	---	---	99.40	---	---
24	---	---	---	---	---	---	---	---	---	---	---	99.35
25	---	---	---	---	---	---	---	---	---	99.37	---	---
26	---	---	99.31	---	99.93	100.21	---	---	---	---	99.57	---
27	---	99.53	---	---	---	---	---	---	---	---	99.55	---
28	---	---	---	---	---	---	---	99.41	---	---	---	---
29	---	---	---	99.61	---	---	---	---	---	---	---	---
30	99.61	---	---	---	---	---	99.65	---	---	99.27	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244850 PEBBLE LAKE NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°49'31", long 81°57'10", in SE¼ sec.1, T.8 S., R.23 E., Clay County, Hydrologic Unit 03080103, on east shore of lake in Gold Head Branch State Park, 5.5 mi northeast of Keystone Heights.

SURFACE AREA.--9.5 acres (0.01 mi^2).

DRAINAGE AREA.--0.19 mi^2.

PERIOD OF RECORD.--July 1945 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 101.16 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

REMARKS.--Lake has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 116.36 ft, July 11, 1948, may have been higher in October 1948; minimum observed, 84.24 ft, Apr. 28, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 94.47 ft, July 14; minimum observed, 87.98 ft, Oct. 1.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87.98	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	94.16	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	93.76	93.76
6	---	---	---	---	---	91.64	---	---	---	---	---	---
7	---	---	---	89.99	---	91.65	---	93.92	---	---	---	---
8	88.00	88.96	---	---	---	---	93.28	---	---	94.36	---	---
9	---	---	---	---	---	---	---	---	---	---	---	93.26
10	---	---	---	90.22	---	---	---	---	94.12	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	89.04	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	93.96	94.23	---	---	---
14	---	---	---	---	---	---	---	---	---	94.47	---	---
15	88.18	---	---	---	---	---	93.50	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	93.12
17	---	---	89.66	---	---	---	---	---	94.14	---	---	---
18	---	---	---	---	---	---	93.56	---	---	---	---	---
19	---	89.16	---	---	91.34	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	94.08	---	---	---	---
21	---	---	---	90.48	---	---	---	---	---	---	---	---
22	88.34	89.26	---	---	---	---	---	---	---	94.04	---	---
23	---	---	---	---	---	---	---	---	---	---	---	92.82
24	---	---	89.66	---	---	---	93.74	---	---	---	---	---
25	---	---	---	---	---	92.88	---	---	---	94.04	---	---
26	---	89.30	---	---	---	---	---	---	---	---	93.57	---
27	---	---	---	---	---	---	---	94.05	---	---	---	---
28	---	---	---	90.50	---	---	---	---	---	---	---	---
29	88.58	---	---	---	---	---	93.84	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	92.64
31	---	---	89.66	---	---	---	---	---	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244900 LAKE JOHNSON (LITTLE LAKE) NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°49'31", long 81°57'07", in SE¼ sec.1, T.8 S., R.23 E., Clay County, Hydrologic Unit 03080103, on north shore of little lake on northwest side of Lake Johnson in Gold Head Branch State Park, 5.5 mi northeast of Keystone Heights.

SURFACE AREA.--34.6 acres (0.05 mi^2), little lake area. Combined areas of little lake and big lake are 475 acres, (0.74 mi^2).

DRAINAGE AREA.--6.37 mi^2, combined areas.

PERIOD OF RECORD.--July 1945 to current year (weekly), incomplete. Records of elevations prior to Oct. 1960 are unpublished and 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. Jan. 4, 1963 to Dec. 1977 at site 200 ft south at same datum. Prior to Jan. 4, 1963, at same site at datum 5.61 ft higher. Since Feb. 7, 1959, auxiliary nonrecording gage in big lake east of earthen dam.

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, about 105 ft in October 1948, from information by local resident; minimum observed, 90.87 ft, Aug. 12, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 95.36 ft, Oct. 29; minimum observed, 95.16 ft, Jan. 28.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.30	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	95.30
3	---	---	---	---	---	---	---	---	95.30	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	95.28	---
6	---	---	---	---	---	95.18	---	---	---	---	---	---
7	---	---	---	95.24	---	95.17	---	95.20	---	---	---	---
8	95.30	95.30	---	---	---	---	95.20	---	---	95.29	---	---
9	---	---	---	---	---	---	---	---	---	---	---	95.28
10	---	---	95.25	95.35	---	---	---	---	95.24	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	95.28	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	95.24	95.26	---	---	---
14	---	---	---	---	---	---	---	---	---	95.21	---	---
15	95.30	---	---	---	---	---	95.20	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	95.26
17	---	---	95.25	---	---	---	---	---	95.28	---	---	---
18	---	---	---	---	---	---	95.20	---	---	---	---	---
19	---	95.28	---	---	95.18	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	95.30	---	---	---	---
21	---	---	---	95.20	---	---	---	---	---	---	---	---
22	95.30	95.28	---	---	---	---	---	---	---	95.20	---	---
23	---	---	---	---	---	---	---	---	---	---	---	95.24
24	---	---	95.23	---	---	---	95.24	---	---	---	---	---
25	---	---	---	---	---	95.20	---	---	---	95.26	---	---
26	---	95.28	---	---	---	---	---	---	---	---	95.26	---
27	---	---	---	---	---	---	---	95.30	---	---	---	---
28	---	---	---	95.16	---	---	---	---	---	---	---	---
29	95.36	---	---	---	---	---	95.22	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	95.26
31	---	---	95.20	---	---	---	---	---	---	---	---	---

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 mi^2), big lake area. Combined areas of big lake and little lake are 475 acres (0.74 mi^2).

DRAINAGE AREA.--6.37 mi^2, 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 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, 91.10 ft, Mar. 25; minimum observed, 90.39 ft, Sept. 30.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90.60	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	90.80
3	---	---	---	---	---	---	---	---	90.65	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	90.50	---
6	---	---	---	---	---	90.66	---	---	---	---	---	---
7	---	---	---	90.80	---	90.66	---	90.50	---	---	---	---
8	90.60	90.80	---	---	---	---	90.88	---	---	90.80	---	---
9	---	---	---	---	---	---	---	---	---	---	---	90.60
10	---	---	90.60	90.95	---	---	---	---	90.54	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	90.78	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	90.46	90.62	---	---	---
14	---	---	---	---	---	---	---	---	---	90.70	---	---
15	90.72	---	---	---	---	---	90.74	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	90.60
17	---	---	90.59	---	---	---	---	---	90.68	---	---	---
18	---	---	---	---	---	---	90.68	---	---	---	---	---
19	---	90.74	---	---	90.80	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	90.60	---	---	---	---
21	---	---	---	90.80	---	---	---	---	---	---	---	---
22	90.64	---	---	---	---	---	---	---	---	90.48	---	---
23	---	---	---	---	---	---	---	---	---	---	---	90.40
24	---	---	90.57	---	---	---	90.64	---	---	---	---	---
25	---	---	---	---	---	91.10	---	---	---	90.55	---	---
26	---	90.68	---	---	---	---	---	---	---	---	90.68	---
27	---	---	---	---	---	---	---	90.59	---	---	---	---
28	---	---	---	90.78	---	---	---	---	---	---	---	---
29	90.78	---	---	---	---	---	90.58	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	90.39
31	---	---	90.52	---	---	---	---	---	---	---	---	---

ST. JOHNS RIVER

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 mi^2).

DRAINAGE AREA.--3.71 mi^2.

PERIOD OF RECORD.--July 1957 to September 1960 (incomplete), October 1960 to current year (fragmentary). Records of elevations prior to October 1960 are unpublished and 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 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			JUN		
22...	0945	81.45	13...	1500	80.85
JAN			JUL		
10...	0835	81.49	25...	0940	81.19
MAR			AUG		
07...	0810	81.45	26...	0840	81.35
APR					
18...	1515	81.35			

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 mi^2).

DRAINAGE AREA.--5.33 mi^2.

PERIOD OF RECORD.--December 1982 to current year (weekly).

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 PERIOD OF RECORD.--Maximum elevation observed, 98.98 ft, Apr. 26, 1983; minimum observed, 96.95 ft, July 9, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 98.89 ft, Mar. 18; minimum observed, 97.61 ft, June 10.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98.21	---	---	---	---	---	98.63	---	---	98.21	---	---
2	---	---	---	---	---	---	---	---	97.71	---	---	98.15
3	---	---	98.01	---	---	---	---	---	97.71	---	---	---
4	---	---	---	---	98.17	98.35	---	---	---	---	---	---
5	---	98.21	---	---	---	---	---	---	---	---	98.19	---
6	---	---	---	---	---	---	---	97.89	---	---	---	---
7	---	---	---	97.97	---	98.37	---	---	---	---	---	---
8	98.16	---	---	---	---	---	98.43	---	---	98.19	---	---
9	---	---	---	---	---	---	---	---	---	---	---	98.27
10	---	---	97.93	98.11	---	---	---	---	97.61	---	---	---
11	---	---	---	---	98.21	98.31	---	---	---	---	---	---
12	---	98.17	---	---	---	---	---	---	---	---	98.15	---
13	---	---	---	---	---	---	---	97.93	97.78	---	---	---
14	---	---	---	98.21	---	---	---	---	---	---	---	---
15	98.21	---	---	---	---	---	98.21	---	---	98.18	---	---
16	---	---	---	---	---	---	---	---	---	---	---	98.25
17	---	---	97.85	---	---	---	---	---	98.09	---	---	---
18	---	---	---	---	98.51	98.89	98.21	---	---	---	---	---
19	---	98.13	97.89	---	---	---	---	---	---	---	98.17	---
20	---	---	---	---	---	---	---	97.91	---	---	---	---
21	---	---	---	98.17	---	---	---	---	---	---	---	---
22	98.19	98.17	---	---	---	---	98.13	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	98.21	---	98.01
24	---	---	97.81	---	---	---	---	---	98.11	---	---	---
25	---	---	---	---	98.47	98.85	---	---	---	98.19	---	---
26	---	98.17	---	---	---	---	---	---	---	---	98.15	---
27	---	---	---	---	---	---	---	97.79	---	---	---	---
28	---	---	---	98.11	---	---	---	---	---	---	---	97.99
29	98.29	---	---	---	---	---	97.91	---	---	98.11	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	97.87	---	---	---	---	---	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245700 KINGSLEY LAKE AT CAMP BLANDING, FL

LOCATION.--Lat 29°58'28", long 81°59'22", in SE¼ sec.15, T.6 S., R.23 E., Clay County, Hydrologic Unit 03080103, on northeast shore of lake, on public pier, at Camp Blanding.

SURFACE AREA.--1,627 acres (2.54 mi^2).

DRAINAGE AREA.--6.84 mi^2.

PERIOD OF RECORD.--June 1945 to March 1946, October 1946 (monthly), March 1947 to current year (twice weekly), incomplete. Records of elevations prior to October 1960 are unpublished and available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 173.22 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark); gage readings have been reduced to elevations NGVD. Prior to Aug. 3, 1961, gage located at site approximately 1,000 ft southeast of present location at same datum.

REMARKS.--Outlet of lake has a fixed concrete (broken) weir with average crest elevation of about 176 ft; flow is into North Fork Black Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 177.82 ft, Oct. 21, 1950, Sept. 12, 1964; minimum observed, 174.34 ft, Apr. 23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 176.54 ft, Mar. 22; minimum observed, 175.62 ft, June 7.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	176.10	176.34	---	---	---	---	---	---
2	---	176.50	---	---	---	---	---	---	---	---	176.06	176.42
3	---	---	176.16	---	---	---	---	175.86	175.64	---	---	---
4	---	---	---	175.92	176.10	176.32	---	---	---	---	---	---
5	176.52	176.42	---	---	---	---	176.32	---	---	176.08	176.04	---
6	---	---	---	---	---	---	---	175.80	---	---	---	176.48
7	---	---	176.10	176.06	---	176.30	---	---	175.62	---	---	---
8	176.48	---	---	---	176.16	176.30	176.24	---	---	176.06	---	---
9	---	176.30	---	---	---	---	---	---	---	---	176.04	176.52
10	---	---	176.06	176.18	---	---	---	175.76	175.64	---	---	---
11	---	---	---	176.22	176.42	176.30	---	---	---	---	---	---
12	176.46	176.28	---	---	---	---	176.18	---	---	176.04	176.16	---
13	---	---	---	---	---	---	---	175.72	175.68	---	---	176.50
14	---	---	176.06	176.20	---	---	---	---	175.68	---	---	---
15	176.40	---	---	---	176.50	176.46	176.10	---	---	175.98	---	---
16	---	176.26	---	---	---	---	---	---	---	---	176.26	176.44
17	---	---	176.02	---	---	---	---	175.68	175.90	---	---	---
18	---	---	---	176.16	176.48	176.50	176.04	---	---	---	---	---
19	176.34	176.26	---	---	---	---	176.04	---	---	175.94	176.32	---
20	---	---	---	---	---	---	---	175.68	---	---	---	176.38
21	---	---	176.00	176.14	---	---	---	---	176.08	---	---	---
22	176.32	176.14	---	---	176.46	176.54	176.00	---	---	176.00	---	---
23	---	176.26	---	---	---	---	---	---	---	---	176.38	176.34
24	---	---	175.96	---	---	---	---	175.70	176.06	---	---	---
25	---	---	---	176.14	176.40	176.48	---	---	---	---	---	---
26	176.30	176.24	---	---	---	---	175.96	---	---	176.06	176.35	---
27	---	---	---	---	---	---	---	175.66	---	---	---	176.32
28	---	---	175.92	176.12	---	---	---	---	176.04	---	---	---
29	176.40	---	---	---	---	176.46	175.90	---	---	176.04	---	---
30	---	176.22	---	---	---	---	---	---	176.06	---	176.34	176.28
31	---	---	175.92	---	---	176.36	---	175.64	---	---	---	---

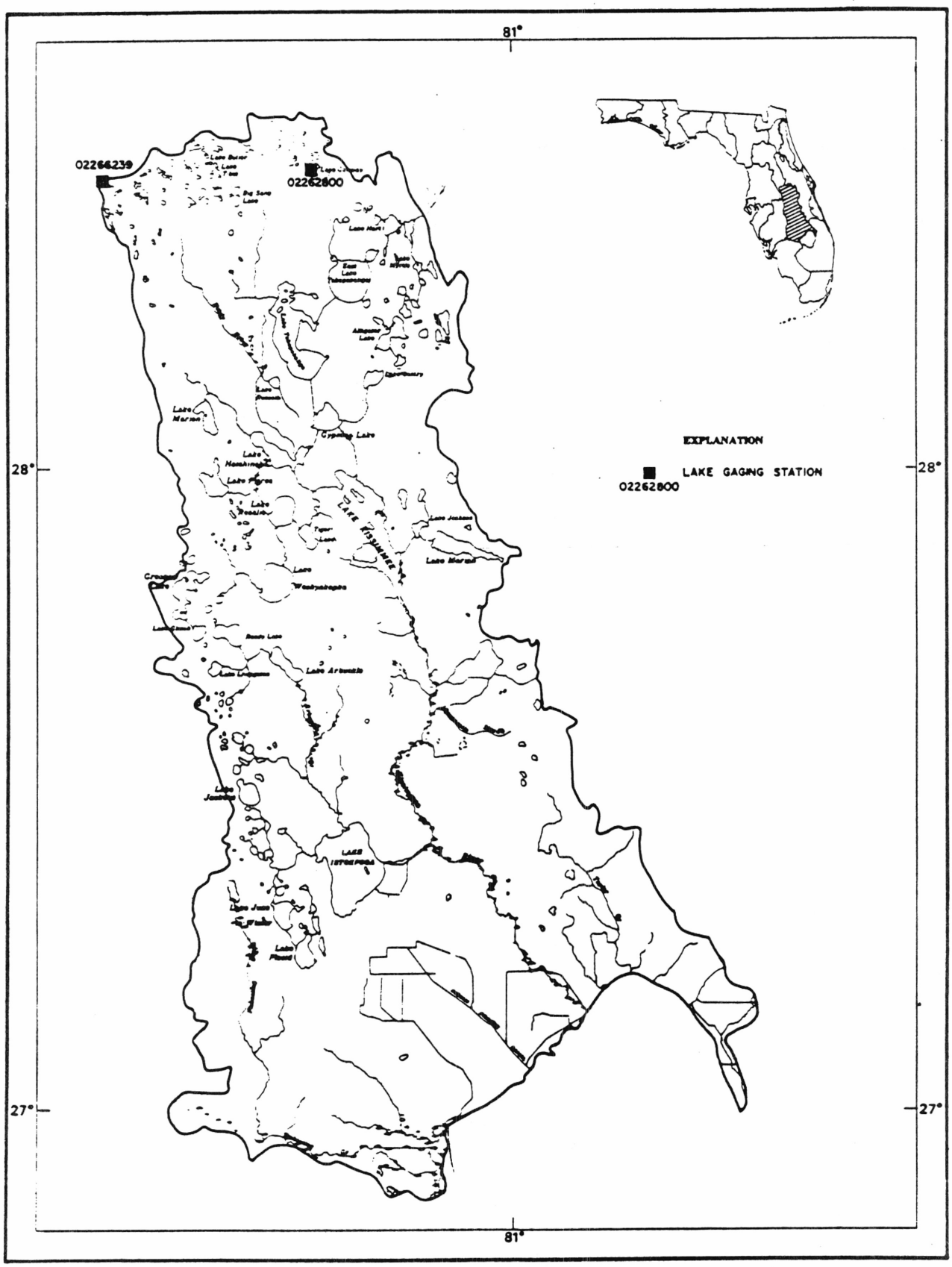

Figure 17. Location of lake gaging stations in the Kissimmee River basin; the Taylor Creek basin and inflow to Lake Okeechobee from the north; and Fisheating Creek basin and inflow to Lake Okeechobee from the northwest.

SOUTH FLORIDA

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 mi^2).

DRAINAGE AREA.--12.7 mi^2.

PERIOD OF RECORD.--March 1952 to current year. Records of elevations prior to October 1960 are unpublished and 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. 25-29,31, 1960; minimum observed, 82.44 ft, Oct. 23,24, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.65	84.61	84.38	84.45	85.04	85.10	85.01	84.51	84.00	84.61	84.62	84.96
2	84.65	84.59	84.38	84.51	85.05	85.09	84.99	84.50	83.98	84.60	84.60	84.94
3	84.65	84.58	84.36	84.53	85.07	85.08	84.98	84.47	83.98	84.59	84.59	84.94
4	84.76	84.59	84.34	84.53	85.07	85.07	84.97	84.45	84.09	84.57	84.59	84.93
5	84.75	84.56	84.33	84.53	85.07	85.06	84.96	84.43	84.07	84.58	84.69	84.91
6	84.76	84.52	84.44	84.53	85.07	85.05	84.95	84.41	84.06	84.63	84.68	84.91
7	84.75	84.49	84.42	84.53	85.07	85.04	84.96	84.40	84.05	84.66	84.67	84.89
8	84.74	84.48	84.42	84.53	85.07	85.03	84.94	84.39	84.13	84.67	84.66	84.89
9	84.74	84.46	84.41	84.56	85.15	85.02	84.91	84.37	84.14	84.66	84.72	84.94
10	84.74	84.45	84.40	84.96	85.17	85.03	84.88	84.37	84.24	84.65	84.72	84.97
11	84.73	84.45	84.40	85.04	85.16	85.04	84.86	84.36	84.23	84.64	84.70	84.97
12	84.73	84.46	84.40	85.05	85.19	85.03	84.84	84.33	84.22	84.62	84.70	84.95
13	84.72	84.46	84.39	85.06	85.18	85.03	84.86	84.31	84.23	84.60	84.71	84.97
14	84.71	84.46	84.45	85.05	85.16	85.03	84.86	84.29	84.27	84.59	84.77	84.99
15	84.70	84.45	84.45	85.05	85.16	85.05	84.85	84.27	84.28	84.58	84.84	84.99
16	84.70	84.45	84.44	85.05	85.16	85.17	84.83	84.25	84.31	84.56	84.83	84.97
17	84.69	84.44	84.43	85.05	85.17	85.17	84.80	84.23	84.30	84.54	84.86	84.95
18	84.68	84.43	84.41	85.07	85.18	85.18	84.77	84.21	84.30	84.52	84.95	84.93
19	84.68	84.42	84.39	85.07	85.18	85.17	84.74	84.19	84.31	84.59	84.94	85.20
20	84.66	84.42	84.38	85.08	85.18	85.17	84.72	84.18	84.57	84.58	84.94	85.19
21	84.65	84.42	84.36	85.07	85.18	85.16	84.71	84.20	84.61	84.56	84.98	85.19
22	84.64	84.41	84.35	85.07	85.17	85.15	84.69	84.20	84.65	84.53	85.05	85.18
23	84.62	84.40	84.34	85.08	85.17	85.12	84.66	84.19	84.65	84.57	85.06	85.17
24	84.60	84.39	84.33	85.07	85.17	85.09	84.64	84.18	84.65	84.57	85.05	85.16
25	84.60	84.39	84.36	85.08	85.16	85.07	84.62	84.15	84.66	84.55	85.04	85.15
26	84.59	84.39	84.34	85.08	85.14	85.06	84.60	84.14	84.65	84.61	85.03	85.15
27	84.57	84.38	84.34	85.10	85.10	85.07	84.58	84.11	84.64	84.61	85.02	85.13
28	84.56	84.36	84.33	85.07	85.11	85.05	84.56	84.09	84.63	84.67	85.01	85.11
29	84.60	84.35	84.32	85.05	---	85.04	84.54	84.06	84.62	84.65	84.99	85.11
30	84.59	84.34	84.31	85.05	---	85.03	84.53	84.05	84.61	84.63	84.99	85.09
31	84.61	---	84.30	85.05	---	85.03	---	84.02	---	84.61	84.98	---
MEAN	84.67	84.45	84.38	84.90	85.13	85.08	84.79	84.27	84.34	84.60	84.84	85.03
MAX	84.76	84.61	84.45	85.10	85.19	85.18	85.01	84.51	84.66	84.67	85.06	85.20
MIN	84.56	84.34	84.30	84.45	85.04	85.02	84.53	84.02	83.98	84.52	84.59	84.89

CAL YR 1985 MEAN 84.13 MAX 84.76 MIN 83.38
WTR YR 1986 MEAN 84.70 MAX 85.20 MIN 83.98

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 mi^2).

DRAINAGE AREA.--1.31 mi^2.

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, 92.30 ft, Mar. 29, Apr. 5; minimum observed, 91.48 ft, June 14.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	92.24	92.18	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	92.04	---	---	---	---	---	---	---	---	92.02	---
4	---	---	---	---	---	---	---	91.90	---	---	---	---
5	92.26	---	---	92.06	92.19	---	92.30	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	92.16	---	92.20
7	---	---	91.88	---	---	---	---	---	91.50	---	---	---
8	---	---	---	---	92.22	92.18	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	91.98	---	---	---	---	---	---	---	---	92.08	---
11	---	---	---	---	---	---	---	91.86	---	---	---	---
12	92.18	---	---	92.22	---	---	92.21	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	92.12	---	92.16
14	---	---	91.86	---	---	---	---	---	91.48	---	---	---
15	92.25	---	---	---	92.22	92.22	---	---	---	91.96	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	91.92	---	---	---	---	---	---	---	---	92.12	---
18	---	---	---	---	---	---	---	91.82	---	---	---	---
19	92.14	---	---	92.28	---	---	92.10	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	92.06	---	92.14
21	---	---	91.84	---	---	---	---	---	---	---	---	---
22	---	---	---	---	92.18	92.26	---	---	91.76	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	91.88	---	---	---	---	---	---	---	---	92.12	---
25	---	---	---	---	---	---	---	91.70	---	---	---	---
26	92.08	---	---	92.26	---	---	92.02	---	---	---	---	---
27	---	---	---	---	---	---	---	91.59	---	92.02	---	---
28	---	---	91.80	---	---	92.27	---	---	---	---	---	---
29	---	91.94	---	---	---	92.30	---	---	92.00	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	91.66	---	---	92.10	---

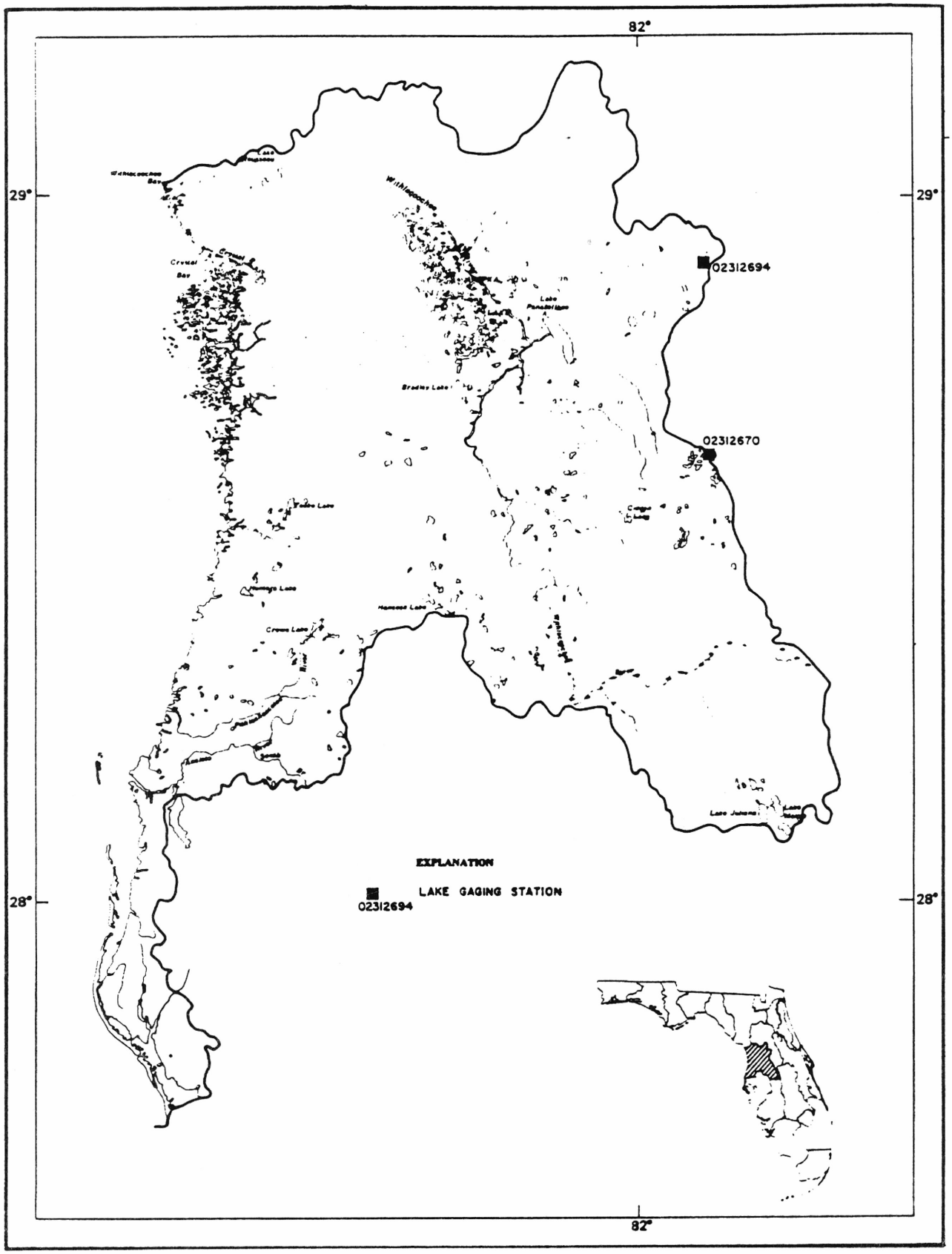

Figure 18. Location of lake gaging stations in the Withlacoochee River basin and coastal areas.

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02312670 LAKE CATHERINE AT GROVELAND, FL

LOCATION.--Lat 28°34'27", long 81°51'37", in NE¼ sec.13, T.22 S., R.24 E., Lake County, Hydrologic Unit 03100208, on northeast shore of lake, 0.3 mi west of State Highway 19, and 1.0 mi northwest of Groveland.

SURFACE AREA.--137 acres (0.21 mi^2).

DRAINAGE AREA.--4.53 mi^2.

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, 98.51 ft, Oct. 14; minimum observed, 97.77 ft, May 26.27.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	98.17
2	---	---	97.92	---	---	98.37	---	---	98.07	---	---	---
3	---	---	---	---	98.27	---	98.33	---	---	---	---	---
4	---	98.19	---	---	98.45	---	---	---	---	---	98.17	---
5	---	---	---	---	---	---	---	98.39	---	---	---	---
6	---	---	---	98.37	---	---	---	---	---	---	---	---
7	98.48	---	---	---	---	---	98.29	---	---	98.05	---	---
8	---	---	---	---	---	---	---	---	---	---	---	98.11
9	98.44	---	97.95	---	---	98.33	---	---	98.11	---	---	---
10	---	---	---	---	98.33	---	---	---	---	---	---	---
11	---	98.31	---	---	---	---	---	---	---	---	98.05	---
12	---	---	---	---	---	---	---	98.37	---	---	---	---
13	---	---	---	98.44	---	---	---	---	---	---	---	---
14	98.51	---	---	---	---	---	98.27	---	---	97.99	---	---
15	---	---	---	---	---	---	---	---	---	---	---	98.03
16	---	---	97.92	---	---	98.35	---	---	98.16	97.98	---	---
17	---	---	---	---	98.39	---	---	---	---	---	---	---
18	---	98.27	---	---	---	---	---	---	---	---	98.13	---
19	---	---	---	---	---	---	---	98.09	---	---	---	---
20	---	---	---	98.41	---	---	---	---	---	---	---	---
21	98.46	---	---	---	---	---	98.21	---	---	97.91	---	---
22	---	---	---	---	---	---	---	---	---	---	---	97.97
23	---	---	97.93	---	---	98.39	---	---	98.18	---	---	---
24	---	---	---	---	98.39	---	---	---	---	---	---	---
25	---	98.27	---	---	---	---	---	---	---	---	98.09	---
26	---	---	---	---	---	---	---	97.77	---	---	---	---
27	---	---	---	98.49	---	---	---	97.77	---	---	---	---
28	98.43	---	---	---	---	---	98.17	---	---	97.87	---	98.01
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	97.95	---	---	98.39	---	---	98.13	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

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 mi^2).

DRAINAGE AREA.--4.67 mi^2.

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 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
07...	1336	63.43	22...	0930	62.29
NOV			JUL		
25...	1329	62.91	17...	1305	61.83
JAN			SEP		
28...	1026	63.29	12...	1140	62.25
MAR					
27...	1345	63.18			

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October 1, 1978

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
	Length	
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)
	Area	
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)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
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)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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