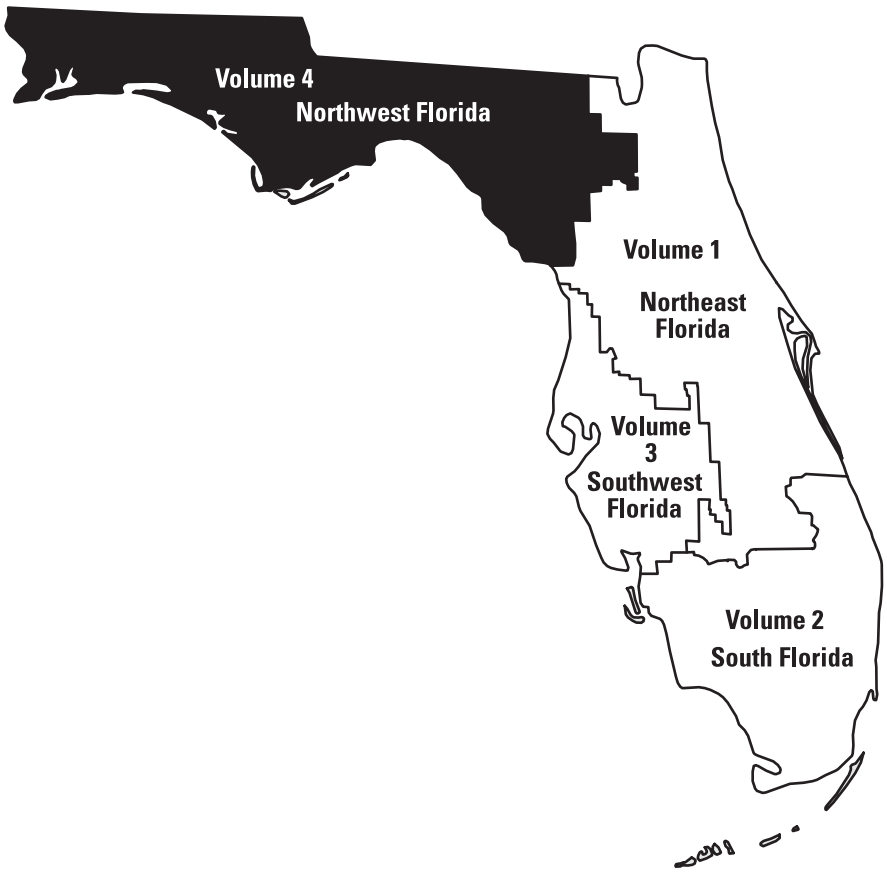
U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Florida Water Year 2001

Volume 4. Northwest Florida

Water-Data Report FL-01-4



Prepared in cooperation with the
State of Florida and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U. S. GEOLOGICAL SURVEY

Charles G. Groat, Director

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

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
227 North Bronough Street, Suite 3015
Tallahassee, Florida 32301

2002

PREFACE

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

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

This report was prepared for publication by Darlene A. Blum and A. Ernie Alvarez under the supervision of Stewart A. Tomlinson and James D. Goin. The following individuals contributed significantly to the collection, processing, and tabulation of the data:

J.C. Collins	E.L. Rau
D.B. Dale	R.B. Stanley
G.B. Donley	D.M. Stephens
M.A. Franklin	J.A. Tomberlin
D.C. Geller	R.J. Verdi
P.E. Meadows	S.G. Welch

This report was prepared in cooperation with the State of Florida and with other agencies listed on page 1.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	September 2002	Annual-Oct. 1, 2000 thru Sept. 30, 2001

4. TITLE AND SUBTITLE

Water Resources Data, Florida, Water Year 2001
Volume 4, Northwest Florida

5. FUNDING NUMBERS

6. AUTHOR(S)

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

U.S. Geological Survey
Water Resources Division
227 N. Bronough Street, Suite 3015
Tallahassee, FL 32301

8. PERFORMING ORGANIZATION REPORT NUMBER

USGS-WDR-FL-01-4

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

U.S. Geological Survey
Water Resources Division
227 N. Bronough Street, Suite 3015
Tallahassee, FL 32301

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

USGS-WDR-FL-01-4

11. SUPPLEMENTARY NOTES

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

12a. DISTRIBUTION / AVAILABILITY STATEMENT

No restriction on distribution. This report may be purchased from:
National Technical Information Center
Springfield, VA 22161

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

This report series for the 2001 water year for the state of Florida consists of records for continuous or daily discharge for 387 streams, periodic discharge for 14 streams, continuous or daily stage for 147 streams, periodic stage for 2 streams, peak stage and discharge for 8 streams, continuous or daily elevations for 14 lakes, periodic elevations for 47 lakes, continuous ground-water levels for 429 wells, periodic ground-water levels for 1,257 wells, and quality-of-water for 112 surface-water sites and 248 wells.

This volume (Volume 4, Northwest Florida) contains records of continuous or daily discharge for 65 streams, periodic discharge for 1 stream, continuous or daily stage for 18 streams, periodic stage for 2 streams, peak stage and discharge for 0 streams, continuous or daily elevations for 1 lake, periodic elevations for 1 lake, continuous ground-water levels for 2 wells, periodic ground-water levels for 3 wells, and quality-of-water for 3 surface-water sites and 0 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.

14. SUBJECT TERMS

*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

15. NUMBER OF PAGES

152

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED			UNCLASSIFIED

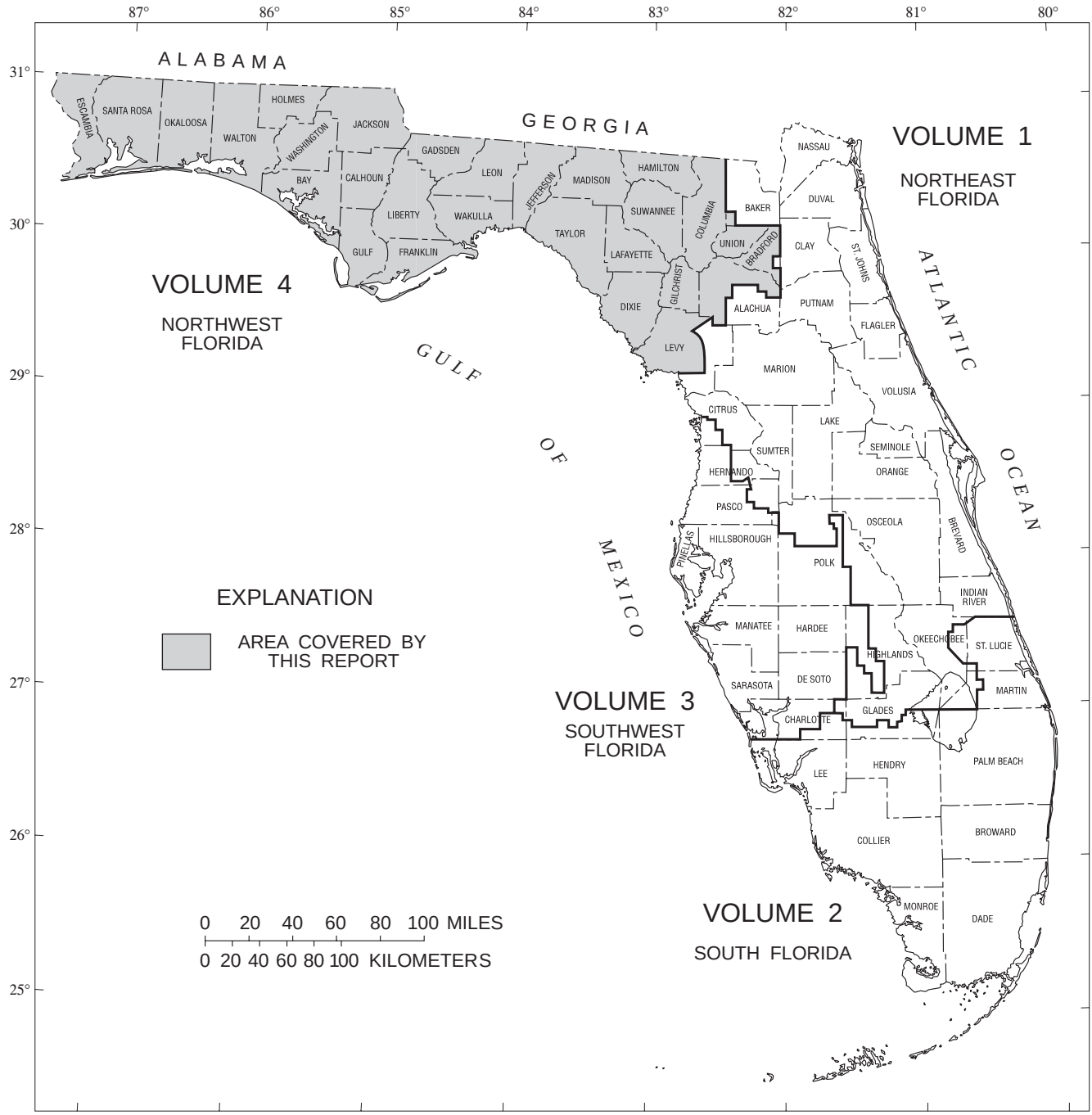


Figure 1. Geographic area covered by this report.

CONTENTS

ILLUSTRATIONS

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

[Letters after station names designate type of data: (d) discharge, (q) discharge measurements only, (c) chemical, (b) biological, (m) microbiological, (s) sediment, (t) temperature, (e) elevation, gage heights, or contents]

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

[Letters after station names designate type of data: (d) discharge, (q) discharge measurements only, (c) chemical, (b) biological, (m) microbiological, (s) sediment, (t) temperature, (e) elevation, gage heights, or contents]

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record surface-water discharge stations (gaging stations) in Florida have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

Station name	Station number	Drainage area (mi^2)	Period of record
Waccasassa River near Otter Creek, FL	02313500	300†	1944-53
Otter Creek at Otter Creek, FL	02314000		1945-53
Tenmile Creek near Lebanon Station. F:	02314200	26	1963-92
Rocky Creek near Belmont, FL	02314986	50	1976-83
Hunter Creek near Belmont, FL	02315005	25.4	1979-88
Deep Creek near Suwannee Valley, FL	02315200	88.6	1976-81, 1990-98
Robinson Creek near Suwannee Valley, FL	02315392	27.4	1976-81
Swift Creek at Facil, FL	02315520	65.3	1976-88
Suwannee River at Suwannee Springs, FL	02315550	2630	1975-96
Santa Fe River near Graham, FL	02320700	94.9	1957-98
Swift Creek near Lake Butler, FL	02321700	46.0	1957-60
Olustee Creek near Providence, FL	02321800	163	1957-60
Pareners Branch near Bland, FL	02321900	4.5	1993-96
Santa Fe River near High Springs, FL	02322000	950	1931-71
Blues Creek near Gainesville, FL	02322016	5.12	1984-94
Cannon Creek near Lake City, FL	02322616	2.33	1992-98
Fenholloway River at Foley, FL	02324500	120	1946-92, 1993-95
Aucilla River near Scanlon, FL	02326512	805	1977-97
Northeast Drainage Ditch at Weems Road, FL	02326845	17.1	1979-83
Munson Slough at Capital Circle, FL	02327017	52.9	1979-83
Little River near Quincy, FL	02329500	237	1950-91
Quincy Creek at S267 at Quincy, FL	02329534	16.8	1974-92
Quincy Creek at Quincy, FL	02329542	21.9	1974-78
Rocky Comfort Creek near Quincy, FL	02329700	9.46	1964-81
New River near Wilma, FL	02330300	81.7	1964-81
North Mosquito Creek at Chattahoochee, FL	02358500	57.9	1936-42
Apalachicola River near Wewahitchka, FL	02358754	17800	1950-96
Econfina Creek near Compass Lake, FL	02359350	40.5	1962-65
Econfina Creek near Fountain, FL	02359450	70.2	1965-78
Bear Creek near Youngstown, FL	02359550	67.2	1962-65
Seven Runs Bay near Redbay, FL	02365800	25.8	1969-70
Holmes Creek at Vernon, FL	02366000	386	1950-81
Magnolia Creek near Freeport, FL	02366900	11.2	1968-83
Alaqua Creek near DeFuniak Springs, FL	02367000	65.6	1951-78
Alaqua Creek near Portland, FL	02367006	83.7	1977-94
Rocky Creek near Portland, FL	02367240	42.4	1980-83
Rocky Creek near Niceville, FL	02367250	67.0	1966-68

Station name	Station number	Drainage area (mi^2)	Period of record
Turkey Creek near Niceville, FL	02367305	22.7	1966-68
Turkey Creek at SR123 near Niceville, FL	02367307	30.1	1980-81
Juniper Creek at State Hwy. 85 near Niceville, FL	02367310	27.6	1966-75, 1978-93
East Bay River near Wynnehaven Beach, FL	02367320	62.0	1966-68
Turkey Creek at Government RR near Niceville, FL	02367355	60.8	1977-81
Turtle Creek near Ft. Walton Beach, FL	02367388	14.3	1977
Turtle Creek near Ocean City, FL	02367390	22.3	1977-81
Baggett Creek near Milligan, FL	02368300	7.80	1965-82
Pond Creek near Dorcas, FL	02368800	94.8	1966-68
Titi Creek near Crestview, FL	02368990	62.9	1966-68
Yellow River near Holt, FL	02369500	1210	1933-41
Big Juniper Creek near Munson, FL	02370200	36.0	1958-67
West Fork Big Coldwater at Cobbtown, FL	02370300	39.5	1958-62
Pine Barren Creek near Barth, FL	02376000	75.3	1952-94
Eightmile Creek near West Pensacola, FL	02376140	11.2	1988-91
Brushy Creek near Walnut Hill, FL	02376300	49.0	1958-91
Jacks Branch near Muscogee, FL	02376700	23.2	1958-62

† Includes drainage area for Otter Creek.

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State, local, and 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. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Florida."

This report series for the 2001 water year for the state of Florida consists of records for continuous or daily discharge for 387 streams, periodic discharge for 14 streams, continuous or daily stage for 147 streams, periodic stage for 2 streams, peak stage and discharge for 8 streams, continuous or daily elevations for 14 lakes, periodic elevations for 47 lakes, continuous ground-water levels for 429 wells, periodic ground-water levels for 1,257 wells, and quality-of-water for 112 surface-water sites and 248 wells.

This volume (Volume 4, Northwest Florida) contains records of continuous or daily discharge for 65 streams, periodic discharge for 1 stream, continuous or daily stage for 18 streams, periodic stage for 2 streams, peak stage and discharge for 0 streams, continuous or daily elevations for 1 lake, periodic elevations for 1 lake, continuous ground-water levels for 2 wells, periodic ground-water levels for 3 wells, and quality-of-water for 3 surface-water sites and 0 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 l975 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, Branch of Information Services, Open-File Reports Section, Box 25286, Federal Center, Denver, CO 80225-00286.

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-01-4." 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 (850) 942-9500.

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 Protection
Florida Department of Transportation
Northwest Florida Water Management District
Suwannee River Water Management District
City of Century
City of Perry
City of Tallahassee
County of Okaloosa
Corps of Engineers, U.S. Army, Mobile District
U. S. Fish and Wildlife Service
County of Santa Rosa
County of Walton

Assistance with funds or services was given by the U.S. Army Corps of Engineer, Mobile District, in collecting records for 5 hydrologic gaging stations throughout northwest Florida.

SUMMARY OF HYDROLOGIC CONDITIONS

Rainfall

Rainfall across northwest Florida varied from about 2 to 16 in. below normal for the 2001 water year. Based on rainfall data at 5 National Oceanic and Atmospheric Administration stations, (Perry, Lake City, Tallahassee, De Funiak Springs, and Pensacola), total rainfall for the 12-month period ranged from 41.61 in. at Perry to 63.12 in. at Tallahassee. The cumulative monthly departures for the water year ranged from -16.54 in. at Perry to -2.59 in. at Tallahassee. The distribution of rainfall differed slightly geographically and seasonally with the Big Bend area around Tallahassee receiving more than average rainfall for the spring (April-June) and summer (July-September) quarters. Heavy rainfall occurred in the Tallahassee area from Tropical Storm Allison in June and Tropical Storm Barry in August. All of the remaining areas were deficient for the entire year, except for the summer quarter (July - September) at Lake City, which received above-normal rainfall. Rainfall during the fall quarter (October-December), one of the dryer periods, ranged from near normal for Pensacola and De Funiak Springs, but 5-6 in. below normal across the Big Bend area. During the winter quarter (January-March), normally a wet period in northwest Florida, rainfall departures from normal ranged from -1.24 in. at Pensacola to -4.78 in. at Lake City. The spring quarter (April-June) departures from normal rainfall ranged from -1.28 in. at De Funiak Springs to +5.01 in. at Tallahassee. Rainfall amounts during the summer quarter (July-September), also normally a wet period, ranged from 3.27 in. below normal at Perry to 2.71 in. above normal at Lake City. The following summary lists the cumulative rainfall and departure from the 30-year normal (1961-90) for each of the stations.

Cumulative rainfall and departure from the 30-year normal (1961-90)

Station	October - December		January - March		April - June		July - September		Water Year	
	Total Rain	Departure	Total Rain	Departure	Total Rain	Departure	Total Rain	Departure	Total Rain	Departure
Perry	2.51	-6.20	9.50	-3.78	10.36	-3.29	19.24	-3.27	41.61	-16.54
Lake City	2.67	-5.58	8.27	-4.78	8.16	-6.08	22.66	2.71	41.76	-13.73
Tallahassee	6.50	-5.32	11.88	-4.66	20.43	5.01	24.31	2.38	63.12	-2.59
De Funiak Springs	13.35	.74	13.23	-3.54	13.38	-1.28	21.57	-1.31	61.53	-5.39
Pensacola	12.16	.12	14.47	-1.24	9.48	-4.89	17.01	-3.12	53.12	-9.13

Surface Water

The drought of the 2000 water year continued into 2001 for most of northwest Florida. Although flows averaged higher in 2001 than in 2000, several gages recorded their lowest annual mean flow or the lowest instantaneous low flow for their periods of record. Flows in the upper Santa Fe River, with about 16 percent of normal were the lowest, and the Sopchoppy and Escambia Rivers, with 107 percent of normal, were the highest. Generally, flows were about 40 to 75 percent of normal over northwest Florida except for the upper Santa Fe River (16 percent of normal), the upper Suwannee River (about 26 percent of normal), the Escambia River (about 105 percent of normal), and the Sopchoppy River (107 percent of normal).The gage at Santa Fe River near Ft. White, 02322500, recorded the lowest annual mean flow, 624 cfs, for its period of record, 1928-2001, and an instantaneous low flow of 464 cfs on Jan. 27, 2001. The gage at St. Marks River near Newport (02326900) recorded the lowest instantaneous flow in its 1964-2001 period of record, 292 cfs on Sept. 30, 2001. The gage at Econfina Creek near Bennet, 02359500, recorded the lowest annual mean flow, 363 cfs, for the period 1936-2001, and an instantaneous low flow of 250 cfs on May 28, 2001. Additionally, several stations in the western panhandle recorded their instantaneous low flows for their periods of record in Oct.-Nov. 2000: Choctawhatchee River near Caryville (02365500), 500 cfs on Oct. 30; Blackwater River near Baker (02370000), 57 cfs on Oct. 29; Escambia River near Century (02375500), 452 cfs on Oct. 31; Escambia River near Molino (02376033), 581 cfs on Nov. 6.

Discharge hydrographs for some representative streams in northwest Florida are shown in figures 2 through 8. The upper graph (A) shows the 2001 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the previous period of record at that site. The lower graph (B) shows the monthly mean discharge for the period 1992-2001.

Ground Water

A hydrograph for the USGS well near Wausau is shown in figure 9. The upper graph (A) shows the 2001 monthly maximum water level compared to the maximum, minimum, and mean monthly maximum water level for the period 1963-2001. The lower graph (B) shows the monthly maximum water level for the period 1998-2001. Water levels declined steadily from October to June, reaching a record low elevation of 47.33 ft. NGVD 1929 on June 10.

Water Quality

Water-quality data were not collected in north Florida during the water year to provide any analysis of conditions that exist in the area.

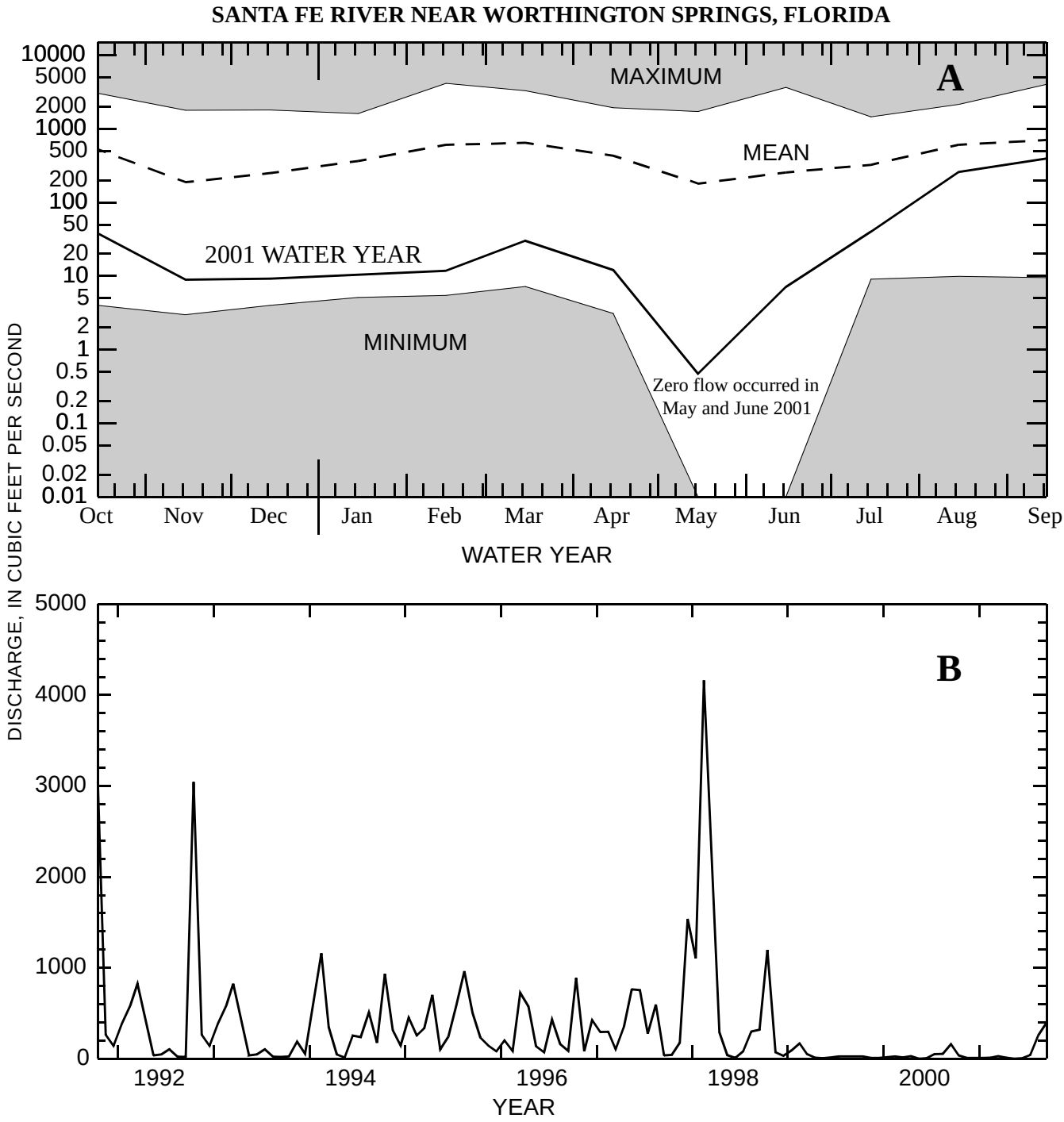


Figure 2. Santa Fe River near Worthington Springs (A) 2001 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1932-2001, and (B) the monthly mean discharge for the period 1992-2001.

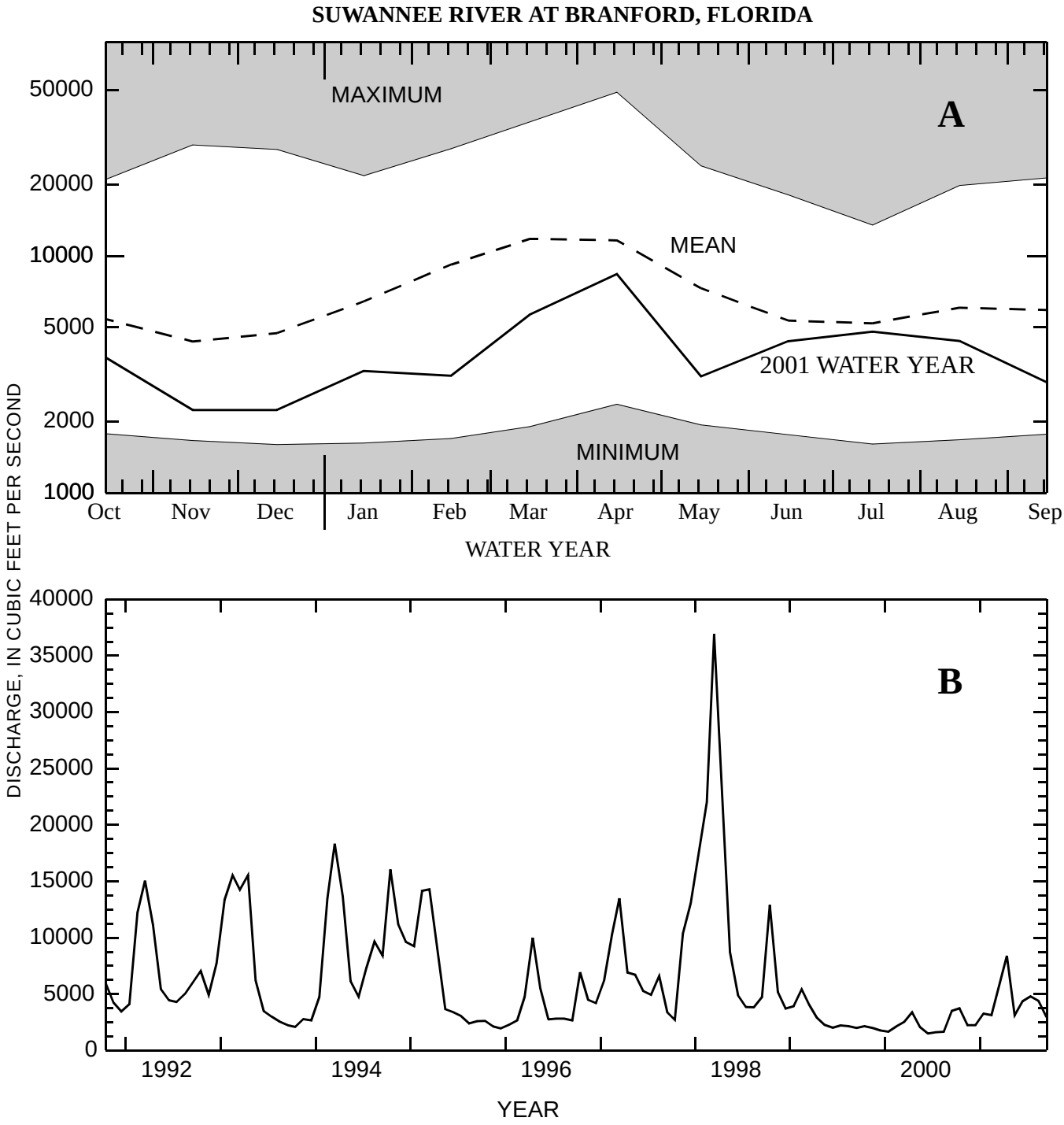


Figure 3. Suwannee River at Branford (A) 2001 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1931-2001, and (B) the monthly mean discharge for the period 1992-2001.

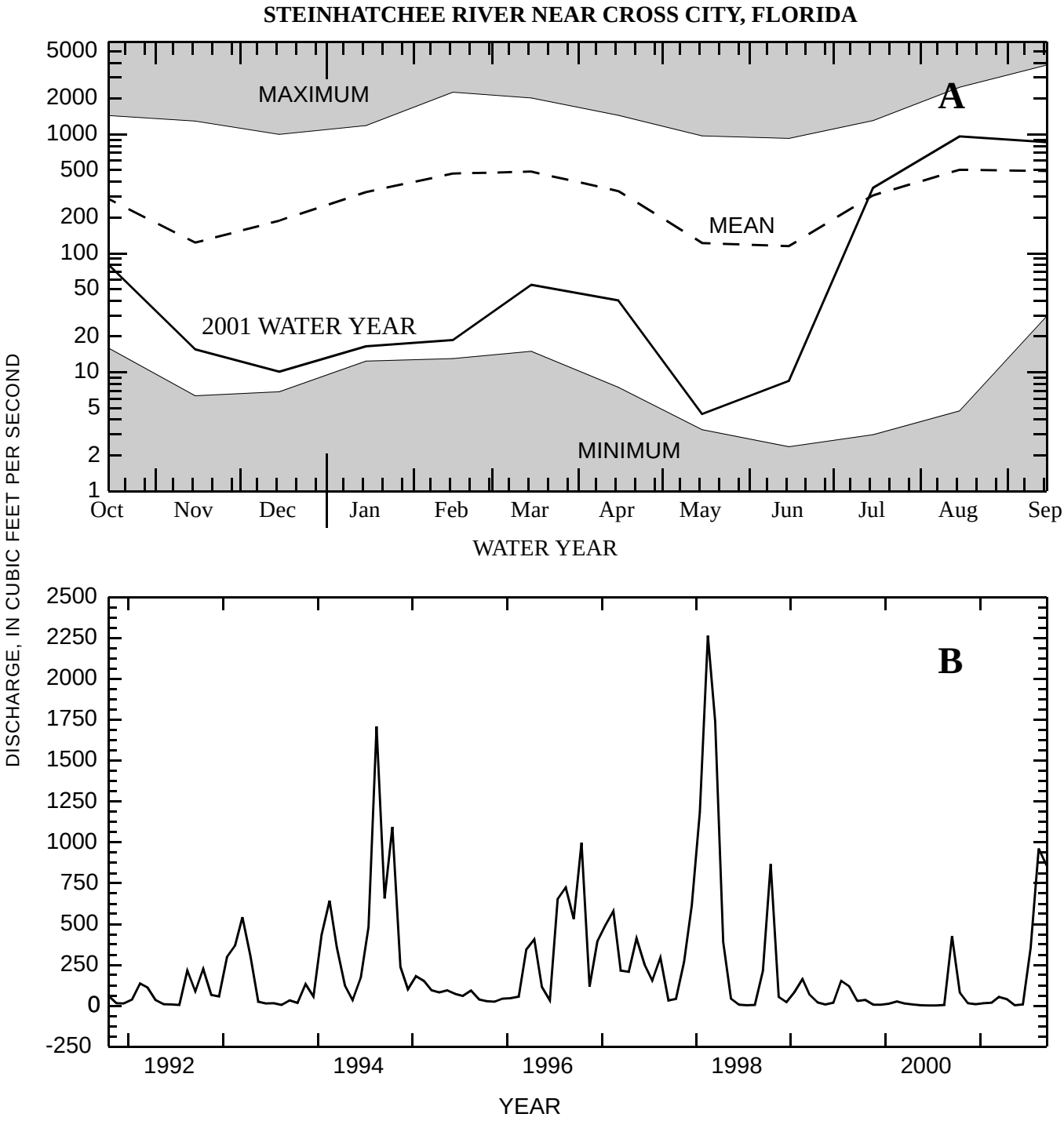


Figure 4. Steinhatchee River near Cross City (A) 2001 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1950-2001, and (B) the monthly mean discharge for the period 1992-2001.

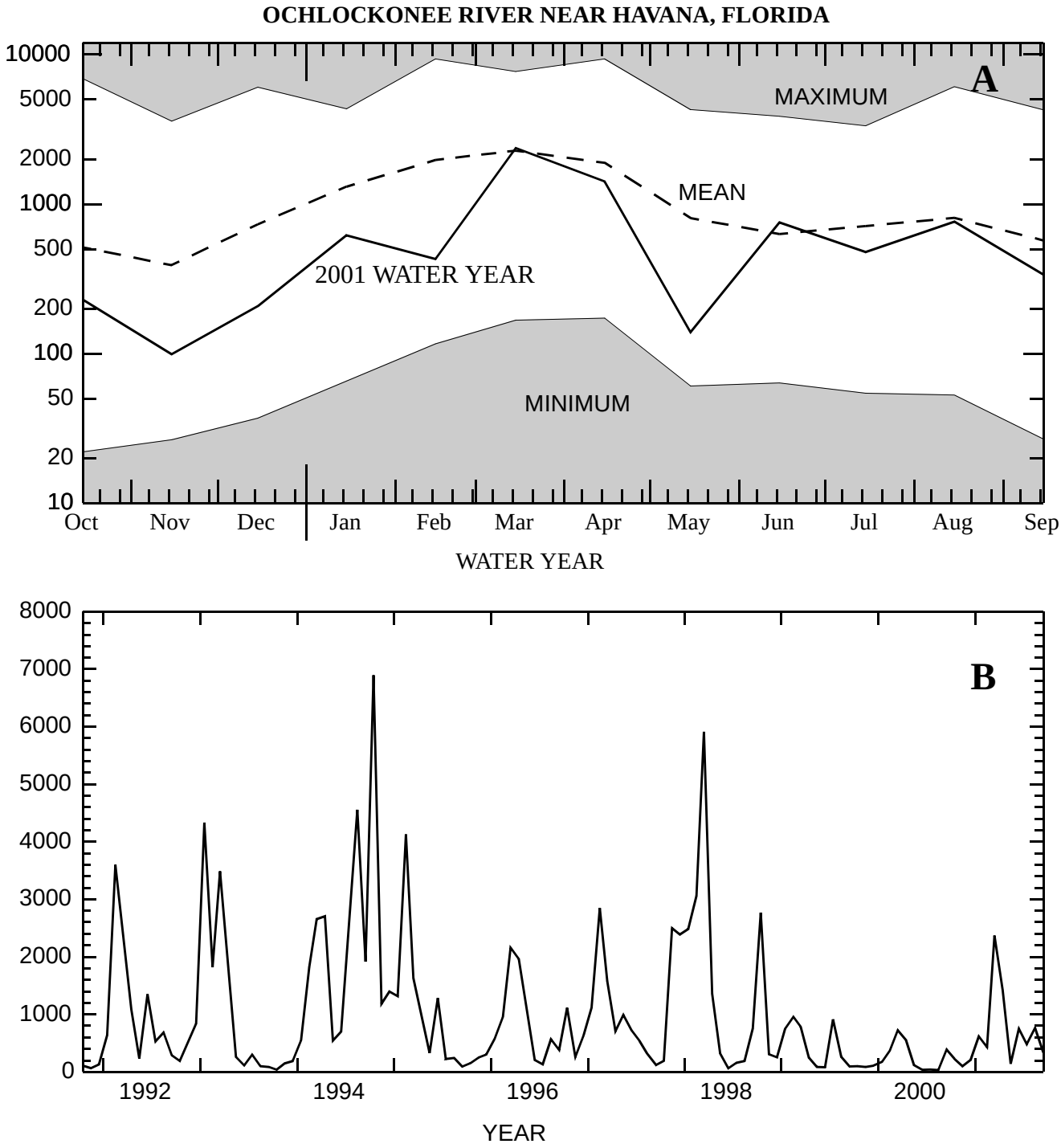


Figure 5. Ochlockonee River near Havana (A) 2001 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1926-2001, and (B) the monthly mean discharge for the period 1992-2001.

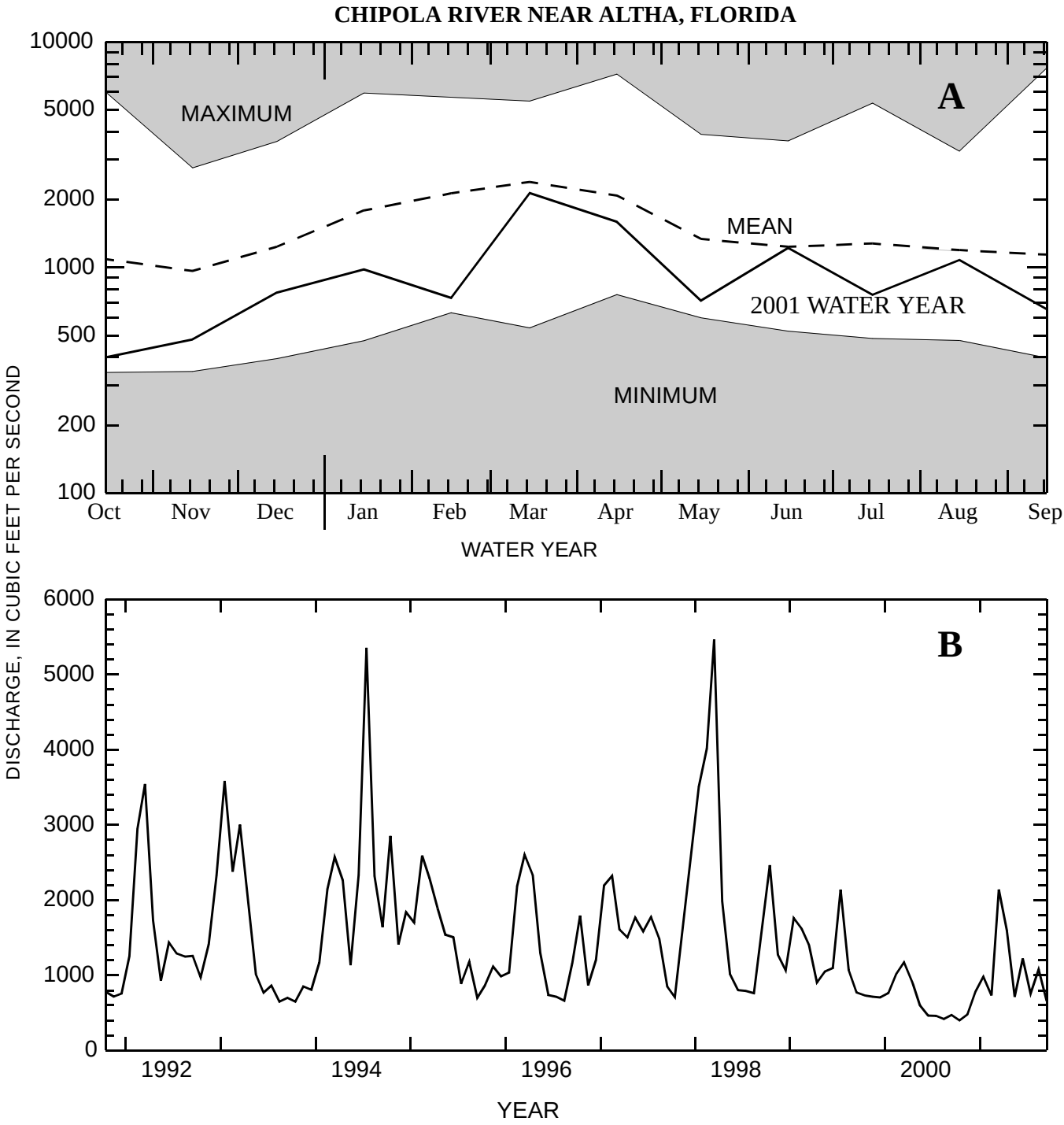


Figure 6. Chipola River near Altha (A) 2001 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1943-2001, and (B) the monthly mean discharge for the period 1992-2001.

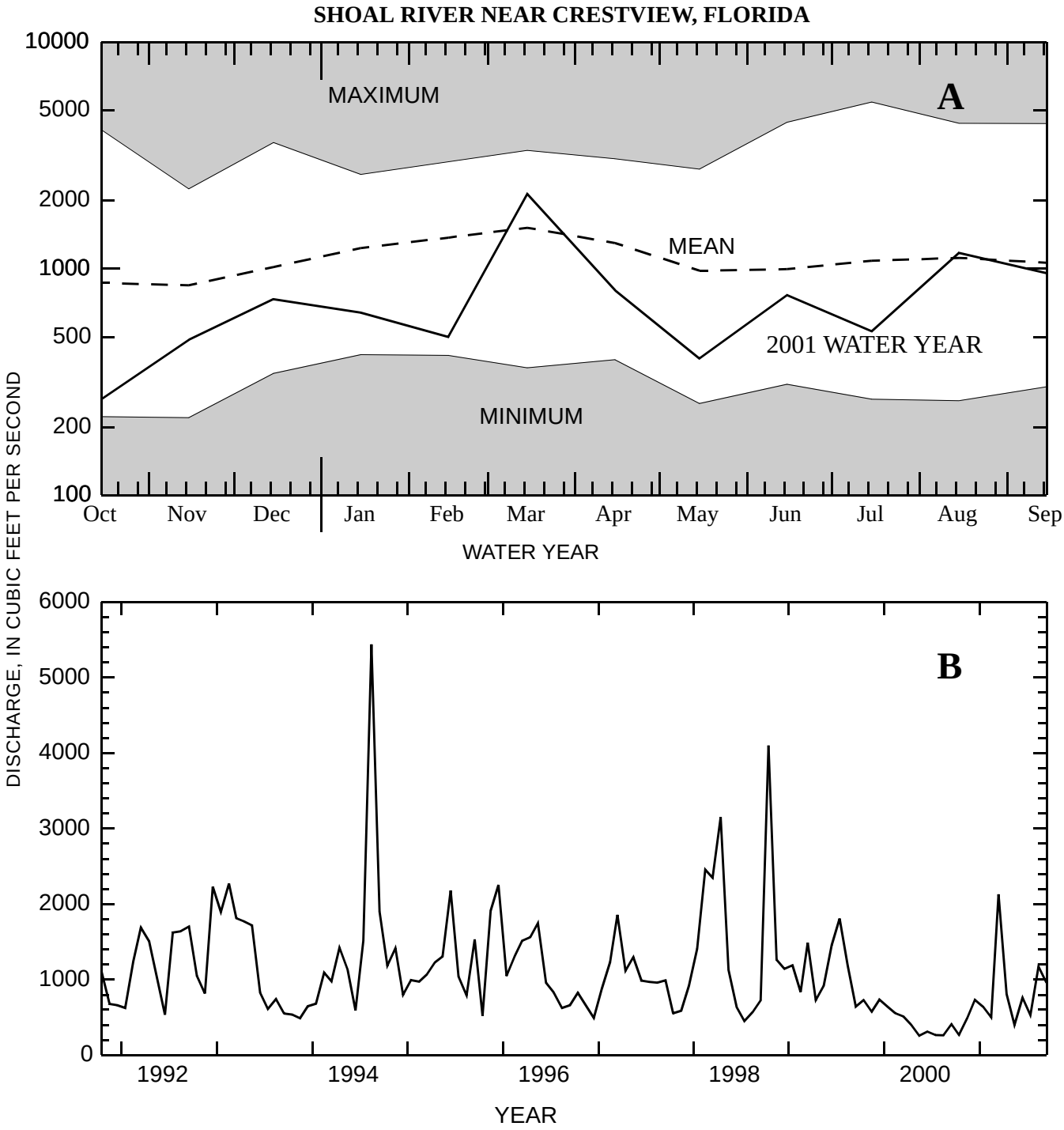


Figure 7. Shoal River near Crestview (A) 2001 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1938-2001, and (B) the monthly mean discharge for the period 1992-2001.

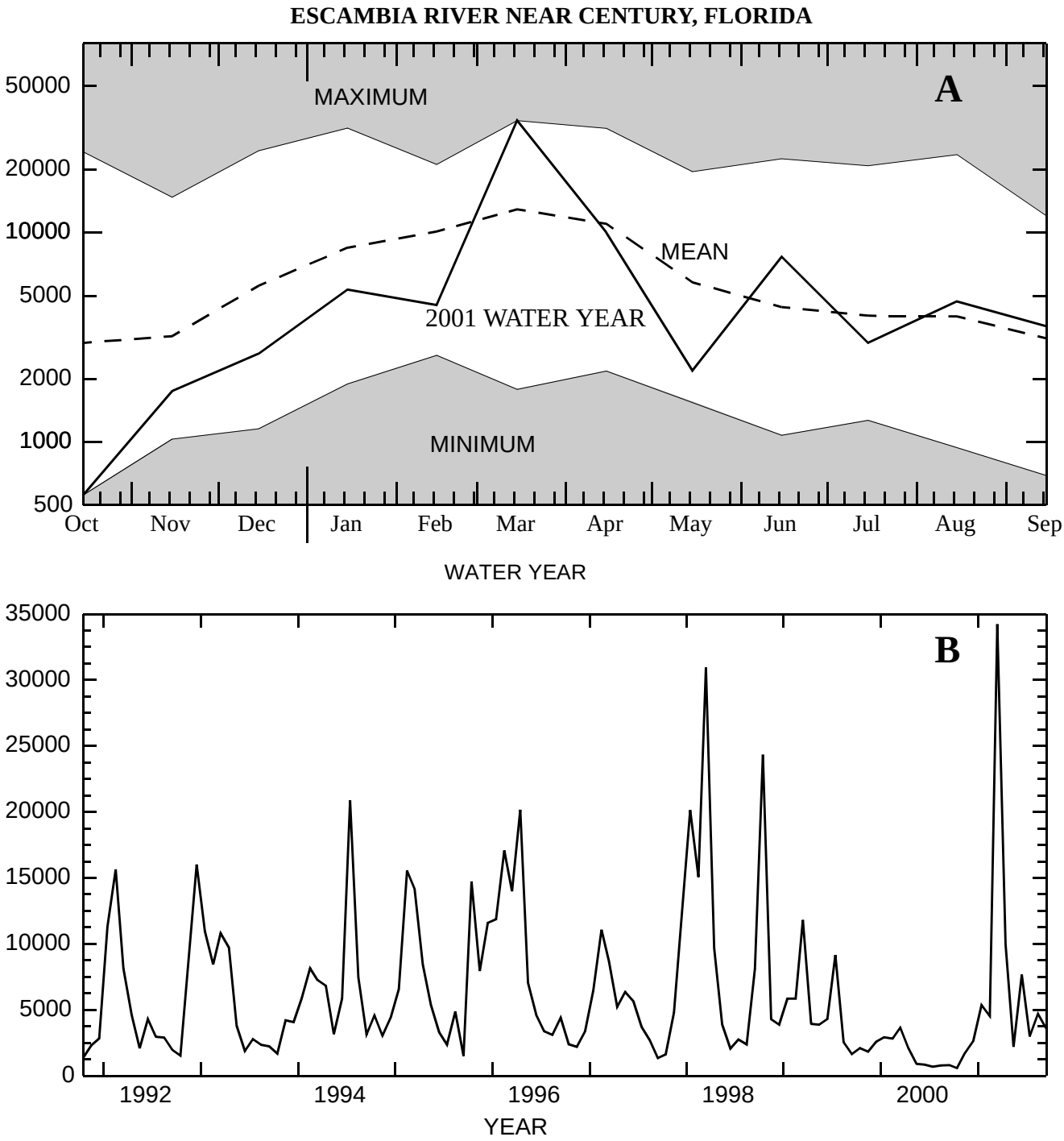


Figure 8. Escambia River near Century (A) 2001 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1934-2001, and (B) the monthly mean discharge for the period 1992-2001.

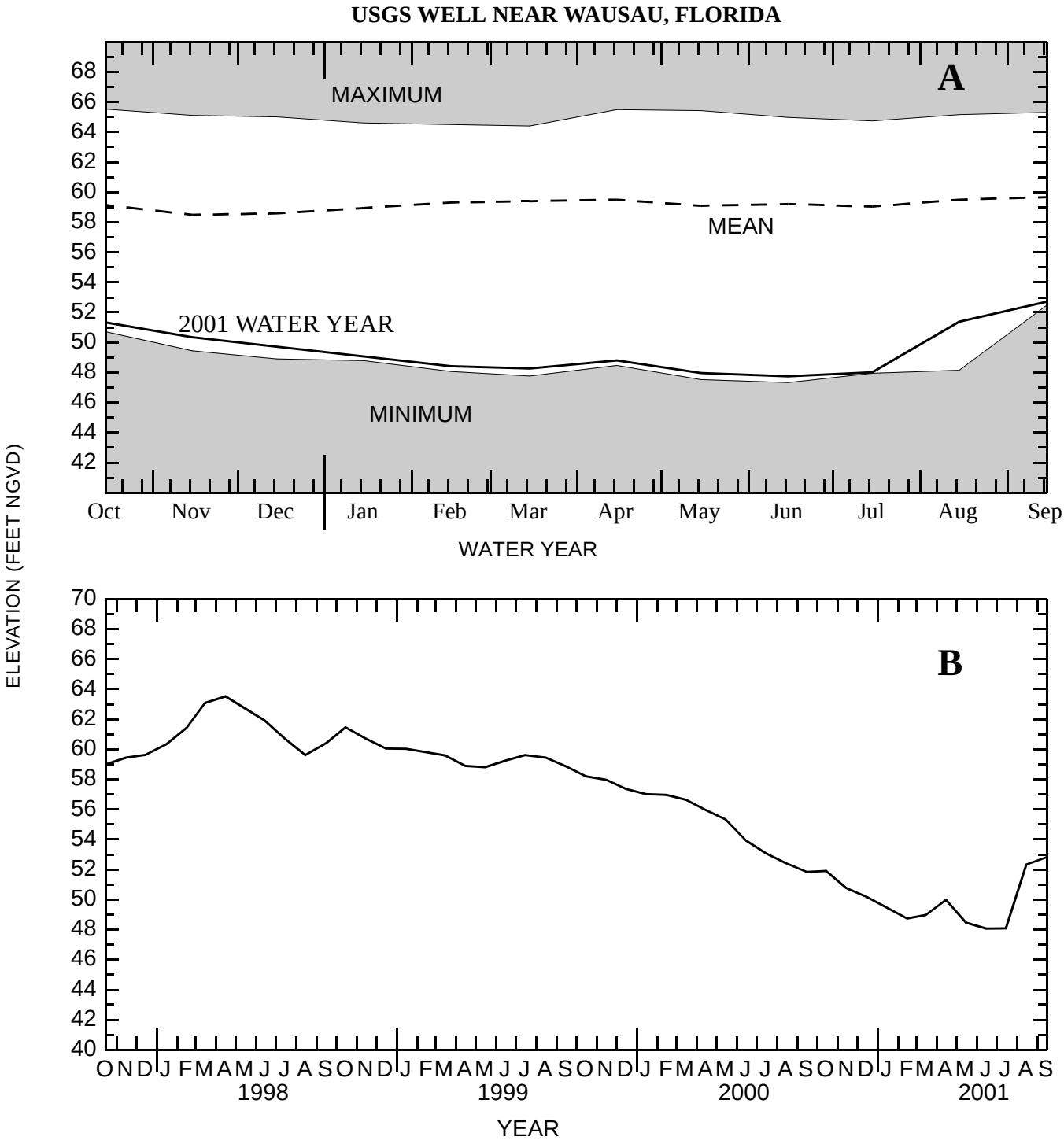


Figure 9. USGS Well near Wausau (A) Monthly maximum water level for the 2001 water year compared to maximum, minimum, and mean monthly maximum water levels for the period 1963-2001 and (B) the monthly maximum water level for the period 1998-2001.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the streamflow representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the affects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at http://water.usgs.gov/hbn/.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program can be found at http://water.usgs.gov/nasqan/.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at http://bqs.usgs.gov/acidrain/.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 59 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program can be found at http://water.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 2001 water year that began October 1, 2000, and ended September 30, 2001. 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 measurements 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 number for each station, such as 02326500, which appears just to the left of the station name, includes the two-digit Part number "02" plus the 6 to 13 digit downstream-order number "326500." The part number refers to an area whose boundaries coincide with natural drainage lines; 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 unique 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 10, page 14.)

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 recording device through which either instantaneous or mean daily discharges may be computed for any period of time. Complete records of lake or reservoirs, similarly, are those for which stage or content may be

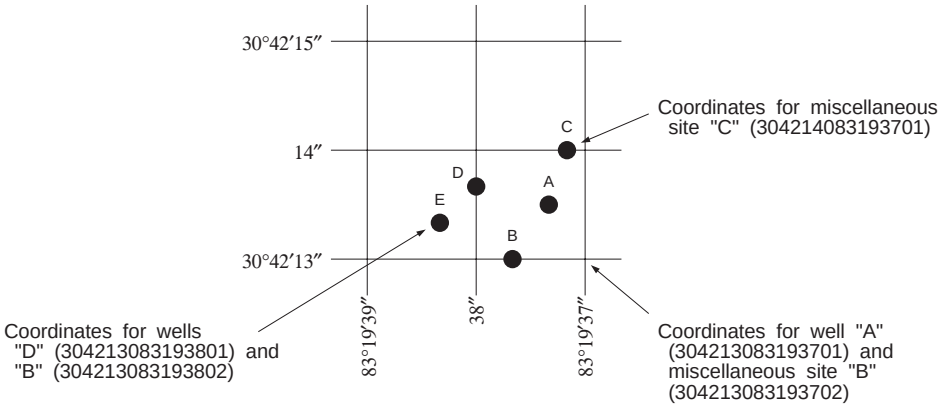


Figure 10. System for numbering wells and miscellaneous sites (latitude and longitude).

computed for any period of time. They may be obtained using a recording device or daily readings. Because daily mean discharges or elevations commonly are published for such stations, they are referred to as “daily stations.”

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

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. Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records. The nature of the partial record is indicated by table titles such as “Crest-stage partial records,” or “Low-flow partial records.”

Data Collection and Computation

The base data collected at gaging stations consist of records of gage heights and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of gage height are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives the fluctuations on a paper tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. 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.

For stream-gaging stations, rating tables giving the discharge for any gage height are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge; such as slope-area, contracted opening measurements, computations of flow over dams or weirs, step backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation was subjected to change because of occasional or continual change in the physical features of the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by the technician are used in applying the gage-height corrections to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by the same method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from streams, tides, 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

determining 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 a rapid change in stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some stations there is no relation between stage and discharge because of the flat stream gradients and/or tidal fluctuations. Discharge is determined from ratings which are based on a relation between recorded velocity index unit at a fixed point and mean velocity at a fixed measuring section, and a relation between recorded stage and cross-sectional area at the measuring site.

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. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations. Records are published for the water year, which begins on October l and ends on September 30.

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; 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 maps available. The location of the gaging station 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. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which records have been published 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 flow at it can reasonably be considered equivalent to flow at 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, page 25), 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 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 paragraph 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, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; 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.

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.

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 District Office (address 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 for a discontinued station 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.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for each 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 or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS _____-_____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS ____-____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-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.

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 the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all the runoff for a given period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that is exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded 90 percent of the time for the designated period.

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.

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 (ft^3/s) 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.

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 Tallahassee 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 limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less 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.

Arrangement of Records

Water-quality records collected at a surface-water daily record 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 represents the quality of the water in its natural state. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the natural water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on “Techniques of Water-Resources Investigations,” Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey.

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 Definition of Terms, page 24) 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.

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.

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

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 complete-record station. Comments that follow clarify information presented under the various headings of the station description.

Manuscript

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 water-quality monitor, sediment pumping

sampler, or other sampling device 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. Potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure 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 show
<	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)
V	Analyte was detected in both the environmental sample and the associated blanks.
&	Biological organism estimated as dominant

Dissolved Trace-Element Concentrations

NOTE: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (µg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the µg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

NOTE: Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Quality-Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample

data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

BLANK SAMPLES—Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank samples for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this District are:

Source solution blank - a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank - a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Field blank - a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank - a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office.)

Sampler blank - a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Pump blank - a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank - a blank solution that is poured from the containment vessel (stand-pipe) before the pump is inserted to obtain the pump blank.

Filter blank - a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank - a blank solution that is treated with the sampler preservatives used for an environmental sample.

Canister blank - a blank solution that is taken directly from a stainless steel canister just before the VOC sampler is submerged to obtain a field blank sample.

REFERENCE SAMPLES-Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

REPLICATE SAMPLES-Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent sample - a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

Sequential sample - a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample - a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

SPIKE SAMPLES-Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Concurrent sample - a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample - a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Records of Ground-Water Levels

Ground-water level data from a statewide network of 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 or below 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 three 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 of the well description.

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; and 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 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 son 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. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

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 published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows 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 only 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. 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

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. All samples were obtained by trained personnel. 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 casing.

Data Presentation

The records of ground-water quality are published with the ground-water-level records for 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 USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

http://www.water.usgs.gov

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various electronic formats. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (see address on the back of the title page).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

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. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also "Biomass")

Bacteria are microscopic unicellular organisims, 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.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peaks per year will be published.

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 ft) that are retained in the bedload sampler. A sample collected with a pressure-differential bed-

load sampler may also contain a component of the suspended load.

Bedload discharge (tons per day) is rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload" and "Sediment")

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

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 microorganisms, such as bacteria.

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

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Cells/volume refers to the number of cells of any organism that 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 volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements on cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } 4/3\ \pi r^3 \quad \text{cone } 1/3\ \pi r^3 h \quad \text{cylinder } \pi r^3 h.$$

pi is the ratio of the circumference to the diameter of a circle; pi = 3.14159…
From cell volume, total algal biomass expressed as biovolume (μm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

Cfs-day (See "Cubic foot per second-day")

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 BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens *(C. perfringens)* is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

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.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

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

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-feet" sometimes is used synonymously with "cubic feet per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) 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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily-mean discharges reported in the daily-value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Mean concentration of suspended sediment," "Sediment," and "Suspended-sediment concentration")

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data Collection Platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents such as suspended sediment, bedload, and dissolved or suspended chemical constituents, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It 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, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon Index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i \approx 1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, 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. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium,* and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive, the index usually decreases with pollution.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Euglenoids (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediments.

Fecal coliform bacteria 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. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestine of warm-blooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that 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. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly larger than

the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any National geodetic datum. However, if the elevation of the gage datum relative to the National datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

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 (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. *See NOAA web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution which uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = sum\frac{(n)(a)}{N}$$

where *n* is the number of individuals of each taxon, a is the tolerance value of each taxon, and *N* is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic index stations referred to in this report are four continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Laboratory Reporting Level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.)

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

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light attenuation coefficient is defined as

$$\lambda = -\frac{1}{L}\log_e\frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-Term Method Detection Level (LT–MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT–MDL data are collected on a continuous basis to assess year-to-year variations in the LT–MDL. The LT–MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT–MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

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

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

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

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, µg/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 kilogram (UG/KG, µg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synony-

mous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent 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.

Minimum Reporting Level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations**,** it does not necessarily represent local mean sea level at any particular place. *See NOAA web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian**,** Mexican, and U.S. first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

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. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

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.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter Code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, Sedigraph) determine fall diameter of particles in

either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as 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	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation/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.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** 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, weight, mass, or volume.

Percent shading is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

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

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed “acidic,” and solutions with a pH greater than 7 are termed “basic.” Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They are usually microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae. (See also “Plankton”)

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL of sample).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/

time)] for phytoplankton. Carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/time)] for phytoplankton. Oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Recoverable from bed (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. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the $7Q_{10}$ occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council, and typically used to denote location along a river.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin in a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside back cover) for identification of the datum used in this report.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment 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 and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Seven-day 10-year low flow (7Q10) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of

the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also "Recurrence interval" and "Annual 7-day minimum")

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. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 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.

Stable isotope ratio (per MIL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

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

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.

Substrate is the physical surface upon which an organism lives.

Substrate Embeddedness Class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

0	< no gravel or larger substrate		
1	> 75%		
2	51-75%	4	5-25%
3	26-50%	5	< 5%

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which 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 operationally defined as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer 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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

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). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/day) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross 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. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment

load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. 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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa richness is the total number of distinct species or groups and usually decreases with pollution. (See also "Percent Shading")

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

Kingdom:	Animal
Phylum:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	*Hexagenia*
Species:	*Hexagenia limbata*

Temperature preferences:

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder' is used in the table descriptions 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 resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (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, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) 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 at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that 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. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. 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 judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume.")

Total recoverable is the amount of a given constituent in a whole-water sample after a 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Sediment," "Suspended sediment," "Suspended-Sediment Concentration," "Bedload," and "Bedload discharge")

Total sediment load or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-Sediment Load," and "Total load")

Trophic group:

Filter feeder – diet composed of suspended plant and/or animal material.

Herbivore – diet composed predominantly of plant material.

Invertivore – diet composed predominantly of invertebrates.

Omnivore – diet composed of at least 25-percent plant and 25-percent animal material.

Piscivore – diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the "REMARKS" column of the Annual Data Report.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are

toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in USGS 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, 2001, is called the "2001 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.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also "Plankton")

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a 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 mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

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, chap. D1. 1975. 65 p.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

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, chap. D1. 1974. 116 p.

2-D2. *Application of seismic-refraction techniques to hydrologic studies,* by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

2-E1. *Application of borehole geophysics to water-resources investigations,* by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.

2-E2. *Borehole geophysics applied to ground-water investigations,* by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells,* by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3-A1. *General field and office procedures for indirect discharge measurements,* by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.

3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.

3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.

3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3. chap. A5. 1967. 29 p.

3-A6. *General procedure for gaging streams,* by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.

3-A7. *Stage measurement at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.

3-A8. *Discharge measurements at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

3-A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.

3-Al0. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.

3-A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.

3-A12. *Fluorometric procedures for dye tracing,* Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.

3-A13. *Computation of continuous records of streamflow,* by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.

3-A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.

3-A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.

3-A16. *Measurement of discharge using tracers,* by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.

3-A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.

3-A18. *Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.

3-A19. *Levels at streamflow gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.

3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers,* by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.

3-A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

3-B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers,* by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.

3-B4. *Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.

3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.

3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction,* by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.

3-B6. *The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.

3-B8. *System and boundary conceptualization in ground-water flow simulation,* by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

3-C1. *Fluvial sediment concepts,* by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.

3-C2. *Field methods for measurement of fluvial sediment,* by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

4-A1. *Some statistical tools in hydrology,* by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.

4-A2. *Frequency curves,* by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

Section B. Surface Water

4-B1. *Low-flow investigations,* by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.

4-B2. *Storage analyses for water supply,* by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.

4-B3. *Regional analyses of streamflow characteristics,* by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

4-D1. *Computation of rate and volume of stream depletion by wells,* by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.

5-A2. *Determination of minor elements in water by emission spectroscopy,* by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.

5-A3. *Methods for the determination of organic substances in water and fluvial sediments,* edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments,* by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

5-C1. *Laboratory theory and methods for sediment analysis,* by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

6-A1. *A modular three-dimensional finite-difference ground-water flow model,* by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.

6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.

6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.

6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions,* by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.

6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details,* by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 p.

6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A5,1996. 125 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.

7-C3. *A model for simulation of flow in singular and interconnected channels,* by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

8-A1. *Methods of measuring water levels in deep wells,* by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.

8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.

9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements,* edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators,* edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.

9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

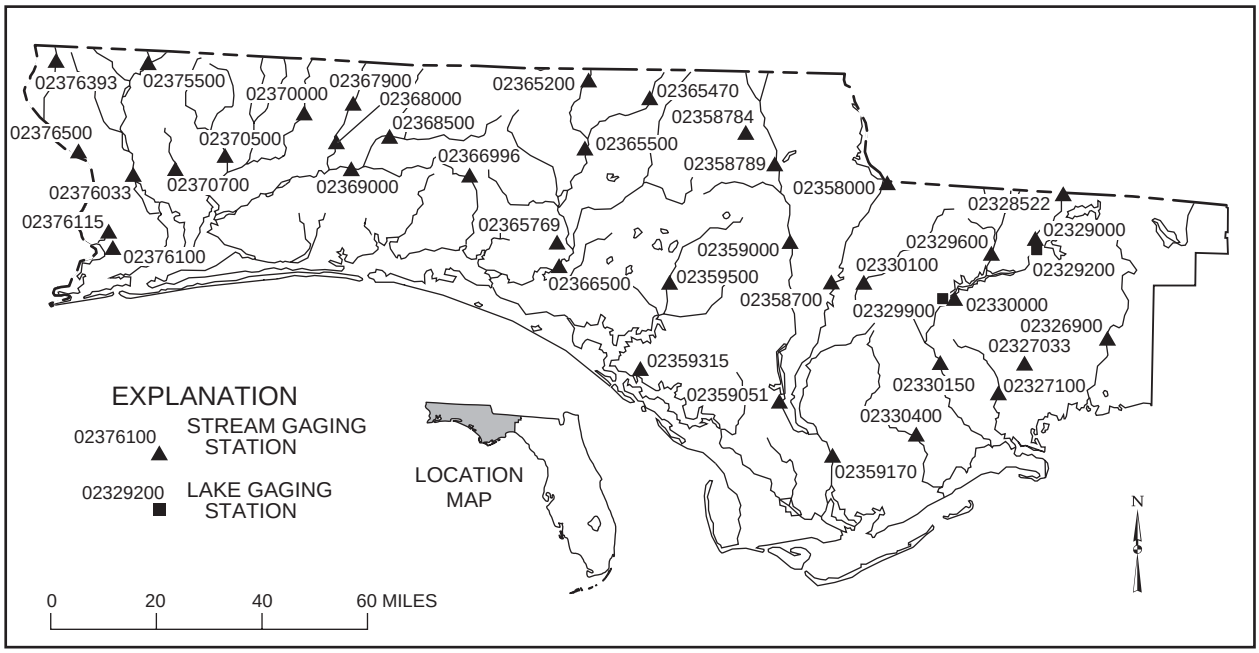


Figure 11. Location of stream gaging and lake gaging stations in Northwest Florida Water Management District.

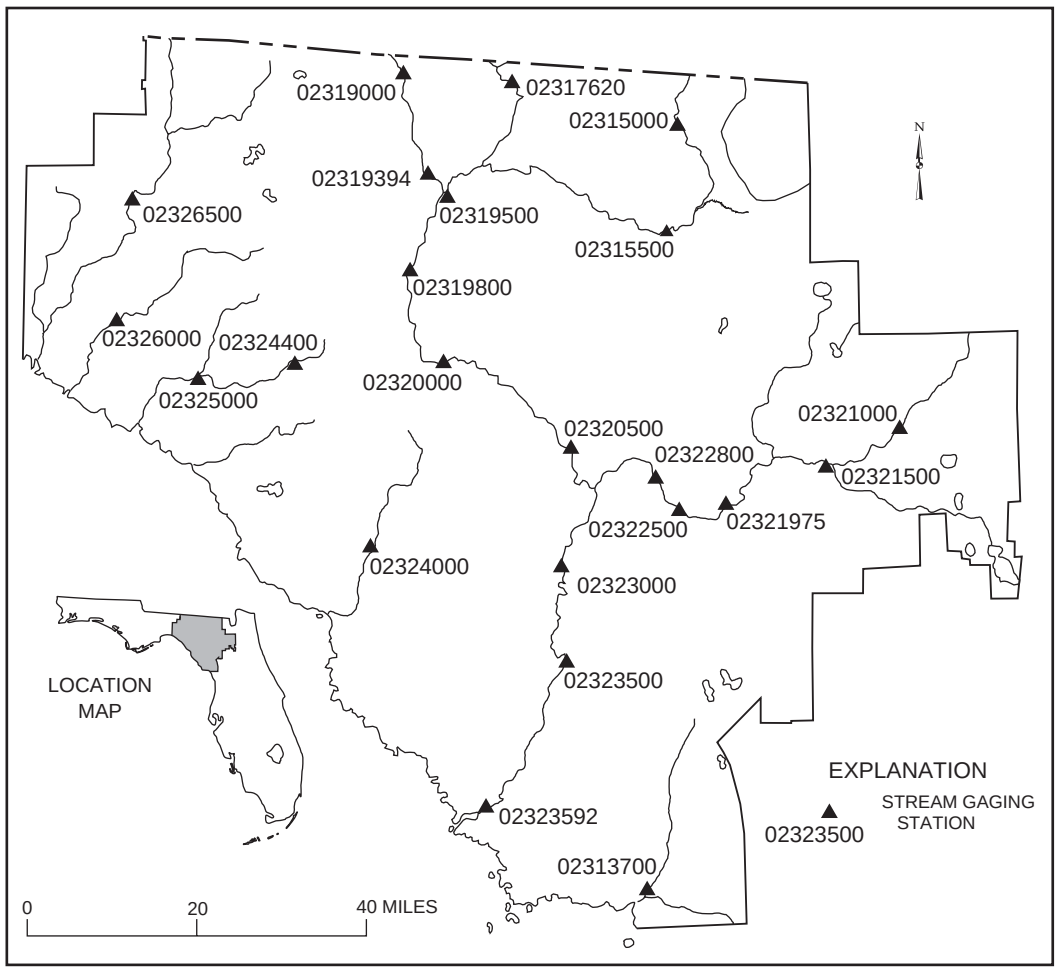


Figure 12. Location of stream gaging stations in Suwannee River Water Management District.

02313700 WACCASASSA RIVER NEAR GULF HAMMOCK, FL

LOCATION.--Lat 29°12'14", long 82°46'09" in SW sec. 2, T. 15 S., R.15 E., Levy County, Hydrologic Unit 03110101, near right bank at abandoned railroad grade, 0.5 mi upstream from Otter Creek, 3.6 mi upstream from mouth, and 4 mi southwest of Gulf Hammock.

DRAINAGE AREA.--480 mi^2, approximately, including that of Otter Creek.

PERIOD OF RECORD.--March 1963 to September 1978, November 1980 to September 1984 (fragmentary), October 1984 to September 1992, October 1998 to current year.

REVISED RECORDS.--WSP 2105: 1969. WRD FL-72-1: Drainage area.

GAGE.--Water-stage and water-current meter recorders. Datum of gage is 10.51 ft below National Geodetic Vertical Datum of 1929. Prior to Nov. 24, 1980, water-stage and deflection-meter recorders at same site at datum 10.00 ft higher.

REMARKS.--Records poor. Flow affected by tide. Discharge computed from continuous velocity record obtained from water-current meter. Records include flow of Otter Creek. Above bankfull stage, discharge measurements are made along abandoned railroad fill and include all flow from about 1.5 mi northwest to 0.8 mi northeast of gaging station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298	-57	-40	-39	142	55	125	-154	-47	165	669	69
2	247	-53	-68	107	168	3.4	67	-88	37	272	631	59
3	231	-19	153	48	121	-313	-30	9.1	48	194	545	52
4	-85	-64	156	26	-2.1	-7.5	130	-9.2	9.7	155	638	76
5	-100	-98	-22	-266	73	370	57	-39	7.3	145	677	98
6	127	-178	-174	-82	92	78	39	-68	6.8	153	769	118
7	197	-75	-176	-153	91	55	-.52	-57	-1.4	127	620	59
8	261	-169	-204	-93	74	75	-21	-54	18	140	508	73
9	224	-309	-177	81	65	14	-48	-157	3.9	93	448	99
10	139	62	-196	-72	63	128	-49	-188	28	199	351	112
11	52	-25	-252	-78	53	37	-108	-115	-130	176	353	81
12	63	-38	-250	-64	38	-42	-19	-115	-47	162	292	98
13	59	-130	-268	-62	1.4	305	-33	-90	23	225	243	185
14	24	-40	-267	-85	71	206	-4.4	-74	-49	288	219	282
15	-6.8	8.3	-223	-95	27	-73	-86	-81	-75	207	283	223
16	-6.1	-98	-381	-92	-23	212	38	-143	31	198	243	180
17	-13	-128	-39	-112	171	138	39	-123	87	195	201	152
18	-4.6	-12	-52	-189	122	166	34	-38	91	237	140	74
19	-27	-59	-128	-211	-22	156	-33	-23	74	279	71	36
20	18	101	-16	228	110	202	-23	-21	53	183	102	13
21	-36	204	-142	19	91	299	-6.2	-59	38	216	89	12
22	20	10	40	77	58	159	-14	-97	146	255	151	58
23	99	-19	28	69	135	166	-58	-87	344	-1310	150	61
24	25	-224	-41	-37	57	123	-87	-104	e198	1660	136	78
25	-3.7	-135	65	49	82	70	-53	-146	e35	890	143	236
26	-38	40	-101	6.1	74	77	19	-124	-98	970	125	233
27	-13	21	-214	1.2	84	88	-14	-110	148	983	115	207
28	-29	17	-306	-12	56	55	-74	-123	121	869	220	169
29	-17	-9.7	72	-37	---	-285	-39	-106	78	803	152	245
30	-1.0	32	6.6	-85	---	272	-59	-70	149	844	118	110
31	-2.3	---	38	53	---	175	---	-90	---	783	55	---
MEAN	54.9	-48.1	-103	-35.5	74.0	95.6	-10.4	-88.5	44.2	347	305	118
MAX	298	204	156	228	171	370	130	9.1	344	1660	769	282
MIN	-100	-309	-381	-266	-23	-313	-108	-188	-130	-1310	55	12
IN.	.13	-.11	-.25	-.09	.16	.23	-.02	-.21	.10	.83	.73	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

MEAN	204	132	176	260	371	354	204	110	144	239	486	396
MAX	771	359	485	707	964	909	814	428	709	1169	1724	2355
(WY)	1966	1986	1965	1965	1965	1978	1970	1964	1966	1964	1965	1964
MIN	46.0	-48.1	-103	-35.5	74.0	59.8	-10.4	-88.5	32.7	55.5	-16.8	29.1
(WY)	1985	2001	2001	2001	2001	1985	2001	2001	1967	1977	1989	1991

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1963 - 2001	
ANNUAL MEAN	146		63.1		274	
HIGHEST ANNUAL MEAN					629	1965
LOWEST ANNUAL MEAN					63.1	2001
HIGHEST DAILY MEAN	1700	Sep 19	1660	Jul 24	11400	Sep 12 1964
LOWEST DAILY MEAN	-391	Apr 24	-1310	Jul 23	-2310	Aug 31 1985
ANNUAL SEVEN-DAY MINIMUM	-262	Dec 10	-262	Dec 10	-262	Dec 10 2000
MAXIMUM PEAK FLOW			3590	Jul 24	12200	Sep 12 1964
MAXIMUM PEAK STAGE			15.00	Jul 23	16.96	Sep 12 1964
ANNUAL RUNOFF (INCHES)	4.15		1.79		7.75	
10 PERCENT EXCEEDS	395		243		577	
50 PERCENT EXCEEDS	102		38		153	
90 PERCENT EXCEEDS	-54		-123		27	

e Estimated

0231427398 ALLIGATOR CREEK NEAR FARGO, GA

LOCATION.--Lat 30°48'02", long 82°30'38", Clinch County, Hydrologic Unit 03110201, on upstream side of concrete bridge on Perimeter Road in Superior Forest (private property), and 8.5 mi northeast of Fargo.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1998 to current year, gage height only.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily gage heights. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 5.77 ft, Jan. 17, 2001; minimum gage height, 1.59 ft, June 24, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.77 ft, Jan. 17; minimum gage height, 2.70 ft, Nov. 24.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.65	3.04	2.85	---	---	3.32	4.40	4.09	3.32	4.55	4.64	4.29
2	3.64	3.01	2.84	---	---	3.32	4.41	4.07	3.32	4.57	4.65	4.34
3	3.62	2.99	2.84	---	---	3.32	4.42	4.05	3.28	4.56	4.66	4.42
4	3.60	2.97	2.82	---	---	3.54	4.43	4.02	3.23	4.56	4.61	4.38
5	3.59	2.94	2.81	2.81	---	3.61	4.44	4.00	3.18	4.58	4.60	4.36
6	3.58	2.91	2.81	3.51	---	3.61	4.44	3.98	3.14	4.60	4.64	4.34
7	3.60	2.89	2.81	2.81	---	3.60	4.43	3.96	3.11	4.59	4.68	4.33
8	3.59	2.87	2.79	---	---	3.59	4.42	3.94	3.07	4.63	4.65	4.31
9	3.57	2.84	2.79	---	---	3.58	4.41	3.92	3.12	4.58	4.62	4.29
10	3.56	2.82	2.80	---	---	3.63	4.40	3.90	3.42	4.54	4.59	4.27
11	3.54	2.80	2.79	4.82	---	3.63	4.38	3.87	3.62	4.51	4.57	4.25
12	3.52	2.78	2.79	3.46	---	3.62	4.37	3.85	4.32	4.48	4.54	4.26
13	3.51	2.74	2.78	4.30	---	3.91	4.35	3.83	4.48	4.47	4.51	4.26
14	3.48	2.79	2.77	2.81	---	3.90	4.34	3.81	4.46	4.54	4.52	4.25
15	3.46	2.80	2.76	4.17	---	3.90	4.33	3.78	4.44	4.54	4.56	4.24
16	3.44	2.79	2.75	2.81	---	3.90	4.34	3.75	4.40	4.52	4.55	4.22
17	3.42	2.78	2.75	2.99	---	3.88	4.31	3.72	4.36	4.50	4.53	4.20
18	3.39	2.77	2.73	3.61	---	3.99	4.29	3.69	4.42	4.47	4.51	4.18
19	3.37	2.77	2.81	4.13	---	4.02	4.27	3.65	4.51	4.45	4.51	4.16
20	3.35	2.78	4.26	3.43	---	4.19	4.25	3.62	4.46	4.44	4.49	4.14
21	3.32	2.76	2.81	2.81	3.40	4.21	4.23	3.58	4.43	4.45	4.48	4.12
22	3.29	2.74	---	2.81	3.40	4.19	4.22	3.55	4.42	4.45	4.47	4.11
23	3.27	2.72	---	2.81	3.40	4.17	4.20	3.50	4.41	4.46	4.45	4.14
24	3.24	2.72	2.81	2.81	3.39	4.18	4.18	3.46	4.40	4.49	4.43	4.14
25	3.22	2.83	2.81	2.81	3.38	4.23	4.18	3.42	4.39	4.48	4.41	4.18
26	3.20	2.87	2.81	2.81	3.37	4.28	4.18	3.39	4.39	4.52	4.39	4.17
27	3.17	2.88	4.47	3.22	3.35	4.31	4.17	3.34	4.40	4.51	4.37	4.16
28	3.15	2.87	2.81	2.81	3.33	4.32	4.14	3.31	4.42	4.50	4.35	4.14
29	3.11	2.87	4.21	2.81	---	4.35	4.12	3.32	4.45	4.48	4.33	4.12
30	3.09	2.86	---	---	---	4.38	4.10	3.37	4.49	4.54	4.31	4.10
31	3.06	---	---	---	---	4.39	---	3.34	---	4.65	4.29	---
MEAN	3.41	2.84	---	---	---	3.91	4.30	3.71	4.00	4.52	4.51	4.23
MAX	3.65	3.04	---	---	---	4.39	4.44	4.09	4.51	4.65	4.68	4.42
MIN	3.06	2.72	---	---	---	3.32	4.10	3.31	3.07	4.44	4.29	4.10

0231427399 BAY CREEK NEAR FARGO, GA

LOCATION.--Lat 30°47'37", long 82°26'27", Clinch County, Hydrologic Unit 03110201, on right bank, 0.5 mi northeast of Perimeter Road in Superior Forest (private property), and about 10.5 mi northeast of Fargo.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1998 to current year, gage height only.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily gage heights. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 4.60 ft, Feb. 8, 1999; minimum gage height, .04 ft, Jan. 29-30, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 3.86 ft, Mar. 29; minimum gage height, .04 ft, Jan. 29-30.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.32	.43	.43	---	.10	---	3.72	.43	.46	1.77	2.68	.50
2	1.20	.43	.43	---	---	---	3.62	.43	.46	2.30	2.96	.50
3	1.09	.43	.43	---	.08	---	3.51	.43	.46	2.68	3.13	.50
4	.97	.43	.43	---	---	.44	3.35	.43	.46	2.69	3.09	.50
5	.87	.43	.43	.66	.36	.59	3.25	.43	.46	2.61	3.13	.50
6	.80	.43	.44	.71	.42	.73	3.30	.43	.49	2.65	3.62	.50
7	.83	.43	.44	.69	.43	.71	3.13	.43	.46	2.56	3.50	.52
8	.76	.43	.43	.65	.47	.71	2.92	.43	.46	2.39	3.21	.76
9	.53	.43	.50	---	.32	.70	2.67	.43	.57	2.19	2.88	.91
10	.45	.43	.46	---	.34	.73	2.47	.43	.68	1.95	2.55	1.00
11	.45	.43	.42	.41	.27	.71	2.30	.44	.75	1.69	2.23	1.04
12	.45	.43	.42	---	.22	.70	2.05	.44	2.15	1.46	1.94	1.10
13	.45	.43	.41	.36	.33	1.38	1.90	.44	2.15	1.33	1.67	1.07
14	.45	.44	.41	.46	.43	1.11	1.78	.44	1.61	1.40	1.43	.97
15	.45	.43	.40	.47	.48	1.14	1.64	.44	1.41	1.51	1.35	.88
16	.45	.43	.42	.60	.53	1.25	1.78	.44	1.24	1.86	1.26	.76
17	.44	.43	.51	.57	.51	1.32	1.89	.44	1.12	2.05	1.13	.61
18	.43	.43	.39	.46	.43	1.70	1.11	.44	1.36	1.96	.98	.52
19	.43	.43	---	.53	.33	2.14	.75	.44	1.70	1.71	1.04	.51
20	.43	.43	---	.41	.35	2.84	.71	.44	1.46	1.40	.95	.51
21	.43	.43	.38	---	.39	3.25	.69	.45	1.36	1.25	.81	.51
22	.43	.43	.38	---	---	3.42	.68	.45	1.45	1.08	.66	.51
23	.43	.43	.37	.38	---	3.56	.66	.45	1.60	.94	.58	.51
24	.43	.47	.37	.26	---	3.66	.63	.45	1.63	1.06	.50	.51
25	.43	.51	.37	---	---	3.72	.66	.45	1.52	.91	.50	.51
26	.43	.43	.36	.25	---	3.79	.68	.45	1.34	1.03	.50	.51
27	.43	.43	.36	.33	---	3.78	.63	.45	1.18	1.38	.50	.51
28	.43	.43	.50	.44	---	3.78	.49	.45	1.04	1.48	.50	.51
29	.43	.43	.35	.33	---	3.84	.42	.46	.94	1.64	.50	.51
30	.43	.43	---	.28	---	3.83	.43	.45	.97	1.87	.50	.51
31	.43	---	---	.09	---	3.79	---	.47	---	2.33	.50	---
MEAN	.58	.43	---	---	---	---	1.79	.44	1.10	1.78	1.64	.64
MAX	1.32	.51	---	---	---	---	3.72	.47	2.15	2.69	3.62	1.10
MIN	.43	.43	---	---	---	---	.42	.43	.46	.91	.50	.50

02314274 SUWANNEE RIVER AT SILL NEAR FARGO, GA

LOCATION.--Lat 30°48'14", long 82°25'03", in Okefenokee National Wildlife Refuge and Wilderness Area, Charlton County, Hydrologic Unit 03110201, at southern control structure on Okefenokee Swamp Sill, and 12 mi northeast of Fargo.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to current year.

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	22	19	22	22	23	216	46	5.0	242	338	53
2	167	21	19	22	22	23	217	43	4.8	294	376	53
3	154	21	20	22	21	23	216	39	4.5	333	395	63
4	143	20	21	22	21	22	218	36	4.3	328	383	69
5	134	19	22	22	21	22	227	33	4.0	318	394	71
6	126	19	23	22	21	22	237	30	3.9	326	464	98
7	124	18	23	22	21	22	229	28	3.6	311	431	110
8	118	17	23	22	21	22	215	26	3.4	290	386	125
9	110	17	23	22	22	22	202	24	4.1	264	342	134
10	103	16	23	22	22	22	194	22	5.4	234	300	139
11	97	16	23	22	22	22	186	21	6.0	207	264	143
12	91	15	23	22	22	22	170	19	164	183	230	150
13	87	15	23	22	22	20	164	18	188	171	201	147
14	83	15	23	22	22	20	161	17	136	180	177	138
15	78	15	23	22	22	20	158	16	115	198	170	130
16	74	14	23	22	22	23	228	15	102	240	161	123
17	71	14	23	22	22	26	238	14	93	256	149	115
18	66	14	23	22	22	41	156	13	111	240	135	108
19	60	14	23	22	22	56	132	12	156	210	144	101
20	52	15	23	21	22	92	116	11	146	175	134	95
21	43	15	23	22	22	120	104	9.9	152	163	125	88
22	39	15	23	22	22	134	94	9.1	174	147	116	85
23	36	15	23	22	22	147	86	8.3	194	137	108	85
24	33	15	23	22	22	156	78	7.5	197	147	100	85
25	30	16	23	22	22	163	75	7.0	184	132	92	87
26	29	16	23	22	22	171	73	6.6	166	146	85	86
27	27	17	23	22	22	179	67	6.0	153	174	78	83
28	26	17	23	22	23	190	60	5.6	142	194	72	81
29	25	18	23	22	---	202	55	5.5	134	214	66	77
30	24	18	22	22	---	209	51	5.2	141	242	61	73
31	23	---	22	22	---	213	---	4.9	---	293	57	---
MEAN	79.1	16.6	22.5	22.0	21.8	79.0	154	18.0	96.6	225	211	99.8
MAX	180	22	23	22	23	213	238	46	197	333	464	150
MIN	23	14	19	21	21	20	51	4.9	3.4	132	57	53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	540	126	68.7	103	208	139	107	31.8	39.1	116	116	87.8
MAX	1462	316	147	244	543	278	154	45.4	96.6	225	211	117
(WY)	1999	1999	1999	1999	1999	1999	2001	2000	2001	2001	2001	2000
MIN	78.8	16.6	22.5	22.0	21.8	59.7	69.1	18.0	9.18	54.0	62.9	46.5
(WY)	2000	2001	2001	2001	2001	2000	2000	2001	1999	2000	1999	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	54.7		87.6		140	
HIGHEST ANNUAL MEAN					275	1999
LOWEST ANNUAL MEAN					58.4	2000
HIGHEST DAILY MEAN	212	Sep 26	464	Aug 6	1840	Oct 12 1998
LOWEST DAILY MEAN	3.0	Jun 15	3.4	Jun 8	3.0	Jun 15 2000
ANNUAL SEVEN-DAY MINIMUM	3.7	Jun 10	4.0	Jun 3	3.7	Jun 10 2000
MAXIMUM PEAK FLOW			469	Aug 6	1840	Oct 12 1998
MAXIMUM PEAK STAGE			109.97	Mar 28		
INSTANTANEOUS LOW FLOW			3.3	Jun 8	2.8	Jun 14 2000
10 PERCENT EXCEEDS	95		215		289	
50 PERCENT EXCEEDS	52		33		62	
90 PERCENT EXCEEDS	15		15		15	

02314274 SUWANNEE RIVER AT SILL NEAR FARGO, GA--Continued

PERIOD OF RECORD.--February 1999 to current year.

REMARKS.--Water Quality sample collected on Mar. 28, 2001 at 11:30AM was taken after control gates opened.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	GAGE HEIGHT (FEET) (00065)	COLOR (PLATINUM-COBALT UNITS) (00080)	SPECIFIC CONDUCTANCE (US/CM) (00095)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
FEB													
01...	1212	12.7	765	111.43	200	93	9.0	3.7	3.9	9	.05	E.01	1.2
MAR													
28...	1045	14.8	766	109.89	280	82	7.8	3.9	3.9	4	.01	<.01	1.1
28...	1130	14.7	766	109.91	280	84	5.9	3.8	3.9	13	<.01	<.01	1.2
MAY													
02...	1230	23.5	766	105.94	280	89	8.8	3.8	3.8	17	.04	<.01	1.5
AUG													
23...	1300	28.5	765	107.15	320	96	--	3.6	3.8	13	.05	<.01	1.7

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	ARSENIC DISSOLVED (UG/L AS AS) (01000)
FEB													
01...	<.02	<.020	43	--	.66	.500	3.9	<.10	6.7	.4	<.1	10.0	<1.0
MAR													
28...	<.02	<.020	43	.6	.71	.500	2.4	<.10	6.2	.5	<.1	7.9	<1.0
28...	<.02	<.020	44	>5.0	.77	.500	2.3	<.10	6.3	.5	<.1	8.1	<1.0
MAY													
02...	<.02	<.020	52	2.9	.73	.500	4.1	<.10	6.9	.2	<.1	9.6	<1.0
AUG													
23...	<.02	<.020	56	.7	.81	.640	4.6	<.10	6.8	<.2	<.1	8.8	<1.0

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, DISSOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
FEB													
01...	<1	<1.00	<1.00	<1.00	<1.00	1	<1.0	<1.0	290	1.00	1	<1.00	<1
MAR													
28...	<1	<1.00	<1.00	<1.00	<1.00	<1	<1.0	<1.0	270	<1.00	<1	<1.00	<1
28...	<1	<1.00	<1.00	<1.00	<1.00	<1	1.2	<1.0	290	<1.00	<1	<1.00	<1
MAY													
02...	<1	<1.00	<1.00	<1.00	<1.00	<1	<1.0	<1.0	480	<1.00	<1	<1.00	<1
AUG													
23...	3	<1.00	<1.00	<1.00	<1.00	5	<1.0	<1.0	990	<1.00	2	<1.00	<1

DATE	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SELENIUM, TOTAL (UG/L AS SE) (01147)	TANNIN AND LIGNIN (MG/L) (32240)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)
FEB											
01...	5.00	<1.0	15	<1.0	<1.0	8.8	82	E.030	<.10	<.10	82
MAR											
28...	6.00	<1.0	9	<1.0	<1.0	11	97	<.010	<.10	<.10	83
28...	6.00	<1.0	7	<1.0	<1.0	11	102	<.010	<.10	<.10	81
MAY											
02...	7.00	<1.0	6	<1.0	<1.0	12	123	<.010	<.10	<.10	91
AUG											
23...	8.50	<1.0	15	<1.0	<1.0	17	147	<.010	<.10	<.10	94

E Estimated
< Actual value is known to be less than the value shown.
> Actual value is known to be more than the value shown.

023142741 NORTH FORK SUWANNEE RIVER AT SILL NEAR FARGO, GA

LOCATION.--Lat 30°48'58", long 82°24'49", in Okefenokee National Wildlife Refuge and Wilderness Area, Charlton County, Hydrologic Unit 03110201, at northern control structure on Okefenokee Swamp Sill, and 12.5 mi northeast of Fargo.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to current year.

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

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	21	18	43	57	29	362	14	.02	91	146	16
2	33	21	18	45	78	29	353	13	.02	117	167	17
3	31	21	18	46	93	29	345	11	.01	140	177	19
4	29	21	18	47	83	52	337	9.9	.00	134	173	20
5	28	20	18	48	77	69	326	8.7	.01	128	182	21
6	27	20	18	48	73	68	301	7.3	.00	133	215	32
7	27	20	18	47	70	65	276	6.3	.00	123	198	35
8	27	20	18	48	67	61	250	5.5	.00	112	178	40
9	26	20	18	47	63	58	232	4.7	.02	98	159	45
10	26	20	18	46	62	63	213	3.8	.32	85	138	48
11	26	19	18	45	60	63	193	2.8	.55	74	117	49
12	26	19	18	46	57	61	166	1.9	61	66	100	50
13	26	18	18	45	55	150	148	1.9	59	63	84	49
14	26	18	18	44	54	183	133	1.5	43	68	73	45
15	26	18	19	43	52	193	115	1.2	36	86	72	41
16	26	18	19	44	51	202	92	.84	32	115	68	38
17	26	17	19	43	49	206	39	.55	28	122	62	34
18	26	17	19	41	47	236	17	.38	34	111	56	31
19	26	16	19	64	45	263	21	.30	49	93	59	e28
20	25	16	19	77	43	322	28	.21	49	77	54	e26
21	24	16	20	70	42	352	24	.18	56	70	48	e24
22	24	16	20	64	40	367	21	.14	70	60	43	e21
23	24	16	20	59	54	377	18	.10	80	55	38	e23
24	23	16	20	57	58	385	15	.06	81	56	35	e24
25	22	16	19	54	43	389	15	.04	75	49	32	e27
26	21	17	19	52	37	395	14	.03	67	54	28	e26
27	21	17	20	49	34	392	12	.02	61	62	25	e24
28	21	18	22	47	31	386	11	.00	56	69	23	e23
29	21	18	30	44	---	380	9.1	.00	53	78	21	e21
30	21	18	36	44	---	377	13	.01	56	95	19	e19
31	21	---	40	45	---	370	---	.00	---	121	17	---
MEAN	25.5	18.3	20.4	49.7	56.2	212	137	3.11	34.9	90.5	90.5	30.5
MAX	36	21	40	77	93	395	362	14	81	140	215	50
MIN	21	16	18	41	31	29	9.1	.00	.00	49	17	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	109	31.7	21.7	36.2	59.1	95.5	62.9	11.6	15.5	47.5	48.9	28.7
MAX	274	52.3	22.8	49.7	99.4	212	137	17.6	34.9	90.5	90.5	30.5
(WY)	1999	1999	2000	2001	1999	2001	2001	2000	2001	2001	2001	2001
MIN	25.5	18.3	20.4	22.1	23.0	22.1	24.9	3.11	5.67	25.5	26.9	25.3
(WY)	2001	2001	2001	2000	2000	2000	2000	2001	1999	1999	1999	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	22.2		64.2		47.5	
HIGHEST ANNUAL MEAN					64.2	2001
LOWEST ANNUAL MEAN					23.2	2000
HIGHEST DAILY MEAN	40	Dec 31	395	Mar 26	395	Mar 26 2001
LOWEST DAILY MEAN	.00	Jun 1	.00	May 28	.00	Jun 1 2000
ANNUAL SEVEN-DAY MINIMUM	.07	May 29	.01	Jun 2	.01	Jun 2 2001
MAXIMUM PEAK FLOW			396	Mar 26	396	Mar 26 2001
MAXIMUM PEAK STAGE			111.33	Mar 26	111.33	Mar 26 2001
INSTANTANEOUS LOW FLOW			.00	May 28	.00	May 30 2000
10 PERCENT EXCEEDS	31		166		96	
50 PERCENT EXCEEDS	23		36		26	
90 PERCENT EXCEEDS	16		6.9		10	

e Estimated

023142741 NORTH FORK SUWANNEE RIVER AT SILL NEAR FARGO, GA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	GAGE HEIGHT (FEET) (00065)	COLOR (PLATINUM-COBALT UNITS) (00080)	SPECIFIC CONDUCTANCE (US/CM) (00095)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
FEB													
01...	1057	12.8	765	111.81	160	89	9.1	3.7	3.8	4	.07	E.01	1.1
MAR													
28...	1015	13.0	766	111.26	280	99	5.9	3.8	3.9	3	.04	<.01	1.4
MAY													
02...	1330	22.1	770	107.68	280	98	7.9	3.8	3.8	22	.02	<.01	1.9
AUG													
23...	1145	26.6	765	108.28	400	101	--	3.6	3.8	11	.06	<.01	1.9

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	ARSENIC DISSOLVED (UG/L AS AS) (01000)
FEB													
01...	<.02	<.020	45	.5	.61	.500	4.4	<.10	7.5	.7	<.1	11.0	<1.0
MAR													
28...	<.02	<.020	51	.4	1.10	.800	3.0	.10	7.1	1.6	<.1	7.4	<1.0
MAY													
02...	<.02	<.020	55	1.3	1.00	.800	5.1	.10	8.4	.3	<.1	6.4	<1.0
AUG													
23...	<.02	<.020	65	.4	.83	.690	5.0	<.10	7.7	<.2	<.1	7.2	<1.0

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, DISSOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
FEB													
01...	<1	<1.00	<1.00	<1.00	<1.00	2	3.3	3.0	320	<1.00	1	<1.00	<1
MAR													
28...	<1	<1.00	<1.00	<1.00	<1.00	<1	<1.0	<1.0	300	<1.00	<1	<1.00	<1
MAY													
02...	<1	<1.00	<1.00	<1.00	<1.00	<1	<1.0	<1.0	710	<1.00	<1	<1.00	<1
AUG													
23...	<1	<1.00	<1.00	<1.00	<1.00	1	<1.0	<1.0	1400	<1.00	<1	<1.00	1

DATE	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SELENIUM, TOTAL (UG/L AS SE) (01147)	TANNIN AND LIGNIN (MG/L) (32240)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)
FEB											
01...	6.00	<1.0	8	<1.0	<1.0	8.3	92	E.020	<.10	<.10	91
MAR											
28...	9.20	1.2	5	<1.0	<1.0	8.8	116	<.010	<.10	<.10	94
MAY											
02...	11.0	<1.0	6	<1.0	<1.0	9.8	128	<.010	<.10	<.10	99
AUG											
23...	9.50	<1.0	9	<1.0	<1.0	14	151	<.010	<.10	<.10	101

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

303902082315200 CYPRESS CREEK NEAR EDITH, GA

LOCATION.--Lat 30°39'02", long 82°31'52", Clinch County, Hydrologic Unit 03110201, reference point at downstream side of bridge on State Highway 94, 2.2 mi east of Edith, 3.0 mi south of Fargo, and 3.2 mi upstream from mouth.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--December 1998 to current year, gage height and discharge measurements only.

GAGE.--Nonrecording gage. Elevation of gage is 117.00 ft above National Geodetic Vertical Datum of 1929,from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured discharge, 40.9 ft^3/s, Apr. 4, 2001; maximum observed gage height, 109.07 ft, Mar. 26, 2001; minimum measured discharge, dry, May 24, 2001.

EXTREMES FOR CURRENT YEAR.-- Maximum measured discharge, 40.9 ft^3/s, Apr. 4; maximum observed gage height, 109.07 ft, Mar. 26; minimum measured discharge, dry, May 24.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM STAGE	DISCHARGE IN FT3/S
Oct. 17	1555	107.38	11.3
Dec. 6	1505	107.12	3.45
Apr. 4	1310	107.80	40.9
May 8	1230	106.89	No flow.
May 24	1330	Dry	

02315000 SUWANNEE RIVER NEAR BENTON, FL

LOCATION.--Lat 30°30'26", long 82°42'59", in NE¼ sec. 9, T. 1 N., R. 16 E., Columbia County, Hydrologic Unit 03110201, near left bank on downstream side of bridge on State Highway 6, 3.7 mi northwest of Benton, 6.4 mi south of Florida-Georgia State Line, 13.7 mi east of Jasper, and 196 mi upstream from mouth.

DRAINAGE AREA.--2,090 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--October 1975 to current year. Miscellaneous discharge measurements for some periods July 1934 to September 1975. Records for December 1931 to June 1934, at site 2.0 mi upstream (at Turner Bridge) not equivalent owing to difference in drainage areas.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 1, 1975 to Oct. 14, 1986, nonrecording gage at same site and datum. Dec. 8, 1931 to June 30, 1934, nonrecording gage at site 2.0 mi upstream, datum unknown.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge measured, 27,700 ft^3/s Apr. 6, 1973, gage height, 102.80 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	658	102	53	81	127	102	1280	116	15	1100	e1000	208
2	659	96	52	86	141	96	1270	105	14	1160	e1100	203
3	644	92	52	91	153	92	1240	96	13	1330	e1080	188
4	619	87	50	96	172	109	1200	87	12	1550	e1050	190
5	601	85	49	101	187	126	1160	80	12	1570	e1100	209
6	605	81	48	103	187	142	1120	73	12	1540	e1350	238
7	636	77	47	106	185	148	1090	64	11	1490	e1700	260
8	669	74	46	109	182	146	1050	57	12	1390	e1650	278
9	638	69	48	109	174	141	1000	52	15	1350	e1550	274
10	595	66	53	111	170	142	934	47	21	1320	e1400	276
11	556	62	54	116	165	144	869	43	26	1220	e1250	274
12	514	58	52	122	160	144	809	38	118	1090	e1100	275
13	482	55	52	124	157	179	748	35	737	981	e950	292
14	449	58	51	125	154	388	690	32	1130	e1000	e850	298
15	418	56	53	126	152	498	637	30	1120	e1100	e800	279
16	388	52	54	126	150	517	606	28	1020	e1050	e750	262
17	360	49	60	125	149	538	568	26	891	e950	e700	245
18	334	48	55	125	146	559	562	24	819	e900	e660	225
19	310	48	54	124	141	671	491	23	866	e850	e630	207
20	288	47	51	126	135	825	404	21	1020	e800	e600	189
21	265	47	49	135	131	1040	352	20	1150	e750	e550	173
22	241	47	48	142	126	1140	309	19	1240	e700	e510	167
23	214	46	47	137	124	1160	273	18	1310	e650	e460	168
24	192	45	46	135	119	1180	243	16	1350	e620	414	189
25	175	54	46	133	121	1200	219	16	1370	e600	375	232
26	160	56	45	128	126	1210	195	15	1330	e630	336	247
27	146	56	45	123	116	1220	178	14	1260	e650	303	227
28	133	54	55	121	107	1220	162	14	1190	e680	273	202
29	123	55	62	120	---	1230	144	14	1120	e670	248	183
30	115	55	72	120	---	1250	129	14	1090	e700	223	166
31	108	---	74	121	---	1280	---	14	---	e800	206	---
MEAN	397	62.6	52.4	118	148	608	664	40.4	676	1006	812	227
MAX	669	102	74	142	187	1280	1280	116	1370	1570	1700	298
MIN	108	45	45	81	107	92	129	14	11	600	206	166
IN.	.22	.03	.03	.06	.07	.34	.35	.02	.36	.56	.45	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

MEAN	789	511	1082	1686	3121	3595	2264	722	555	661	968	691
MAX	3877	2824	9472	6679	10200	10750	12760	2979	3194	2966	5545	2738
(WY)	1995	1998	1977	1977	1998	1984	1984	1983	1976	1991	1991	1985
MIN	9.77	8.18	9.76	17.9	128	116	141	40.4	16.2	22.5	14.0	13.3
(WY)	1979	1979	1979	1979	1989	2000	1999	2001	2000	1990	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1976 - 2001	
ANNUAL MEAN	131		403		1378	
HIGHEST ANNUAL MEAN					3297	1984
LOWEST ANNUAL MEAN					111	2000
HIGHEST DAILY MEAN	669	Oct 8	e1700	Aug 7	18200	Apr 6 1984
LOWEST DAILY MEAN	6.1	Jun 17	11	Jun 7	1.3	Oct 9 1990
ANNUAL SEVEN-DAY MINIMUM	6.6	Jun 14	12	Jun 2	3.3	Oct 3 1990
MAXIMUM PEAK FLOW			e1700	Aug 7	18300	Apr 6 1984
MAXIMUM PEAK STAGE					99.90	Apr 6 1984
INSTANTANEOUS LOW FLOW			11	Jun 7	1.3	Oct 9 1990
ANNUAL RUNOFF (INCHES)	.85		2.62		8.96	
10 PERCENT EXCEEDS	222		1160		3710	
50 PERCENT EXCEEDS	104		173		512	
90 PERCENT EXCEEDS	41		46		43	

e Estimated

02315000 SUWANNEE RIVER NEAR BENTON, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77.43	74.99	74.68	74.85	75.14	74.96	79.90	75.07	74.14	79.20	---	75.58
2	77.43	74.96	74.67	74.89	75.24	74.92	79.84	74.99	74.13	79.43	---	75.56
3	77.38	74.93	74.67	74.92	75.30	74.89	79.73	74.92	74.10	80.06	---	75.49
4	77.30	74.90	74.65	74.96	75.40	75.02	79.59	74.85	74.08	80.86	---	75.50
5	77.23	74.88	74.65	74.99	75.48	75.14	79.44	74.79	74.08	80.93	---	75.59
6	77.25	74.85	74.64	75.01	75.48	75.24	79.29	74.73	74.08	80.81	---	75.73
7	77.35	74.83	74.63	75.02	75.47	75.28	79.16	74.68	74.07	80.64	---	75.84
8	77.46	74.80	74.63	75.04	75.46	75.26	79.03	74.63	74.07	80.27	---	75.93
9	77.36	74.78	74.64	75.04	75.41	75.24	78.82	74.58	74.14	80.15	---	75.91
10	77.21	74.76	74.68	75.06	75.39	75.24	78.56	74.54	74.25	80.01	---	75.91
11	77.07	74.73	74.68	75.09	75.36	75.25	78.29	74.50	74.33	79.66	---	75.91
12	76.92	74.71	74.67	75.12	75.34	75.25	78.05	74.47	75.03	79.18	---	75.91
13	76.80	74.69	74.66	75.14	75.32	75.43	77.79	74.43	77.78	78.74	---	75.99
14	76.67	74.71	74.66	75.15	75.31	76.41	77.55	74.40	79.32	---	---	76.02
15	76.55	74.69	74.67	75.15	75.30	76.86	77.36	74.37	79.29	---	---	75.93
16	76.42	74.67	74.68	75.15	75.29	76.93	77.25	74.35	78.88	---	---	75.85
17	76.31	74.65	74.72	75.14	75.28	77.01	77.12	74.33	78.39	---	---	75.76
18	76.19	74.64	74.69	75.14	75.27	77.08	77.10	74.30	78.09	---	---	75.66
19	76.08	74.64	74.68	75.13	75.23	77.48	76.83	74.28	78.28	---	---	75.57
20	75.97	74.64	74.66	75.15	75.20	78.11	76.49	74.26	78.90	---	---	75.49
21	75.86	74.64	74.65	75.20	75.17	78.96	76.27	74.24	79.41	---	---	75.41
22	75.74	74.63	74.64	75.24	75.14	79.35	76.07	74.22	79.72	---	---	75.38
23	75.61	74.62	74.64	75.21	75.12	79.44	75.90	74.20	79.98	---	---	75.38
24	75.50	74.62	74.63	75.20	75.09	79.51	75.75	74.18	80.15	---	76.53	75.49
25	75.42	74.68	74.62	75.18	75.10	79.57	75.63	74.17	80.20	---	76.37	75.69
26	75.34	74.70	74.61	75.15	75.14	79.62	75.52	74.15	80.07	---	76.20	75.77
27	75.26	74.70	74.61	75.12	75.07	79.66	75.44	74.13	79.81	---	76.04	75.67
28	75.19	74.68	74.69	75.10	75.00	79.66	75.35	74.12	79.53	---	75.90	75.55
29	75.13	74.69	74.73	75.10	---	79.69	75.25	74.12	79.30	---	75.78	75.46
30	75.08	74.69	74.79	75.09	---	79.78	75.16	74.12	79.19	---	75.65	75.37
31	75.03	---	74.81	75.10	---	79.87	---	74.13	---	---	75.57	---
TOTAL	2367.54	2242.10	2314.73	2327.83	2107.50	2392.11	2323.53	2307.25	2316.79	---	---	2270.30
MEAN	76.37	74.74	74.67	75.09	75.27	77.16	77.45	74.43	77.23	---	---	75.68
MAX	77.46	74.99	74.81	75.24	75.48	79.87	79.90	75.07	80.20	---	---	76.02
MIN	75.03	74.62	74.61	74.85	75.00	74.89	75.16	74.12	74.07	---	---	75.37

CAL YR 2000 TOTAL 27483.99 MEAN 75.09 MAX 77.46 MIN 74.01

02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL

LOCATION.--Lat 30°19'32", long 82°44'18", in SW¼ sec. 8, T. 2 S., R. 16 E., Columbia County, Hydrologic Unit 03110201, on downstream side of bridge on U.S. Highway 41, 1.0 mi southeast of White Springs, and 171 mi upstream from mouth.

DRAINAGE AREA.--2,430 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--May 1906 to December 1908, February 1927 to current year.

REVISED RECORDS.--WSP 1504: 1906, 1908. WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 31, 1932, nonrecording gage at site 1.0 mi downstream at datum 48.54 ft. August 1, 1932 to October 10, 1979, water-stage recorder, at present site, at datum 48.54 ft. October 11, 1979 to December 1, 1983, non-recording gage at site 2.2 miles downstream at NGVD. December 2, 1983 to June 30, 1996, nonrecording gage, at present site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	677	111	68	87	127	112	1290	129	14	1090	1050	216
2	673	107	66	95	132	104	1270	118	16	1110	1160	238
3	660	103	66	99	145	99	1250	108	15	1220	1130	244
4	640	100	65	102	159	125	1220	99	14	1400	1120	252
5	615	96	62	105	176	131	1180	91	14	1520	1130	319
6	608	93	62	109	183	134	1140	84	13	1480	1380	440
7	617	90	62	113	181	140	1110	76	13	1460	1740	542
8	641	88	63	118	180	143	1080	67	14	1370	1710	575
9	634	85	64	119	175	141	1040	58	12	1310	1600	504
10	600	83	67	118	170	141	985	52	16	1290	1460	454
11	567	77	67	121	166	139	928	46	24	1230	1310	419
12	540	72	68	128	160	140	875	42	91	1130	1160	395
13	512	69	66	128	156	243	825	38	379	1030	1040	384
14	481	70	65	129	153	316	775	35	1030	1040	934	405
15	450	70	67	130	151	578	733	32	1140	1170	864	390
16	421	65	66	130	150	691	705	30	1080	1080	830	362
17	392	63	79	129	150	683	676	28	977	998	801	335
18	365	60	72	127	145	703	658	26	891	960	765	303
19	339	59	66	127	141	748	627	24	877	918	743	273
20	314	60	64	137	137	901	507	22	966	867	741	247
21	288	56	61	131	133	1060	416	21	1100	815	712	223
22	261	55	61	139	129	1190	357	20	1180	757	670	212
23	234	53	59	142	126	1210	308	19	1250	717	602	258
24	209	54	59	139	122	1220	268	17	1290	682	516	297
25	190	68	58	137	118	1230	241	16	1310	676	447	347
26	174	71	57	132	125	1240	213	15	1300	701	390	378
27	158	69	56	128	124	1240	189	15	1250	727	343	349
28	144	67	65	125	115	1240	173	14	1190	729	308	303
29	133	66	81	123	---	1240	157	15	1130	724	270	263
30	123	67	80	123	---	1270	142	17	1100	731	244	228
31	116	---	84	124	---	1290	---	15	---	864	224	---
MEAN	412	74.9	66.0	122	147	640	711	44.8	657	1026	884	338
MAX	677	111	84	142	183	1290	1290	129	1310	1520	1740	575
MIN	116	53	56	87	115	99	142	14	12	676	224	212
IN.	.20	.03	.03	.06	.06	.30	.33	.02	.30	.49	.42	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2001, BY WATER YEAR (WY)

MEAN	1727	862	1042	1810	2750	3299	3046	1109	838	1236	1922	1863
MAX	13100	16450	9103	8401	12950	14200	23910	8288	6317	5274	10870	13310
(WY)	1929	1948	1977	1942	1998	1998	1973	1964	1973	1906	1945	1964
MIN	8.55	6.63	8.68	11.8	13.2	35.5	22.2	10.5	11.8	19.6	15.8	8.82
(WY)	1932	1932	1932	1932	1932	1932	1932	1932	1935	1955	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1906 - 2001	
ANNUAL MEAN	161		429		1793	
HIGHEST ANNUAL MEAN					6806	1948
LOWEST ANNUAL MEAN					144	2000
HIGHEST DAILY MEAN	1000	Aug 5	1740	Aug 7	38000	Apr 10 1973
LOWEST DAILY MEAN	8.2	Jun 12	12	Jun 9	2.8	Sep 26 1990
ANNUAL SEVEN-DAY MINIMUM	8.9	Jun 7	14	Jun 3	3.4	Sep 26 1990
MAXIMUM PEAK FLOW			1770	Aug 7	38100	Apr 10 1973
MAXIMUM PEAK STAGE			57.28	Aug 7	88.56	Apr 10 1973
INSTANTANEOUS LOW FLOW			11	Jun 7	2.8	Sep 26 1990
ANNUAL RUNOFF (INCHES)	.90		2.40		10.02	
10 PERCENT EXCEEDS	427		1180		4930	
50 PERCENT EXCEEDS	116		181		694	
90 PERCENT EXCEEDS	40		56		61	

02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.59	50.83	50.42	50.58	50.95	50.82	55.74	50.96	49.78	54.98	54.82	51.57
2	53.58	50.78	50.41	50.65	50.98	50.74	55.68	50.86	49.81	55.05	55.24	51.68
3	53.52	50.74	50.41	50.70	51.08	50.70	55.59	50.78	49.81	55.46	55.14	51.70
4	53.44	50.70	50.40	50.73	51.18	50.92	55.47	50.69	49.77	56.14	55.10	51.73
5	53.34	50.67	50.39	50.75	51.29	50.97	55.33	50.62	49.76	56.50	55.12	52.01
6	53.31	50.64	50.38	50.79	51.33	51.00	55.18	50.55	49.75	56.40	56.02	52.44
7	53.35	50.61	50.38	50.82	51.32	51.05	55.05	50.47	49.73	56.32	57.19	52.73
8	53.45	50.58	50.39	50.86	51.31	51.06	54.93	50.42	49.77	56.04	57.12	52.81
9	53.42	50.56	50.40	50.88	51.28	51.05	54.76	50.35	49.72	55.82	56.76	52.62
10	53.28	50.53	50.42	50.87	51.25	51.05	54.54	50.30	49.83	55.75	56.33	52.47
11	53.15	50.48	50.42	50.89	51.22	51.03	54.30	50.25	49.98	55.52	55.82	52.36
12	53.03	50.45	50.42	50.95	51.18	51.04	54.06	50.21	50.62	55.15	55.27	52.28
13	52.92	50.43	50.41	50.95	51.15	51.64	53.84	50.17	52.09	54.73	54.79	52.24
14	52.79	50.44	50.40	50.96	51.14	51.97	53.61	50.13	54.71	54.75	54.35	52.31
15	52.66	50.44	50.42	50.97	51.12	52.83	53.41	50.10	55.16	55.28	54.04	52.26
16	52.53	50.40	50.41	50.97	51.11	53.21	53.27	50.06	54.94	54.93	53.90	52.16
17	52.40	50.39	50.50	50.96	51.11	53.17	53.13	50.04	54.51	54.59	53.77	52.06
18	52.27	50.37	50.45	50.95	51.08	53.26	53.04	50.01	54.13	54.43	53.60	51.93
19	52.15	50.36	50.41	50.94	51.05	53.48	52.95	49.97	54.07	54.25	53.50	51.80
20	52.03	50.37	50.40	51.02	51.02	54.18	52.63	49.95	54.46	54.03	53.49	51.68
21	51.91	50.34	50.37	50.97	50.99	54.85	52.35	49.93	55.00	53.79	53.35	51.55
22	51.78	50.33	50.38	51.03	50.96	55.35	52.14	49.91	55.33	53.52	53.15	51.50
23	51.63	50.32	50.36	51.06	50.93	55.45	51.95	49.89	55.58	53.33	52.93	51.73
24	51.49	50.32	50.36	51.03	50.90	55.48	51.78	49.85	55.74	53.16	52.70	51.90
25	51.37	50.42	50.35	51.02	50.87	55.50	51.65	49.82	55.83	53.13	52.50	52.10
26	51.27	50.45	50.34	50.98	50.93	55.54	51.50	49.81	55.77	53.25	52.31	52.22
27	51.18	50.43	50.34	50.95	50.92	55.56	51.37	49.80	55.60	53.38	52.14	52.11
28	51.08	50.42	50.40	50.93	50.84	55.55	51.27	49.77	55.36	53.39	52.00	51.93
29	51.01	50.41	50.51	50.91	---	55.57	51.16	49.80	55.14	53.37	51.84	51.75
30	50.94	50.42	50.50	50.91	---	55.67	51.06	49.85	55.00	53.40	51.71	51.58
31	50.88	---	50.55	50.92	---	55.72	---	49.80	---	54.01	51.61	---
TOTAL	1624.75	1514.63	1562.70	1577.90	1430.49	1645.41	1602.74	1555.12	1586.75	1693.85	1677.61	1561.21
MEAN	52.41	50.49	50.41	50.90	51.09	53.08	53.42	50.17	52.89	54.64	54.12	52.04
MAX	53.59	50.83	50.55	51.06	51.33	55.72	55.74	50.96	55.83	56.50	57.19	52.81
MIN	50.88	50.32	50.34	50.58	50.84	50.70	51.06	49.77	49.72	53.13	51.61	51.50

CAL YR 2000 TOTAL 18705.76 MEAN 51.11 MAX 54.79 MIN 49.87
WTR YR 2001 TOTAL 19033.16 MEAN 52.15 MAX 57.19 MIN 49.72

02317620 ALAPAHA RIVER NEAR JENNINGS, FL

Location.--Lat 30°35'53", long 83°04'24", in SW¼ sec.1, T.2 N., R.12 E., Hamilton County, Hydrologic Unit 03110202, near left bank on downstream side of bridge on State Highway 150, 150 ft upstream from Southern Railroad bridge, 1,400 ft downstream from Apalahoochee River, 1.5 mi south of Florida-Georgia State line, 1.6 mi southeast of Jennings, and 20.1 mi upstream from mouth.

Drainage Area.--1,680 mi^2, approximately.

PERIOD OF RECORD.--July 1976 to September 1984, October 1984 to September 1985 (gage height and peak discharge only), October 1985 to September 1987, September 1998 to current year. Prior to July 28, 1975 (one miscellaneous discharge measurement in 1923, three in 1928, and six made by Suwannee River Water Management District in 1976).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to August 18, 1928, nonrecording gage at site 150 ft downstream at datum unknown. July 1976 to September 1987, at datum 58.22 ft lower.

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

COOPERATION.--Records from October 1999 to September 2001 were collected and computed by Suwannee River Water Management District and reviewed by U. S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,8000 ft^3/s Feb. 17, 1986, gage height, 32.10 ft, minimum, 31 ft^3/s July 22, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum measured discharge, 17,900 ft^3/s May 2, 1928, gage height not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 5,680 ft^3/s, Mar. 31, gage height 79.52 ft; minimum, 85 ft^3/s, May. 29, June 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	180	475	878	1410	430	5570	515	100	611	1130	303
2	1480	180	455	920	1410	423	5350	460	104	653	1050	353
3	1420	182	430	990	1350	415	5030	418	100	1420	892	355
4	1340	172	400	1080	1260	587	4660	378	96	1460	767	363
5	1200	162	375	1160	1190	794	4260	343	94	1260	707	343
6	1050	156	358	1220	1120	761	3990	313	96	2450	1100	363
7	1290	150	340	1230	1050	773	3860	290	88	2110	1890	363
8	1270	144	325	1220	997	888	3820	268	90	2240	2930	343
9	1150	142	313	1180	958	1040	3770	250	88	1660	2080	310
10	944	140	303	1100	916	1230	3660	230	114	1570	1360	293
11	806	136	295	1020	881	1370	3510	215	168	1430	1380	285
12	734	132	285	1010	848	1490	3360	200	3480	1240	916	283
13	671	130	278	1010	821	2600	3210	190	4190	1420	851	310
14	602	136	283	972	809	2670	3050	184	4890	1300	734	338
15	539	176	318	916	800	2960	2870	174	4280	1140	725	358
16	483	200	350	871	779	3270	2700	164	3330	1040	683	335
17	443	192	383	842	758	3220	2510	152	2720	969	614	290
18	405	166	408	809	725	3370	2330	144	2200	906	521	255
19	380	158	433	779	686	3690	2150	136	2200	821	536	228
20	363	172	465	785	647	4060	1950	126	2030	716	521	205
21	343	182	475	755	617	4460	1690	122	1730	647	498	192
22	313	182	463	725	581	4810	1460	112	1460	584	443	188
23	290	176	440	698	548	5050	1270	110	1300	542	375	413
24	268	174	425	692	521	5130	1100	108	1200	821	323	335
25	253	260	420	701	500	5220	986	106	1080	1120	293	368
26	238	405	420	728	475	5340	909	98	899	1100	263	348
27	225	483	420	782	455	5440	824	92	734	1030	243	293
28	210	488	448	874	438	5510	740	90	644	1010	220	253
29	200	480	644	986	---	5570	662	86	578	842	200	223
30	198	480	794	1100	---	5650	584	91	536	803	190	200
31	188	---	885	1210	---	5660	---	106	---	851	203	---
TOTAL	20886	6516	13106	29243	23550	93881	81835	6271	40619	35766	24638	9089
MEAN	674	217	423	943	841	3028	2728	202	1354	1154	795	303
MAX	1590	488	885	1230	1410	5660	5570	515	4890	2450	2930	413
MIN	188	130	278	692	438	415	584	86	88	542	190	188
AC-FT	41430	12920	26000	58000	46710	186200	162300	12440	80570	70940	48870	18030
CFSM	.40	.13	.25	.56	.50	1.80	1.62	.12	.81	.69	.47	.18
IN.	.46	.14	.29	.65	.52	2.08	1.81	.14	.90	.79	.55	.20

CAL YR 2000 TOTAL 209388 MEAN 572 MAX 3850 MIN 48 AC-FT 415300 CFSM .34 IN. 4.64
WTR YR 2001 TOTAL 385400 MEAN 1056 MAX 5660 MIN 86 AC-FT 764400 CFSM .63 IN. 8.53

02317620 ALAPAHA RIVER NEAR JENNINGS, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.84	62.30	63.50	64.85	66.38	63.32	79.19	63.65	61.90	63.97	65.56	62.81
2	66.58	62.30	63.42	64.97	66.37	63.29	78.56	63.44	61.92	64.11	65.35	63.01
3	66.39	62.31	63.32	65.17	66.20	63.26	77.65	63.27	61.90	66.41	64.89	63.02
4	66.17	62.26	63.20	65.43	65.95	63.89	76.45	63.11	61.87	66.52	64.49	63.05
5	65.77	62.21	63.10	65.65	65.75	64.58	75.11	62.97	61.86	65.93	64.29	62.97
6	65.34	62.18	63.03	65.82	65.53	64.47	74.05	62.85	61.87	69.19	65.52	63.05
7	66.02	62.15	62.96	65.87	65.34	64.51	73.56	62.76	61.82	68.24	67.59	63.05
8	65.98	62.12	62.90	65.83	65.19	64.88	73.43	62.67	61.83	68.60	70.57	62.97
9	65.63	62.11	62.85	65.70	65.08	65.30	73.27	62.60	61.82	67.03	68.15	62.84
10	65.04	62.10	62.81	65.48	64.96	65.85	72.95	62.52	61.97	66.81	66.22	62.77
11	64.62	62.08	62.78	65.27	64.86	66.26	72.51	62.46	62.24	66.42	65.30	62.74
12	64.38	62.06	62.74	65.23	64.76	66.60	72.00	62.40	72.40	65.88	64.96	62.73
13	64.17	62.05	62.71	65.22	64.67	69.63	71.50	62.35	74.86	66.39	64.77	62.84
14	63.94	62.08	62.73	65.12	64.63	69.83	70.98	62.32	77.22	66.06	64.38	62.95
15	63.73	62.28	62.87	64.96	64.60	70.68	70.41	62.27	75.19	65.61	64.35	63.03
16	63.53	62.40	63.00	64.83	64.53	71.70	69.90	62.22	71.90	65.32	64.21	62.94
17	63.37	62.36	63.13	64.74	64.46	71.53	69.36	62.16	69.67	65.11	63.98	62.76
18	63.22	62.23	63.23	64.63	64.35	72.03	68.87	62.12	68.50	64.93	63.67	62.62
19	63.12	62.19	63.33	64.53	64.22	73.00	68.34	62.08	68.49	64.67	63.72	62.51
20	63.05	62.26	63.46	64.55	64.09	74.35	67.76	62.03	67.99	64.32	63.67	62.42
21	62.97	62.31	63.50	64.45	63.99	75.79	67.11	62.01	67.21	64.09	63.59	62.36
22	62.85	62.31	63.45	64.35	63.87	76.94	66.51	61.96	66.51	63.88	63.37	62.34
23	62.76	62.28	63.36	64.26	63.76	77.71	65.96	61.95	66.05	63.74	63.10	63.25
24	62.67	62.27	63.30	64.24	63.67	77.93	65.48	61.94	65.76	64.67	62.89	62.94
25	62.61	62.64	63.28	64.27	63.60	78.19	65.16	61.93	65.42	65.53	62.77	63.07
26	62.55	63.22	63.28	64.36	63.51	78.53	64.94	61.89	64.91	65.48	62.65	62.99
27	62.50	63.53	63.28	64.54	63.42	78.82	64.68	61.85	64.38	65.28	62.57	62.78
28	62.44	63.55	63.39	64.84	63.35	79.02	64.40	61.83	64.08	65.23	62.48	62.61
29	62.40	63.52	64.08	65.16	---	79.21	64.14	61.81	63.86	64.74	62.40	62.49
30	62.39	63.52	64.58	65.49	---	79.44	63.88	61.84	63.72	64.61	62.35	62.40
31	62.34	---	64.87	65.80	---	79.46	---	61.93	---	64.77	62.41	---
TOTAL	1985.37	1873.18	1961.44	2015.61	1811.09	2210.00	2108.11	1933.19	1979.12	2033.54	1996.22	1884.31
MEAN	64.04	62.44	63.27	65.02	64.68	71.29	70.27	62.36	65.97	65.60	64.39	62.81
MAX	66.84	63.55	64.87	65.87	66.38	79.46	79.19	63.65	77.22	69.19	70.57	63.25
MIN	62.34	62.05	62.71	64.24	63.35	63.26	63.88	61.81	61.82	63.74	62.35	62.34

CAL YR 2000 TOTAL 23244.35 MEAN 63.51 MAX 73.54 MIN 61.44
WTR YR 2001 TOTAL 23791.18 MEAN 65.18 MAX 79.46 MIN 61.81

02319000 WITHLACOOCHEE RIVER NEAR PINETTA, FL

LOCATION.--Lat 30°35'43", long 83°15'35", in NW¼ sec. 7, T. 2 N., R. 11 E., Madison County, Hydrologic Unit 03110203, on right bank 300 ft downstream from County Road 150 bridge, 0.1 mi downstream from small tributary, 0.3 mi west of Bellville, 5.6 mi east of Pinetta, and 22 mi upstream from mouth.

DRAINAGE AREA.--2,120 mi^2, approximately.

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for October and November 1931, published in WSP 1304.

REVISED RECORDS.--WSP 972: 1941-42. WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 47.21 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 11, 1931 to Dec. 3, 1941, nonrecording gage at same site and datum. Dec. 3, 1941 to Aug. 2, 1972, water-stage recorder at same site and datum. Aug. 2, 1972 to Apr. 22, 1986, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1928 reached a stage of 36.75 ft from floodmarks, discharge, 53,600 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2660	174	673	1530	1350	538	5600	526	140	695	862	194
2	2420	168	623	1690	1300	525	5230	465	139	661	813	214
3	1990	159	583	1820	1240	521	5210	418	140	697	751	241
4	1550	153	554	2000	1190	582	5450	413	140	779	680	239
5	1230	152	529	2130	1160	701	5810	398	137	981	626	285
6	1040	147	495	2200	1150	804	6140	381	138	1330	721	359
7	1040	142	450	2120	1150	937	6220	355	136	1780	999	349
8	1040	139	413	1890	1140	1160	5840	324	139	1880	1020	326
9	991	139	389	1600	1100	1490	5060	312	151	1600	874	307
10	910	135	361	1410	1050	1940	4260	299	173	1280	783	283
11	814	131	340	1310	992	2420	3750	289	188	1080	780	283
12	744	129	330	1290	928	2840	3460	273	1530	1030	822	254
13	691	129	325	1280	877	3330	3140	248	4460	957	861	316
14	656	132	337	1260	832	3550	2690	237	6490	850	811	389
15	621	141	366	1240	802	3600	2200	233	6940	803	746	378
16	574	200	417	1200	792	3570	1840	228	5690	745	690	298
17	512	172	487	1160	796	3750	1600	211	3860	671	713	239
18	461	158	602	1120	801	4080	1440	195	3050	630	754	197
19	417	173	663	1080	807	4740	1350	183	2730	631	741	172
20	377	190	668	1050	788	6080	1300	177	2500	595	688	155
21	342	200	669	1010	753	7360	1260	168	2230	508	633	139
22	312	199	672	989	718	8510	1210	163	1890	424	581	135
23	284	194	665	1010	687	9510	1140	166	1590	369	550	143
24	260	198	669	1060	652	10000	1050	152	1370	359	498	136
25	245	235	670	1160	628	10000	955	145	1320	437	428	135
26	232	425	642	1300	601	9720	874	140	1340	600	359	131
27	221	631	599	1460	576	9100	789	137	1330	614	310	132
28	208	744	585	1610	555	8420	712	139	1210	642	272	130
29	199	766	737	1680	---	7750	639	142	1020	704	244	132
30	189	729	1070	1640	---	7000	579	140	830	751	221	124
31	180	---	1330	1490	---	6200	---	142	---	802	217	---
MEAN	755	246	578	1445	908	4540	2893	252	1767	835	647	227
MAX	2660	766	1330	2200	1350	10000	6220	526	6940	1880	1020	389
MIN	180	129	325	989	555	521	579	137	136	359	217	124
IN.	.41	.13	.31	.79	.45	2.47	1.52	.14	.93	.45	.35	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2001, BY WATER YEAR (WY)

MEAN	728	584	1241	2148	3529	4107	3217	1325	983	1013	1134	793
MAX	8178	9450	11280	8134	14720	12530	17320	8154	6043	6003	6759	6625
(WY)	1995	1948	1965	1993	1986	1998	1948	1964	1973	1991	1991	1935
MIN	85.7	78.1	92.4	116	133	238	253	199	131	88.3	89.7	96.5
(WY)	1955	1955	1955	1934	1934	1955	1968	1999	2000	1955	1955	1954

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1932 - 2001	
ANNUAL MEAN	593		1260		1724	
HIGHEST ANNUAL MEAN					5364	1948
LOWEST ANNUAL MEAN					236	1955
HIGHEST DAILY MEAN	5430	Sep 13	10000	Mar 24	73600	Apr 5 1948
LOWEST DAILY MEAN	91	Jul 11	124	Sep 30	73	Aug 21 1955
ANNUAL SEVEN-DAY MINIMUM	102	Aug 29	131	Sep 24	77	Aug 17 1955
MAXIMUM PEAK FLOW			10100	Mar 24	79400	Apr 5 1948
MAXIMUM PEAK STAGE			20.76	Mar 24	38.64	Apr 5 1948
INSTANTANEOUS LOW FLOW			122	Sep 30	70	Aug 23 1955
ANNUAL RUNOFF (INCHES)	3.81		8.07		11.05	
10 PERCENT EXCEEDS	1710		3220		4600	
50 PERCENT EXCEEDS	290		687		616	
90 PERCENT EXCEEDS	116		152		148	

02319394 WITHLACOOCHEE RIVER NEAR LEE, FL

LOCATION.--Lat 30°24'37", long 83°10'49", in SW¼ sec.12, T. 1 S., R. 11 E., Madison County, Hydrologic Unit 03110203, near right bank on downstream side of bridge on County Road 141 and Myrrh Road, 2.3 mi upstream from mouth, and 7.3 mi east of Lee.

DRAINAGE AREA.--2,330 mi^2.

PERIOD OF RECORD.--November 2000 to September 2001.

GAGE.--Water-stage and water-current meter recorders. Datum of gage is undetermined.

REMARKS.--Records good. Flow affected by backwater from the Suwannee River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e682	925	1500	1660	1150	4590	1230	593	1220	1100	631
2	---	e658	887	1630	1620	1130	4330	1180	569	1140	1070	612
3	---	e638	861	1760	1590	1130	4240	1140	577	1150	1040	640
4	---	e620	829	1900	1560	1180	4220	1110	573	1130	998	639
5	---	e601	810	2030	1530	1240	4250	1060	559	1220	972	645
6	---	e595	803	2120	1530	1330	4370	1020	568	1370	944	695
7	---	e590	762	2140	1500	1430	4500	987	546	1680	1140	696
8	---	581	723	2090	1510	1610	4490	962	544	1860	1200	679
9	---	585	707	1930	1520	1880	4290	935	557	1790	1120	673
10	---	582	685	1760	1480	2190	4100	881	581	1620	1070	668
11	---	565	661	1680	1430	2600	3870	858	553	1450	1050	653
12	---	564	648	1620	1390	3080	3680	816	949	1370	1060	649
13	---	578	611	1580	1360	3470	3530	778	2820	1330	1080	680
14	---	531	625	1590	1340	3660	3350	765	3860	1240	1090	714
15	---	563	630	1560	1320	3710	3070	762	4110	1190	1030	734
16	---	565	625	1540	1320	3730	2820	740	3900	1130	984	708
17	---	551	677	1470	1320	3740	2550	726	3430	1080	974	648
18	---	560	754	1460	1320	3900	2360	706	3070	1020	995	626
19	---	543	850	1410	1350	4120	2200	691	2820	1030	1020	603
20	---	534	868	1380	1340	4690	2090	696	2690	1000	970	590
21	---	526	875	1320	1310	5260	2020	668	2590	964	945	579
22	---	529	879	1280	1270	5810	1940	645	2380	909	897	564
23	---	524	875	1290	1230	6160	1840	636	2120	842	870	546
24	---	519	889	1320	1230	6470	1760	639	1910	842	828	569
25	---	558	871	1360	1210	6330	1680	618	1790	832	792	510
26	---	581	873	1470	1210	6000	1580	612	1770	888	761	495
27	---	732	849	1580	1180	5770	1510	602	1720	956	710	495
28	---	884	856	1720	1150	5420	1420	584	1630	938	673	487
29	---	940	852	1820	---	5240	1350	592	1510	964	659	501
30	---	952	1090	1850	---	4920	1280	587	1350	998	643	512
31	---	---	1310	1760	---	4740	---	571	---	1030	630	---
MEAN	---	614	812	1643	1385	3648	2976	800	1755	1167	946	615
MAX	---	952	1310	2140	1660	6470	4590	1230	4110	1860	1200	734
MIN	---	519	611	1280	1150	1130	1280	571	544	832	630	487

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2001, BY WATER YEAR (WY)

MEAN	---	614	812	1643	1385	3648	2976	800	1755	1167	946	615
MAX	---	614	812	1643	1385	3648	2976	800	1755	1167	946	615
(WY)	---	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	---	614	812	1643	1385	3648	2976	800	1755	1167	946	615
(WY)	---	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2001 WATER YEAR

ANNUAL MEAN	1488	
HIGHEST DAILY MEAN	6470	Mar 24
LOWEST DAILY MEAN	487	Sep 28
ANNUAL SEVEN-DAY MINIMUM	510	Sep 24
MAXIMUM PEAK FLOW	6920	Mar 24
MAXIMUM PEAK STAGE	41.83	Mar 26
INSTANTANEOUS LOW FLOW	319	Nov 21
10 PERCENT EXCEEDS	3600	
50 PERCENT EXCEEDS	1080	
90 PERCENT EXCEEDS	578	

e Estimated

SUWANNEE RIVER BASIN

02319500 SUWANNEE RIVER AT ELLAVILLE, FL

LOCATION.--Lat 30°23'04", long 83°10'19", in NE¼ sec. 24, T. 1 S., R. 11 E., Suwannee County, Hydrologic Unit 03110205, on left bank at Ellaville, 100 ft upstream from Seaboard Air Line Railroad bridge, 200 ft downstream from Withlacoochee River, 900ft upstream from bridge on U.S. Highway 90, and 127 mi upstream from mouth.

DRAINAGE AREA.--6,970 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--January 1927 to current year.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 27.22 ft above National Geodetic Vertical Datum of 1929. Prior to June 20, 1932, nonrecording gage at same site and datum. Nov. 8, 1955 to Sept. 30, 1970, nonrecording gage 1.1 mi downstream from base gage at datum 2.67ft lower, used as supplementary gage when flow was less than 4,800 ft^3/s.

REMARKS.--No estimated daily discharges. Records good above 5,000 cfs, and fair below. Since Nov. 7, 1953, slight regulation at low water caused by diversions above control 0.7 mi downstream from gage by a steam-electric powerplant for cooling of condensers. Total diverted flow is returned to river below control. Records include flow of large spring on left bank about 200 ft downstream; spring flow may reverse during high stages.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5770	1530	1950	2350	3040	1940	12800	2900	1250	3640	3330	1920
2	5630	1490	1930	2520	3050	1910	12600	2770	1240	3520	3540	1890
3	5340	1460	1860	2690	3040	1890	12400	2660	1220	3550	3600	1890
4	4940	1420	1630	2870	3000	1950	12300	2560	1190	3890	3520	1890
5	4520	1400	1590	3070	2960	1970	12200	2470	1190	4170	3410	1880
6	4170	1380	1570	3240	2930	2100	12200	2390	1170	4540	3380	1920
7	3970	1340	1520	3320	2900	2210	12100	2310	1150	5230	3880	2020
8	3690	1310	1490	3300	2860	2370	11900	2230	1130	5550	4540	2050
9	3540	1290	1470	3120	2820	2650	11600	2170	1130	5580	4890	2060
10	3400	1270	1460	2940	2770	3000	11200	2120	1170	5250	4690	2060
11	3220	1240	1420	2820	2700	3420	10700	2080	1150	5000	4400	2040
12	3050	1220	1390	2770	2620	3860	10300	2020	1660	4740	4170	2030
13	2910	1190	1360	2700	2570	4520	9830	1970	4930	4520	4000	2000
14	2790	1190	1350	2680	2510	5250	9350	1900	7480	4330	3820	1990
15	2690	1160	1340	2660	2470	5650	8800	1820	9110	4140	3580	2020
16	2590	1180	1370	2600	2440	6070	8160	1770	9320	4020	3380	1990
17	2480	1210	1410	2560	2410	6490	7540	1720	8410	3830	3240	1890
18	2380	1170	1460	2520	2390	6870	6980	1670	7460	3640	3140	1800
19	2300	1160	1560	2470	2360	7430	6510	1620	6880	3510	3050	1740
20	2210	1150	1580	2430	2320	8420	6120	1590	6560	3400	2960	1690
21	2140	1200	1580	2370	2270	9550	5750	1550	6270	3240	2870	1650
22	2060	1210	1600	2320	2220	10600	5390	1500	5950	3040	2780	1600
23	1990	1190	1610	2310	2160	11600	5030	1470	5580	2880	2690	1630
24	1930	1210	1570	2360	2100	12300	4670	1430	5230	2840	2570	1720
25	1870	1350	1570	2350	2080	12800	4320	1390	5000	2900	2470	1770
26	1810	1540	1560	2410	2040	13000	3980	1360	4850	3030	2340	1800
27	1760	1730	1550	2600	2000	13100	3700	1340	4690	3120	2240	1800
28	1710	1870	1570	2820	1970	13200	3450	1310	4470	3120	2160	1790
29	1660	1940	1590	2950	---	13200	3230	1290	4190	3150	2060	1730
30	1610	1960	1800	3050	---	13100	3050	1280	3880	3160	1980	1690
31	1570	---	2070	3050	---	12900	---	1250	---	3170	1940	---
MEAN	2958	1365	1574	2717	2536	6946	8272	1868	4164	3861	3246	1865
MAX	5770	1960	2070	3320	3050	13200	12800	2900	9320	5580	4890	2060
MIN	1570	1150	1340	2310	1970	1890	3050	1250	1130	2840	1940	1600
IN.	.49	.22	.26	.45	.38	1.15	1.32	.31	.67	.64	.54	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2001, BY WATER YEAR (WY)

MEAN	4905	3467	4178	6248	9309	11810	11150	6073	4201	4431	5681	5197
MAX	32940	35590	30600	21150	30720	36610	53180	25380	17800	14380	34990	30760
(WY)	1929	1948	1948	1977	1991	1998	1948	1928	1973	1991	1928	1928
MIN	1006	895	833	882	1189	1240	1702	1245	792	877	1010	1082
(WY)	1991	2000	2000	2000	1957	1955	1968	1932	2000	2000	1955	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1927 - 2001	
ANNUAL MEAN	1817		3450		6412	
HIGHEST ANNUAL MEAN					19710	1948
LOWEST ANNUAL MEAN					1296	1955
HIGHEST DAILY MEAN	6530	Sep 14	13200	Mar 28	94700	Apr 8 1948
LOWEST DAILY MEAN	720	Jun 20	1130	Jun 8	720	Jun 20 2000
ANNUAL SEVEN-DAY MINIMUM	740	Jun 16	1160	Jun 5	740	Jun 16 2000
MAXIMUM PEAK FLOW			13200	Mar 29	95300	Apr 7 1948
MAXIMUM PEAK STAGE			13.00	Mar 29	40.88	Apr 7 1948
INSTANTANEOUS LOW FLOW			1190	Nov 23	703	Jun 20 2000
ANNUAL RUNOFF (INCHES)	3.55		6.72		12.50	
10 PERCENT EXCEEDS	3750		6920		14600	
50 PERCENT EXCEEDS	1420		2480		3840	
90 PERCENT EXCEEDS	825		1350		1490	

02319500 SUWANNEE RIVER AT ELLAVILLE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.98	2.45	2.57	3.04	3.69	2.72	12.90	3.49	2.04	4.12	3.86	2.62
2	5.85	2.42	2.55	3.21	3.69	2.69	12.39	3.38	2.04	4.02	4.04	2.60
3	5.59	2.39	2.50	3.35	3.69	2.67	12.24	3.28	2.02	4.04	4.09	2.60
4	5.22	2.36	2.31	3.52	3.65	2.72	12.16	3.19	1.99	4.32	4.02	2.60
5	4.84	2.34	2.28	3.69	3.62	2.74	12.07	3.11	1.99	4.56	3.93	2.59
6	4.52	2.32	2.26	3.83	3.59	2.85	12.00	3.04	1.98	4.87	3.90	2.62
7	4.34	2.29	2.22	3.90	3.56	2.94	11.90	2.97	1.96	5.49	4.32	2.71
8	4.33	2.26	2.23	3.89	3.53	3.08	11.74	2.90	1.94	5.78	4.87	2.74
9	4.24	2.25	2.36	3.75	3.49	3.33	11.46	2.84	1.94	5.81	5.18	2.75
10	4.11	2.23	2.34	3.60	3.45	3.63	11.05	2.86	1.97	5.50	4.99	2.74
11	3.94	2.20	2.32	3.49	3.38	3.97	10.60	2.86	1.96	5.27	4.75	2.73
12	3.79	2.18	2.30	3.49	3.32	4.33	10.19	2.82	2.40	5.03	4.55	2.73
13	3.67	2.16	2.27	3.51	3.26	4.86	9.79	2.78	5.24	4.85	4.41	2.70
14	3.57	2.16	2.27	3.50	3.22	5.51	9.33	2.61	7.57	4.69	4.27	2.69
15	3.47	2.14	2.27	3.48	3.18	5.87	8.81	2.53	9.11	4.53	4.07	2.71
16	3.38	2.15	2.30	3.44	3.15	6.26	8.21	2.49	9.30	4.43	3.91	2.69
17	3.29	2.18	2.32	3.39	3.13	6.65	7.63	2.45	8.44	4.28	3.79	2.60
18	3.20	2.15	2.22	3.35	3.10	7.01	7.11	2.41	7.55	4.12	3.71	2.53
19	3.13	2.13	2.30	3.31	3.08	7.53	6.67	2.36	7.01	4.01	3.63	2.48
20	3.05	2.11	2.32	3.27	3.05	8.45	6.31	2.33	6.71	3.92	3.55	2.44
21	2.98	1.90	2.33	3.22	3.01	9.52	5.96	2.30	6.45	3.79	3.46	2.40
22	2.92	1.89	2.35	3.18	2.96	10.52	5.63	2.26	6.15	3.62	3.38	2.35
23	2.86	1.88	2.36	3.16	2.90	11.42	5.30	2.23	5.81	3.47	3.30	2.38
24	2.80	1.95	2.49	3.15	2.86	12.12	4.98	2.20	5.49	3.44	3.20	2.46
25	2.75	2.15	2.53	3.07	2.83	12.58	4.68	2.17	5.27	3.49	3.11	2.51
26	2.70	2.20	2.52	3.13	2.80	12.82	4.41	2.14	5.13	3.61	2.99	2.53
27	2.65	2.37	2.51	3.29	2.76	12.93	4.17	2.12	5.00	3.68	2.90	2.53
28	2.61	2.49	2.50	3.49	2.74	12.95	3.96	2.10	4.81	3.69	2.83	2.52
29	2.57	2.56	2.37	3.61	---	12.97	3.78	2.08	4.57	3.72	2.75	2.47
30	2.53	2.58	2.56	3.69	---	12.90	3.63	2.07	4.32	3.72	2.68	2.43
31	2.49	---	2.80	3.70	---	12.76	---	2.04	---	3.73	2.64	---
TOTAL	113.37	66.84	73.83	106.70	90.69	223.30	251.06	80.41	138.16	133.60	117.08	77.45
MEAN	3.66	2.23	2.38	3.44	3.24	7.20	8.37	2.59	4.61	4.31	3.78	2.58
MAX	5.98	2.58	2.80	3.90	3.69	12.97	12.90	3.49	9.30	5.81	5.18	2.75
MIN	2.49	1.88	2.22	3.04	2.74	2.67	3.63	2.04	1.94	3.44	2.64	2.35

CAL YR 2000 TOTAL 963.55 MEAN 2.63 MAX 6.68 MIN 1.47
WTR YR 2001 TOTAL 1472.49 MEAN 4.03 MAX 12.97 MIN 1.88

02319800 SUWANNEE RIVER AT DOWLING PARK, FL

LOCATION.--Lat 30°14'41", long 83°14'59", in NW¼ sec. 8, T. 3 S., R. 11 E., Lafayette County, Hydrologic Unit 03110205, at bridge on County Road 250 at Dowling Park, and 112 mi upstream from mouth.

DRAINAGE AREA.--7,190 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--March 1950 to August 1954 and November 1975 to October 1977 (annual maximum discharge and gage-height), October 1996 to current year.

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

REMARKS.--Records fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 7, 1948, reached a stage of 61.46 ft, from floodmarks; discharge, 92,600 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5020	1690	1770	2280	2990	1890	10600	3150	1450	3680	3250	1990
2	4950	1660	1760	2470	2990	1860	10400	3010	1450	3540	3410	1960
3	4800	1630	1740	2640	2990	1840	10300	2880	1430	3500	3500	1970
4	4540	1620	1720	2820	2970	1880	10200	2760	1410	3660	3480	1970
5	4230	1600	1700	3020	2920	1870	10200	2660	1410	3840	3410	1940
6	3940	1580	1690	3190	2890	1930	10100	2560	1410	4040	3360	1950
7	3720	1560	1660	3300	2860	2040	10100	2470	1390	4440	3540	2030
8	3640	1540	1630	3330	2830	2170	9970	2380	1370	4740	3970	2060
9	3570	1520	1590	3250	2790	2400	9790	2310	1380	4860	4320	2070
10	3460	1490	1580	3120	2740	2700	9490	2250	1410	4720	4300	2060
11	3310	1460	1550	3000	2670	3040	9130	2180	1410	4560	4170	2050
12	3130	1450	1530	2910	2600	3380	8780	2120	1540	4390	4010	2040
13	2980	1430	1510	2850	2530	3650	8460	2060	3290	4250	3890	2010
14	2850	1430	1500	2830	2470	4110	8120	2000	5390	4140	3780	2000
15	2740	1400	1500	2800	2420	4490	7720	1940	6950	3990	3620	2000
16	2640	1410	1520	2750	2390	4790	7260	1890	7520	3890	3460	1990
17	2550	1430	1550	2700	2350	5130	6790	1830	7110	3780	3330	1940
18	2470	1410	1590	2650	2300	5460	6360	1790	6480	3650	3230	1880
19	2390	1400	1650	2620	2280	5850	5990	1750	6010	3530	3150	1830
20	2310	1400	1680	2570	2250	6550	5670	1720	5740	3440	3050	1780
21	2250	1410	1710	2500	2210	7400	5380	1690	5540	3340	2960	1740
22	2180	1400	1720	2460	2160	8250	5090	1650	5330	3160	2860	1700
23	2110	1390	1720	2420	2110	9060	4810	1600	5080	3010	2760	1690
24	2040	1390	1720	2420	2060	9740	4540	1580	4810	2990	2660	e1720
25	1990	1420	1730	2450	2030	10200	4300	1560	4610	2970	2550	1750
26	1940	1430	1720	2500	1980	10500	4070	1530	4490	3060	2430	1780
27	1890	1530	1720	2590	1930	10700	3850	1500	4380	3140	2320	1800
28	1850	1660	1730	2720	1900	10700	3660	1490	4240	3150	2230	1790
29	1800	1740	1730	2860	---	10800	3480	1490	4070	3160	2140	1740
30	1760	1770	1820	2970	---	10800	3310	1470	3870	3170	2060	1700
31	1720	---	2030	3000	---	10700	---	1450	---	3200	2000	---
MEAN	2928	1508	1670	2774	2486	5674	7264	2023	3732	3709	3200	1898
MAX	5020	1770	2030	3330	2990	10800	10600	3150	7520	4860	4320	2070
MIN	1720	1390	1500	2280	1900	1840	3310	1450	1370	2970	2000	1690
IN.	.47	.23	.27	.44	.36	.91	1.13	.32	.58	.59	.51	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

MEAN	4645	4068	4346	6175	8408	12280	6982	3306	2628	2479	2720	2476
MAX	10700	10650	13190	18280	22750	38110	17010	6430	4165	3995	5699	3675
(WY)	1999	1998	1998	1998	1998	1998	1998	1998	1997	1997	1997	2000
MIN	1388	1262	1140	1118	1577	1938	2047	1409	1030	1049	1144	1132
(WY)	2000	2000	2000	2000	2000	2000	1999	1999	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1997 - 2001	
ANNUAL MEAN	1868		3241		5028	
HIGHEST ANNUAL MEAN					11550	1998
LOWEST ANNUAL MEAN					1673	2000
HIGHEST DAILY MEAN	5390	Sep 15	10800	Mar 29	53100	Mar 20 1998
LOWEST DAILY MEAN	951	Aug 31	1370	Jun 8	951	Aug 31 2000
ANNUAL SEVEN-DAY MINIMUM	970	Aug 28	1400	Jun 4	970	Aug 28 2000
MAXIMUM PEAK FLOW			10900	Mar 29	53500	Mar 20 1998
MAXIMUM PEAK STAGE			33.29	Mar 29	54.07	Mar 20 1998
INSTANTANEOUS LOW FLOW			1370	Jun 8	947	Aug 30 2000
ANNUAL RUNOFF (INCHES)	3.54		6.12		9.50	
10 PERCENT EXCEEDS	3630		5910		11600	
50 PERCENT EXCEEDS	1520		2550		2850	
90 PERCENT EXCEEDS	1010		1520		1160	

e Estimated

02319800 SUWANNEE RIVER AT DOWLING PARK, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.96	22.29	22.39	23.14	24.14	22.56	33.02	24.38	21.88	25.15	24.53	22.73
2	26.88	22.24	22.37	23.42	24.14	22.52	32.86	24.18	21.87	24.95	24.77	22.68
3	26.69	22.19	22.34	23.66	24.14	22.50	32.74	23.99	21.84	24.90	24.90	22.69
4	26.38	22.16	22.31	23.90	24.11	22.56	32.66	23.83	21.82	25.12	24.87	22.69
5	26.00	22.12	22.28	24.18	24.05	22.53	32.60	23.69	21.81	25.39	24.76	22.64
6	25.63	22.09	22.26	24.44	24.00	22.64	32.54	23.55	21.81	25.66	24.69	22.66
7	25.36	22.05	22.22	24.60	23.97	22.80	32.49	23.42	21.78	26.22	24.96	22.78
8	25.25	22.02	22.16	24.65	23.92	22.99	32.38	23.29	21.75	26.62	25.57	22.83
9	25.16	21.99	22.11	24.53	23.87	23.32	32.19	23.19	21.76	26.77	26.05	22.84
10	25.02	21.95	22.08	24.34	23.80	23.75	31.88	23.10	21.82	26.60	26.04	22.84
11	24.82	21.90	22.04	24.16	23.70	24.22	31.51	23.00	21.81	26.38	25.85	22.81
12	24.59	21.87	22.01	24.03	23.60	24.72	31.15	22.91	22.02	26.15	25.63	22.81
13	24.38	21.85	21.98	23.95	23.51	25.12	30.81	22.82	24.58	25.96	25.45	22.76
14	24.20	21.84	21.96	23.92	23.43	25.77	30.44	22.74	27.39	25.80	25.29	22.74
15	24.04	21.80	21.96	23.88	23.36	26.29	30.01	22.64	29.17	25.59	25.07	22.74
16	23.93	21.81	21.99	23.82	23.31	26.68	29.51	22.56	29.79	25.46	24.84	22.74
17	23.75	21.85	22.03	23.74	23.24	27.10	28.99	22.48	29.34	25.30	24.65	22.66
18	23.60	21.82	22.10	23.67	23.17	27.48	28.51	22.41	28.64	25.11	24.50	22.57
19	23.46	21.80	22.19	23.63	23.14	27.93	28.09	22.35	28.11	24.94	24.38	22.49
20	23.32	21.79	22.25	23.56	23.11	28.72	27.72	22.31	27.81	24.81	24.23	22.42
21	23.21	21.81	22.29	23.46	23.04	29.66	27.38	22.26	27.57	24.67	24.10	22.35
22	23.10	21.79	22.30	23.40	22.98	30.59	27.04	22.19	27.33	24.40	23.97	22.30
23	22.99	21.79	22.31	23.35	22.89	31.43	26.71	22.13	27.03	24.18	23.83	22.30
24	22.89	21.78	22.30	23.35	22.82	32.14	26.36	22.09	26.71	24.15	23.69	---
25	22.80	21.83	22.32	23.39	22.77	32.64	26.03	22.05	26.45	24.12	23.53	22.39
26	22.72	21.85	22.31	23.46	22.70	32.93	25.70	22.01	26.29	24.24	23.36	22.43
27	22.64	22.01	22.31	23.59	22.64	33.08	25.40	21.97	26.14	24.36	23.20	22.46
28	22.56	22.21	22.33	23.77	22.59	33.16	25.13	21.95	25.95	24.37	23.07	22.44
29	22.49	22.35	22.32	23.96	---	33.23	24.87	21.94	25.71	24.40	22.94	22.38
30	22.42	22.39	22.47	24.11	---	33.24	24.61	21.92	25.43	24.42	22.82	22.31
31	22.35	---	22.77	24.15	---	33.15	---	21.88	---	24.45	22.74	---
MEAN	24.18	21.97	22.23	23.85	23.43	27.34	29.38	22.75	25.05	25.18	24.46	---
MAX	26.96	22.39	22.77	24.65	24.14	33.24	33.02	24.38	29.79	26.77	26.05	---
MIN	22.35	21.78	21.96	23.14	22.59	22.50	24.61	21.88	21.75	24.12	22.74	---

02320000 SUWANNEE RIVER AT LURAVILLE, FL

LOCATION.--Lat 30°05'59", long 83°10'18", in NE¼ sec. 36, T. 4 S., R. 11 E., Suwannee County, Hydrologic Unit 03110205, at bridge on State Highway 51, 1.6 mi south of Luraville, 3.0 mi north of Mayo, and 97 mi upstream from mouth.

DRAINAGE AREA.--7,330 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--February 1927 to December 1937, March 1950 to October 1972 and October 1977 to September 1981 (annual maximum discharge and gage-height). October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Vertical Datum of 1929 (Florida Department of Transportation Benchmark).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5260	1890	1850	2170	3120	1950	11100	3500	1970	3990	3550	2450
2	5220	1860	1840	2340	3110	1920	11000	3360	1960	3840	3690	2420
3	5090	1820	1830	2530	3130	1890	10900	3240	1950	3770	3790	2410
4	4880	1790	1820	2750	3100	1930	10800	3130	1940	3860	3780	2410
5	4600	1770	1800	2990	3040	1930	10700	3060	1930	4030	3720	2390
6	4330	1740	1790	3210	2990	1990	10700	2990	1930	4200	3670	2380
7	4120	1710	1770	3320	2950	2080	10700	2920	1910	4540	3770	2430
8	4010	1690	1750	3380	2910	2180	10600	2860	1880	4860	4150	2470
9	3940	1680	1720	3340	2850	2350	10400	2810	1880	5030	4520	2480
10	3850	1660	1710	3240	2790	2660	10100	2750	1920	4970	4590	2470
11	3720	1640	1690	3130	2710	3050	9790	2690	1920	4830	4490	2450
12	3570	1620	1670	3020	2620	3380	9430	2630	1950	4670	4340	2440
13	3430	1610	1660	2920	2520	3770	9080	2580	3030	4520	4200	2420
14	3310	1610	1640	2880	2440	4200	8730	2520	5060	4410	4090	2400
15	3210	1590	1640	2850	2370	4600	8330	2470	6590	4250	3950	2400
16	3110	1580	1640	2800	2330	4890	7870	2420	7330	4150	3790	2380
17	3010	1600	1670	2730	2310	5210	7370	2380	7180	4040	3650	2340
18	2920	1600	1690	2660	2270	5540	6920	2330	6670	3910	3550	2280
19	2810	1590	1730	2570	2250	5890	6540	2290	6260	3790	3470	2230
20	2690	1580	1770	2570	2230	6480	6210	2250	6000	3710	3380	2190
21	2580	1580	1790	2450	2200	7210	5890	2220	5800	3640	3300	2150
22	2490	1570	1800	2390	2150	8070	5580	2190	5610	3470	3220	2110
23	2390	1570	1810	2350	2130	8940	5280	2160	5400	3320	3140	2110
24	2290	1570	1800	2330	2080	9740	4990	2120	5140	3340	3050	2110
25	2230	1580	1810	2350	2050	10400	4730	2100	4920	3270	2950	2140
26	2170	1590	1810	2390	2030	10800	4470	2080	4770	3340	2870	2160
27	2120	1640	1800	2500	1990	11000	4230	2040	4660	3440	2760	2170
28	2070	1740	1810	2660	1960	11200	4020	2020	4530	3460	2680	2170
29	2020	1810	1810	2850	---	11300	3830	2010	4380	3470	2600	2140
30	1980	1850	1840	3030	---	11300	3660	2000	4190	3500	2530	2100
31	1930	---	1980	3120	---	11300	---	1980	---	3510	2480	---
MEAN	3269	1671	1766	2768	2522	5779	7798	2519	4022	3972	3539	2307
MAX	5260	1890	1980	3380	3130	11300	11100	3500	7330	5030	4590	2480
MIN	1930	1570	1640	2170	1960	1890	3660	1980	1880	3270	2480	2100
IN.	.52	.26	.28	.44	.36	.92	1.20	.40	.62	.63	.56	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2001, BY WATER YEAR (WY)

MEAN	7645	4505	4098	5356	7998	10320	9818	6259	3830	3932	6292	6501
MAX	31460	12180	13710	18570	22980	34680	24050	24060	8453	11430	32590	28650
(WY)	1929	1929	1998	1998	1998	1998	1930	1928	1928	1928	1928	1928
MIN	1529	1316	1173	1176	1565	1969	2248	1599	1101	1112	1265	1383
(WY)	2000	2000	2000	2000	1934	2000	1934	1999	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1927 - 2001	
ANNUAL MEAN	1973		3497		6527	
HIGHEST ANNUAL MEAN					12570	1929
LOWEST ANNUAL MEAN					1746	2000
HIGHEST DAILY MEAN	5360	Sep 15	11300	Mar 29	66000	Aug 24 1928
LOWEST DAILY MEAN	1050	Jun 20	1570	Nov 22	1050	Jun 20 2000
ANNUAL SEVEN-DAY MINIMUM	1070	Jun 14	1580	Nov 19	1070	Jun 14 2000
MAXIMUM PEAK FLOW			11400	Mar 29	90000	Apr 8 1948
MAXIMUM PEAK STAGE			27.47	Mar 29	53.50	Apr 8 1948
INSTANTANEOUS LOW FLOW			1560	Nov 24	1050	Jun 20 2000
ANNUAL RUNOFF (INCHES)	3.69		6.52		12.18	
10 PERCENT EXCEEDS	3790		6230		14800	
50 PERCENT EXCEEDS	1590		2730		3850	
90 PERCENT EXCEEDS	1110		1770		1630	

02320000 SUWANNEE RIVER AT LURAVILLE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.12	18.25	18.24	18.79	19.72	18.43	27.30	20.19	17.86	20.78	20.25	18.75
2	22.08	18.19	18.23	19.05	19.71	18.36	27.19	20.01	17.83	20.59	20.42	18.70
3	21.96	18.15	18.22	19.24	19.72	18.31	27.10	19.86	17.82	20.52	20.54	18.69
4	21.74	18.10	18.19	19.42	19.70	18.38	27.04	19.71	17.80	20.63	20.53	18.69
5	21.45	18.07	18.16	19.62	19.66	18.36	27.00	19.58	17.79	20.83	20.46	18.67
6	21.16	18.03	18.13	19.82	19.62	18.42	26.96	19.46	17.79	21.02	20.39	18.65
7	20.92	17.99	18.10	19.96	19.58	18.56	26.93	19.35	17.76	21.38	20.51	18.73
8	20.79	17.95	18.06	20.04	19.55	18.70	26.86	19.24	17.71	21.72	20.96	18.80
9	20.72	17.93	18.00	19.98	19.51	18.95	26.73	19.14	17.71	21.89	21.37	18.81
10	20.61	17.90	17.99	19.86	19.46	19.29	26.52	19.04	17.78	21.83	21.43	18.81
11	20.46	17.85	17.95	19.73	19.39	19.65	26.24	18.96	17.77	21.69	21.33	18.79
12	20.28	17.82	17.91	19.64	19.31	20.03	25.95	18.88	17.83	21.53	21.16	18.78
13	20.11	17.80	17.89	19.56	19.23	20.52	25.66	18.80	19.48	21.36	21.01	18.75
14	19.95	17.80	17.86	19.53	19.16	21.01	25.36	18.72	21.91	21.24	20.89	18.73
15	19.82	17.76	17.86	19.50	19.09	21.45	25.01	18.64	23.39	21.07	20.73	18.73
16	19.69	17.74	17.85	19.47	19.04	21.75	24.60	18.57	24.11	20.95	20.54	18.71
17	19.56	17.78	17.91	19.41	19.01	22.07	24.14	18.50	23.96	20.83	20.37	18.65
18	19.43	17.77	17.95	19.35	18.96	22.39	23.71	18.43	23.48	20.68	20.25	18.57
19	19.32	17.75	18.04	19.28	18.92	22.72	23.34	18.36	23.06	20.54	20.15	18.49
20	19.20	17.74	18.10	19.27	18.88	23.28	23.02	18.30	22.82	20.45	20.05	18.43
21	19.09	17.74	18.13	19.17	18.83	24.00	22.72	18.26	22.64	20.36	19.94	18.37
22	19.00	17.72	18.16	19.12	18.76	24.78	22.43	18.21	22.46	20.15	19.84	18.32
23	18.90	17.72	18.17	19.07	18.72	25.54	22.14	18.17	22.25	19.96	19.73	18.32
24	18.80	17.72	18.16	19.05	18.65	26.20	21.85	18.10	22.00	19.98	19.61	18.33
25	18.72	17.73	18.17	19.08	18.60	26.71	21.58	18.06	21.78	19.90	19.48	18.38
26	18.64	17.76	18.18	19.12	18.55	27.02	21.30	18.03	21.63	19.99	19.35	18.41
27	18.57	17.85	18.15	19.21	18.50	27.20	21.04	17.97	21.51	20.11	19.20	18.44
28	18.49	18.04	18.18	19.35	18.44	27.32	20.81	17.93	21.37	20.14	19.08	18.44
29	18.42	18.18	18.18	19.50	---	27.42	20.59	17.92	21.21	20.15	18.97	18.41
30	18.37	18.24	18.23	19.65	---	27.44	20.39	17.91	21.00	20.19	18.87	18.34
31	18.30	---	18.48	19.72	---	27.39	---	17.87	---	20.21	18.79	---
TOTAL	616.67	537.07	560.83	602.56	536.27	691.65	731.51	580.17	613.51	642.67	626.20	557.69
MEAN	19.89	17.90	18.09	19.44	19.15	22.31	24.38	18.72	20.45	20.73	20.20	18.59
MAX	22.12	18.25	18.48	20.04	19.72	27.44	27.30	20.19	24.11	21.89	21.43	18.81
MIN	18.30	17.72	17.85	18.79	18.44	18.31	20.39	17.87	17.71	19.90	18.79	18.32

WTR YR 2001 TOTAL 7296.80 MEAN 19.99 MAX 27.44 MIN 17.71

02320500 SUWANNEE RIVER AT BRANFORD, FL

LOCATION.--Lat 29°57'20", long 82°55'40", in NE¼ sec. 20, T. 6 S., R. 14 E., Suwannee County, Hydrologic Unit 03110205, near left bank on upstream side of bridge on U.S. Highway 27 at Branford, 10.2 mi upstream from Santa Fe River, and 75 mi upstream from mouth.

DRAINAGE AREA.--7,880 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--July 1931 to current year.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area. WDR FL-96-4:1995.

GAGE.--Water-stage recorder. Datum of gage is 4.81 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1928 reached a stage of 32.0 ft, from floodmark; discharge, 65,000 ft^3/s computed on basis of measured crest flow at Ellaville (station 02319500).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4900	2510	2330	2590	3510	2630	10800	4440	2350	e5000	4390	3170
2	5240	2480	2330	2780	3500	2600	10700	4270	2350	e4830	4470	3130
3	5350	2440	2320	2940	3500	2590	10700	4120	2320	4660	4590	3100
4	5220	2400	2300	3090	3510	2610	10600	3980	2300	4650	4650	3080
5	5030	2380	2280	3240	3490	2590	10600	3850	2290	4760	4660	3050
6	4820	2350	2280	3400	3460	2560	10600	3750	2290	4900	4610	3040
7	4630	2340	2270	3540	3430	2610	10700	3640	2270	5080	4580	3040
8	4440	2310	2250	3650	3400	2690	10600	3540	2240	5370	4780	3070
9	4330	2300	2230	3690	3380	2810	10600	3450	2220	5570	5090	3080
10	4240	2290	2210	3630	3350	3010	10400	3370	2260	5640	5280	3070
11	4150	2240	2190	3560	3300	3220	10200	3290	2290	5580	5290	3060
12	4030	2210	2170	3510	3240	3480	9950	3220	2320	5500	5210	3050
13	3900	2190	2140	3440	3180	3820	9690	3150	2690	5390	5100	3030
14	3780	2190	2130	3400	3130	4130	9420	3070	4250	5280	4990	3000
15	3680	2160	2120	3390	3090	4510	9120	3010	5680	5120	4900	2970
16	3580	2140	2120	3360	3050	4820	8770	2950	6680	5000	4760	2950
17	3480	2150	2140	3330	3020	5030	8330	2900	7040	4890	4620	2940
18	3390	2150	2130	3300	2970	5300	7890	2840	6890	4800	4510	2910
19	3300	2130	2160	3280	2930	5550	7510	2780	6690	4690	4410	2870
20	3210	2120	2200	3270	2920	5970	7170	2740	e6430	4600	4310	2830
21	3120	2110	2230	3180	2900	6510	6880	2700	e6310	4570	4200	2800
22	3040	2100	2250	3120	2870	7180	6590	2660	e6190	4390	4100	2770
23	2970	2100	2250	3090	2830	7930	6320	2610	e6110	4230	3990	2750
24	2890	2110	2250	3070	2770	8690	6050	2570	e5950	4290	3890	2730
25	2830	2150	2250	3070	2760	9380	5800	2530	5730	4190	3780	2740
26	2790	2150	2250	3080	2720	9880	5530	2510	e5570	4160	3670	2740
27	2740	2140	2280	3120	2680	10200	5270	2470	e5460	4230	3560	2740
28	2690	2200	2320	3190	2640	10400	5040	2440	e5360	4300	3450	2750
29	2650	2260	2340	3290	---	10700	4830	2420	e5240	4320	3350	2720
30	2600	2310	2330	3410	---	10800	4620	2400	e5140	4350	3270	2670
31	2560	---	2430	3490	---	10800	---	2370	---	4380	3210	---
MEAN	3728	2237	2241	3274	3126	5645	8376	3098	4364	4797	4376	2928
MAX	5350	2510	2430	3690	3510	10800	10800	4440	7040	5640	5290	3170
MIN	2560	2100	2120	2590	2640	2560	4620	2370	2220	4160	3210	2670
MED	3580	2200	2250	3290	3110	4820	8940	2950	5190	4760	4510	2960
IN.	.55	.32	.33	.48	.41	.83	1.19	.45	.62	.70	.64	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2001, BY WATER YEAR (WY)

MEAN	5424	4359	4725	6423	9188	11810	11630	7296	5335	5202	6048	5923
MAX	21020	29380	28130	21830	28370	36930	49040	24020	18120	13510	19810	21340
(WY)	1965	1948	1948	1948	1991	1998	1948	1973	1973	1991	1945	1964
MIN	1778	1666	1602	1623	1699	1905	2366	1937	1503	1607	1670	1769
(WY)	1991	1991	1991	1956	1957	1955	1955	1932	2000	2000	2000	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1931 - 2001	
ANNUAL MEAN	2351		4018		6941	
HIGHEST ANNUAL MEAN					19260	1948
LOWEST ANNUAL MEAN					1950	1955
HIGHEST DAILY MEAN	5350	Oct 3	10800	Mar 30	82800	Apr 11 1948
LOWEST DAILY MEAN	1420	Jun 19	2100	Nov 22	1420	Jun 19 2000
ANNUAL SEVEN-DAY MINIMUM	1430	Jun 15	2120	Nov 18	1430	Jun 15 2000
MAXIMUM PEAK FLOW			10900	Mar 31	83900	Apr 11 1948
MAXIMUM PEAK STAGE			13.19	Mar 31	34.07	Apr 11 1948
INSTANTANEOUS LOW FLOW			2090	Nov 23	1410	Jun 20 2000
ANNUAL RUNOFF (INCHES)	4.06		6.92		11.97	
10 PERCENT EXCEEDS	3750		6540		14400	
50 PERCENT EXCEEDS	2150		3290		4870	
90 PERCENT EXCEEDS	1560		2250		2300	

e Estimated

02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.31	4.19	3.85	4.14	5.38	3.94	13.15	6.68	3.43	---	6.40	4.79
2	8.31	4.12	3.85	4.43	5.37	3.90	13.09	6.45	3.42	---	6.51	4.74
3	8.24	4.05	3.82	4.67	5.37	3.87	13.04	6.25	3.38	6.61	6.67	4.69
4	8.10	3.98	3.78	4.88	5.37	3.91	13.01	6.05	3.34	6.60	6.76	4.67
5	7.86	3.93	3.76	5.09	5.35	3.88	12.99	5.88	3.31	6.76	6.77	4.62
6	7.61	3.89	3.74	5.31	5.31	3.83	13.02	5.73	3.32	6.94	6.72	4.60
7	7.37	3.86	3.72	5.48	5.26	3.91	13.04	5.57	3.29	7.19	6.68	4.61
8	7.12	3.81	3.69	5.62	5.21	4.05	13.02	5.42	3.22	7.56	6.95	4.67
9	6.98	3.79	3.65	5.64	5.18	4.27	12.97	5.28	3.18	7.81	7.36	4.69
10	6.87	3.77	3.60	5.55	5.14	4.60	12.85	5.17	3.22	7.91	7.61	4.68
11	6.74	3.66	3.56	5.45	5.05	4.93	12.67	5.04	3.22	7.83	7.62	4.66
12	6.58	3.60	3.53	5.38	4.96	5.34	12.45	4.93	3.24	7.74	7.53	4.65
13	6.39	3.58	3.48	5.27	4.87	5.83	12.22	4.82	3.86	7.61	7.39	4.62
14	6.23	3.57	3.46	5.21	4.79	6.27	11.99	4.69	6.18	7.48	7.26	4.58
15	6.08	3.52	3.43	5.19	4.72	6.77	11.73	4.59	7.99	7.28	7.15	4.53
16	5.94	3.47	3.43	5.15	4.66	7.19	11.41	4.50	9.11	7.12	6.97	4.52
17	5.79	3.50	3.47	5.11	4.60	7.45	11.01	4.40	9.46	7.00	6.79	4.50
18	5.64	3.49	3.46	5.05	4.52	7.78	10.59	4.30	9.31	6.87	6.64	4.45
19	5.50	3.45	3.51	5.02	4.47	8.09	10.22	4.21	9.08	6.74	6.51	4.38
20	5.36	3.43	3.60	5.01	4.44	8.57	9.88	4.13	---	6.62	6.39	4.33
21	5.22	3.40	3.65	4.86	4.41	9.17	9.57	4.07	---	6.58	6.25	4.29
22	5.09	3.39	3.69	4.77	4.36	9.88	9.26	4.00	---	6.35	6.11	4.24
23	4.97	3.38	3.69	4.72	4.28	10.63	8.97	3.91	---	6.15	5.97	4.20
24	4.85	3.40	3.69	4.69	4.20	11.34	8.67	3.83	---	6.23	5.84	4.18
25	4.75	3.48	3.68	4.69	4.17	11.95	8.38	3.77	---	6.10	5.68	4.19
26	4.67	3.48	3.69	4.71	4.10	12.39	8.07	3.72	---	6.06	5.53	4.20
27	4.59	3.47	3.71	4.78	4.03	12.66	7.74	3.66	---	6.17	5.37	4.21
28	4.51	3.59	3.75	4.89	3.97	12.85	7.46	3.60	---	6.26	5.21	4.22
29	4.43	3.72	3.77	5.04	---	13.03	7.19	3.56	---	6.30	5.07	4.18
30	4.35	3.81	3.72	5.22	---	13.16	6.93	3.53	---	6.33	4.94	4.09
31	4.26	---	3.86	5.35	---	13.18	---	3.46	---	6.39	4.85	---
TOTAL	188.71	109.78	113.29	156.37	133.54	238.62	326.59	145.20	---	---	199.50	133.98
MEAN	6.09	3.66	3.65	5.04	4.77	7.70	10.89	4.68	---	---	6.44	4.47
MAX	8.31	4.19	3.86	5.64	5.38	13.18	13.15	6.68	---	---	7.62	4.79
MIN	4.26	3.38	3.43	4.14	3.97	3.83	6.93	3.46	---	---	4.85	4.09

CAL YR 2000 TOTAL 1498.71 MEAN 4.09 MAX 8.31 MIN 2.51

02321000 NEW RIVER NEAR LAKE BUTLER, FL

LOCATION.--Lat 29°59'53", long 82°16'27", in SW¼ sec. 2, T. 6. S., R. 20 E., Union County, Hydrologic Unit 03110206, near right bank on downstream side of bridge on State Highway 100, and 4.4 miles southeast of Lake Butler.

DRAINAGE AREA.--191 mi^2.

PERIOD OF RECORD.--January 1950 to September 1971, June 1973 to May 1977, periodic discharge measurements. October 1990 to September 1991, October 1992 to current year.

REVISED RECORDS.--WRD FLA. 1968 Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 83.8 ft above National Geodetic Vertical Datum of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	2.7	3.8	7.4	4.5	1.8	16	.70	.01	17	126	13
2	19	2.5	3.6	6.8	4.8	2.2	14	.63	.00	21	156	55
3	17	2.3	3.6	6.6	4.4	2.3	12	.56	.00	18	140	85
4	16	2.3	3.5	6.4	4.4	4.0	9.8	.52	.00	12	120	81
5	15	2.1	3.5	6.2	4.6	6.1	8.2	.41	.01	20	136	63
6	15	2.0	3.5	6.2	4.4	6.2	7.0	.26	.01	9.3	342	49
7	18	2.0	3.6	6.2	3.9	4.1	5.9	.19	.01	5.0	525	43
8	16	1.9	3.6	6.2	3.4	2.9	4.9	.17	.01	2.9	479	44
9	15	1.9	3.6	6.5	3.1	2.3	4.2	.19	.01	2.3	402	61
10	18	2.0	3.7	6.4	2.9	2.9	3.6	.16	.01	3.3	276	48
11	17	2.0	4.1	6.1	2.8	3.2	3.1	.12	.01	6.7	186	39
12	15	2.0	4.3	6.6	2.7	2.9	2.6	.09	.06	8.4	130	38
13	13	1.9	4.3	6.8	2.6	2.6	2.3	.08	.26	3.9	93	41
14	11	2.0	4.5	6.7	2.3	2.6	2.1	.07	.24	3.4	64	63
15	9.7	2.0	4.6	6.6	2.3	2.6	1.8	.07	.95	2.6	49	189
16	8.5	1.9	4.7	6.5	2.3	4.1	1.7	.06	.61	1.8	37	910
17	7.4	1.9	5.2	6.4	2.2	5.0	1.6	.05	.33	1.3	29	1250
18	6.4	2.0	5.3	6.6	2.1	5.2	1.3	.04	.18	1.0	22	1190
19	5.6	2.1	5.7	6.8	2.0	8.6	1.3	.03	.25	.81	18	836
20	5.3	2.2	5.7	8.1	1.8	21	1.1	.03	1.0	1.4	16	547
21	5.0	2.3	5.6	8.0	1.8	25	1.0	.02	1.1	4.4	15	337
22	4.8	2.1	5.6	7.3	1.8	20	1.0	.01	1.8	3.2	14	224
23	4.4	2.1	5.6	6.7	1.9	18	.96	.01	2.3	2.5	11	175
24	4.0	2.2	5.6	5.8	1.9	16	.87	.01	3.1	1.7	8.9	134
25	4.3	3.9	5.5	5.3	1.9	15	1.1	.01	3.1	1.2	7.0	111
26	4.1	6.2	5.5	4.6	1.9	16	1.8	.01	2.3	.93	5.4	94
27	3.8	6.8	5.4	4.1	1.8	15	1.7	.01	2.8	.91	4.2	81
28	3.6	5.5	6.6	3.7	1.8	13	1.4	.01	5.8	3.3	3.3	68
29	3.2	4.5	8.8	3.5	---	12	1.0	.01	12	28	2.7	58
30	3.0	4.1	9.3	3.4	---	16	.80	.01	15	13	2.4	49
31	2.9	---	8.3	3.8	---	17	---	.01	---	78	2.7	---
MEAN	10.0	2.71	5.04	6.07	2.80	8.89	3.87	.15	1.78	9.01	110	233
MAX	20	6.8	9.3	8.1	4.8	25	16	.70	15	78	525	1250
MIN	2.9	1.9	3.5	3.4	1.8	1.8	.80	.01	.00	.81	2.4	13
IN.	.06	.02	.03	.04	.02	.05	.02	.00	.01	.05	.67	1.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

MEAN	242	44.7	109	129	266	256	134	100	78.2	145	249	246
MAX	1461	459	781	607	1836	1491	1014	801	556	519	772	1845
(WY)	1993	1970	1954	1970	1998	1959	1991	1959	1957	1950	1970	1964
MIN	1.53	.37	1.54	3.23	2.80	3.17	2.52	.045	.52	1.06	1.32	.73
(WY)	1991	2000	2000	2000	2001	2000	1956	2000	1998	1999	1999	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL MEAN	12.4		32.7		167	
HIGHEST ANNUAL MEAN					457	1970
LOWEST ANNUAL MEAN					9.66	1962
HIGHEST DAILY MEAN	185	Sep 12	1250	Sep 17	10400	Sep 13 1964
LOWEST DAILY MEAN	.00	May 16	.00	Jun 2	.00	May 16 2000
ANNUAL SEVEN-DAY MINIMUM	.00	May 16	.01	May 29	.00	May 16 2000
MAXIMUM PEAK FLOW			1330	Sep 17	11400	Sep 12 1964
MAXIMUM PEAK STAGE			8.47	Sep 17	15.33	Sep 12 1964
INSTANTANEOUS LOW FLOW			.00	Jun 2	.00	May 16 2000
ANNUAL RUNOFF (INCHES)	.88		2.33		11.85	
10 PERCENT EXCEEDS	36		51		425	
50 PERCENT EXCEEDS	3.3		4.1		28	
90 PERCENT EXCEEDS	.01		.19		2.7	

02321500 SANTA FE RIVER AT WORTHINGTON SPRINGS, FL

LOCATION.--Lat 29°55'18", long 82°25'35", in SE¼ sec. 32, T. 6 S., R. 19 E., Alachua County, Hydrologic Unit 03110206, near center of span on downstream side of bridge on State Highway 121, 0.5 mi south of Worthington Springs, 0.8 mi downstream from New River, and 51 mi upstream from mouth.

DRAINAGE AREA.--575 mi^2.

PERIOD OF RECORD.--October 1931 to current year. Published as "near Worthington" prior to October 1965. Monthly discharge only for October 1931, published in WSP 1304.

REVISED RECORDS.--WSP 2105: WDR FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 42.74 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 16, 1939, nonrecording gage at site 0.2 mi downstream at present datum; Jan. 16, 1939 to July 23, 1953, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Records do not include diversions during periods of high stages from Santa Fe Lake to Lochloosa Creek in St. Johns River Basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	12	11	13	14	7.3	49	2.7	.00	35	508	9.5
2	75	11	10	12	16	7.4	40	2.3	.00	26	779	10
3	68	11	9.5	11	16	7.2	33	2.0	.00	22	647	24
4	62	10	8.6	11	17	12	27	1.7	.00	25	461	63
5	58	10	8.1	10	17	20	24	1.6	.00	32	368	81
6	54	9.5	7.9	10	17	22	21	1.3	.00	32	444	86
7	56	9.1	7.9	10	16	18	18	.85	.00	27	433	73
8	60	8.8	8.0	10	15	15	16	.95	.00	19	501	70
9	63	8.5	8.1	9.7	14	13	14	.54	.00	19	568	74
10	58	8.5	8.0	9.3	13	12	13	.25	.00	16	552	68
11	52	7.8	8.1	9.3	12	11	11	.13	.00	44	481	69
12	48	7.6	8.7	9.6	12	11	9.9	.12	.00	57	396	63
13	44	7.3	8.8	9.7	12	11	8.8	.12	.00	53	304	59
14	39	7.4	8.7	10	11	11	7.8	.06	.00	42	222	72
15	35	7.0	8.5	10	11	11	7.2	.03	.00	29	268	217
16	32	7.0	8.5	10	11	17	7.1	.02	.68	21	282	362
17	29	6.9	8.6	10	11	30	6.3	.00	.35	16	197	481
18	26	6.6	8.4	10	9.9	30	5.4	.00	.35	13	127	1030
19	24	6.3	9.2	9.7	9.6	39	4.7	.00	1.1	12	92	1510
20	22	6.1	9.1	10	9.3	71	4.2	.00	3.7	21	75	1460
21	21	5.9	8.8	11	9.2	90	3.9	.00	5.8	63	62	1160
22	19	5.7	8.6	11	9.0	77	3.7	.00	12	67	53	872
23	19	5.8	8.4	11	8.6	60	3.3	.00	16	51	44	1070
24	18	5.9	8.6	11	8.5	46	3.1	.00	19	64	37	925
25	18	9.0	8.4	10	8.4	40	3.3	.00	22	54	31	547
26	17	13	8.3	10	8.0	43	3.6	.00	16	33	26	398
27	16	15	8.4	9.5	7.7	39	4.2	.00	11	38	22	324
28	15	15	9.7	9.2	7.4	32	4.7	.00	19	36	18	269
29	15	13	14	9.2	---	30	3.9	.00	44	35	15	227
30	14	12	15	9.5	---	45	3.3	.00	42	61	12	191
31	13	---	14	11	---	53	---	.00	---	180	10	---
MEAN	37.8	8.96	9.22	10.2	11.8	30.0	12.1	.47	7.10	40.1	259	395
MAX	82	15	15	13	17	90	49	2.7	44	180	779	1510
MIN	13	5.7	7.9	9.2	7.4	7.2	3.1	.00	.00	12	10	9.5
IN.	.08	.02	.02	.02	.02	.06	.02	.00	.01	.08	.52	.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2001, BY WATER YEAR (WY)

MEAN	525	188	251	366	607	645	431	180	256	325	607	704
MAX	3043	1788	1801	1607	4161	3303	1927	1716	3646	1459	2137	4033
(WY)	1993	1948	1954	1970	1998	1959	1973	1959	1934	1946	1978	1964
MIN	4.00	2.98	4.00	5.12	5.44	13.7	6.41	.47	3.58	9.05	9.86	10.3
(WY)	1932	1932	1932	1932	1932	2000	1935	2001	1935	1981	1954	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1932 - 2001	
ANNUAL MEAN	34.3		68.6		423	
HIGHEST ANNUAL MEAN					1163	1948
LOWEST ANNUAL MEAN					33.2	2000
HIGHEST DAILY MEAN	280	Sep 13	1510	Sep 19	19000	Sep 13 1964
LOWEST DAILY MEAN	.00	May 20	.00	May 17	.00	May 20 2000
ANNUAL SEVEN-DAY MINIMUM	.00	May 30	.00	May 17	.00	May 30 2000
MAXIMUM PEAK FLOW			1560	Sep 19	20000	Sep 13 1964
MAXIMUM PEAK STAGE			16.04	Sep 19	28.40	Sep 13 1964
INSTANTANEOUS LOW FLOW			.00	May 17	.00	May 19 2000
ANNUAL RUNOFF (INCHES)	.81		1.62		9.99	
10 PERCENT EXCEEDS	98		91		1110	
50 PERCENT EXCEEDS	14		12		135	
90 PERCENT EXCEEDS	.27		.20		16	

02321500 SANTA FE RIVER AT WORTHINGTON SPRINGS, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.03	7.61	7.60	7.73	7.77	7.51	8.60	7.22	6.24	8.32	13.16	7.51
2	8.89	7.58	7.57	7.70	7.85	7.51	8.43	7.19	6.21	8.12	14.24	7.54
3	8.76	7.56	7.55	7.67	7.85	7.50	8.27	7.16	6.18	8.01	13.79	7.88
4	8.64	7.54	7.52	7.65	7.87	7.69	8.15	7.13	6.14	8.08	12.88	8.66
5	8.54	7.53	7.50	7.63	7.89	7.96	8.06	7.11	6.11	8.25	12.24	9.02
6	8.47	7.51	7.49	7.63	7.88	8.00	7.99	7.08	6.12	8.26	12.79	9.10
7	8.50	7.50	7.49	7.62	7.84	7.90	7.91	7.06	6.08	8.14	12.72	8.86
8	8.58	7.49	7.50	7.62	7.80	7.80	7.85	7.07	6.05	7.92	13.12	8.80
9	8.65	7.47	7.50	7.61	7.77	7.72	7.79	7.04	6.01	7.94	13.48	8.87
10	8.55	7.48	7.50	7.59	7.73	7.70	7.73	7.01	6.00	7.84	13.40	8.75
11	8.43	7.45	7.51	7.59	7.71	7.67	7.68	6.99	5.98	8.52	13.01	8.77
12	8.37	7.44	7.53	7.60	7.70	7.67	7.62	6.99	6.00	8.79	12.46	8.65
13	8.30	7.43	7.53	7.61	7.69	7.66	7.58	6.99	6.03	8.72	11.70	8.58
14	8.22	7.44	7.54	7.63	7.67	7.65	7.53	6.96	6.01	8.47	10.90	8.82
15	8.15	7.42	7.53	7.62	7.66	7.66	7.50	6.94	6.49	8.20	11.36	10.80
16	8.08	7.42	7.53	7.62	7.66	7.85	7.50	6.93	7.04	8.00	11.49	12.19
17	8.02	7.42	7.54	7.62	7.65	8.20	7.45	6.89	7.03	7.84	10.62	13.00
18	7.97	7.41	7.53	7.62	7.62	8.21	7.40	6.85	7.02	7.73	9.73	14.87
19	7.92	7.39	7.57	7.61	7.61	8.41	7.36	6.80	7.09	7.71	9.19	15.94
20	7.88	7.39	7.56	7.64	7.60	9.05	7.33	6.75	7.30	7.98	8.90	15.84
21	7.84	7.38	7.55	7.65	7.59	9.40	7.31	6.71	7.42	8.91	8.64	15.22
22	7.81	7.37	7.55	7.67	7.58	9.19	7.29	6.66	7.71	8.99	8.44	14.51
23	7.80	7.38	7.54	7.67	7.57	8.87	7.27	6.61	7.84	8.67	8.30	15.01
24	7.78	7.38	7.55	7.66	7.56	8.56	7.25	6.55	7.93	8.93	8.18	14.64
25	7.77	7.51	7.54	7.64	7.56	8.42	7.27	6.51	8.01	8.72	8.07	13.36
26	7.76	7.66	7.54	7.62	7.54	8.49	7.29	6.46	7.84	8.27	7.97	12.50
27	7.73	7.73	7.55	7.60	7.52	8.40	7.33	6.42	7.68	8.38	7.88	11.93
28	7.70	7.72	7.60	7.59	7.51	8.26	7.36	6.37	7.90	8.33	7.78	11.44
29	7.68	7.68	7.78	7.59	---	8.22	7.31	6.34	8.50	8.33	7.69	11.03
30	7.66	7.64	7.81	7.60	---	8.54	7.26	6.32	8.46	8.89	7.61	10.65
31	7.63	---	7.77	7.65	---	8.72	---	6.28	---	10.41	7.55	---
TOTAL	253.11	224.93	234.37	236.55	215.25	252.39	228.67	211.39	206.42	259.67	329.29	332.74
MEAN	8.16	7.50	7.56	7.63	7.69	8.14	7.62	6.82	6.88	8.38	10.62	11.09
MAX	9.03	7.73	7.81	7.73	7.89	9.40	8.60	7.22	8.50	10.41	14.24	15.94
MIN	7.63	7.37	7.49	7.59	7.51	7.50	7.25	6.28	5.98	7.71	7.55	7.51

WTR YR 2001 TOTAL 2984.78 MEAN 8.18 MAX 15.94 MIN 5.98

02321975 SANTA FE RIVER AT US HWY 441 NEAR HIGH SPRINGS, FL

LOCATION.--Lat 29°51'09", long 82°36'31", in NW¼ sec. 27, T. 7 S., R. 17 E., Columbia County, Hydrologic Unit 03110206, at highway bridge on U.S. 441, 1.9 mi northwest of the intersection of U.S. 441 and U.S. 27, and 28.1 mi upstream from mouth.

DRAINAGE AREA.--859 mi^2.

PERIOD OF RECORD.--October 1992 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 Mar. 17, 1998, nonrecording gage at same site and datum.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e145	e69	52	41	33	e14	e41	e14	3.1	3.9	47	75
2	143	e68	51	41	e30	e14	e40	e14	3.3	4.1	68	74
3	e140	e67	50	42	e29	e14	e37	e14	2.7	3.5	102	72
4	e138	e66	50	42	e28	e15	e35	e14	2.2	3.6	122	73
5	135	e65	50	42	e27	e15	e33	e14	1.9	3.7	120	74
6	e132	e64	50	41	e26	e15	e31	e13	1.9	3.5	118	77
7	e130	e63	49	41	e25	e16	e30	e13	1.8	3.1	118	81
8	e128	e62	49	41	e24	e17	e29	e13	1.7	3.1	124	81
9	125	61	48	38	e23	e18	e27	e13	1.7	3.2	132	80
10	e124	61	48	39	e22	e20	e27	13	1.8	4.1	142	80
11	e123	60	48	40	e21	e21	e26	13	1.9	4.2	148	80
12	e121	59	47	40	e21	e23	e25	13	2.4	4.3	150	82
13	e120	59	47	39	e20	e25	e24	12	2.1	5.6	148	81
14	119	58	47	38	e19	e30	e23	12	1.8	8.1	143	87
15	e115	58	47	38	e18	e35	e22	11	1.6	7.7	136	87
16	e110	58	48	39	e17	e40	e21	11	1.7	7.9	134	96
17	e105	56	46	38	e17	e50	e20	9.3	1.6	8.2	136	118
18	e100	55	46	38	e17	e57	e19	8.0	1.4	11	133	145
19	96	57	46	38	e16	e65	e18	7.3	1.4	11	125	186
20	e94	54	44	36	e16	e72	e17	6.7	1.5	11	116	233
21	e92	53	44	35	e16	e80	e17	5.5	1.4	14	108	263
22	e89	54	43	36	e15	e75	e16	5.2	2.4	16	103	262
23	e87	54	43	36	e15	e73	e16	4.9	4.5	18	99	249
24	e86	55	43	35	e15	e68	e16	4.2	4.1	20	95	263
25	85	56	43	34	e15	e65	e15	4.3	3.3	25	90	266
26	e82	53	43	34	e14	e60	e15	4.2	3.0	29	86	243
27	e80	53	44	35	e14	e56	e15	3.7	3.2	32	83	223
28	e77	53	46	34	e14	e53	e15	3.1	3.4	38	80	206
29	e75	53	43	35	---	e50	e14	2.8	3.4	37	78	190
30	72	53	42	35	---	e47	e14	3.1	3.7	39	76	175
31	70	---	41	34	---	e45	---	3.2	---	38	75	---
MEAN	108	58.6	46.4	37.9	20.2	40.3	23.3	9.11	2.40	13.6	111	143
MAX	145	69	52	42	33	80	41	14	4.5	39	150	266
MIN	70	53	41	34	14	14	14	2.8	1.4	3.1	47	72
IN.	.14	.08	.06	.05	.02	.05	.03	.01	.00	.02	.15	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2001, BY WATER YEAR (WY)

MEAN	1087	434	433	556	961	898	589	412	335	395	485	418
MAX	3505	1006	934	1075	4110	3531	1226	1172	852	745	877	828
(WY)	1993	1993	1998	1998	1998	1998	1993	1997	1997	1996	1997	1995
MIN	108	58.6	46.4	37.9	20.2	40.3	23.3	9.11	2.40	13.6	111	143
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1993 - 2001	
ANNUAL MEAN	104		51.3		582	
HIGHEST ANNUAL MEAN					1219	1998
LOWEST ANNUAL MEAN					51.3	2001
HIGHEST DAILY MEAN	320	Sep 17	266	Sep 25	9150	Feb 25 1998
LOWEST DAILY MEAN	41	Dec 31	1.4	Jun 18	1.4	Jun 18 2001
ANNUAL SEVEN-DAY MINIMUM	43	Dec 25	1.5	Jun 15	1.5	Jun 15 2001
MAXIMUM PEAK FLOW			274	Sep 25	10100	Oct 6 1992
MAXIMUM PEAK STAGE			32.66	Sep 25	45.23	Oct 6 1992
INSTANTANEOUS LOW FLOW			1.1	Jun 19	1.1	Jun 19 2001
ANNUAL RUNOFF (INCHES)	1.65		.81		9.21	
10 PERCENT EXCEEDS	149		122		1120	
50 PERCENT EXCEEDS	102		39		406	
90 PERCENT EXCEEDS	50		3.6		72	

e Estimated

02322500 SANTA FE RIVER NEAR FORT WHITE, FL

LOCATION.--Lat 29°50'55", long 82°42'55", in SE¼ sec. 28, T. 7 S., R. 16 E., Gilchrist County, Hydrologic Unit 03110206, on left bank 2.1 mi upstream from bridge on State Highway 47, 5.1 mi south of Fort White, and 18 mi upstream from mouth.

DRAINAGE AREA.--1,017 mi^2.

PERIOD OF RECORD.--October 1927 to January 1930, June 1932 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 20.86 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 3, 1932, nonrecording gage at several sites within 200 ft of present site at various datums. Oct. 1, 1947 to Feb. 10, 1949, auxiliary nonrecording gage and since Feb. 11, 1949, auxiliary water-stage recorder at bridge on U.S. Highway 129, 16 mi downstream from base gage at datum 3.5 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	764	582	515	e470	488	578	557	542	587	703	617
2	1030	759	583	519	e468	494	575	557	544	584	733	615
3	1020	742	580	522	e470	496	581	554	e546	581	794	614
4	1010	740	572	525	e478	508	581	553	548	584	875	612
5	1000	734	568	514	e490	504	580	557	550	581	917	606
6	998	729	566	516	504	504	579	556	552	580	933	597
7	997	725	563	512	483	504	572	555	552	576	960	618
8	983	720	562	512	472	504	567	555	552	e574	985	649
9	938	708	559	502	472	504	566	552	552	e570	1020	641
10	925	708	551	496	472	510	565	551	552	572	1060	627
11	917	708	550	500	472	512	566	551	552	589	1100	639
12	912	708	550	508	472	508	564	552	558	587	1130	642
13	901	701	543	509	472	510	561	551	556	581	1150	636
14	895	700	531	503	477	508	562	548	552	577	1130	655
15	889	696	531	499	480	509	562	547	552	568	1100	676
16	883	691	530	497	480	e520	563	544	552	566	1060	669
17	871	688	526	496	480	e530	556	546	552	567	1030	700
18	864	683	517	490	480	536	554	544	552	584	990	745
19	861	683	519	489	480	563	558	541	552	592	936	812
20	855	647	522	496	480	616	557	541	552	608	868	962
21	841	643	523	488	480	590	557	540	552	641	810	1100
22	836	636	527	485	485	572	553	539	576	630	741	e1180
23	830	633	525	483	488	564	552	537	665	636	687	1170
24	819	634	529	481	488	556	552	535	628	656	666	e1200
25	810	647	532	480	488	559	562	535	573	663	656	1230
26	806	628	534	479	488	571	561	533	564	665	642	1200
27	798	613	532	472	488	577	563	528	561	666	631	1160
28	787	613	543	472	488	576	560	525	560	686	626	1110
29	780	608	538	470	---	586	558	525	560	679	619	1070
30	776	597	529	477	---	591	557	542	560	680	612	1030
31	776	---	521	473	---	584	---	544	---	694	612	---
MEAN	892	683	543	496	480	537	564	545	561	610	864	826
MAX	1040	764	583	525	504	616	581	557	665	694	1150	1230
MIN	776	597	517	470	468	488	552	525	542	566	612	597
IN.	1.01	.75	.62	.56	.49	.61	.62	.62	.62	.69	.98	.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2001, BY WATER YEAR (WY)

MEAN	1792	1391	1282	1401	1598	1807	1717	1405	1315	1387	1678	1916
MAX	4357	3840	2778	3415	4810	5345	4668	3409	4063	2728	3545	6344
(WY)	1993	1948	1965	1942	1998	1948	1948	1959	1959	1972	1928	1964
MIN	730	683	543	496	480	537	564	545	561	610	773	756
(WY)	1956	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	1955

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1928 - 2001	
ANNUAL MEAN	709		634		1556	
HIGHEST ANNUAL MEAN					3112	1948
LOWEST ANNUAL MEAN					634	2001
HIGHEST DAILY MEAN	1110	Sep 18	1230	Sep 25	16900	Sep 16 1964
LOWEST DAILY MEAN	517	Dec 18	e468	Feb 2	e468	Feb 2 2001
ANNUAL SEVEN-DAY MINIMUM	523	Dec 17	471	Jan 28	471	Jan 28 2001
MAXIMUM PEAK FLOW			1240	Sep 25	17000	Sep 16 1964
MAXIMUM PEAK STAGE			1.26	Sep 25	15.34	Sep 16 1964
INSTANTANEOUS LOW FLOW			464	Jan 27	464	Jan 27 2001
ANNUAL RUNOFF (INCHES)	9.49		8.47		20.79	
10 PERCENT EXCEEDS	875		917		2580	
50 PERCENT EXCEEDS	682		565		1280	
90 PERCENT EXCEEDS	598		488		853	

e Estimated

02322800 SANTA FE RIVER NEAR HILDRETH, FL

LOCATION.--Lat 29°54'41", long 82°51'38", in NE sec. 1, T. 7 S., R. 14 E., Gilchrist County, Hydrologic Unit 03110206, near left bank on downstream side of bridge of U.S. Highway 129 and State Highway 49, 1.7 mi upstream from mouth, and 8.6 mi west of Fort White.

DRAINAGE AREA.--1,376 mi^2, approximately.

PERIOD OF RECORD.--October 1947 to October 2000 (gage heights only), November 2000 to September 2001. Published as "near Fort White (auxiliary)" prior to September 1965.

GAGE.--Water-stage and water-current meter recorders. Datum of gage is 3.5 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 11, 1949, nonrecording gage at same sites and datum. Since October 1947 used as auxiliary gage for Santa Fe River near Fort White (station 02322500).

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e1310	1130	1050	915	997	672	978	1010	911	1050	1170
2	---	e1290	1160	1030	928	1010	670	957	1030	922	1050	1140
3	---	e1280	1140	1040	924	994	717	962	1020	916	1060	1170
4	---	e1270	1150	1020	912	1010	713	973	1010	912	1110	1170
5	---	e1270	1130	1000	935	1030	711	978	988	902	1160	1150
6	---	e1260	1130	978	925	1010	704	976	999	869	1150	1150
7	---	e1250	1140	973	933	1010	705	984	1010	860	1180	1170
8	---	e1250	1130	988	919	996	728	982	1020	834	1170	1190
9	---	e1250	1140	979	931	971	747	1000	987	855	1160	1160
10	---	e1250	1140	978	949	948	761	996	1010	856	1170	1150
11	---	e1250	1150	990	947	945	796	1000	992	908	1140	1140
12	---	e1240	1140	991	943	924	804	995	1040	898	1200	1150
13	---	e1230	1130	973	957	927	824	986	997	926	1220	1140
14	---	e1220	1140	965	968	872	820	967	843	917	1220	1130
15	---	e1220	1120	988	972	868	850	991	717	901	1240	1170
16	---	e1220	1120	973	972	909	830	949	694	919	1220	1170
17	---	e1220	1130	972	984	870	875	1010	696	948	1250	1170
18	---	e1210	1130	974	967	848	870	994	762	949	1240	1190
19	---	e1210	1130	962	963	829	884	997	792	996	1250	1200
20	---	e1200	1100	1010	977	834	889	987	785	998	1250	1270
21	---	1200	1090	977	971	769	877	992	802	1010	1240	1320
22	---	1190	1100	975	985	728	882	1000	812	1020	1240	1380
23	---	1180	1110	979	970	684	899	1000	878	1040	1210	1380
24	---	1190	1080	977	966	620	936	995	875	1010	1220	1390
25	---	1170	1100	979	982	593	934	1000	872	1060	1220	1420
26	---	1170	1080	954	997	623	934	985	862	1060	1180	1400
27	---	1190	1090	970	992	614	943	997	887	1050	1200	1400
28	---	1170	1090	958	1000	589	946	983	878	1050	1200	1390
29	---	1160	1090	919	---	610	958	992	904	1050	1190	1360
30	---	1140	1100	937	---	660	955	1020	914	1010	1180	1400
31	---	---	1070	923	---	654	---	1030	---	1060	1180	---
TOTAL	---	36660	34680	30382	26784	25946	24834	30656	27086	29617	36750	37190
MEAN	---	1222	1119	980	957	837	828	989	903	955	1185	1240
MAX	---	1310	1160	1050	1000	1030	958	1030	1040	1060	1250	1420
MIN	---	1140	1070	919	912	589	670	949	694	834	1050	1130
AC-FT	---	72720	68790	60260	53130	51460	49260	60810	53730	58750	72890	73770
CFSM	---	.89	.81	.71	.70	.61	.60	.72	.66	.70	.86	.90
IN.	---	.99	.94	.82	.73	.70	.67	.83	.73	.80	.99	1.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

MEAN	---	1222	1119	980	957	837	828	989	903	955	1185	1240
MAX	---	1222	1119	980	957	837	828	989	903	955	1185	1240
(WY)	---	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	---	1222	1119	980	957	837	828	989	903	955	1185	1240
(WY)	---	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS WATER YEARS 2000 - 2001

HIGHEST DAILY MEAN	1420	Sep 25 2001	
LOWEST DAILY MEAN	589	Mar 28 2001	
ANNUAL SEVEN-DAY MINIMUM	616	Mar 24 2001	
MAXIMUM PEAK FLOW	1510	Sep 25 2001	
MAXIMUM PEAK STAGE	10.69	Mar 31 2001	(water year)
MAXIMUM PEAK STAGE	30.69	Apr 12 1948	(period of record)
INSTANTANEOUS LOW FLOW	54	Jul 30 2001	
10 PERCENT EXCEEDS	1220		
50 PERCENT EXCEEDS	997		
90 PERCENT EXCEEDS	826		

e Estimated

02323000 SUWANNEE RIVER NEAR BELL, FL

LOCATION.--Lat 29°47'28", long 82°55'28", in NW¼ sec. 16, T. 8 S., R. 14 E., Gilchrist County, Hydrologic Unit 03110205, on downstream side of bridge on State Road 340, 4.5 mi northwest of Bell, 10.4 mi downstream from Santa Fe River, and 55 mi upstream from mouth.

DRAINAGE AREA.--9,390 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--June 1932 to November 1965, November 1975 to October 1977 (annual maximum elevation), November 1996 to January 1999 (gage-heights only), October 2000 to September 2001.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Suwannee River Water Management District). June 1, 1932 to Nov. 16, 1956, water-stage recorder at site .4 mi downstream at datum 3.60 ft higher, Nov. 18, 1975 to Oct. 10, 1977, nonrecording gage at present site at datum 3.60 ft higher, Nov. 1, 1996 to Jan. 31, 1999 and since Aug. 3, 2000, water-stage recorder at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1928, reached a stage of 25.9 ft, from floodmarks; discharge, 74,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7100	e3830	e3490	3500	4610	3670	11600	5840	3330	e6230	5590	4440
2	7150	e3790	e3590	3720	4580	3660	11500	5680	3400	e6010	5660	4410
3	7130	e3770	e3680	3880	4580	3700	11500	5520	3350	e5820	5830	4350
4	7050	e3740	e3560	4070	4620	3870	11500	5330	3280	e5780	6000	4350
5	6840	e3710	e3480	4270	4660	3740	11500	5170	3250	e5770	6110	4290
6	e6630	e3700	3400	4520	4650	3480	11400	5070	3230	e5810	6110	4260
7	e6510	e3720	3410	4640	4650	3460	11500	4950	3230	e5960	5990	4250
8	e6400	3730	3450	4840	4620	3600	11500	4780	3180	e6150	6060	4280
9	e6260	3810	3490	4870	4600	3850	11400	4680	3120	e6310	6350	4280
10	e6010	3830	3490	4700	4580	4090	11400	4640	3110	e6320	6610	4250
11	e5800	3580	3430	4690	4490	4250	11200	4550	3160	e6300	6720	4180
12	e5580	3510	3450	4720	4380	4600	11000	4440	3380	e6390	6690	4190
13	e5440	3540	3350	4570	4310	5060	10900	4340	3450	e6460	6600	4160
14	e5320	3610	3390	4490	4250	5280	10600	4190	4460	e6500	6490	4070
15	e5250	3380	3320	4460	4190	5430	10400	4090	6030	e6470	6450	3980
16	e5130	3340	3290	4430	4150	e5640	10100	4030	e7940	e6180	6340	4040
17	e5020	3490	3460	4410	4120	e5800	9780	3960	e8460	e5900	6170	4160
18	e4930	3320	3160	4380	3970	e6030	9380	3870	e8360	e5740	6040	4190
19	e4840	3270	3180	4410	3910	e6500	9020	3810	e8080	e5660	5940	4210
20	e4780	3230	3210	4470	3990	e6940	8720	3790	e7700	e5640	5830	4200
21	e4720	3110	3230	4200	4010	e7750	8480	3790	e7410	e5630	5690	4220
22	e4640	3070	3330	4100	4010	e8570	8200	3780	e7260	e5600	5530	4170
23	e4530	3180	3260	4040	3970	e8880	7930	3720	e7220	e5520	5410	4120
24	e4410	3310	3230	4020	3830	9330	7690	3610	e7100	e5500	5280	4100
25	e4320	3630	3240	4060	3850	9980	7450	3590	e7030	e5510	5130	4090
26	e4220	3550	3220	4020	3820	10500	7140	3560	e6970	5480	4980	3990
27	e4120	3310	3340	4110	3720	10800	6790	3480	e6860	5510	4840	3990
28	e4070	e3270	3550	4210	3680	11000	6550	3450	e6610	5530	4730	4040
29	e3990	e3310	3560	4310	---	11300	6330	3450	e6500	5590	4590	3980
30	e3950	e3390	3350	4520	---	11500	6060	3410	e6380	5580	4500	3810
31	e3890	---	3330	4600	---	11600	---	3310	---	5600	4450	---
TOTAL	166030	105030	104920	134230	118800	203860	288520	131880	162840	182450	178710	125050
MEAN	5356	3501	3385	4330	4243	6576	9617	4254	5428	5885	5765	4168
MAX	7150	3830	3680	4870	4660	11600	11600	5840	8460	6500	6720	4440
MIN	3890	3070	3160	3500	3680	3460	6060	3310	3110	5480	4450	3810
MED	5130	3520	3390	4410	4220	5640	10200	4030	6200	5780	5940	4180
AC-FT	329300	208300	208100	266200	235600	404400	572300	261600	323000	361900	354500	248000
CFSM	.57	.37	.36	.46	.45	.70	1.02	.45	.58	.63	.61	.44
IN.	.66	.42	.42	.53	.47	.81	1.14	.52	.65	.72	.71	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2001, BY WATER YEAR (WY)

MEAN	8404	7326	6805	8014	8668	10860	12440	8282	6144	6406	8169	8632
MAX	18550	34280	32940	26750	21170	33390	59430	20050	10740	10400	22260	19960
(WY)	1948	1948	1948	1948	1948	1948	1948	1948	1948	1946	1945	1945
MIN	3550	2950	2667	2648	3732	3544	3882	3437	3106	2937	2870	3348
(WY)	1955	1956	1956	1956	1934	1955	1955	1955	1955	1955	1955	1956

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1932 - 2001	
ANNUAL TOTAL	1902320			
ANNUAL MEAN	5212		8382	
HIGHEST ANNUAL MEAN			24140	1948
LOWEST ANNUAL MEAN			3390	1955
HIGHEST DAILY MEAN	11600	Mar 31	82300	Apr 13 1948
LOWEST DAILY MEAN	3070	Nov 22	2490	Jan 11 1956
ANNUAL SEVEN-DAY MINIMUM	3180	Jun 5	2520	Jan 8 1956
MAXIMUM PEAK FLOW	11600	Mar 30	82300	Apr 13 1948
MAXIMUM PEAK STAGE	12.10	Apr 1	27.43	Apr 13 1948
INSTANTANEOUS LOW FLOW	3020	Nov 22	2460	Jan 10 1956
ANNUAL RUNOFF (AC-FT)	3773000		6073000	
ANNUAL RUNOFF (CFSM)	.56		.89	
ANNUAL RUNOFF (INCHES)	7.54		12.13	
10 PERCENT EXCEEDS	7930		15200	
50 PERCENT EXCEEDS	4490		6520	
90 PERCENT EXCEEDS	3350		3680	

e Estimated

02323500 SUWANNEE RIVER NEAR WILCOX, FL

LOCATION.--Lat 29°35'22", long 82°56'12", in NW¼ sec.29, T. 10 S., R. 14 E., Levy County, Hydrologic Unit 03110205, on left bank about 400 ft downstream from Fort Fannin Bridge on U.S. Highway 19, 2.0 mi southwest of Wilcox, and 33 mi upstream from mouth.

DRAINAGE AREA.--9,640 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--October 1930 to September 1931, October 1941 to current year. Monthly discharge only for some periods, published in WSP 1304.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area. WDR FL-97-4: 1996.

GAGE.--Water-stage and water-current meter recorders. Datum of gage is 0.53 ft below National Geodetic Vertical Datum of 1929. Prior to July 4, 1931, nonrecording gage at site 400 ft upstream at present datum. July 4 to Sept. 30, 1931, and Mar. 26 to May 14, 1942, water-stage recorder, and May 15, 1942 to Jan. 24, 1951, nonrecording gage at present site and datum. Feb. 1, 1951, to Dec. 9, 1999, auxiliary water-stage recorder about 9.0 mi downstream from base gage. Datum of auxiliary gage is 2.99 ft below National Geodetic Vertical Datum of 1929. Water-current meter since Dec. 9, 1999.

REMARKS.--No estimated daily discharges. Records poor. Flow generally affected by tide when discharge is less than 17,500 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7230	3680	3570	3530	5140	3960	12200	6280	3270	6270	5270	3920
2	7060	3710	3800	4160	5330	3710	11900	5980	3390	6000	5190	4010
3	7150	3950	4240	4170	5050	3390	11800	5880	3690	5720	5200	4000
4	7190	3820	4020	4460	5050	4090	11900	5800	3240	5740	5440	4080
5	6840	3780	3640	4020	5160	4890	11800	5470	3500	5780	5550	3870
6	6700	3420	3370	4790	4800	4760	11800	5340	3350	5890	5690	4020
7	6870	3430	3550	4490	4790	4280	11800	5470	3250	6210	5730	3890
8	6790	3280	3410	4700	4610	3880	11800	5320	3600	6370	5750	4110
9	6770	3090	3390	5660	4470	3660	11700	4960	3400	6610	5980	4140
10	6170	4080	3530	5030	4650	4430	11600	4860	3300	6630	6170	4300
11	5880	3630	3530	4550	4980	4330	11600	4860	2860	6590	6310	4200
12	5740	3360	3550	4910	4770	4300	11400	4880	3110	6530	6290	4140
13	5660	3090	3290	5150	4550	4980	11200	5040	3820	6620	6190	4330
14	5380	3660	3240	4720	4520	5550	11100	4970	4620	6740	5930	4920
15	5420	3750	3310	4570	4440	5420	11000	4330	6180	6400	5650	4750
16	5280	3030	2850	4690	4270	6310	10900	4310	7590	6200	5710	3840
17	5190	3610	4050	4530	4830	7080	10500	4410	8110	5820	5540	3810
18	5110	3940	3460	4510	4740	6920	10300	4320	8030	5650	5390	3790
19	4990	3290	3580	4050	4070	7100	9470	4180	7890	5700	5300	3770
20	4920	3930	3950	5270	4050	7170	8990	3900	7630	5730	5260	3900
21	4720	3800	3070	4950	4150	8240	8790	3840	7400	5730	5240	4030
22	4600	3180	3850	4600	4070	8600	8530	3840	7370	5470	5110	4270
23	4810	2970	3850	4910	4480	8970	8200	3980	7380	4870	4990	4230
24	4750	2870	3800	4280	4040	9260	7830	3790	7590	5220	5040	4110
25	4280	3150	3760	4740	3820	10000	7790	3740	7110	5380	4950	4670
26	4190	3660	3610	4180	4190	10700	7810	4070	6990	5110	4670	4500
27	4150	3540	3060	4180	4020	11100	7180	3790	6920	5280	4400	4190
28	3960	3530	3170	4360	3940	11100	6910	3720	6740	5380	4440	4140
29	3940	3570	4650	4310	---	11300	6830	3570	6560	5350	4180	4690
30	4160	3730	4120	4490	---	11700	6570	3890	6440	5290	3960	4570
31	3880	---	3840	4930	---	12000	---	3820	---	5330	3810	---
TOTAL	169780	105530	112110	141890	126980	213180	301200	142610	164330	181610	164330	125190
MEAN	5477	3518	3616	4577	4535	6877	10040	4600	5478	5858	5301	4173
MAX	7230	4080	4650	5660	5330	12000	12200	6280	8110	6740	6310	4920
MIN	3880	2870	2850	3530	3820	3390	6570	3570	2860	4870	3810	3770
IN.	.66	.41	.43	.55	.49	.82	1.16	.55	.63	.70	.63	.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2001, BY WATER YEAR (WY)

MEAN	8662	7562	7919	9942	12580	15380	15580	10970	8384	8154	8994	9050
MAX	25810	33030	32630	27320	27450	40960	57260	28690	21690	17550	22190	27910
(WY)	1965	1948	1948	1948	1998	1998	1948	1973	1959	1973	1991	1964
MIN	3553	3428	3177	3058	3400	3638	4631	3265	2462	2421	2610	3587
(WY)	2000	2000	2000	2000	2000	2000	1956	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1931 - 2001	
ANNUAL TOTAL	1322500		1948740			
ANNUAL MEAN	3613		5339		10250	
HIGHEST ANNUAL MEAN					24560	1948
LOWEST ANNUAL MEAN					3406	2000
HIGHEST DAILY MEAN	7230	Oct 1	12200	Apr 1	84700	Apr 14 1948
LOWEST DAILY MEAN	1970	Jul 16	2850	Dec 16	1970	Jul 16 2000
ANNUAL SEVEN-DAY MINIMUM	2220	Jul 10	3270	Jun 6	2220	Jul 10 2000
MAXIMUM PEAK FLOW			12200	Apr 1	84700	Apr 14 1948
MAXIMUM PEAK STAGE			5.92	Mar 29	22.32	Apr 14 1948
ANNUAL RUNOFF (INCHES)	5.10		7.52		14.44	
10 PERCENT EXCEEDS	5440		7950		18400	
50 PERCENT EXCEEDS	3380		4720		8120	
90 PERCENT EXCEEDS	2440		3530		4550	

02323500 SUWANNEE RIVER NEAR WILCOX, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.80	3.01	2.37	1.86	2.60	2.59	5.66	3.04	2.78	3.40	3.22	3.30
2	3.90	2.97	2.44	1.92	2.39	2.66	5.59	3.25	2.94	3.44	3.31	3.29
3	3.78	2.83	2.24	1.86	2.17	2.91	5.65	3.23	2.77	3.39	3.67	3.29
4	3.88	2.64	1.68	2.03	2.32	3.22	5.73	3.05	2.73	3.37	3.90	3.26
5	3.85	2.72	1.85	2.39	2.53	2.62	5.73	3.11	2.70	3.44	3.97	3.20
6	3.75	2.97	2.21	2.78	2.64	1.98	5.74	3.21	2.72	3.47	3.89	3.17
7	3.51	3.17	2.50	2.84	2.77	1.81	5.78	3.08	2.69	3.48	3.61	3.15
8	3.22	3.21	2.72	3.26	2.79	2.21	5.80	2.85	2.59	3.54	3.51	3.16
9	2.71	3.61	2.89	2.94	2.86	2.88	5.79	3.00	2.56	3.68	3.59	3.07
10	2.76	3.37	2.99	2.48	2.87	2.95	5.76	3.12	2.60	3.76	3.69	2.96
11	3.14	2.90	2.89	2.86	2.66	2.89	5.69	3.06	2.70	3.82	3.73	2.73
12	3.34	2.97	3.02	3.08	2.56	3.13	5.64	2.97	3.22	3.82	3.69	2.85
13	3.34	3.10	2.84	2.62	2.47	3.51	5.52	2.81	2.67	3.77	3.62	2.79
14	3.53	3.23	2.99	2.65	2.42	3.01	5.39	2.60	2.63	3.48	3.67	2.40
15	3.60	2.53	2.79	2.61	2.38	3.46	5.29	2.61	3.05	3.27	3.95	2.08
16	3.58	2.82	2.83	2.58	2.40	3.59	5.12	2.68	3.55	3.26	3.93	2.71
17	3.54	3.07	3.03	2.58	2.44	3.12	4.90	2.66	3.85	3.41	3.88	3.12
18	3.39	2.46	1.89	2.62	1.99	2.91	4.54	2.65	3.91	3.63	3.87	3.26
19	3.28	2.56	2.25	2.95	1.93	2.99	4.41	2.72	3.95	3.64	3.92	3.40
20	3.09	2.24	1.86	2.92	2.58	3.70	4.49	2.85	3.90	3.60	3.87	3.39
21	2.95	1.83	1.88	2.06	2.71	3.75	4.56	2.96	3.92	3.67	3.75	3.45
22	3.08	1.59	2.24	2.08	2.84	3.69	4.38	3.07	4.00	3.58	3.59	3.25
23	2.85	2.28	1.71	1.94	2.78	4.05	4.31	3.01	4.06	3.78	3.56	3.07
24	2.63	2.81	1.65	2.09	2.56	4.48	4.27	2.86	3.92	4.50	3.42	3.05
25	2.85	3.49	1.73	2.35	2.75	4.86	4.20	2.96	3.71	3.65	3.17	2.93
26	3.11	3.08	1.63	2.10	2.74	5.07	3.79	2.91	3.57	3.34	3.03	2.61
27	3.28	2.75	2.41	2.50	2.52	5.10	3.54	2.78	3.39	3.23	3.02	2.63
28	3.27	2.64	3.11	2.63	2.63	5.23	3.59	2.80	3.27	3.13	3.04	2.85
29	3.38	2.49	2.47	2.71	---	5.58	3.45	2.87	3.35	3.05	2.96	2.62
30	3.19	2.49	2.00	3.02	---	5.82	3.17	2.68	3.43	3.11	3.05	2.13
31	3.07	---	1.66	2.79	---	5.74	---	2.53	---	3.18	3.19	---
TOTAL	102.65	83.83	72.77	78.10	71.30	111.51	147.48	89.98	97.13	108.89	110.27	89.17
MEAN	3.31	2.79	2.35	2.52	2.55	3.60	4.92	2.90	3.24	3.51	3.56	2.97
MAX	3.90	3.61	3.11	3.26	2.87	5.82	5.80	3.25	4.06	4.50	3.97	3.45
MIN	2.63	1.59	1.63	1.86	1.93	1.81	3.17	2.53	2.56	3.05	2.96	2.08

WTR YR 2001 TOTAL 1163.08 MEAN 3.19 MAX 5.82 MIN 1.59

02323592 SUWANNEE RIVER ABOVE GOPHER RIVER NEAR SUWANNEE, FL

LOCATION.-- Lat 29°20'19", long 83°05'13", in NE¼ sec. 22, T. 13S., R. 12E., Dixie County, Hydrologic Unit 03110205, on right bank, 0.6 mi downstream of Flag Creek, 1.9 mi upstream of Gopher River, 4.8 mi upstream of the town of Suwannee, and 7.6 mi above the mouth.

DRAINAGE AREA.--9,912 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- June 1999 to current year.

GAGE.--Water-stage and water-current meter recorders. Datum of gage is 2.10 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow affected by tide.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7540	4360	3270	3220	4650	3030	11400	5020	3620	6030	6660	5130
2	7710	4520	3940	3820	4400	2180	11100	4960	3980	6450	e7100	5380
3	7910	4540	4510	3400	3570	635	10200	5930	4310	6330	e7700	5030
4	7510	3630	2980	3520	3420	3580	11200	5350	3850	5940	e8070	5510
5	7370	3810	2730	2230	4090	5280	11500	5350	3590	5620	e8470	5220
6	8180	3220	2900	4730	4030	3320	11000	4980	3450	6170	e8250	5920
7	7640	4510	3110	3750	4320	2870	10800	4960	3370	5980	e8040	5460
8	7690	3120	2990	4800	4610	2830	11000	4740	3660	6050	e8160	5630
9	7210	3280	3220	6710	4050	2900	10600	4130	3410	6250	e8420	5420
10	5260	5680	3920	4100	4250	4800	10600	4020	3230	7080	e8670	5890
11	6220	3980	3450	4270	3910	3570	10100	4560	2440	6550	e8810	5290
12	6540	3810	4100	5190	3470	3020	10700	4460	2480	6570	e8570	5330
13	6280	3560	3160	4010	3600	4650	10300	4500	4290	6930	e8010	5850
14	5980	5360	3710	4250	3570	5000	10300	4770	4100	7310	e7680	6470
15	6170	3920	3980	4010	3310	3480	9890	3480	5410	6120	e8230	4380
16	6100	2950	1450	3810	2410	5970	10600	3860	6650	6240	e7840	4300
17	6040	4210	5610	3680	3970	6730	9800	4100	7570	6140	e7630	5020
18	5860	3770	2440	3270	3680	6180	8800	4060	7830	6580	e7600	5050
19	5660	2800	3490	2210	1950	5970	7740	4090	7620	6680	e7760	5540
20	5650	4190	3120	6810	3270	6160	7870	3900	7070	6250	e7530	5230
21	4950	4190	2280	3490	3300	8260	8390	3980	7070	6980	e7530	5800
22	5300	1980	4800	4520	3090	7590	8550	3760	6990	5400	6180	5980
23	5980	2850	3160	3870	4190	7950	7630	3740	7270	1820	6110	5570
24	4400	1730	3220	3150	2790	8430	7130	3520	7530	10000	6360	5480
25	4020	4860	3980	4830	3070	9520	7010	3260	7070	7280	6090	6790
26	4140	4760	2130	3420	3460	10100	7100	3290	7090	6280	5850	5460
27	4660	4040	2430	3330	3110	10400	6260	3350	6930	6310	5390	5040
28	4600	3920	2830	3770	2660	10200	5770	3260	6550	5960	6170	5600
29	5100	3720	5630	2960	---	9180	6470	3140	6200	6110	5530	6750
30	4820	3990	3940	3760	---	11800	5830	3960	6850	6040	5250	4200
31	4770	---	3030	3940	---	12000	---	2970	---	6630	4930	---
MEAN	6041	3842	3404	3962	3579	6051	9188	4176	5383	6325	7245	5457
MAX	8180	5680	5630	6810	4650	12000	11500	5930	7830	10000	8810	6790
MIN	4020	1730	1450	2210	1950	635	5770	2970	2440	1820	4930	4200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	5285	3906	3676	4090	4044	5366	7504	4239	4375	4979	5405	5482
MAX	6041	3970	3948	4218	4494	6051	9188	4302	5383	6325	7245	6564
(WY)	2001	2000	2000	2000	2000	2001	2001	2000	2001	2001	2001	2000
MIN	4530	3842	3404	3962	3579	4682	5820	4176	3368	3841	3885	4425
(WY)	2000	2001	2001	2001	2001	2000	2000	2001	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	5396		4929	
HIGHEST ANNUAL MEAN			5396	2001
LOWEST ANNUAL MEAN			4463	2000
HIGHEST DAILY MEAN	12000	Mar 31	12000	Mar 31 2001
LOWEST DAILY MEAN	635	Mar 3	635	Mar 3 2001
ANNUAL SEVEN-DAY MINIMUM	2590	Feb 25	2590	Feb 25 2001
MAXIMUM PEAK FLOW	20500	Mar 29	20500	Mar 29 2001
MAXIMUM PEAK STAGE	5.86	Jul 23	5.86	Jul 23 2001
INSTANTANEOUS LOW FLOW	-16400	Jul 23	-16400	Jul 23 2001
10 PERCENT EXCEEDS	8240		7280	
50 PERCENT EXCEEDS	5020		4520	
90 PERCENT EXCEEDS	3100		3230	

e Estimated

02323592 SUWANNEE RIVER ABOVE GOPHER RIVER NEAR SUWANNEE, FL--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	1.29	.43	-.08	.20	.70	.85	.25	1.05	1.02	.80	1.45
2	1.05	1.28	.48	-.54	-.32	.97	.62	.62	1.17	1.11	.94	1.40
3	.84	1.07	-.09	-.53	-.38	1.42	1.13	.58	.89	1.10	1.65	1.47
4	1.20	.97	-.55	-.25	-.13	1.71	1.23	.36	.89	1.12	1.83	1.33
5	1.16	1.13	.01	.41	.00	.35	1.22	.64	.89	1.20	1.91	1.30
6	1.12	1.54	.48	.41	.15	-.51	1.29	.89	.93	1.20	1.47	1.16
7	.77	1.64	.56	.61	.29	-.35	1.45	.74	.91	1.15	1.02	1.27
8	.30	1.73	.87	1.14	.33	.12	1.45	.55	.75	1.15	.92	1.30
9	-.90	2.26	1.01	-.01	.48	1.05	1.44	.93	.82	1.25	1.00	1.22
10	-.22	1.58	1.08	-.19	.50	.85	1.37	1.14	.89	1.21	1.07	.98
11	.52	1.02	1.03	.50	.23	.79	1.49	1.08	1.17	1.41	.99	.68
12	.82	1.19	1.14	.77	.24	1.17	1.34	1.01	1.81	1.42	.94	.98
13	.90	1.45	1.00	.06	.10	1.55	1.25	.82	.94	1.32	.84	.76
14	1.30	1.42	1.14	.33	.13	.65	1.11	.51	.66	.67	1.08	-.08
15	1.44	.47	.88	.30	.23	1.47	1.12	.74	.56	.59	1.53	-.24
16	1.42	1.21	1.27	.32	.41	1.14	.79	.88	.58	.65	1.50	.83
17	1.45	1.34	.88	.36	.29	.17	.54	.72	.58	.97	1.47	1.20
18	1.29	.47	-.09	.49	-.61	-.33	-.37	.66	.64	1.33	1.64	1.43
19	1.21	1.00	.38	1.04	-.06	-.11	.27	.74	.88	1.32	1.80	1.59
20	1.05	.00	-.71	.26	.43	1.21	.83	.95	.94	1.37	1.50	1.64
21	.99	-.57	.19	-.75	.59	.44	1.10	1.12	1.13	1.42	1.49	1.72
22	1.11	-.36	-.16	-.45	.82	.00	.84	1.26	1.31	1.45	1.30	1.44
23	.54	.47	-.68	-.77	.57	.36	1.07	1.23	1.44	2.14	1.36	1.30
24	.32	1.30	-.54	-.10	.51	.79	1.15	.98	1.08	2.59	1.20	1.37
25	.84	2.03	-.62	-.25	.72	1.08	1.14	1.22	.94	1.29	.93	1.01
26	1.26	1.22	-.41	-.29	.70	.97	.28	1.15	.81	1.08	.90	.64
27	1.43	.77	.72	.24	.38	.42	.34	.98	.65	.88	1.01	.84
28	1.41	.61	1.63	.35	.71	.64	.78	1.11	.56	.71	.90	1.04
29	1.54	.48	-.14	.64	---	1.84	.55	1.26	.81	.60	.92	.34
30	1.32	.36	-.29	1.06	---	1.62	.25	.83	.97	.70	1.10	-.14
31	1.23	---	-.56	.76	---	1.19	---	.65	---	.68	1.32	---
MEAN	.96	1.01	.33	.19	.27	.75	.93	.86	.92	1.16	1.24	1.04
MAX	1.54	2.26	1.63	1.14	.82	1.84	1.49	1.26	1.81	2.59	1.91	1.72
MIN	-.90	-.57	-.71	-.77	-.61	-.51	-.37	.25	.56	.59	.80	-.24

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1999 to current year.

REMARKS.--Water temperature records poor; salinity records good. Water-quality measured at two elevations, 1.95 ft (top) and 10.02 ft (bottom) below NGVD of 1929.

TEMPERATURE, WATER TOP (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.3	22.7	17.5	13.1	16.7	22.4	17.3	22.6	27.6	27.6	28.0	28.7
2	24.5	22.7	17.4	12.8	16.7	22.7	17.5	22.9	27.1	27.8	27.5	28.6
3	24.6	22.7	17.4	12.5	16.1	22.9	17.9	23.1	27.6	27.8	27.1	28.3
4	24.7	22.9	16.4	12.2	15.6	22.8	18.5	23.4	28.0	27.8	27.1	27.7
5	25.0	23.0	15.7	12.2	15.4	21.6	19.0	23.5	28.2	28.0	27.1	27.4
6	25.3	23.0	15.4	12.5	15.3	20.4	19.4	23.9	28.4	28.0	27.0	27.1
7	25.2	23.0	15.3	12.5	15.5	19.4	19.8	24.1	28.8	27.9	27.4	27.1
8	24.8	23.0	15.3	12.9	16.1	18.9	20.3	23.9	29.2	28.0	27.5	27.6
9	23.1	23.1	16.0	12.9	16.8	18.6	20.7	23.8	29.4	28.7	27.9	27.7
10	21.4	23.1	16.7	12.4	17.6	18.4	21.1	23.9	29.2	28.8	28.4	27.7
11	20.9	22.4	17.4	12.2	18.3	18.6	21.6	24.1	28.9	28.5	28.7	27.7
12	20.9	21.9	18.1	12.5	18.8	19.2	22.1	24.6	28.7	28.5	28.8	27.5
13	21.1	21.5	18.9	12.4	19.2	20.0	22.6	25.3	28.5	28.7	28.9	27.0
14	21.2	21.5	19.5	12.7	19.6	20.7	22.9	25.6	28.6	28.4	28.8	25.8
15	21.4	20.6	20.1	13.7	20.1	21.2	23.3	25.9	28.6	28.2	28.5	24.8
16	21.5	19.8	20.6	14.8	20.8	21.5	23.6	26.2	28.4	28.3	28.6	24.8
17	21.6	19.8	20.4	15.5	20.9	20.8	23.4	26.4	28.3	28.3	28.6	24.9
18	21.8	19.5	19.1	16.2	20.2	19.2	22.3	26.6	27.4	28.0	28.7	25.2
19	22.0	18.9	17.8	17.0	19.5	17.8	21.9	26.6	27.2	28.1	28.9	25.4
20	22.2	18.2	16.2	17.2	19.7	17.7	21.7	26.6	27.4	28.2	29.1	25.8
21	22.3	17.4	15.1	16.3	20.0	17.3	21.9	26.4	27.9	27.7	28.9	26.3
22	22.5	16.6	14.6	15.6	20.3	17.1	22.3	26.6	27.6	27.9	28.8	26.6
23	22.4	16.0	13.8	15.1	20.3	17.4	22.6	26.8	27.0	28.2	28.8	26.9
24	22.2	15.9	13.6	14.9	20.2	17.5	23.1	26.4	26.9	27.4	28.9	26.7
25	22.2	16.5	13.6	14.6	20.6	17.2	23.1	26.4	27.2	26.9	29.1	26.3
26	22.2	16.9	13.6	14.3	21.2	16.8	22.8	26.6	27.6	27.6	29.0	25.7
27	22.1	17.0	14.1	14.2	21.8	16.2	22.6	26.7	27.9	28.1	28.9	25.2
28	22.2	17.1	14.6	14.5	22.2	16.1	22.5	26.7	27.7	28.3	28.8	24.9
29	22.4	17.3	14.8	15.3	---	16.3	22.5	27.2	27.3	28.4	28.7	24.4
30	22.7	17.5	14.3	15.8	---	16.6	22.6	27.3	27.2	28.7	28.8	23.5
31	22.7	---	13.6	16.3	---	16.9	---	27.6	---	28.5	28.8	---
MEAN	22.7	20.0	16.4	14.1	18.8	19.0	21.4	25.4	28.0	28.1	28.4	26.4
MAX	25.3	23.1	20.6	17.2	22.2	22.9	23.6	27.6	29.4	28.8	29.1	28.7
MIN	20.9	15.9	13.6	12.2	15.3	16.1	17.3	22.6	26.9	26.9	27.0	23.5

02323592 SUWANNEE RIVER ABOVE GOPHER RIVER NEAR SUWANNEE, FL--Continued

TEMPERATURE, WATER BOTTOM (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.2	22.6	17.4	13.0	16.6	22.3	17.2	22.5	27.5	27.5	27.9	28.6
2	24.3	22.6	17.3	12.7	16.6	22.6	17.5	22.8	27.0	27.7	27.4	28.5
3	24.5	22.6	17.3	12.4	16.0	22.8	17.8	23.0	27.5	27.7	27.0	28.1
4	24.6	22.8	16.3	12.1	15.6	22.7	18.2	23.3	27.9	27.7	27.0	27.6
5	24.9	22.9	15.6	12.1	15.3	21.5	18.8	23.4	28.1	27.9	27.0	27.3
6	25.2	22.9	15.3	12.4	15.2	20.3	19.1	23.8	28.3	27.9	26.9	27.0
7	25.1	22.9	15.2	12.4	15.4	19.3	19.6	24.0	28.7	27.8	27.3	27.0
8	24.7	22.9	15.2	12.8	16.0	18.8	20.1	23.8	29.1	27.9	27.4	27.4
9	23.0	23.0	15.9	12.8	16.7	18.4	20.5	23.7	29.3	28.6	27.8	27.5
10	21.4	23.0	16.6	12.3	17.5	18.3	20.9	23.8	29.1	28.7	28.3	27.6
11	20.8	22.3	17.3	12.1	18.2	18.5	21.4	24.0	28.8	28.4	28.6	27.6
12	20.8	21.8	18.0	12.4	18.7	19.1	21.9	24.5	28.6	28.4	28.7	27.4
13	21.0	21.4	18.8	12.3	19.1	19.9	22.4	25.2	28.4	28.6	28.8	26.9
14	21.0	21.4	19.4	12.6	19.5	20.6	22.8	25.5	28.5	28.3	28.7	25.7
15	21.3	20.5	20.0	13.6	20.0	21.1	23.2	25.8	28.5	28.1	28.4	24.7
16	21.4	19.7	20.5	14.7	20.7	21.3	23.5	26.1	28.3	28.2	28.5	24.7
17	21.5	19.7	20.3	15.4	20.8	20.7	23.3	26.3	28.2	28.2	28.5	24.8
18	21.7	19.4	19.0	16.1	20.1	19.1	22.2	26.5	27.3	27.9	28.6	25.1
19	22.0	18.8	17.7	16.9	19.4	17.7	21.7	26.5	27.1	28.0	28.8	25.3
20	22.2	18.1	16.1	17.1	19.6	17.6	21.4	26.5	27.3	28.1	29.0	25.7
21	22.2	17.3	15.0	16.2	19.9	17.2	21.6	26.3	27.8	27.6	28.8	26.2
22	22.4	16.5	14.5	15.5	20.2	17.0	22.1	26.5	27.5	27.8	28.7	26.5
23	22.3	15.9	13.7	15.0	20.2	17.3	22.4	26.7	26.9	28.1	28.6	26.7
24	22.1	15.8	13.5	14.8	20.1	17.3	22.9	26.3	26.8	27.3	28.8	26.7
25	22.1	16.4	13.5	14.5	20.5	17.2	23.0	26.3	27.1	26.8	28.9	26.2
26	22.1	16.8	13.5	14.2	21.1	16.7	22.7	26.5	27.5	27.5	28.9	25.6
27	22.0	16.9	14.0	14.1	21.7	16.1	22.3	26.6	27.8	28.0	28.8	25.0
28	22.1	17.0	14.5	14.4	22.1	16.0	22.4	26.6	27.6	28.2	28.5	24.8
29	22.3	17.2	14.7	15.2	---	16.3	22.4	27.1	27.2	28.3	28.4	24.3
30	22.6	17.4	14.2	15.7	---	16.5	22.5	27.2	27.1	28.6	28.6	23.4
31	22.6	---	13.5	16.2	---	16.9	---	27.5	---	28.4	28.6	---
MEAN	22.6	20.0	16.3	14.0	18.7	18.9	21.3	25.3	27.9	28.0	28.3	26.3
MAX	25.2	23.0	20.5	17.1	22.1	22.8	23.5	27.5	29.3	28.7	29.0	28.6
MIN	20.8	15.8	13.5	12.1	15.2	16.0	17.2	22.5	26.8	26.8	26.9	23.4

SALINITY, TOP (PARTS PER THOUSAND), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.16	.18	.16	.13	.15	.05	.14	.17	.10	.14	.15
2	.09	.16	.18	.16	.13	.15	.05	.14	.17	.10	.14	.15
3	.09	.16	.18	.16	.13	.15	.05	.14	.17	.10	.14	.16
4	.09	.17	.17	.16	.12	.15	.05	.14	.17	.11	.14	.16
5	.09	.17	.17	.16	.12	.15	.05	.15	.17	.11	.14	.16
6	.09	.17	.17	.15	.12	.15	.05	.15	.17	.12	.13	.16
7	.10	.17	.17	.14	.12	.15	.05	.15	.17	.12	.13	.16
8	.10	.17	.16	.13	.12	.15	.05	.15	.17	.12	.13	.16
9	.11	.17	.16	.12	.12	.16	.05	.16	.17	.12	.13	.16
10	.12	.17	.16	.12	.12	.16	.05	.16	.17	.11	.13	.17
11	.12	.17	.16	.11	.12	.15	.05	.16	.17	.10	.13	.17
12	.13	.17	.16	.11	.13	.15	.05	.16	.17	.09	.12	.17
13	.13	.17	.16	.11	.13	.15	.06	.16	.17	.08	.11	.16
14	.13	.19	.16	.11	.13	.14	.06	.16	.17	.08	.10	.16
15	.13	.17	.17	.11	.13	.13	.07	.16	.17	.09	.10	.16
16	.13	.17	.17	.12	.13	.12	.07	.16	.17	.09	.11	.16
17	.13	.17	.17	.12	.13	.10	.08	.16	.15	.10	.11	.16
18	.14	.18	.17	.12	.13	.09	.08	.16	.08	.10	.11	.16
19	.14	.18	.17	.13	.13	.08	.09	.17	.06	.10	.12	.16
20	.14	.18	.17	.13	.14	.08	.09	.17	.06	.11	.12	.16
21	.14	.18	.17	.13	.14	.07	.10	.17	.06	.11	.13	.16
22	.15	.18	.17	.13	.14	.07	.10	.17	.06	.11	.13	.16
23	.15	.18	.17	.13	.14	.06	.11	.17	.06	1.0	.14	.16
24	.15	.18	.17	.13	.14	.06	.11	.17	.07	.15	.14	.16
25	.15	.34	.17	.13	.14	.05	.11	.17	.08	.12	.14	.16
26	.15	.17	.17	.14	.14	.05	.12	.17	.08	.13	.14	.16
27	.15	.17	.17	.14	.14	.04	.12	.17	.09	.13	.14	.16
28	.16	.17	.17	.14	.14	.04	.13	.17	.09	.13	.14	.16
29	.16	.18	.16	.14	---	.04	.13	.17	.09	.14	.15	.16
30	.16	.18	.16	.14	---	.04	.13	.17	.10	.14	.15	.16
31	.16	---	.16	.14	---	.04	---	.17	---	.14	.15	---
MEAN	.13	.18	.17	.13	.13	.11	.08	.16	.13	.14	.13	.16
MAX	.16	.34	.18	.16	.14	.16	.13	.17	.17	1.0	.15	.17
MIN	.09	.16	.16	.11	.12	.04	.05	.14	.06	.08	.10	.15

02323592 SUWANNEE RIVER ABOVE GOPHER RIVER NEAR SUWANNEE, FL--Continued

SALINITY, BOTTOM (PARTS PER THOUSAND), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.16	.18	.16	.14	.15	.05	.14	.18	.11	.14	.15
2	.09	.16	.18	.16	.13	.15	.05	.14	.18	.11	.14	.16
3	.09	.16	.18	.16	.13	.15	.05	.14	.18	.11	.14	.16
4	.09	.17	.17	.16	.13	.15	.05	.15	.18	.11	.14	.16
5	.09	.17	.17	.16	.13	.15	.05	.15	.18	.12	.14	.16
6	.09	.17	.17	.16	.12	.15	.05	.15	.17	.12	.14	.16
7	.10	.17	.17	.15	.12	.15	.05	.15	.18	.12	.13	.16
8	.10	.17	.16	.13	.12	.16	.05	.16	.18	.12	.13	.16
9	.11	.17	.16	.12	.12	.16	.05	.16	.18	.12	.13	.17
10	.12	.17	.16	.12	.13	.16	.05	.16	.18	.11	.13	.17
11	.12	.17	.16	.12	.13	.16	.05	.16	.18	.10	.13	.17
12	.13	.17	.16	.11	.13	.15	.06	.16	.18	.09	.12	.17
13	.13	.17	.16	.11	.13	.15	.06	.16	.18	.08	.11	.17
14	.13	.21	.16	.11	.13	.14	.07	.17	.18	.08	.10	.16
15	.13	.17	.17	.12	.13	.13	.07	.17	.18	.09	.10	.16
16	.13	.17	.17	.12	.13	.12	.07	.17	.17	.10	.11	.16
17	.13	.17	.17	.12	.13	.10	.08	.17	.16	.10	.11	.16
18	.14	.17	.17	.13	.14	.09	.09	.17	.09	.11	.12	.16
19	.14	.17	.17	.13	.14	.08	.09	.17	.07	.11	.12	.16
20	.14	.17	.17	.13	.14	.08	.10	.17	.07	.12	.13	.17
21	.14	.18	.17	.13	.14	.07	.10	.17	.06	.11	.13	.17
22	.14	.18	.17	.13	.14	.07	.11	.17	.07	.12	.13	.17
23	.15	.18	.17	.13	.14	.06	.11	.17	.07	1.6	.14	.17
24	.15	.18	.17	.13	.14	.06	.11	.17	.08	.16	.14	.17
25	.15	.61	.17	.14	.14	.05	.12	.17	.08	.12	.14	.16
26	.15	.17	.17	.14	.15	.05	.12	.18	.09	.13	.14	.16
27	.15	.17	.17	.14	.15	.04	.12	.18	.09	.13	.14	.16
28	.16	.17	.17	.14	.15	.04	.13	.18	.10	.14	.15	.16
29	.16	.17	.16	.14	---	.04	.13	.18	.10	.14	.15	.16
30	.16	.17	.16	.14	---	.04	.14	.18	.10	.14	.15	.16
31	.16	---	.16	.14	---	.04	---	.18	---	.14	.15	---
MEAN	.13	.19	.17	.13	.13	.11	.08	.16	.14	.16	.13	.16
MAX	.16	.61	.18	.16	.15	.16	.14	.18	.18	1.6	.15	.17
MIN	.09	.16	.16	.11	.12	.04	.05	.14	.06	.08	.10	.15

02324000 STEINHATCHEE RIVER NEAR CROSS CITY, FL

LOCATION.--Lat 29°47'11", long 83°19'18", in NE¼ sec. 16, T. 8 S., R. 10 E., Taylor County, Hydrologic Unit 03110102, on right bank 0.7 mi downstream from Atlantic Coast Line Railroad bridge, 0.7 mi south of Clara, 13 mi upstream from mouth, and 16 mi northwest of Cross City.

DRAINAGE AREA.--350 mi^2, approximately. See REMARKS.

PERIOD OF RECORD.--February 1950 to current year.

REVISED RECORDS.--WSP 1234: 1950. WSP 1724: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.84 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Below about 500 ft^3/s, all flow enters sinkhole 0.5 mi downstream from gage. Above about 4,000 ft^3/s, discharge measurements are made along U.S. Highways 19, 98, and Alternate 27, measurements include all flow from about 3 mi northwest to 5 mi southwest of main channel, drainage area is increased by about 30 mi^2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	20	15	e9.4	e22	15	116	6.6	3.6	34	e725	e782
2	197	19	14	e11	e22	16	101	6.4	3.8	41	e784	e825
3	174	19	13	e12	e22	16	90	5.9	3.6	45	e856	e882
4	154	18	12	e12	e21	18	83	5.4	3.4	57	e890	e900
5	139	17	12	e11	e22	22	76	5.4	3.3	65	e905	e927
6	127	17	12	e10	e22	19	69	5.0	3.3	66	e940	e958
7	152	16	11	e9.6	e22	19	63	5.0	3.1	62	e1010	e981
8	138	15	11	e9.7	22	17	58	5.0	3.0	56	e1090	e1020
9	120	15	11	e10	22	17	54	5.0	3.0	56	e1130	e1030
10	104	16	10	e11	21	19	50	5.0	3.3	61	e1160	e1030
11	93	15	9.7	e14	22	19	47	4.9	3.3	90	e1190	e1030
12	84	15	9.7	e15	21	19	44	4.8	3.7	89	e1140	e1020
13	75	14	9.7	e16	19	19	41	4.6	3.7	85	e1050	e1020
14	69	13	9.1	e17	19	23	39	4.5	2.8	103	e1030	e1010
15	63	13	9.1	e18	19	30	38	4.3	2.5	100	e1020	e964
16	58	12	9.3	e18	19	55	34	4.3	2.4	94	e928	e900
17	54	13	9.3	e16	18	60	30	4.3	2.4	83	e875	e852
18	50	12	8.6	e17	17	75	24	4.1	2.9	104	e803	e838
19	47	12	8.5	e19	15	90	20	3.9	2.6	138	e910	e822
20	44	14	8.3	e24	15	112	18	3.9	3.0	127	e1020	e803
21	41	14	8.6	e23	14	116	16	3.8	2.6	233	e1150	e759
22	39	13	8.6	e22	14	107	14	3.7	2.5	252	e1310	e720
23	36	12	8.6	e21	14	93	13	3.8	5.3	250	e1220	e684
24	32	12	8.6	e20	15	81	11	3.7	7.8	734	e1090	e642
25	30	15	8.6	e21	18	75	11	3.7	18	1220	e982	e704
26	28	21	8.8	e20	17	84	11	3.5	37	1350	e900	e778
27	26	21	8.7	e19	15	75	11	3.5	32	1340	e821	e743
28	24	19	9.7	e21	15	68	9.3	3.7	26	1230	e766	e719
29	23	18	12	e21	---	69	8.3	3.6	25	e1080	e732	e710
30	22	17	e10	e21	---	115	7.5	3.4	35	e915	e695	e681
31	21	---	e9.6	e24	---	122	---	3.3	---	e840	e744	---
MEAN	80.3	15.6	10.1	16.5	18.7	54.4	40.2	4.45	8.46	355	963	858
MAX	226	21	15	24	22	122	116	6.6	37	1350	1310	1030
MIN	21	12	8.3	9.4	14	15	7.5	3.3	2.4	34	695	642
IN.	.26	.05	.03	.05	.06	.18	.13	.01	.03	1.17	3.17	2.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

MEAN	286	123	188	327	468	486	334	122	115	307	504	492
MAX	1436	1291	998	1186	2266	2022	1443	972	925	1305	2496	3820
(WY)	1958	1952	1954	1998	1998	1991	1982	1978	1957	1964	1970	1964
MIN	16.0	6.34	6.87	12.4	13.0	15.1	8.21	4.45	2.37	2.99	4.75	29.5
(WY)	1956	2000	2000	2000	1957	2000	2000	2001	2000	2000	1998	1956

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL MEAN	50.4		203		313	
HIGHEST ANNUAL MEAN					901	1964
LOWEST ANNUAL MEAN					35.4	1956
HIGHEST DAILY MEAN	1360	Sep 20	1350	Jul 26	16400	Sep 14 1964
LOWEST DAILY MEAN	1.5	Jun 13	2.4	Jun 16	1.5	Jun 13 2000
ANNUAL SEVEN-DAY MINIMUM	1.6	Jun 8	2.6	Jun 15	1.6	Jun 8 2000
MAXIMUM PEAK FLOW			1370	Jul 26	17600	Sep 13 1964
MAXIMUM PEAK STAGE			10.32	Jul 26	18.90	Sep 13 1964
INSTANTANEOUS LOW FLOW			2.4	Jun 15	1.4	Jun 11 2000
ANNUAL RUNOFF (INCHES)	1.96		7.89		12.16	
10 PERCENT EXCEEDS	80		902		856	
50 PERCENT EXCEEDS	9.6		21		113	
90 PERCENT EXCEEDS	2.6		4.2		14	

e Estimated

02324400 FENHOLLOWAY RIVER NEAR FOLEY, FL

LOCATION.--Lat 30°05'53", long 83°28'19", in NE¼ sec. 36, T. 4 S., R. 8 E., Taylor County, Hydrologic Unit 03110102, near left bank at downstream side of bridge on U.S. Highway 27, 1.8 mi upstream from small tributary, 4 mi northeast of Foley, and 32 mi upstream from mouth.

DRAINAGE AREA.--60 mi^2 approximately.

PERIOD OF RECORD.--February to August 1955 (discharge measurements only); September 1955 to current year.

REVISED RECORDS.--WSP 1905: Drainage area: WDR FL-92-4: 1991.

GAGE.--Water-stage recorder. Datum of gage is 53.59 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	e2.4	.67	.55	e.47	e.50	52	1.7	.50	12	53	8.0
2	26	e2.0	.65	.53	e.46	e.50	48	1.4	.52	31	53	11
3	24	e1.7	.64	.52	e.46	e.49	43	1.2	.50	24	46	20
4	22	e1.5	.64	.52	e.46	e.50	39	1.1	.48	18	46	35
5	20	e1.2	.62	.54	e.45	e.49	35	.96	.52	14	45	31
6	19	e1.0	.59	.53	e.45	e.48	32	.89	.58	11	68	26
7	25	e.89	.60	.52	e.44	e.47	29	.79	.56	8.2	63	23
8	29	.75	.58	.55	.45	e.46	26	.76	.64	6.0	83	20
9	26	.74	.58	.55	e.46	e.47	23	.68	.72	4.5	86	18
10	24	.71	.57	e.54	e.47	e.48	21	.67	.69	3.7	79	16
11	21	.70	.57	e.54	e.47	e.47	19	.62	.68	6.4	64	14
12	19	.67	.56	e.54	e.47	.67	17	.60	.92	17	50	13
13	18	.65	.54	e.54	e.46	17	15	.58	1.6	9.6	41	12
14	16	.71	.55	e.53	e.46	36	13	.57	2.6	7.1	34	11
15	15	.76	.52	e.53	e.47	37	12	.54	1.6	5.6	32	9.9
16	13	.73	.53	e.52	e.47	40	12	.49	1.2	4.0	31	8.6
17	12	.71	.55	e.52	e.46	40	11	.50	1.0	3.0	59	7.3
18	11	.69	.54	e.52	e.46	45	9.5	.53	.97	2.4	59	6.1
19	10	.62	.57	e.51	e.47	52	8.3	.49	2.5	2.1	55	5.2
20	9.3	.63	.63	e.51	e.48	64	7.2	.50	2.8	2.3	49	4.6
21	8.5	.62	.63	e.50	e.47	75	6.3	.52	1.9	42	40	4.0
22	7.7	.61	.62	e.50	e.48	81	5.5	.50	1.5	26	32	3.8
23	e7.0	.59	.60	e.50	e.49	75	4.5	.46	1.5	20	26	5.7
24	e6.4	.61	.52	e.50	e.50	67	3.8	.43	2.3	67	22	6.4
25	e5.8	.66	.51	e.49	e.51	60	3.5	.40	1.9	106	19	6.4
26	e5.2	.69	.52	e.49	e.50	56	3.5	.42	1.4	79	17	5.9
27	e4.7	.71	.52	e.48	e.49	51	3.0	.43	1.1	63	15	5.0
28	e4.1	.70	.56	e.48	e.48	46	2.6	.44	1.9	51	13	4.3
29	e3.6	.68	.59	e.48	---	45	2.2	.47	4.3	51	11	3.6
30	e3.2	.68	.56	e.48	---	54	1.9	.49	14	38	9.6	3.0
31	e2.7	---	.55	e.47	---	54	---	.50	---	37	8.4	---
MEAN	14.4	.88	.58	.52	.47	32.3	17.0	.67	1.78	24.9	42.2	11.6
MAX	29	2.4	.67	.55	.51	81	52	1.7	14	106	86	35
MIN	2.7	.59	.51	.47	.44	.46	1.9	.40	.48	2.1	8.4	3.0
IN.	.28	.02	.01	.01	.01	.62	.32	.01	.03	.48	.81	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2001, BY WATER YEAR (WY)

MEAN	38.0	12.9	25.5	46.0	72.2	86.2	69.5	25.0	30.5	47.1	78.5	58.4
MAX	389	81.5	185	179	259	377	413	147	478	194	580	560
(WY)	1958	1977	1977	1987	1998	1991	1973	1964	1957	1964	1970	1964
MIN	.53	.70	.58	.52	.47	1.17	.50	.31	.32	.36	.50	.64
(WY)	1994	1969	2001	2001	2001	2000	2000	2000	2000	2000	1993	1993

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1956 - 2001	
ANNUAL MEAN	5.01		12.4		49.0	
HIGHEST ANNUAL MEAN					154	1964
LOWEST ANNUAL MEAN					4.42	2000
HIGHEST DAILY MEAN	121	Sep 20	106	Jul 25	2710	Sep 12 1964
LOWEST DAILY MEAN	.20	Jun 16	.40	May 25	.20	Jun 16 2000
ANNUAL SEVEN-DAY MINIMUM	.21	Jun 10	.44	May 23	.21	Jun 10 2000
MAXIMUM PEAK FLOW			119	Jul 25	3210	Sep 12 1964
MAXIMUM PEAK STAGE			5.50	Jul 25	15.21	Sep 12 1964
INSTANTANEOUS LOW FLOW			.40	May 24	.20	Jun 11 2000
ANNUAL RUNOFF (INCHES)	1.14		2.81		11.11	
10 PERCENT EXCEEDS	12		45		135	
50 PERCENT EXCEEDS	.67		1.9		15	
90 PERCENT EXCEEDS	.28		.48		1.3	

e Estimated

02325000 FENHOLLOWAY RIVER NEAR PERRY, FL

LOCATION.--Lat 30°04'16", long 83°39'45", in SE¼ sec. 6, T. 5 S., R. 7 E., Taylor County, Hydrologic Unit 03110102, near right bank on downstream side of old bridge at State Highway 356, 1.0 mi southwest of the community of Hampton Springs, 5.5 mi southwest of Perry, and 14 mi upstream from mouth.

DRAINAGE AREA.--160 mi^2, approximately.

PERIOD OF RECORD.--August 1946 to June 1952 (discharge measurements only); August 1952 to October 1954 (gage heights and discharge measurements only); November 1964 to July 1977 (crest-stage and periodic discharge measurements only); August 1977 to September 1984. May 1986 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. August 13, 1946 to October 1954, nonrecording gage at same site at datum 5.00 ft higher. November 1964 to July 1977, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by large ground-water withdrawals by cellulose plant about 10 mi upstream. Flow affected by backwater from Spring Creek at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	95	82	76	68	65	151	88	70	94	119	114
2	125	92	81	77	69	77	148	89	71	92	115	117
3	124	90	81	77	69	74	144	88	68	92	116	117
4	123	83	80	75	70	79	144	84	67	95	122	122
5	122	86	79	73	70	79	141	81	66	92	124	122
6	120	85	80	73	70	74	136	80	65	89	136	121
7	123	87	80	72	65	73	132	83	64	89	138	124
8	119	87	80	74	63	70	127	80	62	88	141	124
9	116	83	80	73	70	72	125	81	65	87	144	130
10	114	84	79	73	73	76	122	76	69	87	147	128
11	111	85	80	74	77	71	119	76	70	109	148	126
12	110	83	82	75	77	70	118	78	71	93	144	128
13	107	81	80	75	76	102	117	80	77	94	137	123
14	106	86	79	75	74	102	117	78	82	107	129	121
15	106	83	82	75	74	102	116	77	67	105	133	117
16	106	82	82	75	75	122	113	77	69	100	118	110
17	102	79	81	73	75	115	110	76	71	94	117	112
18	104	80	78	71	71	124	107	76	71	97	127	109
19	103	79	79	73	71	128	99	74	81	92	156	107
20	100	81	78	76	73	141	105	74	81	99	169	108
21	97	78	80	73	74	136	104	75	77	119	152	104
22	99	77	78	72	71	132	103	74	86	108	141	102
23	97	78	77	70	74	131	100	74	92	101	134	108
24	96	81	77	68	73	135	98	72	94	110	125	111
25	91	88	76	69	77	137	103	72	88	129	120	111
26	95	89	78	68	75	146	101	71	87	114	118	108
27	94	85	77	67	66	140	98	72	87	110	116	107
28	95	82	77	69	67	136	94	71	87	108	113	105
29	92	82	80	69	---	142	91	71	87	111	111	104
30	92	83	78	69	---	155	88	72	91	108	108	99
31	95	---	76	71	---	151	---	71	---	113	110	---
MEAN	107	83.8	79.3	72.6	71.7	108	116	77.1	76.1	101	130	115
MAX	129	95	82	77	77	155	151	89	94	129	169	130
MIN	91	77	76	67	63	65	88	71	62	87	108	99
IN.	.77	.58	.57	.52	.47	.78	.81	.56	.53	.73	.94	.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)

MEAN	172	139	148	184	233	268	249	155	139	185	224	176
MAX	451	266	369	476	495	699	652	316	317	475	492	310
(WY)	1995	1981	1987	1987	1987	1991	1983	1983	1983	1984	1991	1988
MIN	75.7	83.8	79.3	72.6	71.7	80.0	81.8	77.1	76.1	85.9	82.8	94.2
(WY)	1991	2001	2001	2001	2001	2000	2000	2001	2001	2000	1993	1993

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1977 - 2001	
ANNUAL MEAN	90.2		94.9		190	
HIGHEST ANNUAL MEAN					317	1983
LOWEST ANNUAL MEAN					91.9	2000
HIGHEST DAILY MEAN	189	Sep 18	169	Aug 20	1130	Jul 31 1982
LOWEST DAILY MEAN	69	Mar 9	62	Jun 8	35	Oct 8 1990
ANNUAL SEVEN-DAY MINIMUM	75	Jan 11	65	Jun 3	48	Oct 4 1990
MAXIMUM PEAK FLOW			175	Aug 20	1360	Sep 18 1964
MAXIMUM PEAK STAGE			13.57	Aug 20	24.39	Sep 13 1964
INSTANTANEOUS LOW FLOW			60	Mar 1	35	Oct 8 1990
ANNUAL RUNOFF (INCHES)	7.68		8.05		16.11	
10 PERCENT EXCEEDS	117		129		340	
50 PERCENT EXCEEDS	84		87		145	
90 PERCENT EXCEEDS	77		71		94	

02326000 ECONFINA RIVER NEAR PERRY, FL

LOCATION.--Lat 30°10'14", long 83°49'26", in NE¼ sec. 4, T. 4 S., R. 5 E., Taylor County, Hydrologic Unit 03110102, on downstream side of concrete bridge, 3.0 mi downstream from Natural Well Branch, 14 mi upstream from mouth, and 14.7 mi northwest of Perry.

DRAINAGE AREA.--198 mi^2.

PERIOD OF RECORD.--February 1950 to September 2000, October 2000 to September 2001 (fragmentary).

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.35 ft above National Geodetic Vertical Datum of 1929.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge 139 ft^3/s, Apr. 1, gage height, 4.74 ft; minimum 16 ft^3/s, Jan. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	21	24	21	18	18	139	33	---	---	---	---
2	51	21	24	20	19	18	137	31	---	---	---	---
3	49	20	23	19	20	18	130	30	---	---	---	---
4	47	20	23	19	20	20	124	29	---	---	---	---
5	45	20	23	19	20	21	118	28	---	---	---	---
6	44	19	22	19	19	24	111	27	---	---	---	---
7	49	19	22	19	19	26	105	26	---	---	---	---
8	50	19	21	19	19	24	99	25	---	---	---	---
9	48	19	21	18	19	23	93	24	---	---	---	---
10	46	19	21	18	19	24	88	24	---	---	---	---
11	43	19	21	18	19	25	83	23	---	---	---	---
12	41	19	21	18	19	28	78	23	---	---	---	---
13	38	18	21	18	19	37	73	22	---	---	---	---
14	37	19	20	18	19	43	69	21	---	---	---	---
15	35	18	20	18	19	54	66	---	---	---	---	---
16	34	18	20	18	19	60	62	---	---	---	---	---
17	32	18	20	17	19	58	59	---	---	---	---	---
18	31	18	20	17	18	61	55	---	---	---	---	---
19	30	18	20	17	18	68	52	---	---	---	---	---
20	29	18	20	18	18	79	50	---	---	---	---	---
21	28	18	20	18	18	92	47	---	---	---	---	---
22	27	18	20	18	18	100	44	---	---	---	---	---
23	26	17	19	18	18	101	42	---	---	---	---	---
24	25	18	19	18	18	98	40	---	---	---	---	---
25	25	21	19	18	18	96	39	---	---	---	---	---
26	24	22	18	17	18	95	39	---	---	---	---	---
27	23	24	18	17	18	93	39	---	---	---	---	---
28	23	25	19	17	18	90	37	---	---	---	---	---
29	22	25	19	17	---	101	36	---	---	---	---	---
30	22	25	20	17	---	124	34	---	---	---	---	---
31	21	---	20	18	---	134	---	---	---	---	---	---
MEAN	35.4	19.8	20.6	18.1	18.7	59.8	72.9	---	---	---	---	---
MAX	53	25	24	21	20	134	139	---	---	---	---	---
MIN	21	17	18	17	18	18	34	---	---	---	---	---
IN.	.21	.11	.12	.11	.10	.35	.41	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

MEAN	115	64.4	97.4	139	218	247	217	87.0	87.7	111	171	142
MAX	816	305	771	624	813	828	1176	379	432	381	756	1266
(WY)	1995	1998	1977	1987	1986	1991	1973	1964	1957	1958	1991	1957
MIN	6.26	8.18	6.22	9.47	7.50	9.97	13.2	7.73	4.80	4.49	8.31	9.12
(WY)	1994	1969	1991	1957	1957	1957	1955	1955	1955	1955	1993	1993

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		WATER YEARS 1951 - 2001	
ANNUAL MEAN	21.5		142	
HIGHEST ANNUAL MEAN			317	1991
LOWEST ANNUAL MEAN			18.1	1955
HIGHEST DAILY MEAN	59	Sep 25	2480	Sep 18 1957
LOWEST DAILY MEAN	3.4	Jul 11	2.4	Jul 8 1955
ANNUAL SEVEN-DAY MINIMUM	4.0	Jul 7	2.6	Jul 3 1955
MAXIMUM PEAK FLOW			2540	Sep 17 1957
MAXIMUM PEAK STAGE			12.78	Sep 17 1957
INSTANTANEOUS LOW FLOW			2.3	Jul 8 1955
ANNUAL RUNOFF (INCHES)	1.48		9.76	
10 PERCENT EXCEEDS	32		370	
50 PERCENT EXCEEDS	21		60	
90 PERCENT EXCEEDS	8.8		18	

02326500 AUCILLA RIVER AT LAMONT, FL

LOCATION.--Lat 30°22'11", long 83°48'25" in NE¼ sec.27, T.1 S., R.5 E., Madison County, Hydrologic Unit 03110103, near left bank on downstream side of bridge on U.S. Highway 19, 0.6 mi southeast of Lamont, and 34 mi upstream from mouth.

DRAINAGE AREA.--747 mi^2.

PERIOD OF RECORD.--February 1950 to September 1979, November 1983 to September 1992 (gage heights and peak discharge only), October 1996 to current year.

REVISED RECORDS.--WSP 1204, 1905: Drainage area. WSP 1504: 1953.

Gage.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to September 1992, at datum 42.90 ft lower.

REMARKS.--Records fair. Pumpage above and below station for irrigation during dry seasons. Since Aug. 27, 1963, low-head rock and concrete dam 0.6mi downstream.

COOPERATION.--Records from October 1999 to September 2001, were collected and computed by Suwannee River Water Management District and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s. Apr. 8, 1973, gage height, 16.57 ft; minimum, river dry at gage June 13-16, 1955.

EXTREMES FOR 2000 WATER YEAR.--Maximum daily discharge 234 ft^3/s, Apr. 5, gage height, 49.17 ft; minimum daily, .85 ft^3/s, July 11.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge 1,630 ft^3/s, June 24, gage height, 52.47 ft; minimum daily, 2.7 ft^3/s, May 28.

REVISIONS.--Daily and monthly discharges for the water year 2000 were revised.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	17	7.6	10	23	58	175	66	4.9	3.2	1.8	1.6
2	13	30	7.4	10	23	54	191	61	4.7	2.2	3.1	2.1
3	11	40	7.2	10	22	51	212	53	4.5	1.9	3.7	3.0
4	10	36	7.6	10	21	48	232	46	4.3	1.6	3.7	5.5
5	10	29	7.6	10	22	45	234	38	5.4	1.4	3.7	9.1
6	14	26	7.6	11	23	42	222	32	13	1.3	3.4	16
7	16	26	7.4	9.8	23	38	204	26	9.3	1.1	3.0	32
8	16	25	7.0	9.6	22	36	190	22	6.6	e1.0	2.7	32
9	14	23	7.2	9.8	21	36	172	18	5.5	e.90	3.2	26
10	12	24	7.2	10	21	35	154	15	5.0	e.85	4.5	21
11	12	23	7.4	11	21	34	137	13	4.7	.85	5.1	19
12	12	14	7.4	12	22	36	123	11	4.5	.93	6.0	17
13	12	12	7.7	12	25	36	113	10	5.0	1.1	9.3	14
14	11	11	8.4	12	30	34	104	9.3	5.5	1.8	8.3	12
15	10	10	9.6	12	45	32	97	8.2	5.2	1.9	6.0	9.6
16	10	9.8	9.3	13	50	31	90	7.6	5.0	1.8	4.3	7.6
17	10	9.3	8.6	12	62	36	81	6.9	4.8	1.5	3.2	6.2
18	9.3	9.1	8.4	12	58	39	72	6.5	4.5	1.3	2.9	21
19	9.1	9.1	8.9	12	48	36	63	6.1	4.4	1.1	2.6	46
20	9.3	9.3	9.3	13	42	51	56	5.9	4.4	1.0	2.8	41
21	9.3	9.6	10	14	42	68	50	5.6	5.2	.90	3.0	37
22	9.6	9.6	11	15	48	63	45	5.6	5.1	.93	3.4	42
23	9.6	8.6	11	15	49	59	40	8.2	5.0	1.5	4.0	81
24	9.3	8.4	10	22	48	58	34	9.8	5.7	1.2	3.1	81
25	8.9	8.6	10	35	46	56	34	8.6	6.9	1.8	2.7	75
26	8.6	8.6	9.8	32	43	53	33	7.4	6.2	2.4	2.5	79
27	8.6	8.6	10	27	42	66	31	6.6	5.6	2.8	2.7	82
28	8.9	7.7	9.8	23	65	87	32	6.2	6.1	2.2	2.7	82
29	9.1	7.6	10	21	66	86	46	5.7	6.0	1.8	2.3	79
30	9.6	7.6	10	20	---	85	62	5.3	5.4	1.6	1.9	75
31	12	---	10	21	---	119	---	5.0	---	1.5	1.7	---
TOTAL	340.2	477.5	270.4	466.2	1073	1608	3329	535.5	168.4	47.36	113.3	1054.7
MEAN	11.0	15.9	8.72	15.0	37.0	51.9	111	17.3	5.61	1.53	3.65	35.2
MAX	16	40	11	35	66	119	234	66	13	3.2	9.3	82
MIN	8.6	7.6	7.0	9.6	21	31	31	5.0	4.3	.85	1.7	1.6
AC-FT	675	947	536	925	2130	3190	6600	1060	334	94	225	2090
CFSM	.01	.02	.01	.02	.05	.07	.15	.02	.01	.00	.00	.05
IN.	.02	.02	.01	.02	.05	.08	.17	.03	.01	.00	.01	.05

WTR YR 2000 TOTAL 9483.56 MEAN 25.9 MAX 234 MIN .85 AC-FT 18810 CFSM .03 IN. .47

e Estimated

02326500 AUCILLA RIVER AT LAMONT, FL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	10	18	18	23	14	1400	58	5.3	850	183	65
2	63	9.6	20	18	24	17	1360	53	5.8	875	157	59
3	57	9.6	21	19	28	19	1270	48	6.9	990	145	56
4	50	9.3	20	20	30	25	1160	42	5.5	e1000	118	73
5	44	9.0	20	19	28	36	1080	38	4.2	e900	108	75
6	39	8.8	20	19	28	37	975	34	3.2	e800	147	70
7	46	8.6	19	18	26	38	875	29	3.0	e700	175	66
8	43	7.8	19	17	26	38	780	25	3.0	e600	202	76
9	37	7.8	18	18	25	38	694	22	4.0	502	189	102
10	32	7.1	18	17	25	41	614	19	9.8	424	184	107
11	29	6.6	16	16	26	41	550	16	16	378	243	97
12	27	6.2	16	16	26	38	487	14	156	345	198	88
13	24	6.0	15	16	26	69	427	12	283	311	178	79
14	22	6.0	14	16	26	150	380	10	321	285	192	76
15	20	6.0	13	16	25	181	383	8.6	535	253	213	69
16	18	6.2	12	16	24	245	321	7.3	514	217	192	63
17	16	6.4	11	17	23	299	281	6.4	526	190	225	59
18	15	6.9	8.6	18	23	333	243	5.8	950	171	275	56
19	14	8.3	8.0	18	21	384	217	5.1	1430	159	271	51
20	12	8.8	8.0	18	20	451	195	4.7	1580	140	249	46
21	11	9.3	7.6	17	18	535	175	4.3	1600	189	217	42
22	10	8.8	7.1	17	17	568	156	4.0	1530	177	192	38
23	10	8.3	6.9	18	16	574	137	3.4	1520	141	175	41
24	9.8	7.8	6.4	19	15	571	122	3.1	1630	145	159	41
25	9.8	9.8	6.2	19	15	556	109	3.0	1550	175	144	46
26	10	13	6.0	18	15	577	101	2.9	1420	156	131	42
27	10	16	5.8	18	14	583	87	2.8	1250	129	122	37
28	11	15	6.9	18	13	580	78	2.7	1130	112	107	33
29	11	15	10	17	---	706	70	3.2	1030	101	93	30
30	10	17	17	16	---	1240	63	6.6	920	94	81	26
31	10	---	18	19	---	1400	---	5.8	---	128	72	---
TOTAL	790.6	275.0	412.5	546	626	10384	14790	499.7	19941.7	11637	5337	1809
MEAN	25.5	9.17	13.3	17.6	22.4	335	493	16.1	665	375	172	60.3
MAX	70	17	21	20	30	1400	1400	58	1630	1000	275	107
MIN	9.8	6.0	5.8	16	13	14	63	2.7	3.0	94	72	26
AC-FT	1570	545	818	1080	1240	20600	29340	991	39550	23080	10590	3590
CFSM	.03	.01	.02	.02	.03	.45	.66	.02	.89	.50	.23	.08
IN.	.04	.01	.02	.03	.03	.52	.74	.02	.99	.58	.27	.09

CAL YR 2000 TOTAL 9873.56 MEAN 27.0 MAX 234 MIN .85 AC-FT 19580 CFSM .04 IN. .49
WTR YR 2001 TOTAL 67048.5 MEAN 184 MAX 1630 MIN 2.7 AC-FT 133000 CFSM .25 IN. 3.34

e Estimated

AUCILLA RIVER BASIN

02326500 AUCILLA RIVER AT LAMONT, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.82	46.41	46.70	46.68	46.82	46.56	52.08	47.62	46.21	51.04	48.75	47.74
2	47.72	46.39	46.73	46.69	46.85	46.65	52.02	47.52	46.23	51.09	48.58	47.64
3	47.60	46.39	46.76	46.72	46.95	46.71	51.86	47.42	46.28	51.32	48.50	47.59
4	47.46	46.38	46.74	46.73	47.02	46.88	51.67	47.31	46.22	---	48.29	47.86
5	47.35	46.37	46.73	46.72	46.95	47.16	51.49	47.21	46.15	---	48.21	47.88
6	47.24	46.36	46.73	46.71	46.95	47.19	51.29	47.11	46.09	---	48.51	47.82
7	47.37	46.35	46.72	46.69	46.92	47.20	51.09	46.99	46.05	---	48.70	47.75
8	47.32	46.32	46.71	46.66	46.90	47.21	50.90	46.89	46.05	---	48.88	47.90
9	47.18	46.32	46.70	46.68	46.89	47.20	50.71	46.80	46.14	50.14	48.79	48.16
10	47.05	46.29	46.67	46.65	46.89	47.28	50.51	46.71	46.40	49.88	48.76	48.20
11	46.99	46.27	46.62	46.60	46.91	47.27	50.30	46.62	46.61	49.71	49.09	48.12
12	46.93	46.25	46.60	46.61	46.92	47.20	50.09	46.55	48.57	49.58	48.85	48.04
13	46.86	46.24	46.57	46.63	46.91	47.80	49.89	46.48	49.29	49.43	48.72	47.94
14	46.79	46.24	46.55	46.63	46.90	48.53	49.72	46.41	49.48	49.30	48.81	47.90
15	46.73	46.24	46.51	46.61	46.88	48.74	49.73	46.35	50.25	49.14	48.94	47.80
16	46.68	46.25	46.48	46.61	46.86	49.10	49.49	46.30	50.18	48.96	48.81	47.71
17	46.62	46.26	46.45	46.64	46.84	49.37	49.28	46.26	50.22	48.80	49.00	47.64
18	46.58	46.28	46.35	46.68	46.83	49.53	49.09	46.23	51.24	48.67	49.25	47.57
19	46.55	46.34	46.33	46.69	46.76	49.74	48.96	46.20	52.14	48.59	49.23	47.48
20	46.50	46.36	46.33	46.69	46.73	49.97	48.83	46.18	52.39	48.46	49.12	47.38
21	46.46	46.38	46.31	46.66	46.69	50.25	48.70	46.16	52.41	48.79	48.96	47.29
22	46.42	46.36	46.29	46.65	46.66	50.36	48.57	46.14	52.30	48.71	48.81	47.22
23	46.41	46.34	46.28	46.68	46.63	50.38	48.44	46.11	52.29	48.47	48.70	47.28
24	46.40	46.32	46.26	46.71	46.59	50.37	48.32	46.07	52.47	48.50	48.59	47.28
25	46.40	46.40	46.25	46.72	46.58	50.32	48.22	46.06	52.34	48.70	48.49	47.37
26	46.41	46.53	46.24	46.70	46.57	50.39	48.15	46.03	52.11	48.57	48.39	47.29
27	46.42	46.60	46.23	46.68	46.55	50.41	48.03	46.01	51.84	48.38	48.32	47.18
28	46.43	46.59	46.28	46.67	46.53	50.40	47.92	45.99	51.60	48.24	48.20	47.09
29	46.43	46.59	46.42	46.64	---	50.74	47.81	46.10	51.40	48.15	48.08	47.01
30	46.42	46.65	46.66	46.63	---	51.81	47.71	46.27	51.18	48.09	47.96	46.92
31	46.42	---	46.68	46.72	---	52.08	---	46.23	---	48.37	47.85	---
TOTAL	1451.96	1391.07	1441.88	1446.78	1310.48	1514.80	1490.87	1442.33	1482.13	---	1508.14	1428.05
MEAN	46.84	46.37	46.51	46.67	46.80	48.86	49.70	46.53	49.40	---	48.65	47.60
MAX	47.82	46.65	46.76	46.73	47.02	52.08	52.08	47.62	52.47	---	49.25	48.20
MIN	46.40	46.24	46.23	46.60	46.53	46.56	47.71	45.99	46.05	---	47.85	46.92

304308083555200 WARD CREEK BL MITCHELL POND NEAR METCALF, GA

LOCATION.--Lat 30°43'08", long 83°55'52", in Thomas County, Hydrologic Unit 03120001, on downstream side of bridge on dirt road, and 3.6 mi east of Metcalf.

DRAINAGE AREA.--15.1 mi^2.

PERIOD OF RECORD.--October 1998 to September 2000, October 2000 to September 2001 (gage heights and discharge measurements only).

GAGE.--Water-stage recorder.

REMARKS.--Gage height record fragmentary and intermittent throughtout year. Channel bed dry for long prolonged drought periods.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 100 ft3/s (estimated), Oct. 1, 1998, gage height, undetermined; minimum, dry, many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge measured 23 ft^3/s, June 13, gage height, 4.59 ft; minimum, dry, many days.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	STREAM STAGE	DISCHARGE IN FT3/S
Oct. 4	0800	Dry	
Dec. 12	0830	Dry	
Mar. 12	1440	3.06	1.98
Mar. 15	1240	3.48	5.95
Mar. 20	1130	3.32	4.36
Apr. 9	1245	3.36	5.02
May 17	1200	Dry	
June 13	1045	4.59	23.1

02326900 ST. MARKS RIVER NEAR NEWPORT, FL

LOCATION.--Lat 30°16'00", long 84°09'00", in SE¼ sec. 32, T. 2 S., R. 2 E., Wakulla County, Hydrologic Unit 03120001, on left bank 0.9 mi downstream from Rhodes Springs, 6 mi north of Newport, 11 mi upstream from Wakulla River, and 14 mi upstream from mouth.

DRAINAGE AREA.--535 mi^2 including 240 mi^2 of Lake Miccosukee, which contributes at high stages to the St. Marks River.

PERIOD OF RECORD.--October 1956 to September 1976. October 1976 to September 1977 (gage heights only); October 1977 to September 1990; October 1990 to September 1991 (gage heights and peak discharge only); October 1991 to September 1994; July 1996 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3.53 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharge. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	852	571	452	402	391	404	660	489	405	580	566	433
2	836	566	446	398	392	408	656	488	405	613	619	433
3	820	557	441	395	392	414	629	485	401	615	640	437
4	809	552	438	395	392	431	617	482	397	641	651	443
5	796	546	435	395	392	424	616	481	394	616	765	431
6	790	544	431	395	390	416	605	475	391	598	1080	423
7	787	542	431	395	389	413	595	471	388	584	1350	459
8	772	540	431	397	386	412	586	467	386	564	1370	463
9	755	542	430	395	386	426	579	463	394	552	1490	424
10	749	533	430	395	388	441	575	461	394	560	1460	402
11	743	523	431	396	389	440	570	458	402	561	1310	388
12	730	517	432	397	389	446	564	455	495	552	1190	381
13	722	514	428	395	391	572	560	451	488	548	1090	370
14	716	511	428	395	392	538	555	446	570	539	1050	363
15	706	501	426	395	394	571	554	442	830	531	1090	354
16	697	496	429	395	398	613	547	439	881	522	1110	347
17	691	495	427	395	401	582	539	434	795	518	1050	340
18	681	489	421	395	396	580	527	428	697	516	968	332
19	670	487	419	398	392	579	525	423	624	516	924	326
20	663	483	412	397	392	581	525	419	577	514	853	320
21	658	478	411	394	393	564	521	417	553	505	785	319
22	652	473	407	391	400	539	516	415	542	498	730	316
23	640	470	403	387	404	526	513	408	558	496	680	314
24	632	471	400	386	403	515	510	406	571	550	635	321
25	626	515	397	384	404	509	507	405	572	561	591	325
26	614	489	394	383	404	504	505	403	561	544	559	319
27	607	482	392	380	402	493	502	400	553	533	534	314
28	601	473	408	380	402	486	498	398	548	528	507	310
29	592	466	408	380	---	620	495	399	548	528	482	304
30	582	458	408	389	---	705	490	399	551	529	461	297
31	577	---	405	387	---	669	---	399	---	533	445	---
MEAN	702	509	421	392	394	510	555	439	529	550	872	367
MAX	852	571	452	402	404	705	660	489	881	641	1490	463
MIN	577	458	392	380	386	404	490	398	386	496	445	297
IN.	1.51	1.06	.91	.85	.77	1.10	1.16	.95	1.10	1.19	1.88	.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2001, BY WATER YEAR (WY)

MEAN	651	549	579	630	738	874	845	670	677	716	771	734
MAX	1375	976	1470	1360	1680	2520	2760	1474	1465	1440	2220	1563
(WY)	1958	1960	1965	1987	1986	1991	1973	1965	1965	1994	1994	1957
MIN	351	339	358	345	335	338	378	371	355	360	370	336
(WY)	1969	1969	1991	1957	1957	1957	1968	1968	1968	1968	1968	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1957 - 2001	
ANNUAL MEAN	489		521		704	
HIGHEST ANNUAL MEAN					1148	1994
LOWEST ANNUAL MEAN					403	1968
HIGHEST DAILY MEAN	1070	Sep 23	1490	Aug 9	4700	Apr 6 1973
LOWEST DAILY MEAN	348	Mar 25	297	Sep 30	297	Sep 30 2001
ANNUAL SEVEN-DAY MINIMUM	359	Mar 22	313	Sep 24	313	Sep 24 2001
MAXIMUM PEAK FLOW			1510	Aug 9	4750	Apr 7 1973
MAXIMUM PEAK STAGE			7.75	Aug 9	11.81	Apr 7 1973
INSTANTANEOUS LOW FLOW			292	Sep 30	292	Sep 30 2001
ANNUAL RUNOFF (INCHES)	12.45		13.23		17.88	
10 PERCENT EXCEEDS	734		705		1070	
50 PERCENT EXCEEDS	430		483		625	
90 PERCENT EXCEEDS	379		389		404	

02327033 LOST CREEK AT ARRAN, FL

LOCATION.--Lat 30°11'17", long 84°24'30" in SE¼ sec. 26, T. 3 S., R. 2 W., Wakulla County, Hydrologic Unit 03120001, on downstream side of bridge on State Highway 368, and 0.5 mi east of Arran.

DRAINAGE AREA.--70.4 mi^2.

PERIOD OF RECORD.--October 1928 to May 1981, miscellaneous discharge measurements only; October 1998 to current year.

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	12	23	78	61	14	326	6.2	1.9	178	743	46
2	163	11	21	70	86	14	269	5.9	2.4	183	742	65
3	132	11	20	60	88	14	216	4.9	1.9	150	647	100
4	110	10	18	53	81	20	192	4.6	1.6	134	540	151
5	92	9.9	17	47	72	25	183	4.0	1.5	202	493	204
6	87	9.5	16	43	63	30	171	3.5	1.5	194	1420	215
7	164	9.3	16	40	54	32	152	3.2	1.5	183	2830	288
8	166	9.4	15	38	48	30	131	3.1	1.7	181	2590	343
9	129	9.5	15	36	42	29	112	3.0	1.6	174	2000	234
10	99	9.7	14	35	39	52	93	2.9	1.6	156	1510	181
11	80	9.4	14	34	37	80	77	2.8	2.6	267	1150	145
12	67	8.7	14	40	35	84	65	2.6	54	298	814	154
13	57	8.3	13	48	34	231	55	2.5	914	243	625	127
14	51	8.0	13	52	33	450	48	2.5	1420	181	582	102
15	45	7.7	21	51	32	554	52	2.2	748	142	509	81
16	40	7.4	25	48	30	799	55	2.3	446	110	434	65
17	35	8.7	35	44	29	710	48	2.6	292	84	372	53
18	32	9.1	37	41	27	555	40	2.2	198	66	346	44
19	29	9.5	36	38	25	528	34	1.7	150	55	349	38
20	27	11	35	43	23	593	29	1.9	121	53	304	33
21	24	11	33	54	21	851	24	2.4	124	55	251	30
22	22	10	31	61	20	878	20	2.0	128	64	202	34
23	20	9.8	29	59	21	676	17	1.8	229	56	163	36
24	19	9.8	27	56	19	510	15	1.7	507	82	133	37
25	17	26	25	50	18	397	14	1.6	477	274	109	54
26	16	33	24	44	17	322	12	1.5	349	395	89	60
27	15	32	22	40	16	260	11	1.5	245	395	74	57
28	15	30	31	36	15	210	9.8	1.5	176	330	62	49
29	14	27	60	33	---	242	9.0	1.6	158	340	53	42
30	13	24	74	34	---	344	7.2	1.6	144	323	46	35
31	12	---	80	42	---	368	---	1.6	---	289	41	---
MEAN	64.5	13.4	27.5	46.7	38.8	319	82.9	2.69	230	188	652	103
MAX	208	33	80	78	88	878	326	6.2	1420	395	2830	343
MIN	12	7.4	13	33	15	14	7.2	1.5	1.5	53	41	30
IN.	1.06	.21	.45	.77	.57	5.23	1.31	.04	3.65	3.08	10.69	1.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	137	17.4	15.8	43.0	36.8	135	35.2	2.77	80.8	95.8	239	259
MAX	277	36.3	27.5	49.5	40.0	319	82.9	4.10	230	188	652	596
(WY)	1999	2000	2001	1999	1999	2001	2001	1999	2001	2001	2001	2000
MIN	64.5	2.67	2.56	32.8	31.9	32.1	4.11	1.52	1.27	1.20	10.5	78.4
(WY)	2001	1999	1999	2000	2000	2000	1999	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	68.5		149		91.9	
HIGHEST ANNUAL MEAN					149	2001
LOWEST ANNUAL MEAN					57.0	1999
HIGHEST DAILY MEAN	3960	Sep 23	2830	Aug 7	3960	Sep 23 2000
LOWEST DAILY MEAN	.56	Aug 25	1.5	May 26	.56	Aug 25 2000
ANNUAL SEVEN-DAY MINIMUM	.78	Aug 20	1.6	May 25	.78	Aug 20 2000
MAXIMUM PEAK FLOW			2930	Aug 7	4170	Sep 23 2000
MAXIMUM PEAK STAGE			15.85	Aug 7	18.19	Sep 23 2000
INSTANTANEOUS LOW FLOW			1.4	Jun 6	.47	Aug 25 2000
ANNUAL RUNOFF (INCHES)	13.25		28.71		17.74	
10 PERCENT EXCEEDS	86		381		182	
50 PERCENT EXCEEDS	13		44		20	
90 PERCENT EXCEEDS	1.2		3.4		1.5	

02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL
(Hydrologic bench-mark station)

LOCATION.--Lat 30°07'45", long 84°29'40" in NW¼ sec. 24, T. 4 S., R. 3 W., Wakulla County, Hydrologic Unit 03120003, Apalachicola National Forest, near left bank on downstream side of bridge on U.S. Forest Road 343, 4.7 mi north of Sopchoppy, 5.2 mi upstream from Duval Branch, and 24 mi upstream from mouth.

DRAINAGE AREA.--102 mi^2.

PERIOD OF RECORD.--Water years 1961-64 (annual maximum); June 1964 to current year.

REVISED RECORDS.--WSP 1905, WRD FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Jan. 27, 1961 to June 3, 1964, nonrecording gage and crest-stage gage at same site at datum 9.63 ft higher.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309	4.5	11	85	81	15	519	5.2	3.1	422	1190	31
2	229	4.3	9.6	e74	104	17	417	4.5	3.6	341	1410	75
3	168	4.1	8.4	63	107	16	328	3.9	2.8	256	1390	154
4	125	4.0	7.5	57	100	30	284	3.5	2.4	209	1150	205
5	97	3.8	6.7	51	92	41	272	3.1	2.3	203	933	320
6	85	3.7	6.0	46	82	39	242	2.9	2.2	249	1550	364
7	162	3.7	5.5	42	71	34	207	2.7	2.1	320	3250	408
8	300	3.7	5.0	38	61	27	169	2.6	2.5	276	3140	418
9	280	4.0	4.7	36	53	29	136	2.5	3.0	212	2380	362
10	208	4.3	4.4	32	47	99	110	2.4	2.9	250	1590	327
11	151	4.2	4.2	30	44	136	90	2.4	4.8	676	1080	281
12	113	4.2	4.0	43	41	161	74	2.4	87	693	899	282
13	87	4.4	3.9	59	37	612	60	2.5	447	723	792	280
14	69	4.5	4.0	63	34	1000	48	2.3	781	605	712	234
15	54	4.3	7.2	61	31	1200	47	2.3	634	480	642	180
16	43	4.3	12	56	29	1450	57	2.2	413	365	569	132
17	34	4.5	18	50	26	1280	64	2.2	292	273	513	96
18	27	5.1	21	45	23	1070	55	2.0	221	204	407	72
19	22	5.5	17	41	20	989	46	2.0	172	165	362	53
20	18	6.4	17	55	17	1080	38	2.1	132	150	341	39
21	15	6.6	15	72	15	1410	31	2.6	133	133	304	31
22	13	6.4	14	74	14	1510	26	2.3	135	111	249	28
23	11	5.7	13	70	19	1250	21	2.2	489	86	197	26
24	9.5	5.8	12	63	17	923	18	2.0	544	130	153	36
25	8.4	19	11	56	16	704	15	2.0	523	324	119	112
26	7.4	25	9.8	49	15	586	13	1.9	424	361	94	140
27	6.7	22	8.7	44	14	474	11	1.8	329	359	75	134
28	6.1	21	19	39	12	369	8.9	1.9	253	319	59	109
29	5.5	17	72	35	---	453	7.4	2.3	199	336	46	86
30	5.1	13	88	39	---	602	6.1	2.7	301	312	35	67
31	4.7	---	92	57	---	587	---	2.4	---	391	28	---
MEAN	86.2	7.63	17.1	52.4	43.6	587	114	2.57	218	320	828	169
MAX	309	25	92	85	107	1510	519	5.2	781	723	3250	418
MIN	4.7	3.7	3.9	30	12	15	6.1	1.8	2.1	86	28	26
MED	43	4.5	9.8	51	32	586	56	2.4	154	312	569	133
IN.	.98	.08	.19	.59	.45	6.64	1.25	.03	2.39	3.62	9.36	1.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

MEAN	118	59.2	145	252	288	304	174	63.1	137	244	309	226
MAX	783	470	843	849	753	957	1065	424	520	763	1005	1084
(WY)	1995	1986	1965	1991	1986	1991	1973	1991	1982	1975	1994	2000
MIN	1.86	1.58	2.87	11.1	22.4	27.6	8.81	1.70	1.31	3.06	6.14	4.76
(WY)	1994	1991	1992	1985	1989	2000	1966	1992	2000	1977	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1964 - 2001	
ANNUAL MEAN	119		206		192	
HIGHEST ANNUAL MEAN					334	1991
LOWEST ANNUAL MEAN					43.4	1968
HIGHEST DAILY MEAN	6610	Sep 23	3250	Aug 7	6610	Sep 23 2000
LOWEST DAILY MEAN	.69	Jul 7	1.8	May 27	.69	Jul 7 2000
ANNUAL SEVEN-DAY MINIMUM	.79	Jul 2	2.0	May 22	.79	Jul 2 2000
MAXIMUM PEAK FLOW			3490	Aug 7	7100	Sep 23 2000
MAXIMUM PEAK STAGE			30.38	Aug 7	34.47	Jul 31 1975
INSTANTANEOUS LOW FLOW			1.8	May 26	.63	Jul 7 2000
ANNUAL RUNOFF (INCHES)	15.89		27.42		25.56	
10 PERCENT EXCEEDS	152		586		515	
50 PERCENT EXCEEDS	12		51		61	
90 PERCENT EXCEEDS	1.3		3.3		3.2	

e Estimated

02328522 OCHLOCKONEE RIVER NEAR CONCORD, FL

LOCATION.--Lat 30°40'08", long 84°18'19", in SW¼ sec. 11, T. 3 N., R. 1 W., Gadsden County, Hydrologic Unit 03120003, near center of stream on downstream side of bridge on State Highway 12, and 3.7 mi east of Concord.

DRAINAGE AREA.--1002 mi^2.

PERIOD OF RECORD.--November 1920 to October 1990 (miscellaneous discharge measurements), October 1998 to current year.

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	786	58	199	720	642	242	2360	220	138	319	597	173
2	623	57	185	799	602	240	2590	202	121	305	481	167
3	492	55	172	871	587	236	2830	185	106	339	403	275
4	383	53	160	889	585	292	3110	171	91	360	398	472
5	308	52	149	845	581	537	3160	158	79	411	376	662
6	262	50	141	771	565	764	3170	146	72	496	461	789
7	239	48	133	694	544	885	3010	136	169	584	1120	846
8	223	47	126	625	518	1030	2650	126	193	697	1550	876
9	206	46	121	573	490	1210	2380	118	182	752	1810	873
10	211	46	121	550	461	1490	2140	111	225	705	1840	731
11	227	45	129	525	427	1740	1940	104	287	662	1820	581
12	221	45	143	524	399	1780	1780	98	833	627	1860	456
13	201	45	144	532	382	1760	1590	95	1290	584	1810	366
14	182	48	147	523	370	1700	1380	93	1550	534	1680	337
15	166	45	162	490	357	1800	1170	92	1560	515	1620	308
16	151	48	205	460	348	2270	977	87	1510	529	1610	269
17	137	53	213	436	337	4170	819	87	1500	529	1600	233
18	127	54	203	417	326	5800	701	81	1450	511	1540	207
19	117	59	198	404	323	6700	646	75	1380	451	1410	185
20	109	71	198	431	319	6620	651	71	1350	356	1210	167
21	102	111	200	571	307	6170	669	68	1280	281	1010	151
22	97	125	197	687	298	6030	655	66	1100	228	806	139
23	90	136	193	726	291	5520	592	69	996	193	621	134
24	85	154	190	780	293	4920	511	71	1070	180	483	145
25	80	171	187	829	285	4320	439	68	1030	281	385	168
26	77	191	185	852	269	3670	379	64	874	629	320	210
27	73	211	183	852	256	3020	331	61	731	822	274	191
28	69	215	198	831	247	2440	295	64	586	879	239	172
29	67	214	330	799	---	2100	265	84	451	852	216	169
30	64	210	567	753	---	2000	241	114	363	742	197	163
31	61	---	666	687	---	2180	---	139	---	653	184	---
MEAN	201	92.1	205	660	407	2698	1448	107	752	516	966	354
MAX	786	215	666	889	642	6700	3170	220	1560	879	1860	876
MIN	61	45	121	404	247	236	241	61	72	180	184	134
IN.	.23	.10	.24	.76	.42	3.11	1.61	.12	.84	.59	1.11	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	882	133	171	515	554	1405	723	89.4	291	547	408	310
MAX	2357	230	205	702	841	2698	1448	107	752	1084	966	495
(WY)	1999	1999	2001	1999	1999	2001	2001	2001	2001	1999	2001	2000
MIN	89.0	78.5	109	184	407	677	178	67.8	35.7	40.1	30.0	80.4
(WY)	2000	2000	2000	2000	2001	1999	1999	1999	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	264		703		504	
HIGHEST ANNUAL MEAN					703	2001
LOWEST ANNUAL MEAN					245	2000
HIGHEST DAILY MEAN	1690	Mar 25	6700	Mar 19	11500	Oct 2 1998
LOWEST DAILY MEAN	14	Aug 29	45	Nov 11	14	Aug 29 2000
ANNUAL SEVEN-DAY MINIMUM	15	Aug 26	46	Nov 9	15	Aug 26 2000
MAXIMUM PEAK FLOW			6800	Mar 19	11500	Oct 2 1998
MAXIMUM PEAK STAGE			37.10	Mar 19	39.69	Oct 2 1998
INSTANTANEOUS LOW FLOW			44	Nov 11	14	Aug 29 2000
ANNUAL RUNOFF (INCHES)	3.58		9.53		6.83	
10 PERCENT EXCEEDS	740		1750		1110	
50 PERCENT EXCEEDS	142		348		210	
90 PERCENT EXCEEDS	26		76		48	

02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL

LOCATION.--Lat 30°33'14", long 84°23'03", in SE¼ sec. 24,T.2N.,R.2W., Leon County, Hydrologic Unit 03120003, on left bank 20ft downstream of downstream bridge on divided U.S. Highway 27, 0.8 mi upstream from Seaboard Air Line Railroad bridge, 4.0 mi downstream from Mill Creek, 5.0 mi southeast of Havana, and 94 mi upstream from mouth.

DRAINAGE AREA.--1,140 mi^2, approximately. At site used prior to January 1929, 1,220 mi^2, approximately.

PERIOD OF RECORD.--June 1926 to current year. June 1926 to December 1929 (published as "at Ochlockonee"). Records published for both sites December 1928 to December 1929.

REVISED RECORDS.--WSP 822: 1929 (M). WSP 1504: 1928. WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 59.36 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1930, nonrecording gage at site about 10 mi downstream at datum 9.36 ft lower. Dec. 12, 1928, to Nov. 17, 1963, nonrecording gage at site 100 ft upstream at present datum. Nov. 18, 1963 to Nov. 15, 1976, nonrecording gage at same site and datum.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	738	71	218	587	673	298	2070	294	150	e460	541	228
2	654	69	210	635	628	292	2130	270	155	429	482	223
3	555	68	197	694	593	280	2240	249	141	405	386	277
4	469	66	184	750	574	341	2440	232	125	391	353	385
5	395	65	173	775	568	393	2750	215	110	390	335	490
6	338	64	164	755	560	532	2800	201	98	418	526	582
7	311	63	155	708	547	668	2770	186	93	467	936	654
8	275	61	147	657	528	766	2640	173	222	523	1030	693
9	249	61	142	603	508	875	2430	162	320	592	1120	717
10	231	61	144	559	488	1020	2250	152	321	641	1240	713
11	229	60	142	536	464	e1250	2090	143	357	669	1280	632
12	237	59	147	532	437	e1480	1940	135	1360	621	1300	530
13	231	59	155	527	415	1710	1760	128	1180	601	1330	439
14	214	62	159	527	400	1740	1530	120	1200	547	1290	375
15	197	63	164	516	388	1790	1320	116	1440	500	1210	341
16	181	62	181	491	377	1880	1130	113	1470	477	1130	309
17	165	66	213	466	366	2020	959	108	1390	477	1090	272
18	150	67	222	446	354	2800	820	105	1320	474	1080	241
19	137	71	218	434	344	4480	720	100	1260	461	1050	216
20	127	75	213	459	341	6170	667	96	1210	431	978	191
21	119	84	212	478	334	5950	653	93	1170	379	852	171
22	112	107	212	560	327	5440	654	89	1110	368	707	156
23	106	124	209	634	318	5200	638	88	1040	367	567	145
24	100	137	206	669	312	4790	592	89	948	364	443	143
25	95	168	204	706	312	4340	532	88	929	363	366	156
26	90	186	201	741	305	3830	474	85	895	343	349	163
27	85	201	199	762	291	3330	422	81	797	409	355	186
28	81	216	237	765	282	2830	381	82	692	541	352	174
29	78	221	303	754	---	2510	348	87	587	584	353	157
30	75	221	379	744	---	2320	318	101	497	580	317	147
31	73	---	508	716	---	2120	---	131	---	556	233	---
MEAN	229	98.6	207	619	430	2369	1416	139	753	478	761	337
MAX	738	221	508	775	673	6170	2800	294	1470	669	1330	717
MIN	73	59	142	434	282	280	318	81	93	343	233	143
MED	181	68	201	634	394	1880	1220	116	846	467	707	256
IN.	.23	.10	.21	.63	.39	2.40	1.39	.14	.74	.48	.77	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2001, BY WATER YEAR (WY)

MEAN	514	390	731	1308	1971	2279	1886	806	631	714	809	572
MAX	6892	3594	6057	4332	9355	7718	9368	4282	3867	3345	6098	4279
(WY)	1995	1948	1965	1993	1986	1984	1948	1964	1973	1991	1928	1935
MIN	22.0	26.5	37.0	65.5	116	167	173	60.6	37.6	42.5	34.1	26.8
(WY)	1955	1934	1934	1934	1957	1955	1927	1927	2000	2000	2000	1954

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1926 - 2001	
ANNUAL MEAN	247		655		1046	
HIGHEST ANNUAL MEAN					2854	1948
LOWEST ANNUAL MEAN					209	1968
HIGHEST DAILY MEAN	1390	Mar 26	6170	Mar 20	53100	Apr 4 1948
LOWEST DAILY MEAN	19	Aug 30	59	Nov 12	17	Oct 23 1954
ANNUAL SEVEN-DAY MINIMUM	22	Aug 25	60	Nov 8	17	Oct 22 1954
MAXIMUM PEAK FLOW			6440	Mar 20	55900	Apr 4 1948
MAXIMUM PEAK STAGE			26.38	Mar 20	35.08	Apr 4 1948
INSTANTANEOUS LOW FLOW			58	Nov 12	17	Oct 23 1954
ANNUAL RUNOFF (INCHES)	2.95		7.80		12.47	
10 PERCENT EXCEEDS	619		1410		2560	
50 PERCENT EXCEEDS	149		381		452	
90 PERCENT EXCEEDS	33		93		84	

e Estimated

02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.71	11.65	13.25	15.87	16.36	13.92	21.93	14.05	12.76	---	15.87	13.50
2	16.25	11.62	13.18	16.15	16.11	13.87	22.07	13.86	12.81	15.09	15.47	13.45
3	15.68	11.60	13.06	16.48	15.90	13.78	22.35	13.68	12.66	14.92	14.77	13.90
4	15.14	11.58	12.94	16.77	15.80	14.25	22.84	13.53	12.49	14.81	14.51	14.76
5	14.64	11.56	12.83	16.90	15.76	14.63	23.38	13.38	12.32	14.80	14.37	15.52
6	14.23	11.55	12.74	16.80	15.71	15.54	23.46	13.24	12.18	15.01	15.69	16.14
7	14.02	11.53	12.66	16.55	15.63	16.33	23.40	13.11	12.12	15.36	18.13	16.58
8	13.74	11.51	12.58	16.27	15.52	16.86	23.22	12.99	13.39	15.75	18.60	16.82
9	13.52	11.50	12.52	15.96	15.39	17.39	22.83	12.88	14.25	16.20	18.98	16.96
10	13.36	11.50	12.54	15.70	15.26	18.04	22.39	12.78	14.26	16.50	19.45	16.94
11	13.35	11.48	12.52	15.56	15.11	---	21.97	12.68	14.54	16.67	19.62	16.45
12	13.42	11.47	12.57	15.55	14.93	---	21.54	12.60	19.90	16.38	19.71	15.80
13	13.36	11.47	12.66	15.51	14.78	20.57	21.03	12.52	19.25	16.25	19.79	15.16
14	13.22	11.51	12.69	15.51	14.68	20.64	20.44	12.43	19.32	15.91	19.68	14.68
15	13.06	11.53	12.74	15.44	14.60	20.80	19.77	12.39	20.19	15.60	19.36	14.42
16	12.91	11.51	12.91	15.29	14.51	21.10	19.03	12.36	20.29	15.44	19.04	14.17
17	12.75	11.58	13.20	15.12	14.44	21.56	18.25	12.30	20.01	15.44	18.89	13.87
18	12.60	11.59	13.28	14.99	14.35	23.35	17.53	12.27	19.78	15.41	18.83	13.61
19	12.47	11.64	13.25	14.91	14.27	25.16	16.98	12.21	19.56	15.32	18.70	13.38
20	12.36	11.71	13.20	15.08	14.24	26.23	16.66	12.16	19.35	15.10	18.35	13.16
21	12.26	11.82	13.20	15.20	14.20	26.11	16.58	12.13	19.18	14.72	17.70	12.96
22	12.18	12.12	13.19	15.71	14.14	25.81	16.59	12.07	18.97	14.62	16.90	12.81
23	12.10	12.32	13.17	16.14	14.08	25.66	16.49	12.06	18.66	14.62	16.03	12.70
24	12.03	12.47	13.14	16.34	14.03	25.39	16.20	12.08	18.19	14.59	15.19	12.68
25	11.96	12.79	13.12	16.54	14.03	25.08	15.81	12.06	18.10	14.59	14.61	12.81
26	11.90	12.95	13.09	16.73	13.97	24.68	15.41	12.03	17.93	14.43	14.48	12.89
27	11.84	13.10	13.08	16.84	13.87	24.16	15.04	11.98	17.41	14.94	14.52	13.10
28	11.78	13.24	13.41	16.85	13.80	23.49	14.73	11.99	16.81	15.87	14.50	12.99
29	11.74	13.27	13.96	16.80	---	23.01	14.47	12.05	16.17	16.15	14.51	12.82
30	11.70	13.28	14.52	16.74	---	22.57	14.24	12.22	15.57	16.12	14.22	12.73
31	11.67	---	15.39	16.59	---	22.05	---	12.56	---	15.97	13.54	---
MEAN	13.16	11.95	13.12	16.03	14.84	---	19.22	12.60	16.61	---	16.90	14.26
MAX	16.71	13.28	15.39	16.90	16.36	---	23.46	14.05	20.29	---	19.79	16.96
MIN	11.67	11.47	12.52	14.91	13.80	---	14.24	11.98	12.12	---	13.54	12.68

02329600 LITTLE RIVER NEAR MIDWAY, FL

LOCATION.--Lat 30°30'44", long 84°31'25", in SW¼ sec. 3, T.1N., R. 3W., Gadsen County, Hydrologic Unit 03120003, at bridge on State Highway 268, 0.5 mi upstream from Monroe Creek, 3.2 mi above mouth, and 3.7 mi west of Midway.

DRAINAGE AREA.--305 mi^2.

PERIOD OF RECORD.--Annual maximums, water years 1965 to 1985. October 1985 to current year.

GAGE.--Water-stage recorder and crest-stage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1985, nonrecording and crest-stage gages at same site and datum.

REMARKS.--No estimated daily discharges. Records good, except those below 200 ft^3/s, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	28	48	272	215	153	488	20	11	97	253	23
2	28	27	63	221	182	220	302	21	11	152	241	54
3	28	26	70	197	116	211	235	22	10	166	67	169
4	26	26	76	153	87	398	304	22	10	103	29	259
5	25	23	81	139	47	533	672	22	10	36	120	393
6	29	23	86	108	67	413	1030	22	10	21	729	412
7	47	22	104	103	147	267	956	22	12	39	1360	335
8	85	22	111	108	85	214	398	21	10	82	918	250
9	66	23	117	115	112	204	259	21	105	74	613	253
10	29	22	191	110	119	214	228	21	118	65	312	114
11	23	22	180	107	138	207	176	20	330	170	273	35
12	25	21	103	174	134	167	104	19	3060	75	529	23
13	26	20	83	214	129	790	100	18	3180	106	703	21
14	27	21	83	210	132	939	96	16	2470	26	395	21
15	29	22	114	192	147	1120	82	15	1300	15	293	21
16	31	22	188	135	169	1670	48	13	316	20	275	18
17	32	38	208	113	155	2450	24	12	268	22	275	15
18	34	64	207	101	149	2540	22	12	224	30	252	16
19	36	76	139	106	147	1650	21	11	146	67	201	19
20	34	145	101	341	143	1690	20	11	311	92	107	20
21	34	171	89	433	149	1900	21	12	304	92	50	22
22	33	125	66	357	172	2150	22	12	466	26	32	22
23	31	113	39	257	186	1900	23	11	758	20	28	23
24	30	112	26	220	207	827	25	11	391	21	23	38
25	29	191	27	208	207	364	24	11	258	37	22	146
26	28	215	38	191	188	296	23	10	115	83	21	149
27	27	170	70	172	96	256	21	10	31	122	20	77
28	29	106	215	150	81	222	16	10	21	110	19	30
29	29	85	450	154	---	352	16	10	16	107	17	19
30	28	59	504	192	---	609	18	10	32	89	17	13
31	28	---	409	217	---	617	---	11	---	162	20	---
MEAN	32.7	68.0	138	186	140	824	192	15.5	477	75.1	265	100
MAX	85	215	504	433	215	2540	1030	22	3180	170	1360	412
MIN	23	20	26	101	47	153	16	10	10	15	17	13
IN.	.12	.25	.52	.70	.48	3.12	.70	.06	1.74	.28	1.00	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

MEAN	356	319	344	631	726	783	345	219	317	285	339	270
MAX	2542	1497	876	1694	2139	1791	756	1136	875	1003	1617	1249
(WY)	1995	1998	1986	1991	1986	1991	1994	1991	1989	1994	1994	1994
MIN	24.0	68.0	93.8	96.0	140	213	116	15.5	9.25	21.2	47.0	49.3
(WY)	1991	2001	1989	1989	2001	2000	1999	2001	2000	2000	2000	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1986 - 2001	
ANNUAL MEAN	101		210		410	
HIGHEST ANNUAL MEAN					709	1991
LOWEST ANNUAL MEAN					106	2000
HIGHEST DAILY MEAN	1600	Apr 26	3180	Jun 13	30300	Oct 3 1994
LOWEST DAILY MEAN	4.3	Jun 12	10	May 26	4.3	Jun 12 2000
ANNUAL SEVEN-DAY MINIMUM	4.4	Jun 10	10	May 24	4.4	Jun 10 2000
MAXIMUM PEAK FLOW			4050	Jun 12	49200	Sep 22 1969
MAXIMUM PEAK STAGE			75.83	Jun 12	86.25	Sep 22 1969
INSTANTANEOUS LOW FLOW			9.7	Jun 6	3.8	Jun 14 2000
ANNUAL RUNOFF (INCHES)	4.51		9.35		18.27	
10 PERCENT EXCEEDS	217		410		913	
50 PERCENT EXCEEDS	48		89		205	
90 PERCENT EXCEEDS	14		18		56	

02330000 OCHLOCKONEE RIVER NEAR BLOXHAM, FL

LOCATION.--Lat 30°22'59", long 84°39'18", in NE¼ sec. 20, T. 1 S., R. 4 W., Leon County, Hydrologic Unit 03120003, on left bank at Old State Highway 20(Crooked Road), 3,000 ft downstream from C.H. Corn Hydroelectric Dam, 1.5 mi southwest of Bloxham, and 65 mi upstream from mouth.

DRAINAGE AREA.--1,700 mi^2, approximately.

PERIOD OF RECORD.--June 1926 to current year. Low-flow records not equivalent prior to October 1, 1954, due to undetermined amount of seepage inflow.

REVISED RECORDS.--WSP 1002: 1940-42. WSP 1704: 1958-59. WSP 1905, WRD FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.69 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 9, 1930, nonrecording gage at site 2,700 ft upstream at datum 5.00 ft higher, Apr. 9, 1930 to Jan. 19, 1939, water-stage recorder at site 2,000 ft upstream at datum 5.00ft higher, Jan. 20, 1939 to Sept. 30, 1954, water-stage recorder at present site at datum 5.00 ft higher, Oct. 1, 1954 to Sept. 30, 1985, water-stage recorder at present site and datum, Oct. 1, 1985 to Aug. 27, 1997, at site 2,000 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Records fair, except those below 150 ft^3/s, which are poor. Flow regulated since 1929 by C.H. Corn Hydroelectric Dam (formerly Jackson Bluff Dam) above station and storage in Lake Talquin (02329900). Since October 1981, the publication of adjusted values for storage has been discontinued since the difference between adjusted and the unadjusted values have been minimal. Maximum discharge, 89,400 ft^3/s, Sept. 23, 1969, gage height, 29.2 ft, from floodmark; minimum discharge, since October 1954, 1.0 ft^3/s, Nov. 1, 1957, caused by closure of breaks in earth embankment of C.H. Corn Hydroelectric Dam (indeterminate prior to October 1954).

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Maximum stage since 1834, 32.64 ft, Sept. 30, 1957, from flood marks established by local resident, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	188	273	1350	1590	612	2860	178	189	216	1820	215
2	765	188	198	1290	1350	616	2890	194	189	1510	2630	302
3	722	189	195	1120	1130	621	2930	194	188	2040	2230	938
4	718	187	194	1100	1020	1510	2690	192	188	2300	1020	1540
5	705	187	193	1100	793	1690	2960	189	190	1860	2930	2600
6	616	189	191	1100	673	1410	2980	187	191	759	4100	2540
7	577	191	194	1100	803	1100	3540	190	192	167	6670	2090
8	578	191	207	1100	811	827	2840	214	192	202	4240	1880
9	574	194	208	1100	812	1290	2820	214	195	1310	3210	1350
10	560	192	513	1040	815	1730	2910	200	194	1750	2590	1400
11	220	195	937	874	815	1740	2900	197	3010	1910	2880	1390
12	195	198	900	870	813	1760	2610	198	7600	1700	2540	1220
13	185	192	615	867	790	2990	2110	197	7010	1740	2810	979
14	190	180	463	864	674	3460	1920	197	3710	1640	3020	759
15	194	179	209	860	666	4280	2060	196	3490	891	3020	642
16	194	180	192	928	667	5060	1850	184	3340	204	2760	600
17	195	186	188	1020	622	4530	1370	183	2580	200	2340	496
18	196	185	271	1020	591	4950	1130	183	1520	224	2330	220
19	197	187	1060	1030	592	5120	1110	184	1290	210	2410	200
20	197	186	767	1050	594	6610	771	187	1830	298	2390	202
21	198	184	720	1080	597	7160	663	187	2000	980	2090	209
22	199	181	648	1220	599	7370	657	189	2070	1220	1200	224
23	199	185	602	1320	598	7090	654	187	3120	712	1130	239
24	200	479	501	1110	599	6200	619	186	2320	676	1150	661
25	200	1300	192	1040	603	5070	505	187	1760	711	847	678
26	194	931	179	1040	605	4900	578	184	1620	690	749	545
27	185	638	196	1080	605	4350	649	186	1590	788	622	655
28	185	617	260	1130	608	4160	600	186	1590	973	566	613
29	186	614	1270	1140	---	4500	181	188	884	1090	556	524
30	186	607	1470	1260	---	4200	177	187	243	1190	276	497
31	188	---	1480	1460	---	3320	---	186	---	1500	200	---
MEAN	352	317	500	1086	766	3556	1751	191	1816	1021	2172	880
MAX	1020	1300	1480	1460	1590	7370	3540	214	7600	2300	6670	2600
MIN	185	179	179	860	591	612	177	178	188	167	200	200
IN.	.24	.21	.34	.74	.47	2.41	1.15	.13	1.19	.69	1.47	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2001, BY WATER YEAR (WY)

MEAN	1009	777	1327	2040	2844	3317	2791	1339	1173	1288	1470	1264
MAX	10550	4943	8913	5671	12290	9313	13240	4880	4942	4007	6835	7890
(WY)	1995	1948	1965	1993	1986	1984	1948	1964	1973	1991	1928	1969
MIN	50.0	52.5	82.6	222	243	296	327	172	73.5	66.3	116	120
(WY)	1955	1955	1959	1935	1957	1955	1999	1927	2000	2000	2000	1958

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1926 - 2001	
ANNUAL MEAN	478		1204		1689	
HIGHEST ANNUAL MEAN					4516	1948
LOWEST ANNUAL MEAN					315	1955
HIGHEST DAILY MEAN	3020	Sep 23	7600	Jun 12	73200	Sep 23 1969
LOWEST DAILY MEAN	42	Jul 15	167	Jul 7	.00	Sep 20 1929
ANNUAL SEVEN-DAY MINIMUM	43	Jul 15	183	Nov 14	2.6	Sep 26 1958
MAXIMUM PEAK FLOW			8050	Jun 12	89400	Sep 25 1969
MAXIMUM PEAK STAGE			17.88	Jun 12	29.20	Sep 23 1969
INSTANTANEOUS LOW FLOW			136	Jul 7		
ANNUAL RUNOFF (INCHES)	3.82		9.62		13.50	
10 PERCENT EXCEEDS	1270		2930		4160	
50 PERCENT EXCEEDS	198		711		994	
90 PERCENT EXCEEDS	58		187		157	

02330100 TELOGIA CREEK NEAR BRISTOL, FL

LOCATION.--Lat 30°25'35", long 84°55'40", in NW¼ sec. 3, T. 1 S., R. 7 W., Liberty County, Hydrologic Unit 03120003, near left bank at downstream side of bridge on State Highway 20, 600 ft upstream from White Branch, 3.0 mi east of Bristol, and 33 mi upstream from mouth.

DRAINGAGE AREA.--126 mi^2.

PERIOD OF RECORD.--March 1950 to September 1971, October 1974 to September 1979, October 1980 to current year.

REVISED RECORDS.--WSP 1504: 1950-51, 1953 (M), 1955-56.

GAGE.--Water-stage recorder. Datum of gage is 99.50 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	49	85	113	84	49	162	39	24	83	704	90
2	71	49	82	93	85	77	126	37	26	87	828	156
3	67	49	80	84	80	88	106	36	26	82	402	240
4	63	49	77	78	70	90	112	36	24	78	212	504
5	62	49	75	76	65	142	154	36	24	158	156	821
6	62	49	74	73	63	132	169	32	23	228	1130	543
7	75	50	75	70	60	80	124	30	21	123	2770	569
8	83	50	72	69	58	66	103	30	22	89	1340	921
9	79	52	72	74	56	60	93	29	29	78	918	414
10	69	59	77	77	57	71	86	28	61	68	559	197
11	64	63	107	71	66	97	80	28	103	106	516	153
12	61	62	105	84	73	89	75	28	1140	167	748	135
13	59	59	92	107	66	228	71	27	1800	145	756	120
14	57	60	87	97	63	418	69	26	808	115	544	109
15	56	60	105	83	60	513	80	25	412	87	517	107
16	54	63	126	75	59	477	88	24	245	78	367	100
17	53	77	109	70	57	727	96	23	211	66	316	91
18	52	95	96	67	55	405	79	23	152	56	1350	86
19	51	106	89	67	53	325	67	22	113	54	703	82
20	52	130	90	103	51	580	61	24	94	55	407	80
21	51	139	93	151	49	969	57	28	170	57	249	80
22	51	110	88	127	50	825	54	34	208	63	182	84
23	50	87	84	94	51	374	51	35	145	55	150	158
24	50	82	81	82	50	194	49	30	189	61	132	185
25	49	157	78	75	48	148	47	28	156	110	115	259
26	49	192	76	70	48	131	46	25	98	210	103	241
27	49	177	75	67	47	117	45	23	73	210	100	155
28	50	131	105	64	47	107	44	22	66	210	96	121
29	49	104	197	63	---	140	42	22	79	356	88	102
30	47	92	276	65	---	240	40	26	76	334	85	91
31	48	---	191	76	---	258	---	25	---	402	84	---
MEAN	58.3	85.0	101	82.7	59.7	265	82.5	28.4	221	131	536	233
MAX	83	192	276	151	85	969	169	39	1800	402	2770	921
MIN	47	49	72	63	47	49	40	22	21	54	84	80
IN.	.53	.75	.92	.76	.49	2.43	.73	.26	1.95	1.20	4.91	2.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

MEAN	178	161	198	258	296	329	231	159	170	207	220	213
MAX	867	642	749	766	812	1100	615	788	605	510	726	1268
(WY)	1995	1998	1965	1991	1986	1991	1958	1991	1965	1956	1994	1969
MIN	35.4	46.9	69.3	71.1	59.7	45.1	61.0	28.4	28.6	45.9	47.0	38.4
(WY)	1955	1991	1991	1989	2001	1955	1999	2001	2000	2000	1954	1954

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL MEAN	74.5		158		218	
HIGHEST ANNUAL MEAN					478	1965
LOWEST ANNUAL MEAN					78.9	2000
HIGHEST DAILY MEAN	671	Sep 24	2770	Aug 7	16600	Sep 22 1969
LOWEST DAILY MEAN	22	Jun 10	21	Jun 7	21	Jun 7 2001
ANNUAL SEVEN-DAY MINIMUM	23	Jun 7	24	Jun 2	23	Jun 7 2000
MAXIMUM PEAK FLOW			3240	Aug 7	20600	Sep 22 1969
MAXIMUM PEAK STAGE			8.61	Aug 7	16.65	Sep 22 1969
INSTANTANEOUS LOW FLOW			21	May 29	21	Jun 12 2000
ANNUAL RUNOFF (INCHES)	8.05		17.01		23.48	
10 PERCENT EXCEEDS	124		370		432	
50 PERCENT EXCEEDS	62		80		129	
90 PERCENT EXCEEDS	28		36		60	

02330150 OCHLOCKONEE RIVER NEAR SMITH CREEK, FL

LOCATION.--Lat 30°10'35", long 84°40'05", in NE¼ sec. 31, T. 3 S., R. 4 W., Wakulla County, Hydrologic Unit 03120002, at bridge on County Road 368 and Forest Road FH-13, 1.3 mi upstream from Smith Creek, 2.0 mi southwest of community of Smith Creek, and 39 mi upstream from mouth.

DRAINAGE AREA.--2,080 mi^2.

PERIOD OF RECORD.--November 1964 to November 1992 (annual peak stage); October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is undetermined. Prior to Nov. 29, 1972, crest-stage gage at NGVD of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage-height, 29.75 ft above NGVD of 1929, Sept. 25, 1969, discharge not determined.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1200	255	652	e3000	e1700	517	e4600	353	273	1010	3190	569
2	e1100	254	520	e2450	e1800	517	e4000	334	280	686	4210	796
3	e900	253	e430	e2350	e1600	517	e3350	327	270	1430	5100	1320
4	e880	253	e420	e2100	e1300	574	e2600	322	264	2460	5040	2200
5	e840	252	e415	e2000	e1150	1100	e2100	317	260	3110	4370	3190
6	e800	250	e410	e1900	e840	e1900	e2300	311	256	3270	7680	4010
7	e760	250	e405	e1890	e675	e2100	e2500	306	258	2540	17800	4580
8	e730	249	e410	e1880	e695	e1500	e2600	304	259	1490	15600	4150
9	709	250	e420	e1870	700	e1100	e2200	310	263	992	11200	4050
10	687	255	e460	e1860	698	e1700	e1900	312	265	1480	8450	3410
11	657	257	e1200	e1700	697	e2250	e1700	306	321	2620	6450	2980
12	501	262	e2000	e1400	698	e2300	e1400	300	1960	3270	6170	3070
13	379	266	e1900	e1300	698	e3000	e1200	304	5620	3330	6090	2730
14	339	270	e1300	e1290	689	e4000	e1100	303	10000	3140	5710	2220
15	320	265	e1000	e1280	652	e4600	e1000	294	7760	2940	5480	1720
16	312	262	e465	e1270	623	e5600	e1100	288	6290	2380	5310	1320
17	304	272	e415	e1350	609	e6700	e1200	280	5630	1370	5000	1080
18	299	279	e410	e1400	584	e6100	e1250	272	4700	701	4510	797
19	295	297	e600	e1420	555	e6600	e1100	267	3410	562	4170	595
20	291	311	e2300	e1450	540	e7100	e950	267	2430	481	4080	486
21	288	318	e1700	e1480	533	e8900	e850	270	2300	476	4080	442
22	284	328	e1550	e1500	532	e9500	e750	271	2490	751	4010	426
23	281	329	e1400	e1600	531	e8700	e700	271	3120	1260	3210	437
24	279	334	e1300	e1700	525	e8000	e630	270	3730	1630	2430	550
25	276	485	e1100	e1400	520	e7000	e570	273	3900	2930	2030	796
26	274	917	e420	e1300	517	e6000	e540	273	3210	3380	1650	1180
27	269	1160	e390	e1350	514	e5000	e500	267	2600	2960	1310	1190
28	262	917	e425	e1400	511	e4500	e455	262	2290	2520	1030	1190
29	258	704	e560	e1450	---	e4000	e420	259	2130	2390	755	1160
30	256	673	e2500	e1500	---	e4250	e385	263	1730	2600	666	1020
31	255	---	e2900	e1550	---	e4500	---	274	---	2690	573	---
MEAN	493	381	980	1658	774	4198	1532	291	2609	2027	5076	1789
MAX	1200	1160	2900	3000	1800	9500	4600	353	10000	3380	17800	4580
MIN	255	249	390	1270	511	517	385	259	256	476	573	426
IN.	.27	.20	.54	.92	.39	2.33	.82	.16	1.40	1.12	2.81	.96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	1946	1363	1578	1856	2242	3882	1294	725	989	1215	1640	1205
MAX	5932	4505	3954	3655	4510	10090	1879	1956	2609	2027	5076	2619
(WY)	1999	1998	1998	1998	1998	1998	1998	1997	2001	2001	2001	1998
MIN	480	381	492	573	774	1277	614	291	156	181	243	353
(WY)	2000	2001	2000	2000	2001	2000	1999	2001	2000	2000	2000	1997

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL MEAN	623		1829		1665	
HIGHEST ANNUAL MEAN					2798	1998
LOWEST ANNUAL MEAN					591	2000
HIGHEST DAILY MEAN	3300	Sep 24	17800	Aug 7	31800	Oct 2 1998
LOWEST DAILY MEAN	128	Jul 22	249	Nov 8	128	Jul 22 2000
ANNUAL SEVEN-DAY MINIMUM	135	Jun 11	251	Nov 3	135	Jun 11 2000
MAXIMUM PEAK FLOW			18700	Aug 7	33000	Oct 2 1998
MAXIMUM PEAK STAGE			16.37	Aug 7	18.30	Oct 2 1998
INSTANTANEOUS LOW FLOW			248	Nov 8	125	Jul 22 2000
ANNUAL RUNOFF (INCHES)	4.08		11.94		10.88	
10 PERCENT EXCEEDS	1450		4500		3810	
50 PERCENT EXCEEDS	400		1100		973	
90 PERCENT EXCEEDS	160		270		274	

e Estimated

02330400 NEW RIVER NEAR SUMATRA, FL

LOCATION.--Lat 30°02'19", long 84°50'38", in SE¼ sec. 16, T. 5 S., R. 6 W., Liberty County, Hydrologic Unit 03130013, on left bank 1,000 ft downstream from closed Owens bridge and dead ends of Forest Road 125 at river, 1.8 mi downstream from Cat Branch, 4.6 mi west of Tate Fire Tower, and 8.2 mi east of Sumatra.

DRAINAGE AREA.--157 mi^2.

PERIOD OF RECORD.-November 1964 to October 1986 (annual maximum discharge and gage-height), December 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929; from USGS Benchmark "TT 24 S"; elevation, 25.587 ft above NGVD of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,670 ft^3/s, Sept. 23, 1969, gage height 27.38 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	839	2.0	53	111	129	20	692	1.9	.96	542	1110	80
2	701	1.9	43	116	136	23	660	1.7	1.0	594	1100	89
3	584	1.8	35	111	147	17	616	1.4	.85	633	1080	120
4	479	1.7	29	103	152	54	567	1.2	.72	637	1050	163
5	376	1.6	23	94	147	72	513	1.0	.64	613	1080	285
6	277	1.6	20	86	137	62	454	.89	.55	588	2280	434
7	229	1.5	17	76	125	70	395	.74	.48	544	4790	540
8	188	1.5	15	71	112	67	337	.64	.40	498	5370	622
9	155	1.6	13	64	100	63	282	.60	.47	502	e4370	649
10	134	1.7	16	54	91	89	232	.54	.75	511	e3680	625
11	116	1.5	20	50	85	98	191	.52	16	513	3220	571
12	95	1.5	17	88	74	148	158	.45	310	512	2700	507
13	75	1.5	19	91	66	376	130	.41	563	558	2220	435
14	59	1.6	28	92	61	502	106	.28	730	649	1840	372
15	45	1.5	47	105	56	737	85	.13	761	940	1550	324
16	34	1.5	47	107	52	996	67	.03	708	1070	1300	271
17	26	1.6	63	102	47	1070	58	.00	630	994	1120	226
18	20	1.5	60	94	38	1100	65	.00	547	867	1000	190
19	15	1.8	52	94	33	1080	59	.00	493	770	962	160
20	12	2.2	46	147	28	1250	44	.00	488	678	873	134
21	8.9	1.9	39	142	25	1460	31	.00	468	595	795	122
22	6.7	1.8	38	145	21	1600	22	.00	436	542	715	93
23	5.1	1.8	36	159	19	1570	16	.00	473	490	634	79
24	3.8	3.4	31	160	16	1430	12	.00	562	505	555	99
25	3.0	76	28	152	15	1280	8.9	.00	638	665	475	119
26	2.7	81	25	139	17	1110	7.5	.00	676	852	389	101
27	2.5	53	22	127	16	946	4.9	.00	658	1280	296	118
28	2.4	68	46	115	12	820	3.2	.00	613	1420	217	136
29	2.3	74	75	103	---	777	2.6	.00	557	1350	163	135
30	2.1	65	69	112	---	747	2.1	.31	526	1220	127	117
31	2.0	---	91	125	---	714	---	.96	---	1140	100	---
MEAN	145	15.3	37.5	108	69.9	656	194	.44	362	751	1521	264
MAX	839	81	91	160	152	1600	692	1.9	761	1420	5370	649
MIN	2.0	1.5	13	50	12	17	2.1	.00	.40	490	100	79
IN.	1.07	.11	.28	.79	.46	4.82	1.38	.00	2.57	5.51	11.17	1.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

MEAN	398	75.6	26.3	112	82.9	291	81.5	124	143	316	555	449
MAX	865	202	37.5	152	121	656	194	359	362	751	1521	845
(WY)	1999	2000	2001	1999	1999	2001	2001	1997	2001	2001	2001	1998
MIN	145	9.72	14.3	75.7	58.8	56.3	9.19	.001	.080	.49	103	73.2
(WY)	2001	1999	1999	2000	2000	2000	1999	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1997 - 2001	
ANNUAL MEAN	95.2		347		219	
HIGHEST ANNUAL MEAN					347	2001
LOWEST ANNUAL MEAN					113	2000
HIGHEST DAILY MEAN	2440	Sep 25	5370	Aug 8	5370	Aug 8 2001
LOWEST DAILY MEAN	.00	May 2	.00	May 17	.00	Jun 5 1998
ANNUAL SEVEN-DAY MINIMUM	.00	May 2	.00	May 17	.00	Jun 12 1998
MAXIMUM PEAK FLOW			5430	Aug 8	5430	Aug 8 2001
MAXIMUM PEAK STAGE			26.31	Aug 8	26.31	Aug 8 2001
INSTANTANEOUS LOW FLOW			.00	May 16	.00	Sep 11 1997
ANNUAL RUNOFF (INCHES)	8.25		30.05		18.92	
10 PERCENT EXCEEDS	178		975		662	
50 PERCENT EXCEEDS	16		94		82	
90 PERCENT EXCEEDS	.00		1.0		.39	

e Estimated

02357150 SPRING CREEK NEAR REYNOLDSVILLE, GA

LOCATION.--Lat 30°54'14", long 84°44'57", Decatur County, Hydrologic Unit 03130010, on right bank, 1 mi upstream of Smith Landing, and 3 mi north-northeast of Reynoldsville.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage and velocity recorder.

REMARKS.--No estimated daily discharges. Records good below 2,000 ft^3/s, and fair above.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	137	165	251	294	267	1460	580	324	430	249	199
2	129	141	173	287	285	275	1450	562	315	429	232	199
3	116	130	177	494	297	292	1380	534	306	421	244	205
4	124	133	163	569	317	326	1410	525	305	420	242	194
5	139	143	156	579	330	342	1570	516	280	414	253	191
6	148	152	158	478	330	313	1870	506	288	407	238	197
7	129	153	152	337	331	415	2360	490	281	403	229	197
8	124	146	152	321	323	590	2650	462	287	395	234	193
9	132	153	173	287	319	768	2540	455	280	382	213	188
10	137	129	179	279	321	796	2170	434	301	358	248	200
11	137	136	171	306	305	690	1810	420	324	353	251	188
12	141	140	166	311	305	606	1570	413	392	341	262	183
13	137	141	162	297	294	595	1410	419	439	339	265	187
14	138	139	167	308	302	708	1290	404	463	333	269	184
15	147	143	167	311	310	906	1180	371	461	332	257	168
16	146	146	172	290	315	1220	1130	368	479	315	271	170
17	141	145	165	286	302	1580	1120	368	495	296	267	175
18	147	162	180	287	280	1750	1060	353	479	281	277	174
19	148	155	167	304	301	1800	992	338	473	277	257	188
20	140	144	172	264	307	1750	927	333	454	281	247	179
21	129	147	185	263	316	1920	876	349	429	264	228	181
22	137	155	180	290	305	2380	822	373	438	252	218	170
23	133	149	185	300	277	2870	781	362	447	243	223	182
24	132	140	206	313	297	3040	759	346	452	254	212	187
25	132	144	199	311	304	2850	723	339	450	259	201	161
26	139	153	187	307	294	2340	710	339	445	235	222	166
27	136	150	177	315	279	1960	697	332	428	243	207	162
28	133	159	206	317	276	1710	663	341	428	241	207	175
29	139	158	184	299	---	1520	639	328	411	237	199	170
30	136	155	177	305	---	1470	598	316	414	239	205	163
31	139	---	203	299	---	1440	---	313	---	259	206	---
MEAN	136	146	175	328	304	1274	1287	406	392	320	237	183
MAX	148	162	206	579	331	3040	2650	580	495	430	277	205
MIN	116	129	152	251	276	267	598	313	280	235	199	161

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	570	308	289	451	520	791	695	291	235	317	208	165
MAX	1417	618	498	780	868	1274	1287	406	392	511	289	197
(WY)	1999	1999	1999	1999	1999	2001	2001	2001	2001	1999	1999	1999
MIN	136	146	175	244	304	438	361	202	121	121	97.1	114
(WY)	2001	2001	2001	2000	2001	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	212		433		403	
HIGHEST ANNUAL MEAN					561	1999
LOWEST ANNUAL MEAN					216	2000
HIGHEST DAILY MEAN	533	Feb 14	3040	Mar 24	4260	Oct 3 1998
LOWEST DAILY MEAN	45	Sep 13	116	Oct 3	45	Sep 13 2000
ANNUAL SEVEN-DAY MINIMUM	73	Aug 18	130	Oct 2	73	Aug 18 2000
MAXIMUM PEAK FLOW			3360	Mar 23	4470	Oct 3 1998
MAXIMUM PEAK STAGE			80.39	Mar 23	81.82	Oct 3 1998
10 PERCENT EXCEEDS	416		914		723	
50 PERCENT EXCEEDS	155		287		286	
90 PERCENT EXCEEDS	109		142		129	

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL

LOCATION.--Lat 30°42'03", long 84°51'33", in NW¼ sec. 32, T.4 N., R.6 W., Jackson County, Hydrologic Unit 03130011, on downstream side of abandoned bridge downstream of U.S. Highway 90, 0.6 mi downstream from Jim Woodruff Dam, 0.6 mi upstream from Mosquito Creek, 1.0 mi west of Chattahoochee, and 106 mi upstream from mouth.

DRAINAGE AREA.--17,200 mi^2, approximately.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1304. Prior to October 1939, published as "near River Junction." Gage-height records collected at site 0.9 mi downstream October 1919 to September 1925, and at site approximately 100 ft downstream October 1925 to December 1958 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1906: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (National Weather Service bench mark). Prior to Dec. 16, 1939, water-stage recorder at site 0.9 mi downstream at datum 44.85 ft higher. Dec. 16, 1939 to June 25, 1952, water-stage recorder, June 26, 1952 to June 2, 1954, nonrecording gage, and June 3, 1954 to Oct. 14, 1958, water-stage recorder, at site approximately 100 ft downstream at datum 45.58 ft. Oct. 15, 1958 to Sept. 30, 1987, water-stage recorder at datum 40.58 ft.

REMARKS.--Records good. Flow regulated by Lake Seminole Reservoir (02357500) 0.6 mi upstream since Feb. 4, 1957, Walter F. George Lake (02343240) since 1962, Bartlett's Ferry Reservoir (02341000) since 1926, West Point Lake (02339400) since October 1974, and Lake Sidney Lanier Reservoir (02334400) since 1956.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5640	5810	8000	13200	14200	13800	27800	12800	9810	17500	12700	7950
2	5670	5760	8230	13200	14100	14700	27300	12700	9960	16300	11200	7890
3	5670	5760	7840	13500	14200	16400	27700	11300	10800	15400	11000	7980
4	5660	5770	7300	16300	14100	50700	49600	12200	13300	15400	11100	8010
5	5740	5700	7260	16500	14100	77400	75500	13400	15700	16300	10900	8160
6	5620	5720	7260	14900	14300	81400	85700	13000	16800	17000	10600	7740
7	5590	5710	7320	14800	14500	82600	76300	11400	16900	15400	9290	7840
8	5550	5790	7310	14100	13400	59800	59000	10900	17000	17200	9020	7490
9	5540	5740	7320	11900	11200	51300	48100	10800	17100	15900	8890	7230
10	5570	5800	7340	11400	10700	46300	44900	10900	e20200	12900	9940	7190
11	5630	5790	7120	12800	9140	41400	37700	10500	e26400	13300	10900	7230
12	5750	5720	6860	12800	8670	36800	32600	10100	37100	14800	11100	8410
13	5710	5740	11200	12900	8860	41900	30600	9550	36000	13500	11000	9390
14	5630	5650	17200	12800	9060	50500	24000	8790	32100	10900	10200	8300
15	5620	5620	18900	12800	9060	53000	23200	8320	26400	10700	9890	7330
16	5620	5700	18200	11800	8950	58800	22900	7940	25600	10300	10900	7030
17	5670	5720	16200	11000	8990	75000	21900	7990	25700	8950	11100	6890
18	5690	5730	14600	11100	8890	79500	20700	8110	24600	8270	10700	6910
19	5660	5680	13900	11100	9170	75000	20400	8040	22900	7640	9020	6860
20	5740	5760	12100	11200	10100	68500	18600	11100	19300	7110	8070	6740
21	5710	6690	10600	14400	11000	75200	16200	17500	16900	7080	8300	6300
22	5730	7980	9220	19000	11100	93600	15000	20900	15100	7020	8290	6220
23	5680	7700	9110	21700	12200	98600	14800	19700	14900	6880	8250	6200
24	5620	6840	9150	21500	15000	85100	15100	16000	13900	6050	8170	6180
25	5640	6980	9200	20100	15300	71000	15600	12600	10800	7100	8340	6310
26	5620	7010	8980	19200	15300	61800	15600	11300	10800	7000	8240	6240
27	5690	7640	9150	18100	15300	54900	15400	10700	10800	7010	8200	6330
28	5650	9070	9320	17700	14800	47100	15600	9970	11400	7090	8070	6360
29	5680	7990	9440	15200	---	45000	14600	9940	13100	7130	8020	6230
30	5740	8250	10700	14200	---	36500	13500	9960	16600	7190	7880	6240
31	5690	---	13000	14200	---	29300	---	10000	---	11400	7850	---
MEAN	5659	6361	10300	14690	11990	57190	30860	11560	18600	11150	9585	7173
MAX	5750	9070	18900	21700	15300	98600	85700	20900	37100	17500	12700	9390
MIN	5540	5620	6860	11000	8670	13800	13500	7940	9810	6050	7850	6180
MED	5660	5760	9150	14100	11700	54900	23000	10900	16800	10700	9290	7110
IN.	.38	.41	.69	.98	.73	3.83	2.00	.78	1.21	.75	.64	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2001, BY WATER YEAR (WY)

MEAN	12540	13310	20260	27860	33830	41200	34230	21730	16470	16750	14930	12120
MAX	38500	31790	70390	62470	67310	171600	80700	53260	39460	87780	31950	25440
(WY)	1965	1993	1949	1936	1998	1929	1944	1964	1973	1994	1994	1994
MIN	5319	5524	7576	7262	10420	12780	10880	8413	4826	5117	4750	5889
(WY)	1955	1932	2000	1956	1989	1955	1999	2000	2000	2000	1988	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1929 - 2001	
ANNUAL MEAN	9341		16300		22050	
HIGHEST ANNUAL MEAN					35680	1929
LOWEST ANNUAL MEAN					9107	2000
HIGHEST DAILY MEAN	35100	Apr 6	98600	Mar 23	291000	Mar 20 1929
LOWEST DAILY MEAN	4530	Jul 2	5540	Oct 9	3900	Nov 15 1987
ANNUAL SEVEN-DAY MINIMUM	4580	Jun 28	5610	Oct 5	4530	Aug 10 1988
MAXIMUM PEAK FLOW			100000	Mar 23	293000	Mar 20 1929
MAXIMUM PEAK STAGE			64.88	Mar 23	79.55	Mar 20 1929
INSTANTANEOUS LOW FLOW			5250	Oct 16	2570	Aug 6 1986
ANNUAL RUNOFF (INCHES)	7.39		12.87		17.42	
10 PERCENT EXCEEDS	18900		36200		43600	
50 PERCENT EXCEEDS	5970		10900		16000	
90 PERCENT EXCEEDS	5150		5730		8660	

e Estimated

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.48	39.59	40.89	43.54	44.03	43.80	49.55	43.36	41.87	45.47	43.31	40.86
2	39.50	39.56	41.02	43.57	43.97	44.27	49.37	43.30	41.95	44.97	42.60	40.82
3	39.50	39.56	40.79	43.71	44.01	44.98	49.48	42.65	42.36	44.56	42.49	40.88
4	39.49	39.56	40.49	44.97	43.97	56.46	56.44	43.07	43.60	44.58	42.51	40.89
5	39.54	39.52	40.47	45.06	43.96	61.60	61.28	43.62	44.67	44.97	42.45	40.98
6	39.47	39.53	40.46	44.32	44.08	62.21	62.84	43.46	45.18	45.27	42.27	40.74
7	39.45	39.53	40.50	44.31	44.14	62.39	61.43	42.70	45.23	44.57	41.59	40.79
8	39.42	39.57	40.49	43.96	43.64	58.68	58.51	42.41	45.26	45.36	41.45	40.59
9	39.42	39.55	40.50	42.94	42.57	57.10	56.23	42.39	45.32	44.79	41.38	40.45
10	39.44	39.58	40.51	42.66	42.31	55.68	55.23	42.42	---	43.42	41.93	40.42
11	39.47	39.57	40.38	43.37	41.51	54.14	52.94	42.25	---	43.59	42.45	40.44
12	39.55	39.53	40.23	43.38	41.26	52.65	51.23	42.02	52.77	44.29	42.51	41.11
13	39.53	39.55	42.48	43.39	41.36	54.28	50.52	41.73	52.40	43.67	42.49	41.65
14	39.48	39.49	45.34	43.38	41.47	56.93	48.12	41.32	51.04	42.42	42.08	41.05
15	39.47	39.47	46.06	43.35	41.47	57.45	47.81	41.06	49.03	42.33	41.90	40.50
16	39.47	39.52	45.78	42.87	41.41	58.49	47.68	40.85	48.71	42.12	42.43	40.33
17	39.50	39.53	44.94	42.49	41.43	61.22	47.29	40.88	48.76	41.41	42.53	40.25
18	39.51	39.54	44.20	42.52	41.38	61.94	46.81	40.95	48.35	41.04	42.35	40.26
19	39.50	39.51	43.87	42.52	41.53	61.22	46.69	40.91	47.66	40.68	41.44	40.23
20	39.54	39.55	43.03	42.56	42.00	60.19	45.96	42.49	46.23	40.38	40.92	40.16
21	39.52	40.12	42.28	44.07	42.49	61.24	44.93	45.47	45.21	40.36	41.05	39.89
22	39.54	40.88	41.55	46.10	42.52	63.96	44.39	46.90	44.41	40.32	41.05	39.84
23	39.51	40.72	41.49	47.21	43.04	64.64	44.28	46.39	44.35	40.24	41.03	39.83
24	39.47	40.22	41.52	47.12	44.36	62.74	44.41	44.81	43.85	39.74	40.98	39.82
25	39.48	40.30	41.55	46.57	44.50	60.58	44.64	43.28	42.39	40.37	41.07	39.90
26	39.47	40.32	41.43	46.20	44.50	59.05	44.65	42.65	42.36	40.31	41.02	39.85
27	39.51	40.67	41.52	45.76	44.52	57.76	44.57	42.33	42.40	40.32	41.00	39.91
28	39.48	41.47	41.61	45.55	44.28	55.90	44.64	41.95	42.69	40.36	40.92	39.93
29	39.51	40.88	41.67	44.46	---	55.26	44.21	41.94	43.50	40.39	40.90	39.85
30	39.54	41.02	42.31	44.03	---	52.55	43.71	41.95	45.09	40.42	40.82	39.86
31	39.51	---	43.46	44.00	---	50.08	---	41.98	---	42.67	40.80	---
MEAN	39.49	39.91	42.03	44.19	42.92	57.08	49.66	42.69	---	42.43	41.73	40.40
MAX	39.55	41.47	46.06	47.21	44.52	64.64	62.84	46.90	---	45.47	43.31	41.65
MIN	39.42	39.47	40.23	42.49	41.26	43.80	43.71	40.85	---	39.74	40.80	39.82

02358700 APALACHICOLA RIVER NEAR BLOUNTSTOWN, FL

LOCATION.--Lat 30°25'30", long 85°01'53", in NE¼ sec.3, T.1 S., R.8 W., Calhoun County, Hydrologic Unit 03130011, on right bank 500 ft upstream from Neal Lumber Company Landing at McNeal, 0.5 mi upstream from Old River cutoff, 1.5 mi southeast of Blountstown, and 78 mi upstream from mouth.

DRAINAGE AREA.--17,600 mi^2, approximately.

PERIOD OF RECORD.--January 1920 to September 1957 gage-height records collected in this vicinity by the National Weather Service are in the files of the Geological Survey. Miscellaneous discharge measurements from some periods August 1938 to August 1957 are in files of the U.S. Army Corps of Engineers, Mobile, Alabama District. October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 26.96 ft above National Geodetic Vertical Datum of 1929 (National Weather Service benchmark). Prior to Sept. 17, 1921, nonrecording gage near present site at different datum. Sept. 17, 1921 to Aug. 28, 1957, nonrecording gage at several sites within 500 ft of present site at present datum. Since Aug. 26, 1960, auxiliary nonrecording gage at site 2.2 mi upstream at bridge on State Highway 20, at present datum.

REMARKS.--Records good.

COOPERATION.--Records from October 1957 to current year, were collected and computed by the U.S. Army Corps of Engineers and were reviewed by the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 266,000 ft^3/s, Mar. 13, 1998; maximum gage height, 27.23 ft, Mar. 13, 1998; minimum daily discharge, 4,680 ft^3/s (estimated), Aug. 3, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1920, 28.6 ft present datum, Mar. 21, 1929, discharge not determined, from National Weather Service records.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 75,200 ft^3/s, Mar. 24, gage height, 21.51 ft; minimum daily, 5,400 ft^3/s, Oct. 29.

MAIN CHANNEL ONLY
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5520	5450	7180	12000	14200	12200	27400	13400	10900	18500	13700	8160
2	5490	5480	7180	12100	14100	11800	25900	13000	10900	18600	13000	8240
3	5490	5470	7130	12300	13900	12600	25400	12100	11100	17100	12400	8210
4	5500	5460	6800	13600	13900	26400	33100	11800	13000	16800	12100	8260
5	5500	5440	6550	15700	13700	46200	48300	13100	15500	17100	12100	8160
6	5530	5460	6520	14500	13700	58100	63900	13500	17600	18500	13000	8080
7	5510	5450	6550	14000	13800	64700	69200	12300	18200	17400	15200	7970
8	5470	5450	6550	13900	13600	62100	63200	11600	18500	17900	11200	7900
9	5470	5480	6550	12600	11600	52000	52700	11100	18700	18200	10600	7390
10	5490	5500	6570	11000	10700	46000	46800	11200	20600	15600	10600	7150
11	5490	5530	6550	11700	9590	40200	40700	11100	24100	14400	10500	7100
12	5490	5470	6270	12300	8760	35700	34300	10700	39200	15600	12000	7380
13	5510	5440	6880	12400	8480	34600	31200	10300	41800	15900	12200	8700
14	5490	5450	12600	12400	8450	39600	26300	9520	38700	13400	12200	8710
15	5440	5470	16000	12300	8390	43700	23600	9040	32600	12100	11900	7500
16	5450	5490	16700	12200	8280	46000	22800	8540	29900	11800	11100	7050
17	5460	5490	15400	11000	8180	51600	22200	8380	29200	10800	11000	6680
18	5450	5500	13700	10800	8160	58500	20900	8450	28500	9980	11900	6590
19	5460	5510	13200	10900	13100	61000	20400	8540	26900	9280	11900	6550
20	5460	5520	11800	10900	8240	60000	19100	9320	23700	8620	11100	6470
21	5490	5700	10500	11700	9260	58900	17100	15000	20800	8310	9320	6180
22	5470	6740	9220	16500	9520	64400	15200	20500	e19800	8180	8980	5980
23	5480	7030	8540	20000	9600	73600	14700	21300	e18800	8080	8920	5920
24	5440	6630	8480	21200	11800	75200	14600	18600	e17900	8000	8840	5970
25	5430	6490	8510	20400	12900	66300	15200	15100	e16900	8070	8710	6130
26	5430	6470	8540	19700	13000	59000	15500	12800	e16100	8080	8620	6060
27	5420	6380	8460	18400	13000	54100	15400	12100	e15200	8080	8590	5970
28	5410	7530	8670	18000	12800	48000	15400	11100	e14300	8070	8510	5960
29	5400	7410	9010	16500	---	44500	15200	10900	13500	8050	8420	5950
30	5440	7140	8930	14900	---	39000	14000	10900	16300	8080	8150	5870
31	5450	---	11000	14300	---	31400	---	10900	---	10100	8070	---
MEAN	5469	5901	9243	14200	11240	47660	28990	12140	21310	12540	10800	7075
MAX	5530	7530	16700	21200	14200	75200	69200	21300	41800	18600	15200	8710
MIN	5400	5440	6270	10800	8160	11800	14000	8380	10900	8000	8070	5870
IN.	.36	.37	.61	.93	.67	3.12	1.84	.80	1.35	.82	.71	.45

CAL YR 2000 MEAN 9901 MAX 39700 MIN 5190 IN. 7.66
WTR YR 2001 MEAN 15580 MAX 75200 MIN 5400 IN. 12.02

e Estimated

02358700 APALACHICOLA RIVER NEAR BLOUNTSTOWN, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.48	2.06	4.81	5.55	5.63	12.74	5.63	3.47	7.23	4.98	2.23
2	.52	.51	2.06	4.90	5.54	5.43	12.17	5.38	3.45	7.26	4.65	2.30
3	.53	.50	2.02	4.98	5.50	5.93	11.92	4.84	3.54	6.58	4.27	2.31
4	.54	.49	1.76	5.65	5.52	12.14	14.51	4.65	4.60	6.47	4.11	2.37
5	.54	.47	1.55	6.72	5.46	17.47	17.90	5.36	5.92	6.58	4.13	2.32
6	.57	.49	1.53	6.12	5.50	19.33	20.03	5.55	6.90	7.25	4.62	2.29
7	.55	.48	1.55	5.81	5.59	20.18	20.57	4.90	7.15	6.72	5.80	2.23
8	.50	.48	1.55	5.77	5.54	19.91	19.87	4.44	7.25	6.96	3.66	2.20
9	.50	.51	1.55	5.01	4.49	18.60	18.46	4.13	7.33	7.11	3.29	1.85
10	.52	.54	1.57	4.08	3.95	17.63	17.46	4.15	8.11	5.91	3.30	1.70
11	.53	.57	1.55	4.45	3.32	16.49	16.22	4.10	9.52	5.29	3.26	1.68
12	.53	.50	1.32	4.80	2.81	15.42	14.58	3.82	14.22	5.90	4.17	1.91
13	.55	.47	1.80	4.82	2.66	15.16	13.62	3.58	14.80	6.07	4.33	2.88
14	.52	.48	5.49	4.80	2.68	16.49	11.91	3.04	14.11	4.78	4.34	2.91
15	.47	.50	7.26	4.76	2.68	17.40	10.84	2.70	12.47	4.07	4.19	2.07
16	.48	.52	7.57	4.65	2.64	17.88	10.47	2.33	11.64	3.90	3.78	1.75
17	.49	.53	6.94	3.97	2.61	18.87	10.18	2.20	11.40	3.32	3.76	1.48
18	.48	.54	6.04	3.82	2.65	19.87	9.61	2.23	11.17	2.79	4.30	1.43
19	.49	.55	5.74	3.83	5.71	20.23	9.36	2.26	10.57	2.35	4.28	1.41
20	.49	.56	4.92	3.86	2.78	20.14	8.77	2.77	9.39	1.91	3.86	1.38
21	.53	.77	4.17	4.29	3.52	19.97	7.83	5.98	8.17	1.70	2.77	1.15
22	.50	1.71	3.31	6.78	3.73	20.61	6.88	8.49	e7.75	1.61	2.56	1.00
23	.51	1.94	2.84	8.38	3.82	21.43	6.59	8.82	e7.33	1.54	2.55	.97
24	.47	1.62	2.78	8.87	5.18	21.51	6.48	7.66	e6.90	1.49	2.52	1.04
25	.45	1.50	2.78	8.51	5.84	20.73	6.79	5.98	e6.48	1.54	2.45	1.20
26	.45	1.49	2.78	8.18	5.95	19.81	6.86	4.72	e6.06	1.55	2.41	1.13
27	.44	1.41	2.71	7.60	5.99	19.11	6.78	4.28	e5.64	1.56	2.42	1.04
28	.43	2.32	2.83	7.37	5.90	18.11	6.76	3.71	e5.21	1.55	2.38	1.02
29	.42	2.23	3.04	6.67	---	17.44	6.64	3.58	4.79	1.55	2.34	1.01
30	.46	2.03	2.98	5.84	---	16.23	5.99	3.54	6.20	1.57	2.18	.93
31	.48	---	4.27	5.57	---	14.15	---	3.51	---	2.92	2.14	---
TOTAL	15.50	27.19	100.32	175.67	123.11	529.30	348.79	138.33	241.54	127.03	109.80	51.19
MEAN	.50	.91	3.24	5.67	4.40	17.07	11.63	4.46	8.05	4.10	3.54	1.71
MAX	.57	2.32	7.57	8.87	5.99	21.51	20.57	8.82	14.80	7.26	5.80	2.91
MIN	.42	.47	1.32	3.82	2.61	5.43	5.99	2.20	3.45	1.49	2.14	.93

CAL YR 2000 TOTAL 1024.76 MEAN 2.80 MAX 14.47 MIN .17
WTR YR 2001 TOTAL 1987.77 MEAN 5.45 MAX 21.51 MIN .42

e Estimated

02358784 MUDDY BRANCH NEAR MARIANNA, FL

LOCATION.--Lat 30°49'58", long 85°12'31", in SW¼ sec. 14, T. 5N., R. 10W., Jackson County, Hydrologic Unit 03130012, at downstream side of culvert at County Road 167, 1.4 mi west of Marianna Municipal Airport, 1.4 mi north of State Highway 166, 2.4 mi upstream from Chipola River, and 4.2 mi north of Marianna.

DRAINAGE AREA.--10.4 mi^2.

PERIOD OF RECORD.--October 1998 to September 1999, October 1999 to September 2000 (gage heights only), October 2000 to September 2001.

GAGE.--Water-stage recorder.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	e.00	.00	.00	2.2	.58	.02	.00	e.25	.01
2	.00	.00	.00	e.00	.00	.00	2.0	.56	.17	.08	e.45	.11
3	.00	.00	.00	e.00	.00	.00	1.9	.54	.00	.26	e.25	.23
4	.00	.00	.00	.00	.00	.34	7.7	.52	.00	.00	e.10	.33
5	.00	.00	.00	.00	.00	.31	4.8	.51	.00	.00	e.05	.31
6	.00	.00	.00	e.00	.00	.00	3.1	.48	.00	.00	e.10	.29
7	.00	.00	.00	e.00	.00	.00	2.4	.46	.00	.49	e.15	.34
8	.00	.00	.00	.00	.00	.00	2.3	.44	.72	1.6	e.25	.22
9	.00	.00	.00	e.00	.00	.00	2.1	.39	2.9	.33	e.20	.09
10	.00	.00	.00	e.00	.00	.00	1.5	.36	2.2	1.8	e.05	.00
11	.00	.00	.00	e.00	.00	.00	1.5	.36	6.7	3.1	e.00	.00
12	.00	.00	.00	e.00	.00	3.0	1.3	.33	8.5	.55	e.00	.07
13	.00	.00	.00	e.00	.00	11	1.2	.29	1.3	.09	e.00	.62
14	.00	.00	.00	e.00	.00	2.6	1.1	.23	.81	.02	e.20	.27
15	.00	.00	.00	.00	.00	21	1.1	.15	.62	.19	e.40	.07
16	.00	.00	.00	.00	.00	6.0	1.0	.00	.39	.24	e.10	.00
17	.00	.00	.00	.00	.00	3.8	.89	.00	.34	e.20	e.00	.00
18	.00	.00	.00	.00	.00	3.7	.82	.00	.18	e.10	e.00	.00
19	.00	.00	.00	.00	.00	3.1	.63	.00	.03	e.00	e.00	.00
20	.00	.00	.00	.00	.00	15	.45	4.1	.00	e.00	e.15	.00
21	.00	.00	e.00	.00	.00	5.6	.41	1.7	.00	e.00	e.20	.00
22	.00	.00	.00	e.00	.00	3.6	.53	.50	.04	e.05	.21	.00
23	.00	.00	.00	e.00	.00	3.3	.69	.29	.19	e.20	.20	.00
24	.00	.00	.00	e.00	.00	3.1	.72	.12	.00	e.30	.15	.00
25	.00	.00	.00	e.00	.00	3.1	.71	.01	.00	e.15	.07	.00
26	.00	.00	.00	.00	.00	2.9	.66	.00	.00	e.10	.01	.00
27	.00	.00	.00	e.00	.00	2.7	.64	.00	.00	e.05	.00	.00
28	.00	.00	.00	.00	.00	2.6	.62	.00	.00	e.00	.00	.00
29	.00	.00	.00	.00	---	4.0	.60	.00	.00	e.00	.00	.00
30	.00	.00	.00	.00	---	4.1	.58	.00	.00	e.00	.00	.00
31	.00	---	.00	.00	---	2.9	---	.00	---	e.10	.00	---
MEAN	.000	.000	.000	.000	.000	3.48	1.54	.42	.84	.32	.11	.099
MAX	.00	.00	.00	.00	.00	21	7.7	4.1	8.5	3.1	.45	.62
MIN	.00	.00	.00	.00	.00	.00	.41	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	1.64	.51	.23	.87	.55	1.41	.77	.66	.54	.52	.15	.11
MAX	4.50	1.40	.67	1.74	1.06	3.48	1.54	1.58	.84	1.25	.33	.14
(WY)	1999	1999	1999	1999	1999	2001	2001	1999	2001	1999	1999	2000
MIN	.000	.000	.000	.000	.000	.31	.38	.000	.001	.005	.001	.099
(WY)	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000	2000	2001

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	.57		.88	
HIGHEST ANNUAL MEAN			1.19	1999
LOWEST ANNUAL MEAN			.57	2001
HIGHEST DAILY MEAN	21	Mar 15	25	Oct 1 1998
LOWEST DAILY MEAN	.00	Oct 1	.00	Apr 21 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1	.00	Sep 3 1999
MAXIMUM PEAK FLOW	50	Mar 15	50	Mar 15 2001
MAXIMUM PEAK STAGE	5.72	Mar 15	6.70	May 7 1999
INSTANTANEOUS LOW FLOW	.00	Oct 1	.00	Apr 21 1999
10 PERCENT EXCEEDS	1.7		1.7	
50 PERCENT EXCEEDS	.00		.02	
90 PERCENT EXCEEDS	.00		.00	

e Estimated

02358789 CHIPOLA RIVER AT MARIANNA, FL

LOCATION.--Lat 30°46'22", long 85°12'59", in SE $^1/_4$ sec. 3, T.4N., R.10W, Jackson County, Hydrologic Unit 03130012, at bridge on downstream side of U.S. Highway 90, 0.6 mi east of courthouse in Marianna, and 78.5 mi upstream from mouth.

DRAINAGE AREA.--464 mi^2.

PERIOD OF RECORD.--April 1913 to October 1986 (miscellaneous discharge measurements), October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 56 ft above National Geodetic Vertical Datum of 1929, from Topographic map. Prior to Oct. 1, 1999, nonrecording gage at same site at different datum.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	125	465	e1280	538	415	1360	470	293	475	419	377
2	158	125	387	1420	570	474	1460	451	362	587	507	365
3	154	125	347	1350	620	500	1460	428	428	859	577	363
4	151	124	324	1160	628	576	1390	410	455	922	653	397
5	149	125	311	948	587	667	1390	391	496	719	689	460
6	150	125	303	823	543	820	1550	372	465	554	721	462
7	152	125	296	757	512	1350	2170	356	396	482	e759	451
8	156	125	291	718	493	1720	2720	342	375	441	796	433
9	152	131	286	693	477	1730	2740	330	396	400	906	396
10	152	140	284	667	480	1470	2370	321	458	376	1130	359
11	149	145	282	650	490	1130	1890	315	543	375	1200	330
12	147	152	282	645	478	951	1450	307	754	355	1130	309
13	145	158	280	647	470	1070	1190	300	983	344	982	324
14	143	158	282	636	473	1180	1040	294	1220	352	904	329
15	141	158	377	634	470	1750	951	287	1570	363	888	311
16	140	162	523	640	460	2370	880	278	1740	338	837	293
17	138	172	576	631	455	2890	832	268	1720	303	802	274
18	137	183	593	603	445	3440	847	259	1560	282	842	259
19	136	208	675	586	431	3760	959	251	1280	269	749	245
20	135	242	867	608	422	3650	958	271	968	256	646	237
21	134	266	1030	601	412	3160	819	331	744	250	592	232
22	132	276	1050	585	404	2690	703	406	703	252	547	224
23	131	e300	912	584	399	2670	647	477	736	255	500	218
24	130	e360	793	604	392	2920	610	536	716	249	455	223
25	129	e300	e720	588	389	2850	585	515	643	242	413	240
26	128	e305	e680	555	390	2470	558	441	589	258	378	248
27	127	346	e760	528	392	2020	535	383	544	273	356	241
28	126	372	e820	509	394	1620	535	339	495	283	335	232
29	127	445	e840	496	---	1440	523	316	460	284	325	220
30	126	508	e880	504	---	1370	496	302	444	288	343	208
31	125	---	e1020	522	---	1330	---	291	---	315	359	---
MEAN	141	216	566	715	472	1821	1187	356	751	387	669	309
MAX	164	508	1050	1420	628	3760	2740	536	1740	922	1200	462
MIN	125	124	280	496	389	415	496	251	293	242	325	208
CFSM	.30	.47	1.22	1.54	1.02	3.92	2.56	.77	1.62	.83	1.44	.67
IN.	.35	.52	1.41	1.78	1.06	4.53	2.86	.88	1.81	.96	1.66	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

MEAN	203	248	420	532	481	1248	794	275	451	268	405	234
MAX	266	280	566	715	490	1821	1187	356	751	387	669	309
(WY)	2000	2000	2001	2001	2000	2001	2001	2001	2001	2001	2001	2001
MIN	141	216	275	349	472	674	400	194	151	149	142	159
(WY)	2001	2001	2000	2000	2001	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 2000 - 2001	
ANNUAL MEAN	302		634		464	
HIGHEST ANNUAL MEAN					634	2001
LOWEST ANNUAL MEAN					294	2000
HIGHEST DAILY MEAN	1050	Mar 21	3760	Mar 19	3760	Mar 19 2001
LOWEST DAILY MEAN	124	Aug 24	124	Nov 4	124	Aug 24 2000
ANNUAL SEVEN-DAY MINIMUM	125	Oct 31	125	Oct 31	125	Oct 31 2000
MAXIMUM PEAK FLOW			3790	Mar 19	3790	Mar 19 2001
MAXIMUM PEAK STAGE			15.65	Mar 19	15.65	Mar 19 2001
INSTANTANEOUS LOW FLOW			124	Oct 31	120	Aug 25 2000
ANNUAL RUNOFF (CFSM)	.65		1.37		1.00	
ANNUAL RUNOFF (INCHES)	8.87		18.55		13.57	
10 PERCENT EXCEEDS	670		1350		902	
50 PERCENT EXCEEDS	192		455		313	
90 PERCENT EXCEEDS	132		152		142	

e Estimated

02359000 CHIPOLA RIVER NEAR ALTHA, FL

LOCATION.--Lat 30°32'02", long 85°09'55", in NW¼ sec. 32, T.2 N., R.9 W., Calhoun County, Hydrologic Unit 03130012, on right downstream bank at State Highway 274, 0.9 mi downstream from Holliman Branch, 3.5 mi southwest of Altha, and 54 mi upstream from mouth.

DRAINAGE AREA.--781 mi^2.

PERIOD OF RECORD.--November 1912 to December 1913, September 1921 to September 1927, August 1929 to September 1931, March 1943 to current year. Monthly discharge only for some periods published in WSP 1304.

REVISED RECORDS.--WSP 1384: Drainage area. WSP 1504: 1924, 1925 (M), 1926.

GAGE.--Water-stage recorder. Datum of gage is 19.95 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 13, 1950, and Mar. 13, 1978 to Mar. 20, 1979, nonrecording gage at same site and datum.

REMARKS.-No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	440	374	760	1180	799	662	1870	844	667	848	716	734
2	431	374	696	1430	814	696	1860	833	681	900	803	779
3	449	374	639	1570	851	786	1900	812	730	1090	904	795
4	444	371	588	1510	879	901	1940	792	763	1290	934	777
5	438	366	567	1310	861	936	2000	782	782	1200	983	822
6	422	356	554	1140	852	983	1950	742	789	1010	1180	840
7	467	355	548	1050	802	1240	2120	719	726	891	1240	874
8	448	346	587	1000	760	1670	2590	704	681	837	1220	815
9	412	387	578	966	734	1900	2870	691	734	801	1320	776
10	445	448	565	935	778	1880	2860	695	794	764	1550	729
11	432	403	553	911	767	1580	2530	681	1130	789	1730	680
12	405	400	556	914	744	1360	2090	686	2620	755	1740	649
13	391	408	540	910	728	1780	1780	662	1910	726	1640	656
14	383	429	537	901	722	1730	1610	649	1750	718	1430	669
15	375	410	565	893	723	2040	1470	641	1940	722	1350	644
16	377	409	690	895	712	2550	1380	625	2090	709	1280	616
17	432	442	776	893	747	2810	1300	608	2170	659	1210	595
18	416	438	794	876	713	3050	1220	598	2100	618	1270	588
19	388	495	866	880	686	3340	1250	614	1900	609	1210	569
20	376	526	964	952	672	3840	1320	704	1590	616	1070	555
21	385	553	1110	916	658	3860	1270	725	1270	618	993	544
22	364	554	1210	893	649	3480	1090	720	1090	606	936	531
23	348	564	1160	872	644	3120	1020	772	1110	598	885	532
24	355	588	1030	876	671	3060	1030	815	1090	598	826	567
25	342	649	932	874	650	3100	1000	837	1030	583	786	564
26	343	618	870	841	632	2980	957	782	962	591	741	562
27	387	629	838	815	630	2680	908	758	923	608	712	554
28	383	669	912	792	632	2240	909	695	899	621	693	544
29	369	697	977	773	---	2050	878	661	863	618	673	530
30	354	752	994	783	---	2030	847	636	852	647	658	501
31	369	---	1030	788	---	1950	---	619	---	767	696	---
MEAN	399	479	774	979	732	2138	1594	713	1221	755	1077	653
MAX	467	752	1210	1570	879	3860	2870	844	2620	1290	1740	874
MIN	342	346	537	773	630	662	847	598	667	583	658	501
IN.	.59	.69	1.14	1.45	.98	3.16	2.28	1.05	1.75	1.11	1.59	.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2001, BY WATER YEAR (WY)

MEAN	1089	965	1237	1788	2130	2396	2083	1338	1234	1277	1194	1140
MAX	6000	2763	3617	5936	5687	5465	7200	3890	3636	5353	3273	7642
(WY)	1927	1948	1948	1926	1926	1998	1948	1964	1989	1994	1946	1926
MIN	379	370	394	473	671	540	757	598	462	460	417	397
(WY)	1969	1991	1956	1956	1955	1955	1968	2000	2000	2000	2000	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1913 - 2001	
ANNUAL MEAN	660		961		1489	
HIGHEST ANNUAL MEAN					2977	1948
LOWEST ANNUAL MEAN					613	1955
HIGHEST DAILY MEAN	1860	Feb 15	3860	Mar 21	21000	Sep 19 1926
LOWEST DAILY MEAN	338	Aug 25	342	Oct 25	312	Jun 18 1972
ANNUAL SEVEN-DAY MINIMUM	348	Aug 25	359	Oct 20	336	Oct 27 1968
MAXIMUM PEAK FLOW			3950	Mar 20	25000	Sep 20 1926
MAXIMUM PEAK STAGE			17.50	Mar 20	33.55	Sep 20 1926
INSTANTANEOUS LOW FLOW			336	Oct 25	309	Nov 18 1990
ANNUAL RUNOFF (INCHES)	11.50		16.71		25.91	
10 PERCENT EXCEEDS	1080		1870		2760	
50 PERCENT EXCEEDS	553		777		1110	
90 PERCENT EXCEEDS	385		430		620	

02359051 CHIPOLA RIVER AT COCKRAN LANDING NEAR WEWAHITCHKA, FL

LOCATION.--Lat 30°06'01", long 85°10'53", NE¼ sec.30, T.4 S., R.9 W., Gulf County, Hydrologic Unit 03130012, on left bank at Cockran Landing, 2.34 mi downstream from Dead Lake, 1.45 mi southeast of Wewahitchka and 11.5 mi upstream from mouth.

DRAINAGE AREA.--1,206 mi^2, approximately.

PERIOD OF RECORD.-- October 1987 to current year.

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

REMARKS.--No estimated daily discharges. Records good. Discharge for main channel only and includes flow diverted from the Apalachicola River through the Chipola Cutoff.

COOPERATION.--Records from October 1987 to current year, were collected and computed by U.S. Army Corps of Engineers and were reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined, July 12, 1994, gage height 25.16 ft; minimum discharge 2,460 ft^3/s, Aug. 9, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of January 1978 reached a stage of 25.64 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 14,100 ft^3/s, Mar. 25, gage height, 20.31 ft; minimum daily discharge, 2,800 ft^3/s, Oct. 28-29, 31.

MAIN CHANNEL ONLY
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3210	2890	3720	4450	5530	5000	10900	5830	4530	5970	5400	4240
2	3160	2890	3730	4730	5370	4970	10300	5640	4480	6370	5860	4340
3	3110	2900	3740	4900	5260	4920	9810	5460	4400	6600	5970	4390
4	3070	2900	3690	5050	5190	5120	9510	5230	4360	6660	5980	4430
5	3060	2900	3600	5360	5150	6010	9560	5090	4580	6750	6570	4500
6	3050	2890	3500	5660	5110	7060	9950	5130	4950	6910	7470	4520
7	3070	2900	3440	5710	5090	8150	10800	5150	5350	7010	8070	4500
8	3050	2890	3410	5650	5090	9440	11800	5030	5650	6940	8180	4530
9	3020	2920	3410	5550	5000	11000	12500	4860	5860	6980	7910	4460
10	3000	2950	3410	5260	4760	12000	12400	4720	6040	7020	7490	4320
11	3000	2940	3420	4970	4510	12000	12100	4640	6460	6800	7240	4200
12	2990	2960	3410	4930	4260	11600	13600	4570	7340	6570	7150	4110
13	3000	2940	3350	4910	4030	11400	11100	4500	8710	6580	7060	4120
14	2990	2940	3510	4900	3860	11000	10600	4390	9800	6480	6960	4250
15	2970	2930	4280	4880	3770	10700	10000	4230	10300	6100	6780	4230
16	2950	2920	5090	4860	3720	10800	9410	4070	10300	5770	6530	4050
17	2940	2960	5630	4770	3690	11000	8930	3910	10200	5480	6400	3870
18	2930	2960	5800	4600	3660	11400	8470	3780	9950	5160	6390	3720
19	2930	2990	5760	4490	3640	11800	8100	3720	9730	4880	6380	3630
20	2940	3010	5620	4470	3630	12600	7860	3690	9460	4680	6230	3590
21	2930	3010	5350	4430	3650	13100	7600	3790	9040	4510	5810	3540
22	2930	3080	5040	4630	3780	13000	7230	4400	8440	4390	5470	3430
23	2930	3290	4710	5170	3890	13000	6830	5290	7880	4280	5210	3360
24	2920	3440	4470	5760	3980	13500	6500	5860	7400	4400	5020	3420
25	2900	3570	4320	6210	4260	14100	6320	6070	6920	4500	4840	3520
26	2890	3580	4210	6450	4620	14000	6220	5880	6340	4570	4710	3570
27	2890	3580	4110	6540	4810	13200	6150	5500	5870	4640	4590	3560
28	2880	3580	4070	6440	4920	12700	6100	5130	5600	4680	4500	3500
29	2880	3720	4080	6290	---	12300	6050	4820	5460	4680	4420	3430
30	2890	3750	4120	6070	---	11900	5990	4610	5610	4620	4340	3360
31	2880	---	4180	5760	---	11400	---	4560	---	4780	4260	---
MEAN	2979	3106	4199	5285	4437	10650	9090	4824	7034	5670	6103	3956
MAX	3210	3750	5800	6540	5530	14100	13600	6070	10300	7020	8180	4530
MIN	2880	2890	3350	4430	3630	4920	5990	3690	4360	4280	4260	3360
IN.	2.85	2.87	4.02	5.05	3.83	10.18	8.41	4.61	6.51	5.42	5.84	3.66

CAL YR 2000 MEAN 4410 MAX 9890 MIN 2880 IN. 49.79
WTR YR 2001 MEAN 5619 MAX 14100 MIN 2880 IN. 63.26

02359051 CHIPOLA RIVER AT COCKRAN LANDING NEAR WEWAHITCHKA, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.75	9.18	10.90	12.32	14.10	13.60	18.60	14.35	12.52	13.97	12.60	11.39
2	9.64	9.18	10.92	12.74	13.90	13.58	18.25	14.11	12.45	14.38	13.13	11.56
3	9.54	9.21	10.93	12.99	13.77	13.52	17.96	13.89	12.32	14.61	13.24	11.66
4	9.47	9.20	10.85	13.21	13.69	13.79	17.76	13.59	12.26	14.64	13.24	11.76
5	9.44	9.20	10.70	13.61	13.64	14.89	17.78	13.41	12.58	14.71	13.86	11.87
6	9.42	9.19	10.50	14.00	13.60	16.00	18.00	13.45	13.09	14.86	14.69	11.92
7	9.46	9.21	10.40	14.06	13.58	16.94	18.44	13.48	13.61	14.93	15.18	11.93
8	9.44	9.20	10.35	14.00	13.59	17.77	19.00	13.32	13.97	14.85	15.24	11.99
9	9.38	9.25	10.34	13.89	13.46	18.65	19.34	13.08	14.22	14.86	15.05	11.91
10	9.34	9.33	10.35	13.54	13.14	19.22	19.30	12.88	14.43	14.87	14.71	11.72
11	9.33	9.32	10.37	13.16	12.80	19.20	19.10	12.75	14.88	14.64	14.51	11.55
12	9.33	9.35	10.36	13.12	12.41	19.02	19.87	12.65	15.74	14.38	14.45	11.43
13	9.34	9.32	10.25	13.10	12.05	18.90	18.58	12.55	16.78	14.37	14.40	11.47
14	9.33	9.32	10.56	13.10	11.79	18.68	18.29	12.38	17.45	14.24	14.33	11.70
15	9.30	9.29	11.88	13.08	11.63	18.56	17.94	12.13	17.70	13.80	14.16	11.69
16	9.25	9.28	13.06	13.07	11.55	18.60	17.57	11.86	17.70	13.40	13.93	11.42
17	9.24	9.37	13.75	12.95	11.50	18.72	17.26	11.60	17.60	13.03	13.82	11.15
18	9.23	9.38	13.96	12.72	11.45	18.95	16.96	11.37	17.45	12.60	13.82	10.90
19	9.23	9.44	13.92	12.57	11.41	19.16	16.70	11.25	17.30	12.20	13.84	10.76
20	9.24	9.47	13.76	12.56	11.40	19.61	16.49	11.19	17.12	11.90	13.70	10.71
21	9.24	9.48	13.44	12.51	11.46	19.84	16.25	11.37	16.84	11.63	13.25	10.64
22	9.24	9.64	13.05	12.80	11.69	19.82	15.91	12.37	16.44	11.43	12.86	10.47
23	9.24	10.07	12.60	13.56	11.89	19.80	15.53	13.60	16.00	11.24	12.56	10.35
24	9.22	10.36	12.27	14.29	12.05	20.03	15.17	14.28	15.56	11.41	12.33	10.49
25	9.18	10.60	12.05	14.82	12.51	20.31	14.97	14.53	15.11	11.53	12.11	10.71
26	9.15	10.63	11.89	15.09	13.06	20.23	14.85	14.31	14.48	11.61	11.94	10.82
27	9.15	10.63	11.74	15.19	13.33	19.83	14.77	13.84	13.94	11.69	11.80	10.79
28	9.14	10.63	11.68	15.10	13.50	19.56	14.70	13.37	13.58	11.73	11.69	10.68
29	9.15	10.89	11.71	14.95	---	19.38	14.64	12.94	13.39	11.70	11.59	10.54
30	9.16	10.95	11.78	14.72	---	19.14	14.55	12.65	13.55	11.60	11.49	10.40
31	9.16	---	11.89	14.37	---	18.89	---	12.57	---	11.80	11.39	---
MEAN	9.31	9.65	11.68	13.59	12.64	18.20	17.15	12.94	15.00	13.18	13.38	11.21
MAX	9.75	10.95	13.96	15.19	14.10	20.31	19.87	14.53	17.70	14.93	15.24	11.99
MIN	9.14	9.18	10.25	12.32	11.40	13.52	14.55	11.19	12.26	11.24	11.39	10.35

CAL YR 2000 MEAN 11.40 MAX 17.43 MIN 9.14
WTR YR 2001 MEAN 13.17 MAX 20.31 MIN 9.14

02359170 APALACHICOLA RIVER NEAR SUMATRA, FL

LOCATION.--Lat 29°56'57", Long 85°00'56", in SW¼ sec.14, T.6 S., R.8 W., Franklin County, Hydrologic Unit 03130011, on left bank at Brickyard Landing, 0.5 mi north of Fort Gadsden, 5.3 mi southwest of Sumatra, and 20.6 mi upstream from mouth.

DRAINAGE AREA.--19,200 mi^2, approximately.

PERIOD OF RECORD.--September 1977 to current year.

REVISED RECORDS.--WRD FL-98-4: 1994-97.

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

REMARKS.--Records good. Discharges below 15,000 ft^3/s are tide affected.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7000	6630	9250	e11500	17200	13400	53500	15800	11500	13200	11000	8810
2	6970	6830	9320	11900	15200	13500	46300	14300	11400	16500	12000	9120
3	6740	6490	9020	12100	13700	13400	40400	13400	11200	18300	13000	9500
4	6970	6200	8860	12400	13400	15600	36200	12900	11100	18900	13300	9770
5	6690	6720	8810	12700	13300	19400	34100	12700	11300	18700	13300	9720
6	6520	7330	8920	13400	13200	25100	33800	12700	12000	18900	28300	9820
7	6170	7950	8890	15100	13200	30400	36300	12800	12800	19600	31300	9920
8	5330	8030	8920	15700	13200	37300	43100	12700	13500	19800	29000	9970
9	4920	8860	8920	13900	13200	46900	54500	12500	15600	19700	26500	9790
10	4860	7570	9040	13200	12700	56500	64400	12300	16800	20200	23500	9200
11	5840	6430	8810	12700	12100	62500	64100	12000	19500	20400	20800	8790
12	6490	6690	8920	12800	11600	61300	58000	11900	23400	19100	19100	8860
13	6600	7000	8530	12600	11000	59700	51200	11700	26200	17900	18200	9200
14	7050	6860	9520	12700	10600	54400	45000	11300	29400	17500	17500	9450
15	6880	5780	10700	12700	10300	50500	40100	11000	32500	16700	17000	8990
16	6630	6690	12300	12600	10200	48600	35900	10500	34900	13300	16000	8810
17	6660	7080	14000	12600	10000	48700	32800	10000	35700	12800	15000	8710
18	6430	6110	15100	12300	9600	51100	30500	9670	35300	12300	14000	8290
19	6460	6720	15200	12200	9650	54800	28700	9570	34700	11700	13900	8240
20	6690	5900	14300	11900	10000	65500	27300	9500	33200	11100	14100	8160
21	6740	5300	e13000	11600	10200	76300	26100	9520	31700	10700	12900	8370
22	6910	5300	e11500	11700	10800	81600	24700	10700	30100	10500	11900	7870
23	6600	6770	e10500	12300	11100	81600	22900	12500	28800	10300	11300	7600
24	6520	8710	e10400	15200	11300	82600	21000	16200	26100	10700	10500	7980
25	6460	11200	e10300	18900	11700	88300	19400	18000	23400	11400	9870	7790
26	6970	9670	e10200	20900	12500	91900	18300	17200	20100	11000	9520	7600
27	7000	8970	e10300	22000	13000	91000	17600	13500	16200	10800	9320	7600
28	6520	8760	e10400	22100	13200	86200	17300	12900	13200	10600	9120	7600
29	6880	9300	e10400	21700	---	79100	17000	12300	12900	10600	9020	7520
30	6830	9200	e10500	21500	---	70500	16700	11800	12900	10500	8890	6910
31	6630	---	e11000	19500	---	61300	---	11500	---	10400	8860	---
MEAN	6515	7368	10510	14660	12040	55450	35240	12430	21580	14650	15420	8665
MAX	7050	11200	15200	22100	17200	91900	64400	18000	35700	20400	31300	9970
MIN	4860	5300	8530	11500	9600	13400	16700	9500	11100	10300	8860	6910
IN.	.39	.43	.63	.88	.65	3.33	2.05	.75	1.25	.88	.93	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

MEAN	15050	16020	23830	30260	41110	47210	36260	24170	19390	21180	18970	15900
MAX	40720	32420	52700	62310	71920	95690	78430	46350	29450	81670	42360	33700
(WY)	1995	1978	1993	1998	1998	1998	1980	1991	1980	1994	1994	1994
MIN	6515	6577	9300	10380	10130	16740	15610	10380	6085	5631	5878	7302
(WY)	2001	1982	2000	1981	1989	2000	1999	1999	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1978 - 2001	
ANNUAL MEAN	11020		17920		25710	
HIGHEST ANNUAL MEAN					38760	1998
LOWEST ANNUAL MEAN					11100	2000
HIGHEST DAILY MEAN	36800	Apr 9	91900	Mar 26	178000	Mar 24 1990
LOWEST DAILY MEAN	4860	Oct 10	4860	Oct 10	4860	Oct 10 2000
ANNUAL SEVEN-DAY MINIMUM	5360	Jul 7	5730	Oct 6	5360	Jul 7 2000
MAXIMUM PEAK FLOW			92400	Mar 26	179000	Mar 24 1990
MAXIMUM PEAK STAGE			10.29	Mar 26	15.36	Mar 15 1998
INSTANTANEOUS LOW FLOW			4860	Oct 10	4860	Oct 10 2000
ANNUAL RUNOFF (INCHES)	7.82		12.67		18.19	
10 PERCENT EXCEEDS	23900		36200		48400	
50 PERCENT EXCEEDS	7600		12200		19800	
90 PERCENT EXCEEDS	5660		6830		9400	

e Estimated

MAIN CHANNEL ONLY
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7000	6630	9250	e11500	14900	13400	24300	14500	11500	13200	11000	8810
2	6970	6830	9320	11900	14200	13500	23300	13800	11400	14600	12000	9120
3	6740	6490	9020	12100	13600	13400	22100	13400	11200	15200	13000	9500
4	6970	6200	8860	12400	13400	14300	21200	12900	11100	15400	13300	9770
5	6690	6720	8810	12700	13300	15600	20700	12700	11300	15400	13300	9720
6	6520	7330	8920	13400	13200	17400	20600	12700	12000	15400	18300	9820
7	6170	7950	8890	14100	13200	18900	21300	12800	12800	15700	19100	9920
8	5330	8030	8920	14300	13200	20600	22700	12700	13500	15700	18500	9970
9	4920	8860	8920	13700	13200	22700	24400	12500	14300	15700	17800	9790
10	4860	7570	9040	13200	12700	24400	25400	12300	14700	15900	16900	9200
11	5840	6430	8810	12700	12100	25000	25300	12000	15600	15900	16100	8790
12	6490	6690	8920	12800	11600	24900	24800	11900	16900	15500	15500	8860
13	6600	7000	8530	12600	11000	24700	24100	11700	17700	15100	15200	9200
14	7050	6860	9520	12700	10600	24100	23000	11300	18600	15000	15000	9450
15	6880	5780	10700	12700	10300	23500	22100	11000	19500	14700	14800	8990
16	6630	6690	12300	12600	10200	23100	21200	10500	20100	13300	14400	8810
17	6660	7080	13700	12600	10000	23100	20300	10000	20200	12800	14100	8710
18	6430	6110	14100	12300	9600	23600	19600	9670	20200	12300	13700	8290
19	6460	6720	14100	12200	9650	24200	19100	9570	20000	11700	13700	8240
20	6690	5900	13800	11900	10000	25300	18600	9500	19600	11100	13700	8160
21	6740	5300	e13000	11600	10200	26200	18300	9520	19200	10700	12900	8370
22	6910	5300	e11500	11700	10800	26700	17800	10700	18800	10500	11900	7870
23	6600	6770	e10500	12300	11100	26700	17200	12500	18500	10300	11300	7600
24	6520	8710	e10400	14100	11300	26700	16500	14500	17700	10700	10500	7980
25	6460	11200	e10300	15400	11700	27300	15900	15100	16900	11400	9870	7790
26	6970	9670	e10200	16100	12500	27800	15400	14900	15800	11000	9520	7600
27	7000	8970	e10300	16500	13000	27700	15200	13500	14500	10800	9320	7600
28	6520	8760	e10400	16500	13200	27100	15100	12900	13200	10600	9120	7600
29	6880	9300	e10400	16400	---	26500	15000	12300	12900	10600	9020	7520
30	6830	9200	e10500	16300	---	25900	14900	11800	12900	10500	8890	6910
31	6630	---	e11000	15600	---	25100	---	11500	---	10400	8860	---
MEAN	6515	7368	10420	13450	11920	22880	20180	12150	15750	13130	13250	8665
MAX	7050	11200	14100	16500	14900	27800	25400	15100	20200	15900	19100	9970
MIN	4860	5300	8530	11500	9600	13400	14900	9500	11100	10300	8860	6910

CAL YR 2000 MEAN 9686 MAX 20700 MIN 4860
WTR YR 2001 MEAN 12980 MAX 27800 MIN 4860

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.06	2.03	2.56	---	4.95	4.48	8.15	4.83	3.48	4.53	3.43	3.03
2	2.09	2.10	2.62	3.64	4.72	4.52	7.71	4.69	3.44	4.86	3.98	3.13
3	2.05	2.00	2.50	3.79	4.55	4.54	7.33	4.53	3.36	5.08	4.37	3.25
4	2.13	1.81	2.33	3.93	4.48	4.76	7.04	4.33	3.35	5.13	4.45	3.26
5	2.04	1.97	2.35	4.19	4.43	5.19	6.86	4.14	3.55	5.11	4.62	3.26
6	2.07	2.36	2.38	4.55	4.38	5.78	6.84	4.14	3.93	5.14	6.07	3.27
7	1.88	2.52	2.41	4.70	4.39	6.27	7.05	4.21	4.32	5.21	6.35	3.29
8	1.53	2.47	2.48	4.78	4.39	6.84	7.51	4.15	4.59	5.23	6.16	3.32
9	1.20	2.83	2.54	4.67	4.41	7.54	8.20	4.02	4.76	5.22	5.92	3.32
10	1.35	2.35	2.62	4.43	4.23	8.16	8.74	3.88	4.91	5.28	5.62	3.19
11	1.70	1.97	2.54	4.22	3.89	8.52	8.72	3.79	5.20	5.30	5.34	2.99
12	1.89	2.08	2.60	4.23	3.55	8.45	8.40	3.70	5.62	5.16	5.15	3.09
13	1.93	2.21	2.43	4.07	3.23	8.36	8.01	3.57	5.89	5.03	5.06	3.19
14	2.10	2.25	2.74	4.08	3.01	8.03	7.64	3.38	6.19	4.98	4.98	3.22
15	2.12	1.77	3.42	4.06	2.92	7.78	7.31	3.21	6.46	4.89	4.93	2.97
16	2.07	2.02	4.20	4.04	2.93	7.65	7.02	3.04	6.66	4.60	4.81	2.96
17	2.08	2.37	4.67	4.02	2.85	7.66	6.74	2.83	6.72	4.31	4.69	2.87
18	2.00	1.83	4.70	3.90	2.67	7.82	6.52	2.67	6.69	4.05	4.62	2.76
19	2.04	2.07	4.71	3.92	2.70	8.05	6.33	2.62	6.64	3.71	4.64	2.77
20	2.06	1.72	4.60	3.81	2.88	8.69	6.19	2.65	6.52	3.38	4.65	2.77
21	2.10	1.36	---	3.51	2.94	9.27	6.07	2.84	6.39	3.18	4.39	2.87
22	2.19	1.40	---	3.60	3.15	9.54	5.91	3.53	6.25	3.08	4.05	2.72
23	1.99	2.01	---	4.12	3.28	9.54	5.70	4.31	6.13	3.09	3.81	2.61
24	1.81	2.78	---	4.71	3.40	9.58	5.48	4.83	5.89	3.35	3.59	2.67
25	1.86	3.52	---	5.14	3.74	9.93	5.28	5.03	5.61	3.46	3.39	2.70
26	2.10	2.88	---	5.36	4.08	10.24	5.14	4.95	5.27	3.24	3.25	2.55
27	2.16	2.56	---	5.48	4.26	10.16	5.05	4.64	4.84	3.17	3.17	2.55
28	2.05	2.46	---	5.48	4.40	9.79	5.02	4.30	4.49	3.09	3.14	2.59
29	2.16	2.59	---	5.44	---	9.45	4.99	3.96	4.26	3.06	3.05	2.55
30	2.12	2.62	---	5.42	---	9.04	4.95	3.65	4.29	3.02	3.01	2.21
31	2.06	---	---	5.20	---	8.58	---	3.48	---	3.10	3.01	---
TOTAL	60.99	66.91	---	---	104.81	244.21	201.90	119.90	155.70	131.04	137.70	87.93
MEAN	1.97	2.23	---	---	3.74	7.88	6.73	3.87	5.19	4.23	4.44	2.93
MAX	2.19	3.52	---	---	4.95	10.24	8.74	5.03	6.72	5.30	6.35	3.32
MIN	1.20	1.36	---	---	2.67	4.48	4.95	2.62	3.35	3.02	3.01	2.21

e Estimated

02359315 MARTIN BAYOU AT US 98 AT SPRINGFIELD, FL

LOCATION.--Lat 30°08'06", long 85°36'56", in SE¼ sec. 14, T. 4 S., R. 14 W., Bay County, Hydrologic Unit 03140101, at upstream side of concrete weir control structure above U.S. Highway 98, at boundary of Parker and Springfield communities, 0.9 mi west of State Road 22-A, and 1.2 mi south of State Highway 22.

DRAINAGE AREA.--3.96 mi^2.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.1	8.5	e19	14	13	31	13	10	24	18	50
2	2.9	5.4	8.6	28	14	12	26	13	11	21	20	51
3	3.0	5.6	7.9	e24	13	12	24	13	11	22	17	47
4	3.1	5.5	7.6	e20	11	19	26	13	10	19	17	50
5	3.2	e5.5	6.8	e17	11	14	26	12	10	19	40	61
6	3.9	e5.6	7.6	e13	10	10	25	12	9.7	29	107	66
7	4.4	5.6	7.7	9.5	10	8.5	24	12	9.1	29	72	68
8	3.3	6.0	7.7	9.0	9.7	7.7	23	12	9.1	26	39	81
9	1.9	14	7.9	8.2	9.6	15	24	12	10	24	25	59
10	1.8	16	e8.3	7.6	12	23	24	12	14	24	20	47
11	2.2	9.8	8.7	8.7	11	18	26	12	46	40	16	38
12	2.2	7.4	e8.7	10	12	22	26	12	108	36	16	33
13	2.4	6.7	8.7	9.3	12	36	27	12	62	31	19	33
14	2.8	7.9	10	8.9	12	30	28	12	43	e26	23	30
15	3.1	6.2	11	8.9	12	41	29	11	31	e22	24	30
16	3.2	6.6	10	9.3	12	36	29	11	25	17	20	29
17	3.5	19	8.8	8.9	11	28	26	10	21	27	e19	28
18	3.8	15	7.6	8.9	10	32	23	10	19	81	e30	28
19	4.1	14	8.0	13	9.4	34	23	9.9	17	63	e25	28
20	e3.9	12	6.5	17	8.9	55	23	10	16	43	e20	29
21	e3.7	10	8.0	14	9.8	45	e24	10	15	41	e40	32
22	e3.5	9.0	8.4	12	10	37	25	11	17	44	e45	32
23	e3.4	8.6	9.7	11	10	32	25	11	27	36	43	29
24	3.2	16	7.2	9.9	10	28	25	10	23	34	41	71
25	3.4	34	6.9	9.6	11	29	22	10	19	37	40	117
26	3.2	22	6.4	9.1	e13	26	18	10	16	33	39	79
27	3.2	15	6.7	8.9	15	23	16	9.9	16	29	37	60
28	3.6	12	e9.9	9.3	14	22	15	9.9	15	26	32	48
29	4.2	11	13	9.5	---	40	14	9.6	15	26	29	38
30	4.6	9.4	10	12	---	40	14	9.2	19	14	31	33
31	4.9	---	9.5	14	---	35	---	9.2	---	15	32	---
MEAN	3.31	10.9	8.46	12.2	11.3	26.6	23.7	11.1	22.5	30.9	32.1	47.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	20.3	14.9	10.3	15.3	9.08	16.8	12.8	12.0	13.4	15.6	16.7	19.9

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	7.00		20.0		14.8	
HIGHEST DAILY MEAN	64	Mar 30	117	Sep 25	e480	Oct 1 1998
LOWEST DAILY MEAN	1.4	Jul 22	1.8	Oct 10	1.4	Jul 22 2000
ANNUAL SEVEN-DAY MINIMUM	2.1	Jul 17	2.3	Oct 9	2.1	Jul 17 2000
MAXIMUM PEAK FLOW			143	Jun 11	e480	Oct 1 1998
MAXIMUM PEAK STAGE			10.92	Jun 11	10.92	Jun 11 2001
INSTANTANEOUS LOW FLOW			1.3	Oct 9	.90	Jul 21 2000
10 PERCENT EXCEEDS	12		40		32	
50 PERCENT EXCEEDS	5.6		14		9.1	
90 PERCENT EXCEEDS	3.0		5.6		3.9	

e Estimated

02359500 ECONFINA CREEK NEAR BENNETT, FL.

LOCATION.--Lat 30°23'04", long 85°33'24", in SE¼ sec. 20, T. 1 S., R. 13 W., Bay County, Hydrologic Unit 03140101, near center of span on downstream side of bridge on State Highway 388, 0.5 mi downstream from Old Mill Branch, 1.6 mi southwest of Bennett, and 11 mi upstream from mouth.

DRAINAGE AREA.--122 mi^2.

PERIOD OF RECORD.--October 1935 to September 1994. Monthly discharge only for October and November 1936, published in WSP1304. October 1998 to current year.

REVISED RECORDS.--WSP 872: 1937. WSP 1906: Drainage area. WRD FL-80-4: 1979. WRD FL-93-4: 1948 (M), 1989 (M).

GAGE.--Water-stage recorder. Datum of gage is 1.03 ft above National Geodetic Vertical Datum of 1929. Nov. 11, 1935 to Jan. 29, 1962, nonrecording gage and Jan. 30, 1962 to June 16, 1966, water-stage recorder at site 150 ft downstream at present datum. June 17, 1966 to Sept. 28, 1966, nonrecording gage and Oct. 1, 1966 to Sept. 30, 1994, water-stage recorder at present site and datum.

REMARKS.--Records good. Flow includes large ground-water inflow.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since September 1926, 15.0 ft present datum, from floodmark, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	287	326	342	324	305	411	287	305	405	e350	498
2	317	289	323	334	321	308	364	284	334	434	e400	574
3	314	289	322	330	318	308	348	283	336	437	e450	614
4	311	289	320	327	317	342	371	280	318	416	e550	575
5	310	289	320	326	314	365	406	278	291	380	e700	535
6	307	290	320	326	311	335	389	275	275	450	e900	487
7	311	292	320	324	305	318	355	273	270	379	969	565
8	321	293	320	323	302	301	344	270	268	373	927	667
9	321	306	320	322	300	294	338	269	272	373	763	568
10	314	335	320	320	307	310	333	268	292	347	596	495
11	310	338	320	320	319	309	330	271	384	343	553	472
12	307	324	320	325	318	305	326	314	722	401	509	447
13	304	316	320	329	314	491	324	303	783	367	494	454
14	301	313	320	328	311	566	326	284	550	346	502	453
15	298	310	324	324	310	552	354	273	420	340	517	439
16	298	310	331	321	310	561	365	267	406	335	486	430
17	295	323	332	320	309	476	359	265	412	328	477	421
18	295	330	328	318	305	426	338	263	367	328	489	397
19	294	332	326	321	299	439	328	261	346	328	494	395
20	292	372	326	337	297	583	323	262	340	332	572	406
21	292	353	326	356	295	641	321	267	356	333	511	420
22	292	333	326	339	296	526	320	270	345	330	464	403
23	292	325	326	330	296	444	317	271	339	327	440	410
24	289	324	325	326	291	406	314	266	336	324	427	591
25	289	432	322	322	291	373	311	260	330	323	415	572
26	289	456	320	320	294	357	305	256	324	343	402	486
27	289	374	320	320	295	349	300	253	319	352	393	443
28	288	340	323	317	292	341	298	252	352	344	383	430
29	287	332	451	317	---	398	296	253	413	347	381	418
30	286	327	449	319	---	487	292	262	420	345	387	403
31	287	---	365	322	---	462	---	298	---	363	415	---
MEAN	301	327	333	326	306	409	337	272	374	360	526	482
MAX	321	456	451	356	324	641	411	314	783	450	969	667
MIN	286	287	320	317	291	294	292	252	268	323	350	395
IN.	2.84	3.00	3.14	3.08	2.61	3.87	3.08	2.57	3.42	3.41	4.98	4.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2001, BY WATER YEAR (WY)

MEAN	509	501	512	538	547	581	562	506	515	555	574	558
MAX	1261	890	818	780	838	1045	1176	789	958	1005	962	824
(WY)	1995	1948	1948	1993	1986	1991	1948	1946	1989	1994	1939	1937
MIN	301	323	317	326	306	358	332	272	334	337	339	344
(WY)	2001	1956	1956	2001	2001	1956	1956	2001	2000	2000	2000	1955

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1936 - 2001	
ANNUAL MEAN	366		363		538	
HIGHEST ANNUAL MEAN					1261	1995
LOWEST ANNUAL MEAN					363	2001
HIGHEST DAILY MEAN	647	Feb 15	969	Aug 7	4670	Mar 3 1991
LOWEST DAILY MEAN	286	Oct 30	252	May 28	252	May 28 2001
ANNUAL SEVEN-DAY MINIMUM	288	Oct 26	257	May 24	257	May 24 2001
MAXIMUM PEAK FLOW			982	Aug 8	5850	Mar 3 1991
MAXIMUM PEAK STAGE			7.84	Aug 8	14.37	Mar 3 1991
INSTANTANEOUS LOW FLOW			250	May 28	250	May 28 2001
ANNUAL RUNOFF (INCHES)	40.80		40.41		59.93	
10 PERCENT EXCEEDS	450		490		704	
50 PERCENT EXCEEDS	342		326		507	
90 PERCENT EXCEEDS	301		288		395	

e Estimated

02365200 CHOCTAWHATCHEE RIVER NEAR PITTMAN, FL

LOCATION.--Lat 30°56'59", long 85°50'35", in NW¼ sec. 9, T. 6 N., R. 16 W., Holmes County, Hydrologic Unit 03140203, on downstream side of bridge on State Highway 2, 1.5 mi west of Pittman, 3.8 mi downstream from Florida-Alabama State line, and 84 mi upstream from mouth.

DRAINAGE AREA.--3,209 mi^2.

PERIOD OF RECORD.--May 1957, April 1960 and October 1975 to June 1976 (gage height and discharge measurements only), July 1976 to September 1981, October 1996 to September 1998 (gage height and discharge measurements only), October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 51.83 ft above National Geodetic Vertical Datum of 1929 (levels by Northwest Florida Water Management District). Apr. 8, 1957 to Sept. 15, 1976, nonrecording gage at same site and datum, July 1, 1976 to Sept. 30, 1981, water stage recorder, Oct. 1, 1996 to Sept. 30, 1998, nonrecording gage.

REMARKS.-- Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	733	458	1440	10100	4980	3330	8830	2130	1290	2890	2020	1420
2	675	459	1310	9070	4430	3730	8080	2000	e2500	3870	2420	1710
3	630	463	1220	6900	3940	4130	7350	1910	e2000	4190	1810	2140
4	594	465	1140	4970	3510	11100	7380	1840	1540	3550	1420	2390
5	574	466	1090	4010	3180	20600	9600	1720	1370	2970	1190	3300
6	567	469	1060	3380	2890	28900	14800	1650	1200	2550	1870	3200
7	617	471	1040	3010	2600	30800	17100	1580	1100	2350	4600	3390
8	765	486	1020	2760	2410	27000	15900	1490	1070	2000	6390	3270
9	725	710	1010	2610	2300	21900	13300	1450	e1500	1720	5770	2640
10	631	1430	1010	2480	2320	18800	10600	1400	e2500	1520	4850	2160
11	596	2130	1010	2380	2760	15100	8750	1370	e5500	1420	4020	1810
12	575	1670	1010	2400	3040	10900	7260	1360	e8500	2200	4380	1570
13	555	1370	997	2490	2880	13200	6120	1600	12000	1990	3800	1470
14	544	1260	1430	2430	2700	17000	5520	1610	13100	1620	3460	1360
15	526	1250	2370	2330	2540	23100	5170	1490	11400	1380	3240	1260
16	518	1140	2990	2270	2420	23800	5170	1400	e9500	1290	2940	1170
17	513	1180	4910	2350	2340	21800	4980	1290	e7000	1200	2690	1100
18	505	1420	5700	2830	2290	18700	4530	1210	5240	1070	2580	1050
19	502	1870	4830	3300	2200	14500	4040	1130	4170	1020	2580	995
20	496	2500	3750	4410	2070	13300	3700	1150	3530	969	2540	980
21	489	2660	3150	5850	2000	16200	3460	1840	3250	947	2680	946
22	483	2100	2700	5650	1960	20600	3250	2170	2990	1070	2380	948
23	476	1700	2530	4570	2000	20700	3060	1700	3150	1140	1950	903
24	470	1500	2300	3950	2080	18300	2900	1650	3340	1040	1690	936
25	461	2010	2090	3520	2060	15300	3030	1630	3120	955	1550	1220
26	459	2870	1910	3080	2210	12800	2880	1620	2780	1300	1420	1440
27	461	2810	1780	2760	3390	10400	2750	1530	2430	1570	1360	1390
28	458	2210	2280	2560	3440	8720	2580	1510	2110	1840	1270	1310
29	456	1880	5040	2420	---	8140	2480	1490	1880	1940	1310	1230
30	456	1630	8570	2720	---	8590	2330	1390	2080	2000	1330	1070
31	460	---	10300	4130	---	9100	---	1310	---	1900	1420	---
MEAN	547	1435	2677	3796	2748	15820	6563	1568	4105	1854	2675	1659
MAX	765	2870	10300	10100	4980	30800	17100	2170	13100	4190	6390	3390
MIN	456	458	997	2270	1960	3330	2330	1130	1070	947	1190	903
IN.	.20	.50	.96	1.36	.89	5.69	2.28	.56	1.43	.67	.96	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

MEAN	2996	2938	4000	6126	6445	10410	6633	4303	3113	2637	2346	1946
MAX	9492	5727	10700	15520	12730	18540	15910	12040	6725	5871	3933	3777
(WY)	1999	1978	1977	1978	1979	1980	1980	1978	1978	1999	1978	1977
MIN	547	1342	2008	1971	2625	3024	1727	622	534	432	568	747
(WY)	2001	2000	2000	1981	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1976 - 2001	
ANNUAL MEAN	1473		3800		4467	
HIGHEST ANNUAL MEAN					7220	1978
LOWEST ANNUAL MEAN					1480	2000
HIGHEST DAILY MEAN	10300	Dec 31	30800	Mar 7	64000	Jan 28 1978
LOWEST DAILY MEAN	327	Jul 21	456	Oct 29	327	Jul 21 2000
ANNUAL SEVEN-DAY MINIMUM	355	Jul 17	458	Oct 26	355	Jul 17 2000
MAXIMUM PEAK FLOW			31300	Mar 7	64700	Jan 28 1978
MAXIMUM PEAK STAGE			24.49	Mar 7	28.56	Jan 28 1978
INSTANTANEOUS LOW FLOW			440	Oct 29	308	Jul 21 2000
ANNUAL RUNOFF (INCHES)	6.25		16.08		18.91	
10 PERCENT EXCEEDS	3130		9260		9900	
50 PERCENT EXCEEDS	949		2200		2660	
90 PERCENT EXCEEDS	398		696		1090	

e Estimated

02365470 WRIGHTS CREEK AT SH 177A NEAR BONIFAY, FL

LOCATION.--Lat 30°51'25", long 85°45'44", in NW¼ sec. 8, T. 5 N., R. 17 S., Holmes County, Hydrologic Unit 03140203, on downstream side of bridge on U.S. Highway 177A, 0.4 mi above Caney Branch, 7.3 mi upstream of mouth, and 7.6 mi northwest of Bonifay.

DRAINAGE AREA.--148 mi^2.

PERIOD OF RECORD.--March 1983 to September 1987, discharge measurements and annual maximum discharge, October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 42.94 ft above National Geodetic Vertical Datum of 1929. Mar. 23, 1983 to Sept. 30, 1987, nonrecording gage and crest-stage gage at same site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	24	95	511	286	90	484	61	43	107	277	97
2	34	24	86	374	241	147	394	59	283	113	322	125
3	32	24	80	303	199	220	327	56	300	99	267	169
4	30	25	76	264	176	389	354	55	221	83	174	192
5	29	25	73	239	161	1000	555	52	121	76	118	212
6	29	25	70	220	149	1200	739	50	82	74	343	168
7	36	25	68	202	138	667	652	47	68	66	853	147
8	46	25	67	190	130	438	474	47	65	60	780	126
9	40	36	66	179	130	328	375	45	93	57	698	106
10	36	47	66	166	133	278	318	44	184	54	568	96
11	34	65	65	158	149	261	274	44	299	61	460	93
12	32	52	64	191	152	309	242	43	890	78	453	90
13	31	43	63	226	138	849	214	42	982	79	461	111
14	30	39	123	210	129	1590	191	41	790	76	444	99
15	29	40	305	181	124	1710	180	40	646	63	423	82
16	29	39	391	163	120	1930	181	38	532	56	355	73
17	28	41	547	156	118	1790	224	38	351	50	392	67
18	27	50	597	150	115	1090	202	36	251	48	402	64
19	27	77	511	155	108	738	157	35	185	46	384	61
20	27	127	405	216	101	790	134	40	187	45	307	60
21	27	132	319	261	96	1020	119	41	181	47	287	58
22	26	85	274	244	95	1110	108	42	174	50	246	56
23	26	66	254	194	95	859	99	42	361	46	190	54
24	26	71	227	163	94	615	93	41	338	43	152	57
25	25	181	199	146	91	489	87	39	226	48	127	60
26	25	331	178	133	90	430	82	36	159	57	108	58
27	25	346	164	125	95	376	87	35	121	54	95	56
28	25	234	258	122	91	335	74	34	113	52	85	54
29	25	137	589	119	---	372	69	35	107	65	81	51
30	24	109	670	154	---	503	64	34	98	96	79	50
31	24	---	667	263	---	528	---	33	---	168	75	---
MEAN	29.6	84.8	246	206	134	724	252	42.7	282	68.3	323	93.1
MAX	46	346	670	511	286	1930	739	61	982	168	853	212
MIN	24	24	63	119	90	90	64	33	43	43	75	50
IN.	.23	.64	1.91	1.60	.94	5.64	1.90	.33	2.12	.53	2.52	.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	105	91.0	150	206	150	377	130	40.8	170	154	139	57.0
MAX	249	150	246	351	223	724	252	51.0	282	365	323	93.1
(WY)	1999	1999	2001	1999	1999	2001	2001	1999	2001	1999	2001	2001
MIN	29.6	38.0	44.1	60.5	94.6	202	67.9	28.5	31.6	29.8	21.5	38.4
(WY)	2001	2000	2000	2000	2000	2000	1999	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	78.2		208		148	
HIGHEST ANNUAL MEAN					208	2001
LOWEST ANNUAL MEAN					57.9	2000
HIGHEST DAILY MEAN	670	Dec 30	1930	Mar 16	1930	Mar 16 2001
LOWEST DAILY MEAN	16	Aug 18	24	Oct 30	16	Aug 18 2000
ANNUAL SEVEN-DAY MINIMUM	17	Aug 15	24	Oct 28	17	Aug 15 2000
MAXIMUM PEAK FLOW			2120	Mar 16	7200	Mar 6 1984
MAXIMUM PEAK STAGE			10.02	Mar 16	13.73	Mar 6 1984
INSTANTANEOUS LOW FLOW			24	Oct 31	15	Aug 21 2000
ANNUAL RUNOFF (INCHES)	7.19		19.08		13.57	
10 PERCENT EXCEEDS	192		495		337	
50 PERCENT EXCEEDS	42		111		70	
90 PERCENT EXCEEDS	22		34		28	

02365500 CHOCTAWHATCHEE RIVER AT CARYVILLE, FL

LOCATION.--Lat 30°46'32", long 85°49'40", in NW¼ sec.10, T.4 N., R.16 W., Holmes County, Hydrologic Unit 03140203, near right bank on downstream side of bridge on U.S. Highway 90, 300 ft downstream from Louisville and Nashville Railroad bridge, 0.8 mi west of Caryville, 1.8 mi downstream from Wrights Creek, and 64 mi upstream from mouth.

DRAINAGE AREA.--3,499 mi^2.

PERIOD OF RECORD.--August 1929 to September 1994, October 1994 to September 1996(gage height only), October 1996 to September 1997, October 1997 to September 1998(gage height only), October 2000 to September 2001. Gage-height records collected at same site from 1928 to August 1929 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 39.02 ft above National Geodetic Vertical Datum of 1929. Aug. 17 to Oct. 11, 1929, nonrecording gage at same site and datum; Oct. 12, 1929 to Sept. 11, 1951, water-stage recorder at same site and datum; Sept. 12, 1951 to Aug.11, 1976, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1850 (from information furnished by U.S. Army Corps of Engineers, Mobile District) 27.1 ft Mar. 17, 1929, from National Weather Service records and floodmarks; discharge, 206,000 ft^3/s from rating curve extended above 160,000 ft^3/s on basis of slope-area determination of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	858	506	1790	e10000	e4000	e3600	e9500	2440	1560	2730	2290	1820
2	782	508	1590	e9800	e5000	e3800	e9100	2320	2150	3380	2670	2170
3	724	508	1460	e9000	e4500	e4100	e8000	2210	2840	3970	2660	2540
4	679	510	1360	e7000	e4000	e4600	e7200	2120	2430	4020	2200	2770
5	646	510	1300	e5000	e3500	e13000	6980	2040	1990	3630	1790	3200
6	640	515	e1280	e4000	e3250	e21000	9320	1960	1670	3150	1940	3680
7	654	519	e1260	e3300	e3000	e28500	13300	1870	1440	2820	3350	3840
8	696	526	e1240	e3000	e2700	e30000	18000	1810	1380	2600	5230	3980
9	802	580	e1220	e2800	e2500	e26000	17300	1750	1440	2300	5950	3640
10	744	890	e1200	e2700	e2300	e22000	14000	1710	1770	2060	5770	3060
11	673	1620	e1180	e2500	e2400	e19000	11600	1660	2440	1940	5180	2590
12	642	1950	e1160	e2300	e2800	e17000	9240	1620	4970	2160	4770	2280
13	620	1590	e1140	e2400	e3200	e15000	7130	1650	7960	2510	4700	2130
14	603	1380	e1120	e2500	e2900	e18500	5900	1870	11000	2270	4330	2000
15	589	1290	e1750	e2400	e2800	22300	5340	1810	13000	1950	4030	1840
16	575	1260	e2500	e2350	e2600	e27300	5060	1710	12100	1730	3760	1670
17	566	1200	e3500	e2300	e2500	e28000	4920	1600	9790	1610	3450	1550
18	559	1300	e4800	e2400	e2400	e23000	4760	1470	7450	1490	3290	1450
19	554	1650	e5700	e2800	e2300	e20000	4400	1370	5680	1390	3280	1360
20	549	2160	e5000	e3250	e2250	e16000	4020	1380	4590	1310	3260	1300
21	544	2710	e4000	e4500	e2200	e15000	3750	1490	4010	1260	3180	1260
22	536	2610	e3300	e5700	e2100	e17000	3520	2220	3680	1260	3110	1240
23	529	2110	e2800	e5600	e2000	e20800	3310	2160	3680	1410	2710	1200
24	523	1790	e2700	e4500	e2100	e21000	3140	1920	3850	1380	2330	1180
25	515	1900	e2500	e4000	e2200	e19000	3070	1870	3820	1310	2050	1280
26	507	2560	e2300	e3500	e2300	e16000	3050	1880	3500	1390	1870	1580
27	505	3200	e2100	e3000	e2500	e13000	2950	1820	3120	1760	1700	1690
28	505	2980	e2000	e2800	e3400	e11000	2810	1710	2770	1940	1590	1600
29	504	2470	e2500	e2600	---	e9000	2680	1760	2520	2200	1560	1540
30	503	2070	e5500	e2500	---	e8100	2560	1690	2400	2260	1560	1430
31	506	---	e8000	e3000	---	e8800	---	1590	---	2380	1630	---
MEAN	607	1512	2556	3984	2846	16820	6864	1822	4367	2180	3135	2096
MAX	858	3200	8000	10000	5000	30000	18000	2440	13000	4020	5950	3980
MIN	503	506	1120	2300	2000	3600	2560	1370	1380	1260	1560	1180
IN.	.20	.48	.84	1.31	.85	5.54	2.19	.60	1.39	.72	1.03	.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

MEAN	3084	3414	5324	7436	8450	10150	8569	4820	3776	4220	3907	3114
MAX	17160	11790	24150	23510	16190	29190	22900	15700	12450	42530	17120	16650
(WY)	1999	1990	1954	1936	1982	1998	1975	1946	1989	1994	1939	1937
MIN	607	992	1395	1925	2846	1777	2343	1618	1107	1187	856	905
(WY)	2001	1932	1956	1956	2001	1955	1967	1941	1988	1986	2000	1954

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1930 - 2001	
ANNUAL MEAN	4080		5481	
HIGHEST ANNUAL MEAN			9163	1946
LOWEST ANNUAL MEAN			2714	1955
HIGHEST DAILY MEAN	e30000	Mar 8	162000	Jul 9 1994
LOWEST DAILY MEAN	503	Oct 30	503	Oct 30 2000
ANNUAL SEVEN-DAY MINIMUM	505	Oct 26	505	Oct 26 2000
MAXIMUM PEAK FLOW	e30000	Mar 8	164000	Jul 9 1994
MAXIMUM PEAK STAGE			23.85	Jul 9 1994
INSTANTANEOUS LOW FLOW	500	Oct 30	500	Oct 30 2000
ANNUAL RUNOFF (INCHES)	15.83		21.28	
10 PERCENT EXCEEDS	9390		11400	
50 PERCENT EXCEEDS	2400		3620	
90 PERCENT EXCEEDS	736		1420	

e Estimated

02365769 BRUCE CREEK AT SH 81 NEAR REDBAY, FL

LOCATION.--Lat 30°37'28", long 85°56'33", in NE¼ sec. 33, T. 3 N., R. 17 W., Walton County, Hydrologic Unit 03140203, on downstream side of bridge on State Highway 81, 0.6 mi north of Bruce Creek School, 1.4 mi south of Knox Hill, and 2.4 mi north of Redbay.

DRAINAGE AREA.--82.4 mi^2.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder.

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

REVISIONS.--Daily, monthly discharges, and extremes for water year 2000 were revised.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	36	17	34	51	45	59	21	5.0	37	45	8.6
2	33	104	17	35	47	40	48	18	4.9	25	55	24
3	29	82	16	35	44	38	43	16	4.8	15	44	25
4	29	46	16	35	41	36	42	15	5.0	13	37	21
5	37	37	17	40	39	34	41	15	4.9	10	28	15
6	40	33	20	43	37	32	36	17	5.0	8.1	21	13
7	35	31	25	36	36	31	33	15	8.0	6.8	16	34
8	30	29	26	34	36	30	31	14	7.2	5.8	24	96
9	28	28	24	32	35	29	29	13	5.7	5.1	34	59
10	44	27	23	39	34	29	28	12	5.2	5.3	26	37
11	143	27	24	101	33	31	27	11	4.8	11	24	29
12	123	26	24	68	33	62	26	11	4.6	6.4	22	25
13	57	25	25	50	35	83	26	10	4.7	6.1	16	25
14	51	25	30	50	271	49	33	9.5	4.6	11	13	26
15	43	24	35	48	366	40	60	8.9	4.7	18	9.4	23
16	36	24	29	42	167	53	52	8.5	5.5	11	7.7	33
17	32	23	26	37	85	228	38	8.1	14	7.4	6.6	26
18	29	22	25	35	80	213	31	7.7	15	5.8	5.9	17
19	27	21	37	34	77	97	28	7.6	12	4.8	5.4	13
20	25	21	79	34	65	192	25	7.4	8.7	4.3	5.1	11
21	25	22	70	34	52	177	24	7.1	6.8	4.0	5.0	18
22	24	23	196	32	44	95	22	7.0	6.0	4.0	4.8	106
23	24	26	166	34	41	74	19	6.8	6.2	3.9	5.1	361
24	23	24	69	172	39	73	27	6.7	11	3.9	5.1	382
25	21	24	57	284	38	70	49	6.3	15	5.0	4.8	178
26	20	24	50	138	36	65	45	6.1	13	5.7	4.7	144
27	20	24	43	75	37	76	32	6.0	13	24	4.6	181
28	20	23	39	70	59	88	27	5.6	16	55	4.9	77
29	20	21	37	69	60	64	27	5.4	31	28	5.4	53
30	21	19	35	65	---	71	24	5.2	35	19	5.4	43
31	21	---	34	56	---	75	---	5.1	---	25	6.5	---
MEAN	37.1	30.7	42.9	61.0	69.6	74.8	34.4	10.1	9.58	12.7	16.2	70.1
MAX	143	104	196	284	366	228	60	21	35	55	55	382
MIN	20	19	16	32	33	29	19	5.1	4.6	3.9	4.6	8.6
IN.	.52	.42	.60	.85	.91	1.05	.47	.14	.13	.18	.23	.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

MEAN	271	89.7	113	146	98.0	167	41.2	32.6	97.1	153	77.0	51.7
MAX	504	149	184	231	127	260	48.0	55.2	185	292	138	70.1
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	2000
MIN	37.1	30.7	42.9	61.0	69.6	74.8	34.4	10.1	9.58	12.7	16.2	33.2
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL MEAN	124		39.0		112	
HIGHEST ANNUAL MEAN					185	1999
LOWEST ANNUAL MEAN					39.0	2000
HIGHEST DAILY MEAN	1100	Mar 10	382	Sep 24	e4550	Oct 1 1998
LOWEST DAILY MEAN	16	Dec 3	3.9	Jul 23	3.9	Jul 23 2000
ANNUAL SEVEN-DAY MINIMUM	17	Nov 30	4.3	Jul 19	4.3	Jul 19 2000
MAXIMUM PEAK FLOW			429	Sep 24	e4550	Oct 1 1998
MAXIMUM PEAK STAGE			15.16	Sep 24	18.73	Mar 10 1999
INSTANTANEOUS LOW FLOW			3.7	Jul 23	3.7	Jul 23 2000
ANNUAL RUNOFF (INCHES)	20.41		6.44		18.46	
10 PERCENT EXCEEDS	296		74		259	
50 PERCENT EXCEEDS	69		27		46	
90 PERCENT EXCEEDS	23		5.5		9.6	

e Estimated

CHOCTAWHATCHEE RIVER BASIN

02365769 BRUCE CREEK AT SH 81 NEAR REDBAY, FL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	8.2	47	e295	122	75	217	28	32	92	244	88
2	34	8.2	44	e211	100	82	184	26	174	107	260	105
3	32	7.9	41	e183	95	69	167	25	97	68	190	238
4	29	8.0	39	e164	90	158	162	23	41	50	114	287
5	27	7.9	37	e150	84	262	203	21	27	43	86	285
6	25	8.1	36	e138	75	170	206	20	20	45	907	244
7	26	8.5	35	e129	66	203	170	19	17	48	2540	174
8	34	8.9	34	e121	61	353	191	19	15	34	1090	141
9	32	13	34	e114	58	459	227	18	16	27	528	157
10	26	84	36	e108	72	431	230	17	38	30	723	180
11	24	68	37	e105	112	354	209	16	91	64	500	108
12	22	37	35	e136	87	299	181	16	923	173	494	82
13	20	29	34	e160	72	630	152	14	1070	296	452	90
14	19	25	46	e138	67	947	138	14	371	202	485	83
15	17	23	140	e123	65	544	171	13	249	92	357	64
16	17	21	180	e115	63	628	336	12	199	58	288	53
17	15	21	e260	e110	60	525	325	11	210	42	217	e48
18	14	30	e295	e107	55	456	180	11	163	35	191	e46
19	14	54	e230	e126	49	410	119	11	131	32	489	e45
20	13	133	e167	e170	47	541	99	10	107	29	1510	e44
21	13	85	e138	e193	46	795	84	10	89	45	974	e44
22	13	47	e135	e180	56	480	71	11	71	54	372	e43
23	13	38	e112	e153	66	314	61	11	62	42	229	e43
24	12	37	e90	e130	55	316	53	11	56	30	170	e49
25	12	237	e82	115	50	318	48	10	45	40	133	e53
26	11	385	e76	101	65	294	43	9.3	40	256	108	e48
27	9.8	217	e94	89	72	259	38	8.8	35	225	92	e47
28	9.3	87	e150	82	59	228	34	8.6	28	306	80	e46
29	8.8	62	e460	78	---	249	32	8.2	27	384	81	e45
30	8.4	53	e550	104	---	353	30	8.6	46	344	102	e44
31	8.4	---	e540	158	---	297	---	11	---	256	109	---
MEAN	19.2	61.7	137	138	70.3	371	145	14.6	150	114	455	101
MAX	38	385	550	295	122	947	336	28	1070	384	2540	287
MIN	8.4	7.9	34	78	46	69	30	8.2	15	27	80	43
IN.	.27	.84	1.91	1.93	.89	5.19	1.97	.20	2.03	1.60	6.37	1.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	187	80.4	121	144	88.9	235	75.9	26.6	115	140	203	68.1
MAX	504	149	184	231	127	371	145	55.2	185	292	455	101
(WY)	1999	1999	1999	1999	1999	2001	2001	1999	1999	1999	2001	2001
MIN	19.2	30.7	42.9	61.0	69.6	74.8	34.4	10.1	9.58	12.7	16.2	33.2
(WY)	2001	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	47.9		149		124	
HIGHEST ANNUAL MEAN					185	1999
LOWEST ANNUAL MEAN					39.0	2000
HIGHEST DAILY MEAN	550	Dec 30	2540	Aug 7	e4550	Oct 1 1998
LOWEST DAILY MEAN	3.9	Jul 23	7.9	Nov 3	3.9	Jul 23 2000
ANNUAL SEVEN-DAY MINIMUM	4.3	Jul 19	8.1	Oct 31	4.3	Jul 19 2000
MAXIMUM PEAK FLOW			2970	Aug 7	e4550	Oct 1 1998
MAXIMUM PEAK STAGE			18.27	Aug 7	18.73	Mar 10 1999
INSTANTANEOUS LOW FLOW			7.6	Nov 3	3.7	Jul 23 2000
ANNUAL RUNOFF (INCHES)	7.92		24.57		20.50	
10 PERCENT EXCEEDS	95		353		289	
50 PERCENT EXCEEDS	29		75		54	
90 PERCENT EXCEEDS	5.5		13		11	

e Estimated

02366500 CHOCTAWHATCHEE RIVER NEAR BRUCE, FL

LOCATION.--Lat 30°27'03", long 85°53'54", in NE¼ sec. 36, T. 1 N., R. 17 W., Walton County, Hydrologic Unit 03140203, near center of main channel on upstream side of bridge on State Highway 20, 4.0 mi southeast of Bruce, 5.8 mi downstream from Holmes Creek, and 21 mi upstream from mouth.

DRAINAGE AREA.--4,384 mi^2.

PERIOD OF RECORD.--October 1930 to March 1983; Apr. 1983 to May 1984 (discharge measurements only); June 1984 to current year.

REVISED RECORDS.--WSP 872: 1937. WSP 1384: Drainage area. WSP 1504: 1931-34.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Apr. 1, 1983 to May 14, 1999, nonrecording gage at same site and datum. Apr. 6, 1934 to Mar. 31, 1983, water-stage recorder at same site at datum 3.94 ft lower. Oct. 1, 1930 to Apr. 5, 1934, nonrecording gage at site 1.0 mi downstream at datum 4.19 ft lower.

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

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of March 1929 reached a stage of 25.0 ft at former site and datum, from floodmarks, discharge, 220,000 ft^3/s, from rating curve extended above 145,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1870	1250	3400	5540	4080	3510	12500	3440	2410	3700	3740	2810
2	1770	1250	3080	6100	4230	3790	11300	3310	2510	3720	3940	3020
3	1680	1240	2760	7150	4530	3940	10800	3170	2670	3830	4140	3380
4	1610	1230	2530	8480	4870	4200	10800	3040	2940	3960	4260	3750
5	1540	1230	2390	9560	5050	4420	10400	2920	3060	4150	4190	4010
6	1510	1240	2270	9760	5030	4780	9860	2810	2890	4280	4660	4160
7	1460	1310	2180	9030	4820	5540	9350	2720	2610	4240	5410	4400
8	1430	1310	2130	7750	4520	8650	9640	2640	2360	4010	6090	4630
9	1420	1380	2100	6500	4210	21000	12000	2550	2230	3730	6750	4800
10	1480	1470	2070	5470	3990	28800	16200	2480	2270	3460	7610	4930
11	1500	1600	2050	4840	3840	29400	18100	2420	2530	3560	8900	4910
12	1460	1940	2030	4440	3740	27500	17300	2370	3070	3460	10100	4610
13	1430	2300	2010	4270	3760	25400	15300	2330	3830	3400	10100	4170
14	1420	2380	2050	4130	3830	23000	13200	2310	4700	3580	9510	3760
15	1400	2240	2180	4030	3890	20800	11300	2360	5740	3530	8810	3470
16	1390	2120	2530	3950	3850	19800	9640	2400	7680	3190	8140	3230
17	1380	2120	3160	3880	3770	22800	8440	2360	10400	2870	7420	2980
18	1370	2070	3730	3780	3640	28000	7480	2300	12000	2650	6830	2770
19	1360	2110	4160	3780	3530	29900	6770	2200	11800	2450	6280	2610
20	1340	2360	4600	3910	3440	29200	6190	2120	10600	2330	5980	2490
21	1320	2640	4990	4150	3360	26600	5730	2100	9060	2250	5870	2390
22	1310	2910	5380	4440	3270	23600	5310	2110	7660	2150	5810	2310
23	1310	3070	5530	4770	3180	21600	4920	2370	6310	2100	5510	2260
24	1270	3090	5300	5150	3110	21800	4600	2580	5360	2140	5090	2600
25	1260	3230	4880	5480	3080	24200	4310	2550	4810	2250	4580	2670
26	1270	3290	4450	5620	3130	25100	4080	2480	4550	2350	4030	2530
27	1280	3420	4080	5450	3110	23700	3910	2420	4420	2490	3570	2510
28	1280	3590	3910	5070	3200	21500	3800	2400	4260	2690	3220	2580
29	1270	3690	4290	4640	---	19000	3710	2350	4050	2920	2980	2550
30	1270	3620	4870	4320	---	16600	3580	2350	3830	3230	2840	2470
31	1260	---	5220	4120	---	14300	---	2330	---	3510	2790	---
MEAN	1417	2223	3429	5470	3859	18790	9017	2525	5087	3167	5779	3325
MAX	1870	3690	5530	9760	5050	29900	18100	3440	12000	4280	10100	4930
MIN	1260	1230	2010	3780	3080	3510	3580	2100	2230	2100	2790	2260
IN.	.37	.57	.90	1.44	.92	4.94	2.30	.66	1.29	.83	1.52	.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2001, BY WATER YEAR (WY)

MEAN	4480	4346	6336	9092	10490	12370	10790	6317	5127	5617	5830	4529
MAX	24890	13870	25970	29400	20460	31510	27220	20870	18080	48020	26770	24000
(WY)	1999	1931	1954	1936	1978	1998	1975	1946	1973	1994	1939	1937
MIN	1399	1742	1945	2344	3859	2534	3476	1774	1430	1368	1420	1626
(WY)	1969	1955	1956	1956	2001	1955	2000	2000	2000	2000	2000	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1931 - 2001	
ANNUAL MEAN	2579		5358		7094	
HIGHEST ANNUAL MEAN					11620	1948
LOWEST ANNUAL MEAN					2711	2000
HIGHEST DAILY MEAN	6710	Mar 27	29900	Mar 19	164000	Jul 11 1994
LOWEST DAILY MEAN	1100	Jul 23	1230	Nov 4	1100	Jul 23 2000
ANNUAL SEVEN-DAY MINIMUM	1120	Jul 20	1240	Oct 31	1120	Jul 20 2000
MAXIMUM PEAK FLOW			30200	Mar 19	165000	Jul 11 1994
MAXIMUM PEAK STAGE			15.56	Mar 19	26.76	Jul 11 1994
INSTANTANEOUS LOW FLOW			1210	Nov 6	1070	Jul 23 2000
ANNUAL RUNOFF (INCHES)	8.01		16.59		21.99	
10 PERCENT EXCEEDS	4820		10700		14000	
50 PERCENT EXCEEDS	2000		3720		4960	
90 PERCENT EXCEEDS	1240		1530		2300	

02366996 ALAQUA CREEK NEAR PLEASANT RIDGE, FL

LOCATION.--Lat 30°40'08", long 86°11'12" in SW¼ sec. 18, T. 2 N., R. 19 W., Walton County, Hydrologic unit 03140102, at bridge on Nelson Road, 0.3 mi downstream from Cosson Mill Creek, 0.6 mi upstream from Oakie Creek, 1.5 mi southwest of Sconiers Mill, and 1.9 mi south of Pleasant Ridge.

DRAINAGE AREA.--39.1 mi^2.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is National Geodetic Vertical Datum of 1929, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	26	45	94	e110	e65	88	55	73	71	65	121
2	33	26	44	88	e95	e75	83	54	60	54	55	88
3	32	26	44	84	e90	e90	81	53	46	62	48	120
4	31	26	43	82	e85	e250	103	52	41	48	45	109
5	31	26	43	80	e80	73	123	51	39	55	45	152
6	35	28	42	77	e75	65	88	51	37	58	289	84
7	54	28	42	75	e72	61	82	50	37	46	200	77
8	36	29	41	76	e70	59	79	53	44	47	109	79
9	33	113	41	72	e78	72	77	51	53	43	168	78
10	32	107	41	70	e90	100	75	50	55	45	83	67
11	32	46	42	74	e93	68	72	49	269	57	82	64
12	31	40	41	101	e85	76	70	48	376	60	97	74
13	30	38	39	77	e80	e210	69	47	122	51	147	84
14	29	39	119	72	e79	108	83	45	115	44	139	66
15	29	35	73	70	e78	456	92	45	77	41	193	60
16	29	36	109	74	e78	247	132	44	62	39	90	58
17	28	77	279	73	e79	115	80	44	56	38	90	56
18	28	61	83	69	e75	126	73	43	51	39	123	55
19	28	136	93	147	e70	127	70	44	48	38	226	54
20	29	79	76	152	e65	568	68	51	49	44	311	54
21	30	54	69	86	e63	246	66	46	63	54	115	53
22	29	49	106	79	e62	143	64	47	52	43	86	51
23	28	47	74	74	e65	114	63	48	56	39	77	51
24	28	62	67	72	e62	99	62	44	47	37	72	54
25	28	247	63	e71	e61	97	62	43	44	58	69	58
26	27	75	60	e70	e70	92	60	42	43	57	66	52
27	27	58	74	e70	e64	88	58	42	42	71	64	52
28	27	52	694	e71	e60	86	57	42	44	73	64	51
29	27	49	310	e73	---	176	56	42	55	68	67	49
30	27	46	131	e160	---	138	55	41	56	86	75	48
31	27	---	102	e170	---	95	---	40	---	89	67	---
MEAN	30.6	58.7	101	87.2	76.2	141	76.4	47.0	73.7	53.4	111	70.6
MAX	54	247	694	170	110	568	132	55	376	89	311	152
MIN	27	26	39	69	60	59	55	40	37	37	45	48
IN.	.90	1.68	2.98	2.57	2.03	4.17	2.18	1.39	2.10	1.57	3.26	2.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	201	90.1	106	101	80.3	123	67.7	51.3	70.3	75.0	81.9	66.4
MAX	491	151	137	139	96.3	156	79.7	73.9	102	140	111	79.7
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	2001	1999
MIN	30.6	58.7	79.2	77.3	68.7	70.5	47.1	33.0	35.7	32.1	31.1	48.7
(WY)	2001	2001	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	52.9		77.3		93.1	
HIGHEST ANNUAL MEAN					147	1999
LOWEST ANNUAL MEAN					55.4	2000
HIGHEST DAILY MEAN	694	Dec 28	694	Dec 28	e4400	Oct 1 1998
LOWEST DAILY MEAN	22	Aug 13	26	Nov 1	22	Aug 13 2000
ANNUAL SEVEN-DAY MINIMUM	23	Aug 13	26	Oct 30	23	Aug 13 2000
MAXIMUM PEAK FLOW			838	Dec 28	e4400	Oct 1 1998
MAXIMUM PEAK STAGE			52.48	Dec 28	52.48	Dec 28 2000
INSTANTANEOUS LOW FLOW			25	Nov 1	21	Aug 18 2000
ANNUAL RUNOFF (INCHES)	18.40		26.85		32.35	
10 PERCENT EXCEEDS	76		121		157	
50 PERCENT EXCEEDS	41		63		67	
90 PERCENT EXCEEDS	27		35		32	

e Estimated

02367900 YELLOW RIVER NEAR OAK GROVE, FL

LOCATION.--Lat 30°55'34", long 86°33'34" in SE¼ sec. 17, T. 5 N., R. 23 W., Okaloosa County, Hydrologic Unit 03140103, at bridge on downstream side at State Highway 2, 0.7 mi east of Oak Grove, and 58 mi above mouth.

DRAINAGE AREA.--525 mi^2, approximately.

PERIOD OF RECORD.--September 1966 to October 1968, (annual maximum and gage height only), October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, nonrecording gage at same site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	86	284	1010	1040	638	1910	359	307	590	660	444
2	108	86	266	751	882	899	1440	343	265	520	611	513
3	104	86	254	634	710	1080	1150	328	234	464	460	838
4	100	87	249	575	610	2760	1140	315	212	407	370	1020
5	97	87	247	540	555	7010	2040	302	195	373	312	1010
6	101	93	244	517	519	10900	2960	290	184	374	788	1130
7	125	111	237	510	494	8380	2780	279	178	323	1620	1120
8	110	135	231	499	476	4380	1940	270	177	299	1970	1910
9	115	204	230	482	462	1960	1310	265	216	277	2180	2000
10	132	210	229	472	526	1350	1090	275	274	269	1880	1220
11	128	220	229	462	622	1340	956	259	730	272	1110	877
12	118	236	227	470	665	1600	864	254	2270	279	911	658
13	110	215	224	482	615	2960	791	248	3290	331	836	547
14	108	207	417	472	557	4160	752	308	4470	307	797	480
15	104	189	504	458	521	5930	775	286	4250	270	804	433
16	101	200	789	456	501	5910	869	256	2670	250	699	393
17	99	293	948	510	499	4640	808	234	1130	230	595	361
18	96	282	818	620	499	3320	750	219	760	212	606	338
19	94	444	672	684	495	2040	639	232	595	199	855	322
20	94	485	599	853	464	2370	570	436	494	189	1450	313
21	94	443	535	1040	442	4010	530	316	498	226	1720	304
22	92	380	509	946	437	6210	501	305	468	762	1410	295
23	91	323	511	769	435	6410	475	277	454	722	813	286
24	91	297	484	646	429	4430	456	249	536	442	581	282
25	91	397	442	576	420	2370	456	235	520	340	478	281
26	91	461	407	533	431	1590	503	222	427	324	413	273
27	90	489	381	504	731	1410	473	212	370	339	370	270
28	89	424	517	484	731	1260	431	210	338	334	357	263
29	89	357	980	472	---	1490	403	281	320	400	434	254
30	87	312	1340	608	---	2090	377	355	395	587	455	244
31	86	---	1300	985	---	2210	---	340	---	676	451	---
MEAN	102	261	494	614	563	3455	1005	283	908	374	871	623
MAX	132	489	1340	1040	1040	10900	2960	436	4470	762	2180	2000
MIN	86	86	224	456	420	638	377	210	177	189	312	244
IN.	.23	.57	1.12	1.39	1.15	7.81	2.20	.64	1.99	.85	1.97	1.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	2155	542	596	842	583	1741	620	364	636	627	468	324
MAX	6104	1093	901	1385	668	3455	1005	632	908	1391	871	623
(WY)	1999	1999	1999	1999	1999	2001	2001	1999	2001	1999	2001	2001
MIN	102	261	394	528	520	558	405	176	157	117	136	140
(WY)	2001	2001	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	299		799		796	
HIGHEST ANNUAL MEAN					1286	1999
LOWEST ANNUAL MEAN					305	2000
HIGHEST DAILY MEAN	1420	Feb 16	10900	Mar 6	66100	Oct 1 1998
LOWEST DAILY MEAN	86	Oct 31	86	Oct 31	86	Oct 31 2000
ANNUAL SEVEN-DAY MINIMUM	86	Oct 30	86	Oct 30	86	Oct 30 2000
MAXIMUM PEAK FLOW			11300	Mar 6	66100	Oct 1 1998
MAXIMUM PEAK STAGE			92.53	Mar 6	108.42	Sep 30 1998
INSTANTANEOUS LOW FLOW			84	Oct 31	84	Oct 31 2000
ANNUAL RUNOFF (INCHES)	7.98		21.27		21.20	
10 PERCENT EXCEEDS	567		1780		1420	
50 PERCENT EXCEEDS	210		456		414	
90 PERCENT EXCEEDS	99		127		135	

02368000 YELLOW RIVER AT MILLIGAN, FL

LOCATION.--Lat 30°45'10", long 86°37'45" in SE¼ sec. 15, T.3 N., R.24 W., Okaloosa County, Hydrologic Unit 03140103, near center on downstream side of bridge on U.S. Highway 90, 0.5 mi east of Milligan, 0.5 mi upstream from Trammel Creek, 6.7 mi upstream from Shoal River, and 40 mi upstream from mouth.

DRAINAGE AREA.--624 mi^2

PERIOD OF RECORD.--July 1938 to September 1993, October 1996 to current year.

REVISED RECORDS.--WSP 892: 1938-39. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 45.00 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 6, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good, except for water year 1999, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1929 reached a stage of 26.2 ft, from information by local residents, discharge 137,000 ft^3/s, from rating extended above 46,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71700	787	891	914	1150	681	1050	577	984	2640	837	439
2	44600	777	854	929	1250	732	1060	502	934	2480	696	407
3	25600	911	829	1230	1370	772	1030	449	770	1800	612	e400
4	13200	893	811	1490	1400	696	924	413	630	1070	548	e390
5	7260	825	806	1700	1240	677	806	392	635	858	511	e410
6	4530	790	784	1730	1060	773	727	392	576	748	495	393
7	3090	762	789	1430	951	1000	682	1840	679	797	546	331
8	2500	739	845	1100	887	843	651	3200	560	834	562	326
9	2560	725	865	1130	848	1490	629	2310	540	864	526	317
10	2590	715	892	1430	827	1900	600	1660	565	773	e950	345
11	2430	1020	918	1700	808	1850	572	1420	496	764	e1000	343
12	2240	1660	892	1790	786	1690	541	836	558	1060	587	314
13	1950	1640	1040	1730	762	1380	510	676	620	1680	532	298
14	1710	1380	1170	1500	732	1620	489	747	721	2200	492	284
15	1560	1270	1250	e1450	705	1920	469	790	895	1950	457	273
16	1450	1340	1180	e1400	685	2150	448	687	1070	1690	459	260
17	1350	1590	1000	1300	673	2290	433	585	1200	1450	529	251
18	1280	1820	870	1240	674	2770	430	509	1350	1100	454	248
19	1220	1750	801	1160	677	2850	426	592	1520	1070	457	246
20	1170	1460	769	1070	684	1850	416	687	1520	1240	412	250
21	1130	1180	766	1000	698	1270	408	585	951	1330	392	258
22	1080	1090	954	957	675	1080	398	525	663	1430	401	259
23	1020	1170	1080	1170	654	978	393	482	616	1380	390	265
24	971	1390	1230	1460	658	912	385	461	595	1030	394	262
25	931	1510	1140	1670	645	868	388	496	625	1420	565	257
26	896	1550	1170	1860	645	852	403	475	817	1760	782	253
27	871	1440	1230	1870	641	834	438	808	1370	1840	816	258
28	855	1220	1260	1570	674	811	561	1270	1730	2100	626	269
29	840	1050	1250	1200	---	763	597	1450	2110	2280	510	284
30	817	949	1150	1070	---	725	629	1220	2410	2050	461	285
31	800	---	1020	1040	---	813	---	1180	---	1240	452	---
MEAN	6587	1180	984	1364	838	1285	583	910	957	1449	563	306
MAX	71700	1820	1260	1870	1400	2850	1060	3200	2410	2640	1000	439
MIN	800	715	766	914	641	677	385	392	496	748	390	246
IN.	12.17	2.11	1.82	2.52	1.40	2.38	1.04	1.68	1.71	2.68	1.04	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

MEAN	723	742	1172	1461	1667	2058	1698	1068	905	861	939	847
MAX	6587	2737	6232	3375	3066	6380	5322	4173	3733	3191	5434	4305
(WY)	1999	1990	1954	1990	1979	1998	1975	1978	1970	1940	1975	1975
MIN	153	201	286	371	567	405	456	317	211	265	237	179
(WY)	1955	1955	1955	1955	1950	1955	1967	1967	1988	1968	1954	1972

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1938 - 1999	
ANNUAL MEAN	2323		1429		1174	
HIGHEST ANNUAL MEAN					2206	1975
LOWEST ANNUAL MEAN					231	1994
HIGHEST DAILY MEAN	71700	Oct 1	71700	Oct 1	71700	Oct 1 1998
LOWEST DAILY MEAN	268	Jul 2	246	Sep 19	136	Jun 23 1967
ANNUAL SEVEN-DAY MINIMUM	283	Jun 27	253	Sep 16	146	Oct 22 1954
MAXIMUM PEAK FLOW			82600	Oct 1	82800	Sep 30 1998
MAXIMUM PEAK STAGE			24.09	Oct 1	24.09	Oct 1 1998
INSTANTANEOUS LOW FLOW			244	Sep 19	131	Jun 23 1967
ANNUAL RUNOFF (INCHES)	50.54		31.10		25.57	
10 PERCENT EXCEEDS	3020		1830		2270	
50 PERCENT EXCEEDS	1050		854		762	
90 PERCENT EXCEEDS	350		401		318	

e Estimated

02368000 YELLOW RIVER AT MILLIGAN, FL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	314	273	405	673	542	1090	327	156	240	244	169
2	266	496	265	396	671	555	931	309	152	213	310	301
3	288	441	262	389	632	499	772	297	149	199	403	264
4	311	502	262	383	573	443	667	285	145	192	330	216
5	337	518	261	382	525	414	611	274	141	178	328	215
6	312	436	267	378	492	398	574	267	140	165	321	214
7	297	372	279	379	466	429	574	261	138	154	357	333
8	299	344	272	387	442	404	545	254	138	145	309	381
9	298	316	273	373	425	374	500	248	135	162	269	316
10	332	302	287	362	414	355	457	231	132	177	253	285
11	428	296	297	523	405	345	428	222	128	154	238	269
12	442	288	290	880	398	349	407	215	125	180	249	251
13	480	279	290	1050	392	387	393	208	124	203	235	232
14	454	277	374	1050	411	394	388	211	123	186	208	240
15	398	275	411	872	566	396	400	207	168	168	188	270
16	356	267	380	627	881	360	435	211	243	147	174	230
17	327	262	408	527	1280	402	780	246	320	144	167	234
18	305	262	394	472	1400	519	932	243	292	138	155	201
19	287	262	379	441	953	602	715	223	400	149	149	183
20	277	265	735	426	697	617	547	206	378	143	154	173
21	266	285	734	436	598	698	459	197	367	161	170	183
22	262	288	1010	432	535	889	408	198	303	177	172	295
23	257	298	1200	411	492	1020	371	199	262	187	168	333
24	253	317	1150	453	455	873	344	190	236	173	149	259
25	250	315	1030	673	427	642	356	185	212	173	141	247
26	251	307	807	1000	408	518	396	180	232	189	137	233
27	248	303	615	1160	396	478	401	174	355	190	144	213
28	241	295	519	1100	420	633	451	168	364	169	167	206
29	237	284	467	817	489	973	406	214	321	148	178	198
30	237	280	434	677	---	1270	358	185	289	139	155	186
31	240	---	415	637	---	1310	---	164	---	181	138	---
MEAN	307	325	485	597	583	583	537	226	222	172	218	244
MAX	480	518	1200	1160	1400	1310	1090	327	400	240	403	381
MIN	237	262	261	362	392	345	344	164	123	138	137	169
IN.	.57	.58	.90	1.10	1.01	1.08	.96	.42	.40	.32	.40	.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

MEAN	716	735	1160	1446	1649	2033	1678	1053	894	850	927	837
MAX	6587	2737	6232	3375	3066	6380	5322	4173	3733	3191	5434	4305
(WY)	1999	1990	1954	1990	1979	1998	1975	1978	1970	1940	1975	1975
MIN	153	201	286	371	567	405	456	226	211	172	218	179
(WY)	1955	1955	1955	1955	1950	1955	1967	2000	1988	2000	2000	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL MEAN	783		374		1161	
HIGHEST ANNUAL MEAN					2206	1975
LOWEST ANNUAL MEAN					231	1994
HIGHEST DAILY MEAN	3200	May 8	1400	Feb 18	71700	Oct 1 1998
LOWEST DAILY MEAN	237	Oct 29	123	Jun 14	123	Jun 14 2000
ANNUAL SEVEN-DAY MINIMUM	243	Oct 25	129	Jun 8	129	Jun 8 2000
MAXIMUM PEAK FLOW			1460	Feb 18	82800	Sep 30 1998
MAXIMUM PEAK STAGE			5.25	Feb 18	23.92	Sep 30 1998
INSTANTANEOUS LOW FLOW			120	Jun 13	120	Jun 13 2000
ANNUAL RUNOFF (INCHES)	17.04		8.17		25.28	
10 PERCENT EXCEEDS	1640		672		2250	
50 PERCENT EXCEEDS	620		304		750	
90 PERCENT EXCEEDS	271		165		312	

02368000 YELLOW RIVER AT MILLIGAN, FL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	126	406	1460	1140	738	2020	459	453	568	859	968
2	167	126	377	1140	1140	758	1910	437	385	644	736	933
3	158	127	354	860	939	1030	1620	420	329	566	634	928
4	152	129	334	745	770	1350	1360	405	295	501	481	1140
5	148	129	322	685	676	1930	1420	390	270	447	390	1250
6	152	145	315	644	618	4280	1770	376	249	437	557	1280
7	183	167	309	612	578	8400	e2580	363	239	403	1130	1330
8	182	207	303	593	548	6870	e2390	360	236	360	1520	1510
9	158	332	300	566	527	4050	e1960	355	251	348	1760	1850
10	175	366	297	546	583	2290	1500	387	314	362	1900	1910
11	189	313	295	539	683	1630	1200	371	636	357	1880	1480
12	182	320	295	561	756	1670	1050	343	1430	368	1460	1020
13	167	321	290	556	740	2120	951	332	1900	404	1190	796
14	157	316	451	556	676	2480	893	339	2330	409	1070	666
15	153	288	693	542	617	4340	935	382	3020	362	1150	579
16	149	274	884	537	580	5330	1100	345	3200	328	1040	514
17	146	457	1230	560	559	4910	1080	318	2430	306	882	464
18	144	494	1200	651	551	3920	964	296	1470	283	783	434
19	140	641	1030	778	555	2890	850	281	869	264	1050	412
20	139	757	888	959	533	2340	743	437	674	250	1190	395
21	139	655	784	1100	506	2270	678	505	596	253	1500	384
22	138	564	744	1170	509	2860	639	397	682	451	1680	371
23	135	483	704	1040	494	4410	607	383	740	807	1510	360
24	132	452	678	840	481	4860	579	337	623	638	932	366
25	131	653	631	722	470	3680	569	312	651	463	679	381
26	132	660	574	650	462	2340	577	296	570	406	567	358
27	131	667	538	604	585	1790	597	284	487	399	493	344
28	130	616	909	574	808	1560	550	278	425	432	469	335
29	129	530	1170	550	---	1610	514	302	389	482	826	322
30	128	456	1340	665	---	1820	482	392	385	606	712	308
31	127	---	1490	909	---	1980	---	423	---	753	671	---
MEAN	151	392	650	739	646	2984	1136	365	884	441	1023	780
MAX	189	757	1490	1460	1140	8400	2580	505	3200	807	1900	1910
MIN	127	126	290	537	462	738	482	278	236	250	390	308
IN.	.28	.70	1.20	1.37	1.08	5.51	2.03	.67	1.58	.81	1.89	1.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

MEAN	707	729	1152	1435	1632	2049	1669	1042	894	843	929	836
MAX	6587	2737	6232	3375	3066	6380	5322	4173	3733	3191	5434	4305
(WY)	1999	1990	1954	1990	1979	1998	1975	1978	1970	1940	1975	1975
MIN	151	201	286	371	567	405	456	226	211	172	218	179
(WY)	2001	1955	1955	1955	1950	1955	1967	2000	1988	2000	2000	1972

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL MEAN	380		851		1156	
HIGHEST ANNUAL MEAN					2206	1975
LOWEST ANNUAL MEAN					231	1994
HIGHEST DAILY MEAN	1490	Dec 31	8400	Mar 7	71700	Oct 1 1998
LOWEST DAILY MEAN	123	Jun 14	126	Nov 1	123	Jun 14 2000
ANNUAL SEVEN-DAY MINIMUM	127	Oct 29	127	Oct 29	127	Oct 29 2000
MAXIMUM PEAK FLOW			8810	Mar 7	82800	Sep 30 1998
MAXIMUM PEAK STAGE			10.27	Mar 7	23.92	Sep 30 1998
INSTANTANEOUS LOW FLOW			124	Oct 31	120	Jun 13 2000
ANNUAL RUNOFF (INCHES)	8.30		18.53		25.17	
10 PERCENT EXCEEDS	707		1800		2250	
50 PERCENT EXCEEDS	310		566		746	
90 PERCENT EXCEEDS	144		183		310	

e Estimated

02368500 SHOAL RIVER NEAR MOSSY HEAD, FL

LOCATION.--Lat 30°47'45", long 86°18'25" in SW sec. 36, T.4 N., R.21 W., Walton County, Hydrologic Unit 03140103, near center span on dowstream side of bridge on County Road 1087, about 200 ft downstream from Machine Branch, 3.9 miles north of Mossy Head, and 34 miles upstream from mouth.

DRAINAGE AREA.--123 mi^2.

PERIOD OF RECORD.--March 1951 to September 1978, May 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 105.59 ft National Geodetic Vertical Datum of 1929. Prior to July 24, 1956, at site 300 ft north at same datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	39	84	177	133	90	256	81	68	160	123	324
2	56	39	82	163	132	102	228	79	73	166	114	411
3	54	39	80	154	124	102	207	76	57	133	100	326
4	52	39	78	148	121	431	231	73	54	116	87	282
5	50	38	77	144	110	285	321	70	54	112	81	277
6	58	41	76	141	104	151	269	69	54	109	592	289
7	83	43	75	138	102	117	220	66	54	116	639	285
8	64	44	73	137	101	104	199	65	54	126	521	250
9	55	154	74	131	100	108	186	64	73	106	409	202
10	52	202	72	125	130	147	175	66	72	102	258	185
11	52	111	74	126	129	121	163	63	284	110	237	161
12	52	82	72	155	111	336	154	59	707	109	279	157
13	50	69	69	141	105	1390	157	56	472	105	306	269
14	49	78	324	129	102	721	161	e54	447	94	262	233
15	48	71	309	124	101	1570	181	e53	355	87	278	156
16	47	71	350	126	102	1600	279	e52	235	82	198	138
17	46	183	591	127	100	698	193	e52	155	79	177	128
18	44	162	264	123	93	497	152	e52	127	78	179	123
19	43	270	212	147	90	466	138	56	116	77	e225	117
20	42	228	182	227	89	1560	129	60	113	79	e285	113
21	43	134	155	177	90	1290	123	58	115	92	e350	110
22	41	99	196	142	97	662	116	56	116	84	215	104
23	40	88	167	130	93	487	112	e54	149	75	164	101
24	40	99	146	122	88	389	109	e53	118	75	146	115
25	40	307	133	117	87	324	106	e52	103	82	138	131
26	40	207	125	112	89	285	100	e52	98	105	137	114
27	42	128	124	111	88	253	95	e54	95	95	127	104
28	42	103	524	110	84	237	91	56	106	148	123	98
29	42	94	671	110	---	346	87	55	143	122	130	94
30	41	89	331	155	---	402	83	54	123	108	157	90
31	40	---	212	154	---	303	---	54	---	141	139	---
MEAN	48.6	112	194	139	103	502	167	60.1	160	106	231	183
MAX	83	307	671	227	133	1600	321	81	707	166	639	411
MIN	40	38	69	110	84	90	83	52	54	75	81	90
IN.	.46	1.01	1.82	1.31	.88	4.71	1.52	.56	1.45	.99	2.17	1.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

MEAN	188	166	247	280	311	312	306	206	199	188	215	217
MAX	963	556	890	652	649	739	837	630	582	499	831	708
(WY)	1976	1976	1954	1974	1974	1978	1964	1978	1959	1975	1975	1975
MIN	48.6	67.3	67.1	103	103	78.3	90.3	48.1	46.2	46.7	49.6	52.4
(WY)	2001	1956	1956	1955	2001	1955	1967	2000	2000	2000	2000	1972

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL MEAN	168		240	
HIGHEST ANNUAL MEAN			399	1978
LOWEST ANNUAL MEAN			126	1955
HIGHEST DAILY MEAN	1600	Mar 16	8250	Jul 31 1975
LOWEST DAILY MEAN	38	Nov 5	29	Jun 26 2000
ANNUAL SEVEN-DAY MINIMUM	39	Oct 30	34	Jun 20 2000
MAXIMUM PEAK FLOW	2290	Mar 15	10500	Apr 27 1964
MAXIMUM PEAK STAGE	14.69	Mar 15	23.64	Apr 27 1964
INSTANTANEOUS LOW FLOW	35	Nov 5	27	Jun 26 2000
ANNUAL RUNOFF (INCHES)	18.53		26.50	
10 PERCENT EXCEEDS	314		429	
50 PERCENT EXCEEDS	114		162	
90 PERCENT EXCEEDS	52		74	

e Estimated

02369000 SHOAL RIVER NEAR CRESTVIEW, FL

LOCATION.--Lat 30°41'50", long 86°34'15" in SW¼ sec. 5, T. 2 N., R. 23 W., Okaloosa County, Hydrologic Unit 03140103, near center of bridge on downstream side of southbound lane on State Highway 85, 3.5 mi downstream from Titi Creek, 4.2 mi south of Crestview, and 7 mi upstream from mouth.

DRAINAGE AREA.--474 mi^2.

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

REVISED RECORDS.--WSP 1274: 1939-40, 1944, 1947, 1950. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 47.21 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 12, 1939, June 12, 1972 to Aug. 22, 1973, and July 8, 1994 to Oct. 6, 1995, nonrecording gage at same site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	222	415	848	692	412	1330	480	503	574	814	834
2	292	223	405	742	601	432	1020	469	575	724	696	1530
3	282	222	397	686	564	462	930	459	464	715	524	2040
4	275	221	386	656	537	817	900	448	393	625	453	1650
5	269	220	378	637	518	1440	1060	435	354	574	413	1370
6	298	232	379	621	493	1500	1410	425	330	552	769	1400
7	426	245	382	606	477	768	1160	416	318	493	1980	1350
8	370	254	374	601	466	596	940	433	319	537	3250	1880
9	308	382	369	588	459	563	859	436	337	500	2420	2170
10	286	674	366	564	565	707	808	594	402	498	1480	1210
11	279	551	364	560	654	692	764	503	653	503	1150	929
12	272	384	362	667	598	745	740	441	2070	507	1170	828
13	267	331	351	666	530	2020	704	411	2790	529	1500	856
14	261	358	537	602	502	3620	693	390	2230	471	1520	910
15	256	339	968	563	488	5590	777	375	1870	455	1700	825
16	252	325	1030	563	480	5670	985	365	1360	396	1370	703
17	250	656	1060	582	474	6080	1120	356	872	366	1000	648
18	247	793	1430	566	455	4260	902	349	657	356	1040	618
19	243	853	975	603	435	2130	739	345	555	359	1210	600
20	241	936	820	927	427	2560	677	371	507	429	1440	588
21	241	778	710	944	438	4480	648	401	539	623	2030	573
22	240	562	730	774	497	5570	624	395	589	607	1640	551
23	236	478	741	650	480	3640	601	381	667	463	968	532
24	231	470	649	598	447	1960	584	358	651	408	794	573
25	228	774	584	565	432	1460	574	343	522	591	712	685
26	228	884	544	540	434	1210	553	332	463	577	662	656
27	226	691	522	528	430	1040	533	329	440	530	633	578
28	225	536	952	520	414	978	516	328	427	566	625	539
29	224	473	1990	510	---	1090	502	359	450	646	768	516
30	223	441	2250	610	---	1730	489	362	580	601	881	495
31	222	---	1300	753	---	1820	---	345	---	635	807	---
MEAN	265	484	733	640	500	2130	805	401	763	529	1175	955
MAX	426	936	2250	944	692	6080	1410	594	2790	724	3250	2170
MIN	222	220	351	510	414	412	489	328	318	356	413	495
MED	252	456	544	603	480	1460	752	390	530	530	1000	764
IN.	.64	1.14	1.78	1.56	1.10	5.18	1.89	.98	1.80	1.29	2.86	2.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

MEAN	865	844	1016	1232	1371	1515	1298	979	995	1083	1116	1062
MAX	4097	2252	3601	2606	2974	3327	3056	2752	4421	5436	4385	4370
(WY)	1999	1996	1954	1978	1982	1948	1960	1978	1989	1994	1975	1998
MIN	265	331	345	417	500	365	396	254	309	265	261	301
(WY)	2001	1955	1956	1939	2001	1955	2000	2000	2000	2000	2000	1972

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL MEAN	423		784		1114	
HIGHEST ANNUAL MEAN					1781	1978
LOWEST ANNUAL MEAN					470	2000
HIGHEST DAILY MEAN	2250	Dec 30	6080	Mar 17	55500	Sep 30 1998
LOWEST DAILY MEAN	186	Jun 11	220	Nov 5	186	Jun 11 2000
ANNUAL SEVEN-DAY MINIMUM	190	Jun 8	222	Oct 30	190	Jun 8 2000
MAXIMUM PEAK FLOW			6210	Mar 17	59100	Sep 30 1998
MAXIMUM PEAK STAGE			8.43	Mar 17	21.40	Sep 30 1998
INSTANTANEOUS LOW FLOW			220	Nov 4	183	Jun 12 2000
ANNUAL RUNOFF (INCHES)	12.15		22.46		31.93	
10 PERCENT EXCEEDS	676		1450		2020	
50 PERCENT EXCEEDS	354		565		833	
90 PERCENT EXCEEDS	222		307		424	

02370000 BLACKWATER RIVER NEAR BAKER, FL

LOCATION.--Lat 30°50'00", long 86°44'05", in SW¼ sec. 22, T. 4 N., R. 25 W., Okaloosa County, Blackwater River State Forest, Hydrologic Unit 03140104, near left bank on downstream side of bridge on State Highway 4, 0.3 mi downstream from Red Wash Branch, 3.8 mi northwest of Baker, and 35 mi upstream from mouth.

DRAINAGE AREA.--205 mi^2

PERIOD OF RECORD.--March 1950 to September 1992, October 1996 to current year.

REVISED RECORDS.--WSP 1704: 1950 (M), 1951-52.

GAGE.--Water-stage recorder. Datum of gage is 60.5 ft above National Geodetic Vertical Datum of 1929 (from design datum of bridge curb furnished by Florida Department of Transportation).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	59	156	355	378	152	376	134	113	165	182	368
2	70	58	143	305	308	162	308	131	111	149	143	365
3	68	59	136	273	265	204	264	128	104	134	116	358
4	67	59	130	251	239	1470	262	125	100	124	101	310
5	66	59	125	236	220	1920	541	121	98	121	94	368
6	67	64	122	223	206	1090	601	118	98	124	141	321
7	71	73	121	210	196	633	464	116	99	119	190	252
8	71	92	116	202	189	469	351	114	99	114	184	257
9	69	195	113	196	182	392	289	113	100	110	174	233
10	68	238	110	188	216	379	252	124	108	104	166	190
11	67	168	109	185	290	350	227	139	306	107	143	165
12	66	122	107	199	260	632	207	123	1520	104	145	150
13	65	104	105	200	227	1810	193	113	1420	115	190	143
14	65	105	162	189	209	1370	195	108	662	111	171	135
15	64	109	289	182	199	1430	224	105	488	100	233	127
16	63	104	615	185	192	1320	348	103	373	94	190	121
17	63	179	716	215	189	874	290	101	281	89	155	116
18	62	225	493	228	184	631	221	99	223	87	158	112
19	62	361	408	237	174	514	193	99	184	85	319	109
20	61	414	385	505	166	914	178	148	164	84	721	108
21	61	291	327	571	165	1020	169	324	156	94	826	105
22	61	213	327	436	176	808	160	250	161	99	485	102
23	60	176	320	339	173	593	153	180	170	95	296	102
24	60	174	281	290	164	456	147	152	159	88	213	123
25	60	426	253	258	159	383	169	131	145	90	171	118
26	60	410	230	236	159	337	207	120	134	108	147	107
27	60	293	216	222	159	308	173	114	128	110	132	101
28	59	225	388	210	154	287	155	110	123	126	125	98
29	58	189	698	200	---	380	144	110	127	160	186	96
30	58	170	601	313	---	571	138	114	165	140	279	94
31	58	---	446	464	---	468	---	110	---	164	284	---
MEAN	63.9	180	282	268	207	720	253	132	271	113	228	178
MAX	72	426	716	571	378	1920	601	324	1520	165	826	368
MIN	58	58	105	182	154	152	138	99	98	84	94	94
IN.	.36	.98	1.59	1.51	1.05	4.05	1.38	.74	1.47	.64	1.28	.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

MEAN	210	231	357	444	513	564	438	305	305	247	281	306
MAX	941	1142	2029	1200	1158	1661	1223	1438	1845	958	1772	1954
(WY)	1976	1990	1954	1978	1962	1990	1975	1978	1970	1975	1975	1998
MIN	63.9	67.8	74.2	96.8	154	86.1	100	91.4	78.0	71.7	75.6	65.9
(WY)	2001	1956	1956	1955	1951	1955	1968	1968	1968	2000	1954	1954

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL MEAN	138		242		350	
HIGHEST ANNUAL MEAN					738	1975
LOWEST ANNUAL MEAN					131	2000
HIGHEST DAILY MEAN	716	Dec 17	1920	Mar 5	23900	Sep 29 1998
LOWEST DAILY MEAN	58	Oct 29	58	Oct 29	58	Oct 29 2000
ANNUAL SEVEN-DAY MINIMUM	58	Oct 28	58	Oct 28	58	Oct 28 2000
MAXIMUM PEAK FLOW			1990	Mar 5	26500	Sep 29 1998
MAXIMUM PEAK STAGE			8.53	Mar 5	25.68	Sep 29 1998
INSTANTANEOUS LOW FLOW			57	Oct 29	57	Oct 29 2000
ANNUAL RUNOFF (INCHES)	9.19		16.02		23.18	
10 PERCENT EXCEEDS	237		464		659	
50 PERCENT EXCEEDS	114		165		200	
90 PERCENT EXCEEDS	65		72		95	

02370500 BIG COLDWATER CREEK NEAR MILTON, FL

LOCATION.--Lat 30°42'30", long 86°58'20", in SW¼ sec.5, T.2 N., R.27 W., Santa Rosa County, Hydrologic Unit 03140104, near center channel on downstream side of bridge on State Highway 191, 3 mi upstream from mouth, and 6.5 mi northeast of Milton.

DRAINAGE AREA.--237 mi^2

PERIOD OF RECORD.--October 1938 to June 1979, October 1979 to September 1980 (gage heights and discharge measurements only), October 1980 to September 1991, October 1997 to August 1999, May 2000 to current year. Monthly discharge only for some periods, published in WSP 1304. Records published as "Coldwater Creek near Milton" prior to October 1956, and "Big Coldwater River near Milton" October 1956 to September 1957.

REVISED RECORDS.--WSP 892: 1939. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 9.10 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 2, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	198	336	428	481	262	415	260	334	455	338	359
2	216	199	320	375	397	262	375	257	275	381	281	380
3	215	200	306	346	355	279	350	253	246	339	249	397
4	213	199	292	326	333	1320	346	250	232	306	235	373
5	211	202	283	315	316	2220	442	245	222	298	228	349
6	211	208	275	306	302	970	441	242	215	317	230	404
7	219	213	270	297	293	588	386	240	214	301	252	359
8	213	223	267	291	287	472	354	238	212	270	292	398
9	207	288	262	286	282	426	335	247	224	256	280	350
10	206	473	259	277	325	426	322	268	259	247	254	358
11	206	321	255	276	395	400	312	256	618	261	249	329
12	205	263	250	290	351	608	303	249	2540	264	325	288
13	204	249	242	291	322	2010	298	239	3080	259	408	268
14	202	256	267	281	307	2170	321	233	1020	253	438	254
15	202	257	343	276	301	1470	401	230	841	240	441	243
16	201	248	326	295	297	1750	453	228	634	e229	384	235
17	201	355	321	346	290	959	424	225	461	e223	402	230
18	201	391	315	348	278	682	352	223	385	e220	370	225
19	201	582	315	380	269	605	320	223	345	232	510	224
20	203	660	336	801	266	741	302	226	318	223	1320	227
21	204	449	315	851	269	858	293	224	304	230	1640	223
22	204	352	334	567	299	672	287	222	320	265	692	218
23	202	316	345	443	296	547	278	226	462	236	454	216
24	200	432	315	388	280	477	279	225	452	225	367	234
25	200	1330	296	356	273	440	416	218	349	258	329	257
26	199	1610	282	333	274	418	411	216	309	262	302	243
27	199	756	277	322	270	391	320	215	287	265	282	228
28	200	491	453	317	265	373	292	217	273	260	270	223
29	199	409	913	311	---	434	276	239	347	259	297	218
30	199	367	846	437	---	550	266	248	476	269	348	215
31	201	---	542	604	---	477	---	264	---	352	327	---
MEAN	205	417	347	379	310	782	346	237	542	273	413	284
MAX	219	1610	913	851	481	2220	453	268	3080	455	1640	404
MIN	199	198	242	276	265	262	266	215	212	220	228	215
IN.	1.00	1.96	1.69	1.85	1.36	3.81	1.63	1.15	2.55	1.33	2.01	1.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2001, BY WATER YEAR (WY)

MEAN	412	450	521	606	641	754	620	485	570	529	542	556
MAX	1325	1278	1383	1422	1159	2240	1330	1209	2526	1404	2476	2435
(WY)	1976	1976	1954	1978	1962	1990	1961	1991	1989	1940	1975	1988
MIN	178	206	207	273	308	253	261	223	216	227	208	195
(WY)	1969	1956	1956	1956	1957	1955	1968	1956	1968	2000	1956	1968

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 1939 - 2001	
ANNUAL MEAN	378		555	
HIGHEST ANNUAL MEAN			861	1976
LOWEST ANNUAL MEAN			307	1968
HIGHEST DAILY MEAN	3080	Jun 13	29700	Mar 17 1990
LOWEST DAILY MEAN	198	Nov 1	158	Jun 10 1956
ANNUAL SEVEN-DAY MINIMUM	199	Oct 26	171	Oct 28 1968
MAXIMUM PEAK FLOW	4410	Jun 13	36900	Mar 17 1990
MAXIMUM PEAK STAGE	9.32	Jun 13	22.98	Mar 17 1990
INSTANTANEOUS LOW FLOW	196	Oct 29	156	Jun 10 1956
ANNUAL RUNOFF (INCHES)	21.67		31.83	
10 PERCENT EXCEEDS	548		890	
50 PERCENT EXCEEDS	292		412	
90 PERCENT EXCEEDS	215		260	

e Estimated

02370700 POND CREEK NEAR MILTON, FL

LOCATION.--Lat 30°40'50", long 87°07'55", in SE¼ sec. 15, T.2 N., R.29 W., Santa Rosa County, Hydrologic Unit 03140104, near center of span on upstream side of bridge on State Highway 191, 0.6 mi downstream from Reader Creek, 6.4 mi northwest of Milton, and 10 mi upstream from mouth.

DRAINAGE AREA.--58.7 mi^2.

PERIOD OF RECORD.--January 1958 to July 1978; August 1978 to October 1983, 1992, 1993, 1997, 1998 (discharge measurements only); November 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 47.45 ft above National Geodetic Vertical Datum of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	28	38	40	40	36	42	35	39	45	59	43
2	30	28	38	39	39	36	41	34	35	37	38	39
3	30	28	37	38	38	40	40	34	33	35	34	42
4	30	28	37	38	37	95	40	34	32	34	33	50
5	29	29	37	38	37	52	41	34	32	35	32	43
6	35	29	37	37	36	41	40	34	32	35	32	42
7	36	30	37	37	36	38	39	33	32	33	36	56
8	31	30	37	38	36	37	38	33	32	33	40	53
9	30	44	37	37	36	39	38	35	34	32	40	45
10	30	48	36	36	51	41	38	46	33	33	39	37
11	30	33	36	38	45	38	37	37	128	44	46	35
12	29	31	36	41	39	77	37	34	269	47	50	34
13	29	31	35	39	38	149	37	33	83	49	49	33
14	29	35	39	38	38	61	37	33	62	36	53	33
15	29	32	40	37	38	150	39	33	46	33	45	32
16	29	33	39	41	37	102	51	33	39	32	38	32
17	29	64	40	41	37	54	41	32	36	32	41	32
18	29	51	38	38	35	52	37	32	34	38	36	32
19	29	75	40	52	35	50	37	32	33	38	46	32
20	29	52	40	85	35	73	36	32	33	33	114	34
21	29	38	38	48	38	60	36	32	34	35	48	32
22	29	35	42	42	46	48	35	32	35	35	37	31
23	29	34	39	40	40	44	35	32	40	32	34	31
24	29	103	37	39	37	43	37	32	35	36	34	32
25	28	258	36	38	37	42	46	32	33	43	33	32
26	28	118	36	37	38	41	38	32	33	43	32	31
27	28	49	37	37	37	40	36	32	32	37	32	31
28	28	43	110	37	36	40	36	32	33	35	38	31
29	28	41	86	37	---	57	35	32	36	37	42	31
30	28	39	47	56	---	60	34	33	54	51	37	30
31	28	---	42	47	---	46	---	35	---	73	36	---
TOTAL	915	1517	1304	1286	1072	1782	1154	1039	1462	1191	1304	1091
MEAN	29.5	50.6	42.1	41.5	38.3	57.5	38.5	33.5	48.7	38.4	42.1	36.4
MAX	36	258	110	85	51	150	51	46	269	73	114	56
MIN	28	28	35	36	35	36	34	32	32	32	32	30
AC-FT	1810	3010	2590	2550	2130	3530	2290	2060	2900	2360	2590	2160
CFSM	.50	.86	.72	.71	.65	.98	.66	.57	.83	.65	.72	.62
IN.	.58	.96	.83	.81	.68	1.13	.73	.66	.93	.75	.83	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

MEAN	69.2	66.1	72.3	80.0	80.9	84.7	82.5	68.5	84.6	70.6	79.9	77.8
MAX	151	158	130	189	143	145	166	149	275	127	224	212
(WY)	1976	1976	1962	1978	1961	1977	1960	1978	1970	1978	1975	1960
MIN	27.6	30.8	41.2	39.0	38.3	48.9	38.5	32.1	35.9	32.7	31.9	28.6
(WY)	1969	1969	1969	1969	2001	1968	2001	2000	1968	2000	1968	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1958 - 2001	
ANNUAL TOTAL	14735		15117			
ANNUAL MEAN	40.3		41.4		78.2	
HIGHEST ANNUAL MEAN					125	1978
LOWEST ANNUAL MEAN					41.4	2001
HIGHEST DAILY MEAN	258	Nov 25	269	Jun 12	2460	Sep 16 1960
LOWEST DAILY MEAN	27	Jul 20	28	Oct 25	26	Sep 10 1968
ANNUAL SEVEN-DAY MINIMUM	28	Jul 18	28	Oct 25	26	Sep 9 1968
MAXIMUM PEAK FLOW			329	Jun 12	4580	Jun 3 1970
MAXIMUM PEAK STAGE			6.58	Jun 12	12.97	Jun 3 1970
INSTANTANEOUS LOW FLOW			28	Oct 25	26	Sep 9 1968
ANNUAL RUNOFF (AC-FT)	29230		29980		56630	
ANNUAL RUNOFF (CFSM)	.69		.71		1.33	
ANNUAL RUNOFF (INCHES)	9.34		9.58		18.09	
10 PERCENT EXCEEDS	50		51		116	
50 PERCENT EXCEEDS	36		37		65	
90 PERCENT EXCEEDS	29		31		39	

02375500 ESCAMBIA RIVER NEAR CENTURY, FL

LOCATION.--Lat 30°57'54", long 87°14'03", in NW¼ sec. 10, T. 5 N., R. 30 W., Santa Rosa County, Hydrologic Unit 03140305, on left bank 16 ft downstream from bridge on State Highway 4, 1.2 mi downstream from Escambia Creek, 1.7 mi east of Century, and 52 mi upstream from mouth.

DRAINAGE AREA.--3,817 mi^2.

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.-- WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 28.34 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Jan. 13, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Some gage-height fluctuation during periods of low flow are attributed to regulation by power plants at Point-A Dam, 85.4 mi and Gnatt Dam, 90.1 mi upstream from the gaging station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1850, 37.8 ft, March 1929, present datum, discharge not determined, from information by U.S. Army Corps of Engineers, Mobile District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	659	455	2080	7590	8540	5560	12000	3420	4690	4070	2830	2690
2	698	456	1920	6770	8240	7530	10900	3160	3940	4670	2470	3210
3	593	455	1790	6550	7100	13200	9850	3000	3070	4610	2380	3820
4	543	458	1660	6580	6290	39800	9400	2840	2710	e4550	2050	4840
5	522	463	1600	6050	5560	53800	12000	2580	2130	4770	1810	6640
6	519	476	1550	5240	5150	50200	16500	2610	1800	5460	1790	6050
7	650	563	1480	4060	4500	45400	19600	2430	1710	5900	2900	5060
8	729	721	1460	3480	3970	49500	20300	2380	1710	4880	4720	7260
9	712	1240	1330	3120	3530	56300	20600	2290	1860	3710	5640	7760
10	667	1790	1330	2800	3770	60100	21500	2180	2430	3210	6640	7560
11	662	1790	1340	2710	4820	54800	21800	2350	5880	2720	7450	6550
12	595	1450	1330	2750	5470	46800	18500	2290	11100	2890	8010	4980
13	597	1210	1390	2610	5020	40600	12500	2180	15200	2660	8620	3880
14	565	1350	1580	2560	4580	35400	10200	2090	18300	2480	8150	3170
15	527	1320	2280	2450	4250	36000	9340	1980	20100	2310	7210	2950
16	512	1220	3070	2720	4070	37300	7940	1900	21400	2020	6100	2500
17	507	1500	3260	3940	3700	36900	7050	1840	21400	1960	4890	2280
18	580	1830	3410	4920	3440	35800	6330	1710	18100	1860	4810	2120
19	700	2730	3300	5220	3240	33300	5540	1770	13300	1800	6290	2090
20	562	2790	3150	8010	2950	32300	5290	1670	8630	1660	8280	2250
21	507	2430	3060	10000	2960	31800	4770	1760	6350	1880	8440	2410
22	493	2110	2760	10100	2980	31700	4510	1920	6550	2490	6520	2270
23	484	1720	2780	8980	2900	31400	4310	1810	6120	3030	4500	2070
24	473	1910	2800	7400	2750	30500	4110	1790	6230	2210	3700	2000
25	469	4450	2560	6530	2770	28900	3980	1850	5100	1850	3050	1970
26	468	4310	2300	5850	3300	28100	4520	1660	4710	1830	2800	1910
27	465	3620	2380	5250	4760	28200	4100	1570	4080	1960	2450	1830
28	461	2970	2640	4550	5590	26700	4150	1640	3760	2120	2420	1730
29	460	2510	5370	3960	---	22600	4220	2100	3700	2130	2970	1650
30	460	2210	7140	5340	---	16500	3970	2130	3530	2120	2880	1590
31	457	---	7730	7680	---	13400	---	3070	---	2440	2580	---
MEAN	558	1750	2640	5347	4507	34210	9993	2193	7653	2976	4689	3570
MAX	729	4450	7730	10100	8540	60100	21800	3420	21400	5900	8620	7760
MIN	457	455	1330	2450	2750	5560	3970	1570	1710	1660	1790	1590
IN.	.17	.51	.80	1.62	1.23	10.33	2.92	.66	2.24	.90	1.42	1.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2001, BY WATER YEAR (WY)

MEAN	2976	3201	5556	8462	10130	12910	11000	5791	4412	4010	3981	3127
MAX	24310	14740	24600	31530	21160	34210	31430	19520	22500	20850	23560	12010
(WY)	1999	1949	1954	1936	1965	2001	1980	1978	1970	1994	1975	1975
MIN	558	1033	1157	1895	2596	1783	2068	890	828	687	775	693
(WY)	2001	1955	1955	1956	1989	1955	2000	2000	2000	2000	2000	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1935 - 2001	
ANNUAL MEAN	1694		6701		6277	
HIGHEST ANNUAL MEAN					11690	1975
LOWEST ANNUAL MEAN					1820	2000
HIGHEST DAILY MEAN	7730	Dec 31	60100	Mar 10	106000	Sep 30 1998
LOWEST DAILY MEAN	455	Nov 1	455	Nov 1	455	Nov 1 2000
ANNUAL SEVEN-DAY MINIMUM	457	Oct 29	457	Oct 29	457	Oct 29 2000
MAXIMUM PEAK FLOW			60800	Mar 10	117000	Sep 30 1998
MAXIMUM PEAK STAGE			20.46	Mar 10	24.35	Mar 18 1990
INSTANTANEOUS LOW FLOW			452	Oct 31	452	Oct 31 2000
ANNUAL RUNOFF (INCHES)	6.04		23.84		22.34	
10 PERCENT EXCEEDS	3410		18200		14300	
50 PERCENT EXCEEDS	1180		3070		3670	
90 PERCENT EXCEEDS	561		707		1340	

e Estimated

02376033 ESCAMBIA RIVER NEAR MOLINO, FL

LOCATION.--Lat 30°40'12", long 87°16'00", in SE¼ sec. 20, T. 2 N., R. 20 W., Escambia County, Hydrologic Unit 03140305, near right bank on downstream side of bridge on State Highway 184, 4.1 mi northeast of Cottage Hill, and 5.5 mi southeast of Molino.

DRAINAGE AREA.--4,147 mi^2.

PERIOD OF RECORD.--April 1960 to September 1981 (gage heights and discharge measurements only). October 1983 to September 1987 (Daily discharges not computed for days with instantaneous gage heights below 1.5 ft), October 1987 to September 1994, October 1996 to current year.

GAGE.--Water-stage and water-current meter recorders. Elevation of gage is National Geodetic Vertical Datum of 1929. Since May 17, 2000, water-current meter.

REMARKS.--No estimated daily discharges. Records fair. Flow generally affected by tide when discharge is less than 5,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	932	627	3110	6310	5680	5100	18800	4380	2580	4500	2700	3670
2	938	663	2780	8550	7950	5530	16600	4070	3440	4280	3010	3610
3	989	681	2460	10400	9900	6410	15100	3670	4050	4490	2950	3990
4	879	649	2270	10700	10600	9790	14000	3370	3780	4850	2720	4280
5	817	672	2040	9220	10100	18600	12900	3070	3070	5060	2480	4760
6	824	581	1910	8640	9070	40600	12300	2730	2470	5220	2160	5520
7	864	863	1870	7880	6790	49100	13200	2620	1880	5260	2200	6530
8	905	863	1810	5440	5560	45300	15800	2510	1680	5480	2870	7200
9	955	1580	1690	4710	5300	41600	18400	2340	1670	5580	4090	6360
10	951	2140	1620	4220	4970	46100	19500	2310	1830	5270	5010	7800
11	933	2340	1540	3620	4780	53700	20000	2180	2870	4950	5670	10200
12	938	2380	1570	3340	4880	54800	20600	2180	5050	4550	6840	11100
13	838	2110	1470	3310	5460	49700	20700	2270	7650	3910	9710	10100
14	838	1970	1810	3180	5620	41200	19600	2050	11300	3490	11500	6840
15	780	1960	2100	3020	5470	35200	17300	1930	15400	3050	12000	4880
16	743	1980	2600	3100	5320	31200	15000	1800	18900	2770	11700	4090
17	751	2310	3390	3110	4930	30500	12900	1730	20900	2360	10800	3310
18	724	2550	3590	3650	4850	30500	10900	1660	21900	2240	9430	2780
19	806	3110	3970	4600	4500	30100	9130	1530	22100	2140	7090	2560
20	914	3680	4010	5330	4170	29400	6840	1620	21200	2060	6770	2450
21	845	3880	3840	5970	3960	28000	5530	1550	18800	1950	7360	2480
22	723	3570	3850	9330	3900	26900	5060	1590	15100	2230	9340	2670
23	717	3110	3740	11100	3940	26200	4910	1670	11500	2540	10300	2590
24	667	2890	3540	12600	3780	25900	4650	1680	9640	3030	9840	2460
25	623	4140	3470	12500	3720	25600	4730	1620	7420	3090	6050	2410
26	636	4970	3200	11200	3600	25000	4910	1660	6150	2780	4570	2240
27	659	5270	2970	9780	3760	24200	4640	1480	5580	2430	3740	2100
28	656	5180	3570	8070	4350	23700	4530	1390	5160	2490	3300	2010
29	670	4540	4000	5990	---	24000	4380	1490	4790	2640	3380	1970
30	663	3740	4590	5100	---	23300	4400	1840	4590	2680	3480	1840
31	701	---	5450	5040	---	21300	---	2120	---	2670	3600	---
MEAN	803	2500	2898	6742	5604	29950	11910	2197	8748	3550	6021	4493
MAX	989	5270	5450	12600	10600	54800	20700	4380	22100	5580	12000	11100
MIN	623	581	1470	3020	3600	5100	4380	1390	1670	1950	2160	1840
IN.	.22	.67	.81	1.87	1.41	8.33	3.21	.61	2.35	.99	1.67	1.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

MEAN	4836	4267	5927	9946	10460	16130	8264	5114	5739	6504	3633	3641
MAX	32570	8956	18920	24210	19080	37410	13870	14530	19160	22110	9523	9067
(WY)	1999	1993	1993	1998	1992	1990	1989	1991	1989	1994	1994	1988
MIN	803	1961	2212	3126	2650	4462	2785	1444	1357	1168	1266	1335
(WY)	2001	1991	1991	1989	1989	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL MEAN	2259		7133		7019	
HIGHEST ANNUAL MEAN					10680	1990
LOWEST ANNUAL MEAN					2433	2000
HIGHEST DAILY MEAN	6950	Mar 30	54800	Mar 12	111000	Mar 22 1990
LOWEST DAILY MEAN	581	Nov 6	581	Nov 6	581	Nov 6 2000
ANNUAL SEVEN-DAY MINIMUM	653	Oct 24	653	Oct 24	653	Oct 24 2000
MAXIMUM PEAK FLOW			55800	Mar 12	113000	Mar 23 1990
MAXIMUM PEAK STAGE			11.63	Mar 12	15.72	Mar 23 1990
INSTANTANEOUS LOW FLOW			581	Nov 6	581	Nov 6 2000
ANNUAL RUNOFF (INCHES)	7.42		23.35		23.00	
10 PERCENT EXCEEDS	4120		18800		16200	
50 PERCENT EXCEEDS	1810		3940		3980	
90 PERCENT EXCEEDS	938		946		1870	

02376100 BAYOU MARCUS CREEK NEAR PENSACOLA, FL

LOCATION.--Lat 30°26'53", long 87°17'26", in SE¼ sec.13, T.2 S., R.30 W., Escambia County, Hydrologic Unit 03140107, near mid channel on downstream side of eastbound bridge on U.S. Highway 90, 0.3 mi upstream from Turner's Creek, 4.5 mi upstream, and 5.3 mi northwest of City Hall in Pensacola.

DRAINAGE AREA.--10.8 mi^2.

PERIOD OF RECORD.--February 1958 to March 1960, October 1987 to September 1991, October 1998 to current year.

REVISED RECORDS.--WDR FL-88-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 11.21 ft above National Geodetic Vertical Datum of 1929. Feb. 12, 1958 to Mar. 17, 1960, water-stage recorder 100 ft upstream at present datum.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e9.7	7.7	12	12	11	11	14	8.7	15	12	55	18
2	e9.6	7.7	12	11	11	11	12	8.4	10	14	27	16
3	e9.5	7.8	12	11	10	13	12	8.0	7.9	12	17	23
4	e9.4	7.7	11	11	9.9	17	12	7.7	6.5	9.9	13	26
5	e10	9.0	12	11	9.8	13	12	7.4	6.1	12	12	17
6	11	13	12	11	9.9	11	11	6.9	5.7	12	12	14
7	13	11	11	11	10	9.8	11	6.4	5.9	10	14	12
8	11	12	12	12	12	9.4	11	6.6	6.6	9.3	30	15
9	e10	37	12	11	12	19	11	7.1	9.2	10	22	15
10	9.8	20	11	10	16	22	10	6.9	12	18	15	15
11	e9.6	13	11	12	12	15	10	6.7	63	13	17	15
12	9.4	11	12	14	11	43	9.7	6.5	42	26	18	19
13	9.0	13	10	12	11	42	9.3	6.4	20	47	15	15
14	9.1	15	18	11	10	23	9.0	5.9	16	19	42	12
15	8.9	11	15	11	10	150	9.2	5.8	13	12	26	11
16	8.7	18	14	14	10	33	10	5.7	11	11	17	9.8
17	8.7	26	12	13	11	20	9.4	5.5	9.5	9.2	16	9.5
18	8.6	20	11	12	8.6	22	8.5	5.3	8.4	8.3	19	9.4
19	8.7	23	16	33	8.6	19	8.3	5.7	8.3	7.7	41	9.9
20	8.7	17	12	28	9.3	21	8.7	6.3	7.7	7.6	34	11
21	8.5	13	13	16	24	17	8.8	5.7	9.2	13	20	10
22	9.2	12	13	13	30	16	8.9	6.0	14	15	15	9.3
23	8.9	12	12	12	16	14	8.8	5.3	15	10	13	8.4
24	8.4	68	11	11	13	14	11	5.2	11	7.9	12	9.8
25	7.8	56	11	11	13	14	14	5.2	8.8	36	11	10
26	7.6	22	10	10	14	13	10	4.9	8.4	24	11	8.8
27	7.7	17	13	11	12	12	8.3	4.9	7.8	18	11	8.9
28	7.7	15	35	11	11	13	8.3	5.4	8.3	22	11	8.6
29	7.7	15	20	11	---	23	8.5	6.7	8.9	14	11	8.5
30	7.7	13	14	18	---	21	8.4	6.7	10	11	11	8.2
31	7.8	---	12	13	---	16	---	8.8	---	109	15	---
MEAN	9.08	18.1	13.3	13.2	12.4	22.5	10.1	6.41	12.8	18.1	19.5	12.8
MAX	13	68	35	33	30	150	14	8.8	63	109	55	26
MIN	7.6	7.7	10	10	8.6	9.4	8.3	4.9	5.7	7.6	11	8.2
IN.	.97	1.87	1.42	1.41	1.19	2.40	1.04	.68	1.33	1.93	2.08	1.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

MEAN	31.2	29.3	27.1	29.6	28.3	33.0	27.2	26.4	28.2	30.8	29.0	31.0
MAX	49.9	48.6	39.5	40.8	51.5	46.3	49.2	43.6	46.9	55.4	50.1	61.8
(WY)	1959	1959	1959	1959	1988	1958	1959	1991	1989	1958	1988	1988
MIN	9.08	14.9	13.3	13.2	12.4	13.4	10.1	6.41	11.5	7.95	9.78	12.8
(WY)	2001	1991	2001	2001	2001	2000	2001	2001	2000	2000	2000	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1958 - 2001	
ANNUAL MEAN	13.6		14.0		27.6	
HIGHEST ANNUAL MEAN					41.8	1959
LOWEST ANNUAL MEAN					14.0	2001
HIGHEST DAILY MEAN	310	Sep 8	150	Mar 15	310	Sep 8 2000
LOWEST DAILY MEAN	4.7	Jul 19	4.9	May 26	4.7	Jul 19 2000
ANNUAL SEVEN-DAY MINIMUM	5.0	Jun 8	5.3	May 22	5.0	Jun 8 2000
MAXIMUM PEAK FLOW			260	Mar 15	701	Mar 16 1990
MAXIMUM PEAK STAGE			4.36	Mar 15	5.51	Mar 16 1990
INSTANTANEOUS LOW FLOW			4.4	May 26	4.1	Jul 19 2000
ANNUAL RUNOFF (INCHES)	17.10		17.64		34.66	
10 PERCENT EXCEEDS	20		22		47	
50 PERCENT EXCEEDS	11		11		26	
90 PERCENT EXCEEDS	6.4		7.7		11	

e Estimated

02376115 ELEVENMILE CREEK NEAR PENSACOLA, FL

LOCATION.--Lat 30°29'53", long 87°20'09", in SE¼ sec. 22, T. 1 S., R. 31 W., Escambia County, Hydrologic Unit 03140107, near left bank on downstream side of bridge on U.S. Highway 90, 1.8 mi upstream from Eightmile Creek, 4.0 mi upstream from mouth, and 5.6 mi northwest of Pensacola High School in West Pensacola.

DRAINAGE AREA.--27.8 mi^2.

PERIOD OF RECORD.--October 1987 to current year.

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

REMARKS.--No estimated daily discharges. Records good. Discharges are increased by about 30 ft^3/s from a paper mill located about 10 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	51	61	65	65	70	68	49	78	66	329	66
2	50	52	60	61	60	70	63	52	60	68	118	65
3	52	51	59	61	60	98	62	51	51	65	87	76
4	54	54	59	59	57	219	60	50	49	75	78	93
5	53	55	58	60	56	93	60	50	49	92	68	72
6	74	59	57	56	57	71	63	51	45	73	64	69
7	79	58	56	58	56	70	63	49	49	62	116	66
8	59	62	57	59	55	68	62	45	64	58	110	64
9	56	150	57	57	56	80	58	48	62	58	89	66
10	47	85	56	56	72	84	61	51	54	91	73	70
11	46	62	60	62	63	73	59	47	609	73	169	69
12	45	60	55	68	63	226	59	48	351	146	192	78
13	46	64	55	62	62	344	59	46	538	228	132	68
14	50	72	66	60	63	119	57	46	447	83	219	62
15	49	61	61	59	70	930	57	47	135	69	373	60
16	50	72	62	69	67	249	55	47	95	61	127	59
17	53	122	56	70	59	137	53	46	79	59	104	59
18	51	103	53	69	55	133	54	46	68	64	154	59
19	51	134	66	109	53	107	52	48	67	66	307	60
20	53	94	59	159	54	130	54	50	64	57	222	60
21	52	80	59	84	395	101	55	47	69	63	110	57
22	54	73	64	69	396	89	54	47	75	72	83	57
23	53	64	58	67	129	76	52	47	79	58	77	56
24	52	190	59	63	95	74	55	48	63	73	73	56
25	49	341	56	59	90	72	58	46	60	382	69	56
26	49	103	53	59	84	68	49	46	61	268	64	54
27	49	80	58	59	77	65	49	47	58	129	63	53
28	52	73	244	60	75	65	52	48	59	102	65	52
29	50	66	139	58	---	113	52	47	60	88	65	54
30	51	63	85	83	---	97	49	50	70	78	64	53
31	51	---	71	73	---	75	---	64	---	481	68	---
MEAN	52.6	88.5	68.4	68.2	90.9	138	56.8	48.5	122	110	127	63.0
MAX	79	341	244	159	396	930	68	64	609	481	373	93
MIN	45	51	53	56	53	65	49	45	45	57	63	52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

MEAN	86.6	99.9	89.4	115	105	143	93.5	78.7	105	112	95.5	114
MAX	223	311	199	239	153	332	246	168	323	252	183	457
(WY)	1996	1996	1996	1998	1997	1998	1996	1991	1989	1994	1995	1998
MIN	52.5	47.4	53.6	67.5	56.4	71.5	56.8	48.5	57.6	50.4	58.8	53.1
(WY)	1991	1991	1991	1989	2000	2000	2001	2001	1988	2000	1990	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL MEAN	66.7		86.1		103	
HIGHEST ANNUAL MEAN					160	1998
LOWEST ANNUAL MEAN					66.4	2000
HIGHEST DAILY MEAN	609	Sep 8	930	Mar 15	8000	Sep 28 1998
LOWEST DAILY MEAN	44	Jul 26	45	Oct 12	33	Aug 24 1989
ANNUAL SEVEN-DAY MINIMUM	46	Jul 23	47	May 12	42	Nov 2 1990
MAXIMUM PEAK FLOW			1510	Mar 15	12800	Sep 28 1998
MAXIMUM PEAK STAGE			9.71	Mar 15	16.94	Sep 28 1998
INSTANTANEOUS LOW FLOW			41	May 14	29	Aug 25 1989
10 PERCENT EXCEEDS	84		129		142	
50 PERCENT EXCEEDS	56		62		72	
90 PERCENT EXCEEDS	49		49		56	

02376293 BRUSHY CREEK NEAR BRATT, FL

LOCATION.--Lat 30°58'42", long 87°31'41", in SE¼ sec. 3, T. 5 N., R. 5 E., Escambia County, Hydrologic Unit 03140106, at bridge on Nokomis Road, 0.8 mi downstream from Rocky Creek, 1.4 mi below Alabama-Florida State Line, 2.1 mi upstream from Reedy Creek, and 6.0 mi west of Bratt.

DRAINAGE AREA.--26.5 mi^2.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge measured, 3,070 ft^3/s, Sept. 29, 1998, gage height, 184.11 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	17	19	24	18	28	16	15	23	26	27
2	12	12	17	18	21	18	26	16	13	20	21	26
3	12	12	16	18	20	e490	26	16	11	26	19	32
4	12	12	16	18	18	e210	62	16	10	43	17	57
5	12	12	16	18	18	e108	132	15	11	48	18	30
6	12	13	16	17	18	e48	44	14	11	83	22	24
7	12	20	16	16	18	e45	33	14	18	32	21	23
8	12	17	16	17	18	e41	28	15	26	23	104	28
9	12	28	16	17	18	e49	26	19	26	20	103	36
10	12	18	16	17	30	e54	25	25	17	20	36	36
11	12	14	16	17	23	e48	24	17	231	24	61	33
12	12	13	16	18	20	e88	23	15	177	25	131	27
13	12	14	16	17	19	e320	26	14	46	45	92	22
14	12	18	44	16	19	89	51	13	31	26	58	20
15	12	15	27	18	19	507	42	13	27	20	79	19
16	12	18	22	28	18	181	42	13	23	18	42	18
17	12	28	22	31	18	71	31	12	20	18	38	18
18	12	37	20	24	17	51	25	12	19	18	30	20
19	12	50	24	40	17	44	23	12	20	18	28	20
20	12	23	21	74	17	52	21	11	21	17	32	20
21	12	19	20	26	23	50	20	11	20	23	26	19
22	12	18	23	23	24	41	18	12	48	25	24	18
23	12	17	19	21	20	36	18	12	29	18	22	17
24	12	48	18	20	19	32	19	12	21	17	21	21
25	12	79	18	19	18	34	20	12	18	19	20	20
26	12	23	17	18	18	31	19	11	18	52	19	19
27	12	20	18	18	18	30	18	11	18	56	19	18
28	12	19	66	18	18	38	17	11	21	41	25	18
29	11	18	51	19	---	49	16	13	70	32	23	17
30	12	18	24	65	---	37	16	12	29	24	22	16
31	12	---	21	29	---	32	---	14	---	24	23	---
MEAN	12.0	22.2	22.1	23.7	19.6	94.9	30.6	13.8	35.5	29.0	39.4	24.0
MAX	12	79	66	74	30	507	132	25	231	83	131	57
MIN	11	12	16	16	17	18	16	11	10	17	17	16
IN.	.52	.93	.96	1.03	.77	4.13	1.29	.60	1.50	1.26	1.72	1.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	38.3	35.7	31.3	36.3	27.0	68.9	28.0	19.4	44.5	36.1	26.9	21.6
MAX	74.6	59.7	43.3	60.1	35.8	94.9	30.6	28.6	82.6	64.1	39.4	26.7
(WY)	1999	1999	1999	1999	1999	2001	2001	1999	1999	1999	2001	1999
MIN	12.0	22.2	22.1	23.7	19.6	20.3	23.0	13.8	15.5	15.2	13.1	14.2
(WY)	2001	2001	2001	2001	2001	2000	2000	2001	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1999 - 2001	
ANNUAL MEAN	18.6		30.7		34.6	
HIGHEST ANNUAL MEAN					52.3	1999
LOWEST ANNUAL MEAN					20.8	2000
HIGHEST DAILY MEAN	136	Feb 14	507	Mar 15	871	Mar 14 1999
LOWEST DAILY MEAN	11	Oct 29	10	Jun 4	10	Jun 4 2001
ANNUAL SEVEN-DAY MINIMUM	12	Oct 23	12	May 20	12	May 20 2001
MAXIMUM PEAK FLOW			1270	Mar 3	2060	Jun 26 1999
MAXIMUM PEAK STAGE			182.52	Mar 3	183.39	Jun 26 1999
INSTANTANEOUS LOW FLOW			10	May 27	10	May 27 2001
ANNUAL RUNOFF (INCHES)	9.57		15.72		17.73	
10 PERCENT EXCEEDS	24		49		51	
50 PERCENT EXCEEDS	16		19		23	
90 PERCENT EXCEEDS	12		12		13	

e Estimated

02376500 PERDIDO RIVER AT BARRINEAU PARK, FL

LOCATION.--Lat 30°41'25", long 87°26'25", in NW¼ sec. 23, T. 4 S., R. 6 E., Baldwin County, Ala., Hydrologic Unit 03140106, on right bank 25 ft downstream from bridge on county road, 1,000 ft downstream from Alligator Creek, 0.5 mi southwest of Barrineau Park, and 27 mi upstream from mouth.

DRAINAGE AREA.--394 mi^2.

PERIOD OF RECORD.--June 1941 to current year.

REVISED RECORDS.--WSP 1384: Drainage area. WRD FL-76-4: 1973-75 (M).

GAGE.--Water-stage recorder. Datum of gage is 25.77 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 22, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 15,1929, reached a stage of 25.7 ft present datum, from information by local resident (discharge not determined).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	174	490	668	676	324	556	259	248	298	624	492
2	198	175	440	609	616	327	511	255	241	272	539	457
3	195	175	405	538	567	417	475	254	223	273	468	479
4	192	176	381	479	504	2290	457	254	208	313	378	668
5	192	180	364	442	436	3800	446	250	200	332	329	756
6	196	188	351	417	386	4770	499	245	195	330	306	741
7	223	225	343	397	355	2670	439	238	202	327	310	681
8	210	274	337	389	334	1280	401	233	209	285	325	579
9	200	346	333	379	322	878	376	232	240	258	368	683
10	196	381	329	368	401	714	360	245	266	254	493	826
11	196	345	324	364	477	606	348	257	e650	312	579	816
12	194	293	319	372	470	1060	337	252	e1420	497	1470	723
13	192	270	313	368	429	2760	327	238	1400	731	1660	600
14	190	304	368	359	408	2320	336	227	1010	532	1340	484
15	189	334	497	356	394	2730	422	220	762	389	1380	406
16	187	316	546	405	375	3330	478	216	555	324	902	362
17	186	445	517	495	349	3100	439	213	431	294	769	335
18	185	536	469	570	325	2320	394	210	356	276	690	317
19	185	913	474	636	307	1370	361	208	314	269	985	308
20	184	1030	486	1040	296	1020	343	208	303	257	1240	306
21	184	814	473	1000	310	888	328	205	295	289	767	301
22	184	666	490	846	479	781	316	210	290	344	572	291
23	182	559	490	719	470	695	303	218	371	351	471	285
24	180	660	462	594	417	626	298	209	372	303	417	359
25	177	1470	432	503	395	577	314	204	306	330	380	421
26	177	1270	407	437	410	550	307	202	278	393	350	375
27	177	917	407	395	376	525	301	201	261	515	331	332
28	176	770	831	371	343	500	288	200	256	634	331	306
29	175	662	1080	359	---	552	276	204	259	587	457	290
30	175	568	919	571	---	622	266	209	315	632	443	278
31	174	---	765	726	---	596	---	249	---	560	441	---
MEAN	189	515	479	522	415	1452	377	227	415	379	649	475
MAX	223	1470	1080	1040	676	4770	556	259	1420	731	1660	826
MIN	174	174	313	356	296	324	266	200	195	254	306	278
IN.	.55	1.46	1.40	1.53	1.10	4.25	1.07	.66	1.17	1.11	1.90	1.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2001, BY WATER YEAR (WY)

MEAN	513	614	715	948	967	1130	1010	706	664	696	706	735
MAX	2519	1865	2084	2636	2364	2791	3179	2402	2394	2023	2938	3460
(WY)	1996	1990	1954	1998	1990	1990	1983	1991	1989	1997	1975	1998
MIN	189	246	302	339	343	269	283	227	238	210	217	213
(WY)	2001	1956	1955	1957	1957	1955	1968	2001	1968	2000	2000	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL MEAN	322		509		782	
HIGHEST ANNUAL MEAN					1372	1998
LOWEST ANNUAL MEAN					339	2000
HIGHEST DAILY MEAN	1470	Nov 25	4770	Mar 6	40800	Sep 29 1998
LOWEST DAILY MEAN	171	Aug 27	174	Oct 31	171	Aug 27 2000
ANNUAL SEVEN-DAY MINIMUM	175	Oct 28	175	Oct 28	175	Oct 28 2000
MAXIMUM PEAK FLOW			5300	Mar 6	44000	Sep 29 1998
MAXIMUM PEAK STAGE			12.89	Mar 6	26.30	Sep 29 1998
INSTANTANEOUS LOW FLOW			173	Oct 30	171	Aug 27 2000
ANNUAL RUNOFF (INCHES)	11.14		17.54		26.97	
10 PERCENT EXCEEDS	483		837		1420	
50 PERCENT EXCEEDS	300		368		508	
90 PERCENT EXCEEDS	185		200		294	

e Estimated

ELEVATION OF LAKES

304356082321700 JONES CREEK POND NEAR FARGO, GA

LOCATION.--Lat 30°43'56", long 82°32'17", Clinch County, Hydrologic Unit 03110201, attached to wooden post of walkway on upstream side of dam on Williamsburg Road in Superior Forest (private property), and 3.5 mi northeast of Fargo.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--February 1999 to current year.

GAGE.--Nonrecording gage.

REMARKS.--Records good. Weekly staff gage readings furnished by Suwannee Forest employees.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed gage height, 6.04 ft, June 25, 2001; minimum observed gage height, 3.06 ft, July 10, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum observed gage height, 6.04 ft, June 25; minimum observed gage height, 4.28 ft, June 4.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	5.04	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	5.52	---	---	5.76	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	5.22	---	4.96	---	---	---	5.48	---	4.28	---	---	5.10
5	---	---	---	---	---	5.08	---	---	---	---	---	---
6	---	5.00	4.94	---	---	---	---	---	---	---	5.54	---
7	---	---	---	---	---	---	---	4.88	---	---	---	---
8	---	---	---	---	---	---	---	4.86	---	---	---	---
9	5.18	---	---	5.16	---	---	5.40	---	---	5.70	---	---
10	---	---	---	---	---	---	---	---	---	---	---	5.06
11	---	---	4.94	---	---	---	---	---	4.38	---	---	---
12	---	---	---	---	5.08	5.08	---	---	---	---	---	---
13	---	4.94	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	4.74	---	---	---	---
15	---	---	---	5.16	---	---	---	---	---	---	---	---
16	5.12	---	---	---	5.06	---	5.26	---	---	5.58	5.42	---
17	5.12	---	---	---	---	---	---	---	---	---	---	---
18	---	---	4.90	---	---	---	---	---	5.48	---	---	5.00
19	---	---	---	---	---	5.32	---	---	---	---	---	---
20	---	4.94	---	---	---	---	---	---	---	---	5.34	---
21	---	---	---	---	5.08	---	---	4.56	---	---	---	---
22	---	---	---	5.12	---	---	---	---	---	---	---	---
23	5.08	---	---	---	---	---	5.08	---	---	5.34	---	---
24	---	---	---	---	---	---	---	---	---	---	---	5.04
25	---	---	---	---	---	---	---	---	6.04	---	---	---
26	---	---	4.86	---	---	5.48	---	---	---	5.38	---	---
27	---	5.00	---	---	---	---	---	---	---	---	5.18	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	5.12	---	---	---	4.32	---	---	---	---
30	5.04	---	---	---	---	---	5.00	---	---	5.34	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

304553082295000 GATOR CREEK DAM NEAR FARGO, GA

LOCATION.--Lat 30°45'53", long 82°29'50", Clinch County, Hydrologic Unit 03110201, attached to metal post on upstream side of concrete dam abutment on River Road in Superior Forest (private property), and 6.5 mi northeast of Fargo.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--February 1999 to current year.

GAGE.--Nonrecording gage.

REMARKS.--Records good. Weekly staff gage readings furnished by Suwannee Forest employees.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed gage height, 6.34 ft, June 25, 2001, July 9, 2001; minimum observed gage height, 3.84 ft, July 10, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum observed gage height, 6.34 ft, June 25, July 9; minimum observed gage height, 4.16 ft, Dec. 26.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	4.44	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	6.00	---	---	6.30	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	4.84	---	4.26	---	---	---	6.00	---	4.98	---	---	5.76
5	---	---	---	---	---	4.56	---	---	---	---	---	---
6	---	4.30	4.24	---	---	---	---	---	---	---	6.16	---
7	---	---	---	---	---	---	---	5.50	---	---	---	---
8	---	---	---	---	---	---	---	5.50	---	---	---	---
9	4.78	---	---	4.40	---	---	5.96	---	---	6.34	---	---
10	---	---	---	---	---	---	---	---	---	---	---	5.68
11	---	---	4.24	---	---	---	---	---	5.30	---	---	---
12	---	---	---	---	4.50	4.54	---	---	---	---	---	---
13	---	4.20	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	5.40	---	---	---	---
15	---	---	---	4.38	---	---	---	---	---	---	---	---
16	4.64	---	---	---	4.40	---	5.82	---	---	6.10	6.00	---
17	4.60	---	---	---	---	---	---	---	---	---	---	---
18	---	---	4.22	---	---	---	---	---	5.92	---	---	5.66
19	---	---	---	---	---	5.70	---	---	---	---	---	---
20	---	4.24	---	---	---	---	---	---	---	---	5.90	---
21	---	---	---	---	4.44	---	---	5.20	---	---	---	---
22	---	---	---	4.40	---	---	---	---	---	---	---	---
23	4.52	---	---	---	---	---	5.66	---	---	5.90	---	---
24	---	---	---	---	---	---	---	---	---	---	---	5.64
25	---	---	---	---	---	---	---	---	6.34	---	---	---
26	---	---	4.16	---	---	5.78	---	---	---	5.98	---	---
27	---	4.30	---	---	---	---	---	---	---	---	5.78	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	4.34	---	---	---	4.98	---	---	---	---
30	4.42	---	---	---	---	---	5.62	---	---	5.90	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

02329200 LAKE JACKSON NEAR TALLAHASSEE, FL

LOCATION.--Lat 30°31'43", long 84°21'30", in SW¼ sec. 32, T. 2 N., R. 1 W., Leon County, Hydrologic Unit 03120003, on southwest side of lake, east of U.S. Highway 27, and 6.0 mi northwest of Tallahassee.

SURFACE AREA.--4,001 acres (6.25 mi^2), at elevation 87.00 ft National Geodetic Vertical Datum of 1929.

DRAINAGE AREA.--43.2 mi^2.

PERIOD OF RECORD.--March 1950 to January 1953, March 1954 to August 1956, September 1956 to August 1958 (fragmentary), September 1958 to May 1990. June 1990 to current year (fragmentary). Records of elevation prior to October 1960 are available in file of the Geological Survey.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.-Lake has no surface outlet. Some outflow from lake through sinkhole to ground water.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 96.16 ft, June 18, 1966 (from recorded range in stage); minimum observed, 75.68 ft, Jan. 4, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 81.46 ft, Sept. 6; minimum observed, below 76.20 ft, elevations unknown, many days from October to March.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	<76.20	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	77.38	---	---	---	---	---
3	---	<76.20	---	76.35	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	76.35	<76.20	---	---	---	---	---	---
6	76.58	---	---	---	---	---	---	---	---	---	---	81.46
7	---	---	---	---	---	---	---	---	76.31	---	---	---
8	---	---	<76.20	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	<76.20	---	<76.20	---	---	---	---	---	---	81.39	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	76.30	---	---	---	---	---	---	---
13	<76.20	---	---	---	---	---	---	---	77.28	---	---	---
14	---	---	---	---	---	---	---	76.65	---	---	---	---
15	---	---	<76.20	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	<76.20	---	76.31	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	81.30
19	---	---	---	---	---	---	---	---	---	---	---	---
20	<76.20	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	<76.20	---	---	---	---	---	---	---	81.40	---
23	---	---	---	---	<76.20	---	---	---	---	---	---	---
24	---	<76.20	---	<76.20	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	76.50	---	---	---	---
26	---	---	---	---	---	---	---	---	79.08	---	---	---
27	<76.20	---	---	---	---	77.20	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	<76.20	<76.20	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	76.90	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

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

02329900 LAKE TALQUIN NEAR BLOXHAM, FL

LOCATION.--Lat 30°23'15", long 84°38'45", in SW¼ sec. 16, T.1 S., R.4 W., Leon County, Hydrologic Unit 03120003, at left upstream end of C.H. Corn Hydroelectric Dam on Ochlockonee River, 1.0 mi northwest of Bloxham, and 3.5 mi downstream from Oklawaha Creek.

SURFACE AREA.--6,850 acres (10.7 mi^2), at elevation 60.0 ft National Geodetic Vertical Datum, from data provided by Florida Power Corporation.

DRAINAGE AREA.--1,700 mi^2.

PERIOD OF RECORD.--January 1930 to September 1950 (month-end contents only, published only in WSP 1304); October 1951 to September 1960 (month-end elevations and contents); October 1960 to September 1982, March 1985 to September 30 1992 (month-end elevations, contents and daily elevations); October 1,1992 to current year, daily elevations.

REVISED RECORDS.--WSP 1905, WRD FL-76-4: Drainage area.

GAGE.--Nonrecording gage and water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway is equipped with seven taintor gates, each 16ft high by 25 ft wide. Storage began in June 1929; water in lake first reached minimum operating level January 1930. Usable capacity, 69,800 acre-ft between elevations, 60.0 ft, minimum operating level, and 68.5 ft, top of closed taintor gates. Dead storage is unknown. Contents are available by request.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 99,400 acre-ft, Sept. 22, 1969, elevation, 71.16 ft; maximum instantaneous elevation, 71.60 ft, Sept. 22, 1969; minimum daily elevation after January 1930, 48.70 ft, Oct. 22,23, 1957 (earth embankment breached).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 73,900 acre-ft, Dec. 29, elevation, 68.91 ft; minimum daily contents, 65,600 acre-ft, Aug. 8, elevation, 68.06 ft.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.48	68.50	68.44	68.75	68.72	68.69	68.44	68.52	68.20	68.65	68.78	68.55
2	68.49	68.49	68.48	68.71	68.66	68.70	68.55	68.54	68.20	68.71	68.68	68.66
3	68.51	68.48	68.53	68.68	68.64	68.69	68.49	68.56	68.20	68.66	68.40	68.71
4	68.50	68.48	68.55	68.67	68.62	68.77	68.53	68.56	68.21	68.60	68.35	68.72
5	68.47	68.47	68.55	68.67	68.63	68.71	68.60	68.56	68.20	68.43	68.25	68.69
6	68.46	68.46	68.58	68.69	68.69	68.66	68.68	68.57	68.19	68.41	68.11	68.48
7	68.53	68.45	68.60	68.69	68.71	68.65	68.52	68.58	68.17	68.55	68.22	68.57
8	68.52	68.44	68.64	68.68	68.71	68.71	68.45	68.56	68.18	68.67	68.06	68.51
9	68.50	68.43	68.67	68.66	68.71	68.73	68.59	68.53	68.23	68.66	68.06	68.55
10	68.44	68.44	68.71	68.64	68.72	68.77	68.59	68.51	68.32	68.49	68.17	68.55
11	68.44	68.43	68.64	68.65	68.73	68.70	68.52	68.49	68.53	68.51	68.20	68.51
12	68.47	68.42	68.53	68.69	68.75	68.71	68.45	68.48	68.62	68.46	68.34	68.51
13	68.50	68.41	68.48	68.72	68.71	68.86	68.50	68.48	68.17	68.43	68.56	68.48
14	68.52	68.43	68.48	68.74	68.71	68.86	68.56	68.47	68.17	68.38	68.59	68.46
15	68.53	68.43	68.58	68.75	68.71	68.79	68.51	68.43	68.33	68.34	68.56	68.46
16	68.54	68.43	68.62	68.76	68.71	68.60	68.48	68.40	68.23	68.44	68.48	68.43
17	68.55	68.47	68.66	68.71	68.71	68.44	68.43	68.36	68.19	68.54	68.51	68.42
18	68.56	68.51	68.73	68.66	68.74	68.49	68.46	68.34	68.34	68.61	68.55	68.45
19	68.57	68.55	68.74	68.60	68.74	68.51	68.43	68.31	68.50	68.68	68.54	68.48
20	68.58	68.58	68.74	68.68	68.72	68.59	68.42	68.32	68.61	68.76	68.49	68.51
21	68.58	68.60	68.68	68.77	68.72	68.68	68.45	68.34	68.63	68.77	68.43	68.54
22	68.58	68.63	68.64	68.79	68.71	68.64	68.49	68.33	68.63	68.60	68.50	68.55
23	68.58	68.66	68.61	68.76	68.72	68.51	68.53	68.34	68.61	68.51	68.55	68.57
24	68.56	68.68	68.57	68.73	68.72	68.45	68.54	68.31	68.50	68.48	68.52	68.59
25	68.55	68.61	68.61	68.75	68.70	68.53	68.57	68.27	68.49	68.51	68.50	68.57
26	68.54	68.52	68.65	68.76	68.70	68.53	68.57	68.26	68.45	68.53	68.50	68.57
27	68.53	68.51	68.67	68.76	68.69	68.52	68.50	68.21	68.41	68.59	68.47	68.55
28	68.52	68.49	68.80	68.77	68.65	68.48	68.43	68.18	68.37	68.62	68.46	68.51
29	68.51	68.47	68.91	68.76	---	68.43	68.46	68.17	68.35	68.63	68.44	68.49
30	68.51	68.44	68.84	68.78	---	68.42	68.51	68.19	68.49	68.64	68.45	68.42
31	68.50	---	68.80	68.77	---	68.42	---	68.19	---	68.67	68.48	---
MEAN	68.52	68.50	68.64	68.72	68.70	68.62	68.51	68.40	68.36	68.57	68.43	68.54
MAX	68.58	68.68	68.91	68.79	68.75	68.86	68.68	68.58	68.63	68.77	68.78	68.72
MIN	68.44	68.41	68.44	68.60	68.62	68.42	68.42	68.17	68.17	68.34	68.06	68.42

CAL YR 2000 MEAN 68.36 MAX 68.91 MIN 67.44
WTR YR 2001 MEAN 68.54 MAX 68.91 MIN 68.06

WELL DESCRIPTIONS AND GROUND-WATER DATA

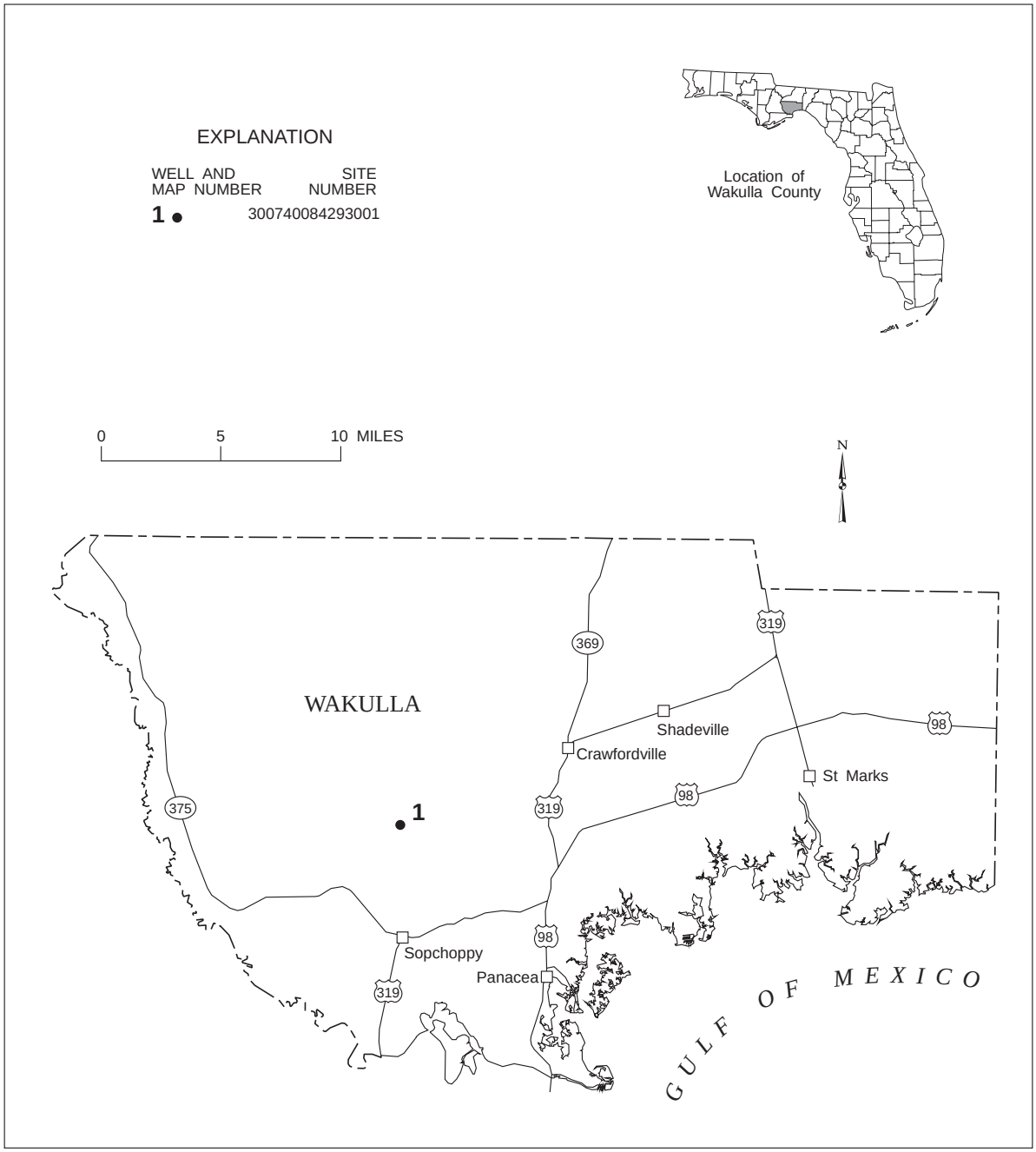


Figure 13. Location of wells in Wakulla County.

WELL NUMBER.--300740084293001. USGS Observation Well near Crawfordville, FL.

LOCATION.--Lat 30°07'40", long 84°29'30", in NW ¼ NE ¼ NW ¼ sec.24, T.4 S., R.3 W., Hydrologic Unit 03120003, 400 ft east of Sopchoppy River, 6.6 mi southwest of intersection of Forest Road 365 and State Highway 368, and 7.8 mi west of Crawfordville.

AQUIFER.--Hawthorne Limestone aquifer of the Miocene System, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, bench mark, artesian well, diameter 6 in., depth 127 ft, cased to 121 ft.

INSTRUMENTATION.--Water-level recorder.

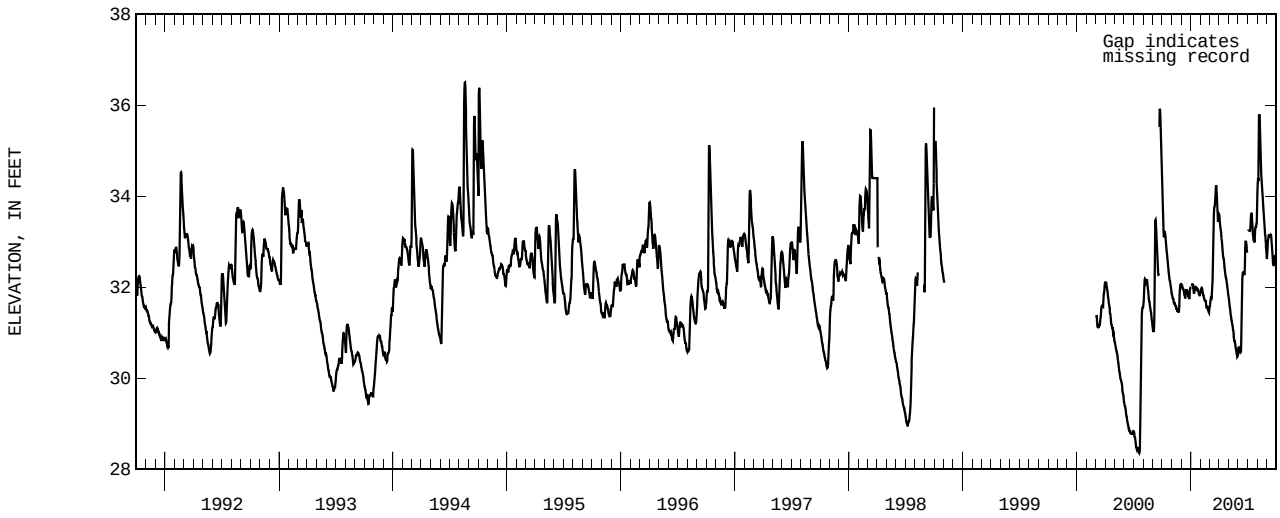
DATUM.--Land-surface datum is 46.91 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.90 ft above land-surface datum.

PERIOD OF RECORD.--January 1967 to September 1998, March to September 2000. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.91 ft NGVD, July 31, 1975; lowest, 24.42 ft NGVD, Sept. 14, 1966.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.87	31.84	32.07	---	31.90	31.54	33.61	31.79	30.62	---	34.08	32.62
2	33.67	31.81	32.06	---	31.95	31.58	33.50	31.76	30.67	---	34.28	32.74
3	33.48	31.77	32.04	32.04	31.97	31.59	33.41	31.68	30.68	33.27	34.38	32.88
4	33.34	31.75	31.98	32.05	31.99	31.69	33.34	31.61	30.66	33.25	34.38	33.02
5	33.20	31.75	31.97	32.08	31.98	31.73	33.29	31.56	30.63	---	34.33	33.07
6	33.10	31.72	31.97	32.05	31.95	31.78	33.24	31.52	30.61	33.22	35.08	33.12
7	33.17	31.67	31.95	32.01	31.89	31.78	33.20	31.45	30.59	33.24	35.78	33.15
8	33.22	31.63	31.92	32.02	31.85	31.77	33.14	31.37	30.57	33.24	35.80	33.15
9	33.21	31.67	31.89	31.91	31.83	31.91	33.07	31.35	30.58	33.24	35.77	33.15
10	33.17	31.63	31.86	31.86	31.82	32.04	33.02	31.28	30.61	33.30	35.48	33.15
11	33.11	31.62	31.84	31.90	31.77	32.14	32.94	31.25	30.88	33.44	35.08	33.10
12	33.02	31.59	31.83	31.94	31.75	32.37	32.83	31.21	31.33	33.58	34.83	33.14
13	32.93	31.59	31.78	31.97	31.72	32.81	32.75	31.17	31.86	33.62	34.62	33.16
14	32.84	31.58	31.78	32.00	31.71	33.20	32.67	31.13	32.20	33.62	34.48	33.16
15	32.77	31.51	31.86	32.01	31.71	33.58	32.64	31.06	32.30	33.53	34.38	33.14
16	32.71	31.53	31.93	32.00	31.70	33.74	32.62	31.04	32.33	33.41	34.24	33.03
17	32.62	31.53	31.93	31.99	31.70	33.76	32.56	30.98	32.33	33.32	34.12	32.91
18	32.55	31.46	31.92	31.98	31.59	33.80	32.46	30.92	32.29	33.18	34.02	32.80
19	32.48	31.51	31.96	31.99	31.56	33.90	32.40	30.86	32.30	33.10	33.94	32.70
20	32.40	31.48	31.89	31.96	31.56	34.00	32.35	30.83	32.29	33.04	33.81	32.61
21	32.33	31.46	31.89	31.92	31.55	34.17	32.28	30.82	32.29	33.03	33.72	32.53
22	32.27	31.46	31.87	31.96	31.56	34.25	32.23	30.77	32.48	33.03	33.61	32.49
23	32.20	31.47	31.81	31.96	31.53	34.21	32.20	30.74	32.87	32.99	33.48	32.49
24	32.15	31.59	31.80	31.95	31.50	34.06	32.17	30.69	33.00	33.08	33.38	32.52
25	32.13	31.82	31.77	31.91	31.49	33.88	32.12	30.64	33.02	33.26	33.27	32.60
26	32.09	31.96	31.74	31.86	31.47	33.75	32.07	30.61	33.02	33.31	33.17	32.65
27	32.04	32.03	31.77	31.85	31.46	33.57	32.01	30.56	32.98	33.33	33.12	32.69
28	31.99	32.06	31.93	31.83	31.45	33.44	31.96	30.52	32.93	33.33	33.03	32.69
29	31.94	32.07	31.97	31.83	---	33.58	31.91	30.47	32.85	33.39	32.89	32.66
30	31.89	32.07	32.00	31.87	---	33.61	31.83	30.48	32.76	33.41	32.80	32.56
31	31.86	---	32.01	31.89	---	33.62	---	30.51	---	33.65	32.70	---
MEAN	32.70	31.69	31.90	---	31.71	33.00	32.66	31.05	31.82	---	34.13	32.86
MAX	33.87	32.07	32.07	---	31.99	34.25	33.61	31.79	33.02	---	35.80	33.16
MIN	31.86	31.46	31.74	---	31.45	31.54	31.83	30.47	30.57	---	32.70	32.49



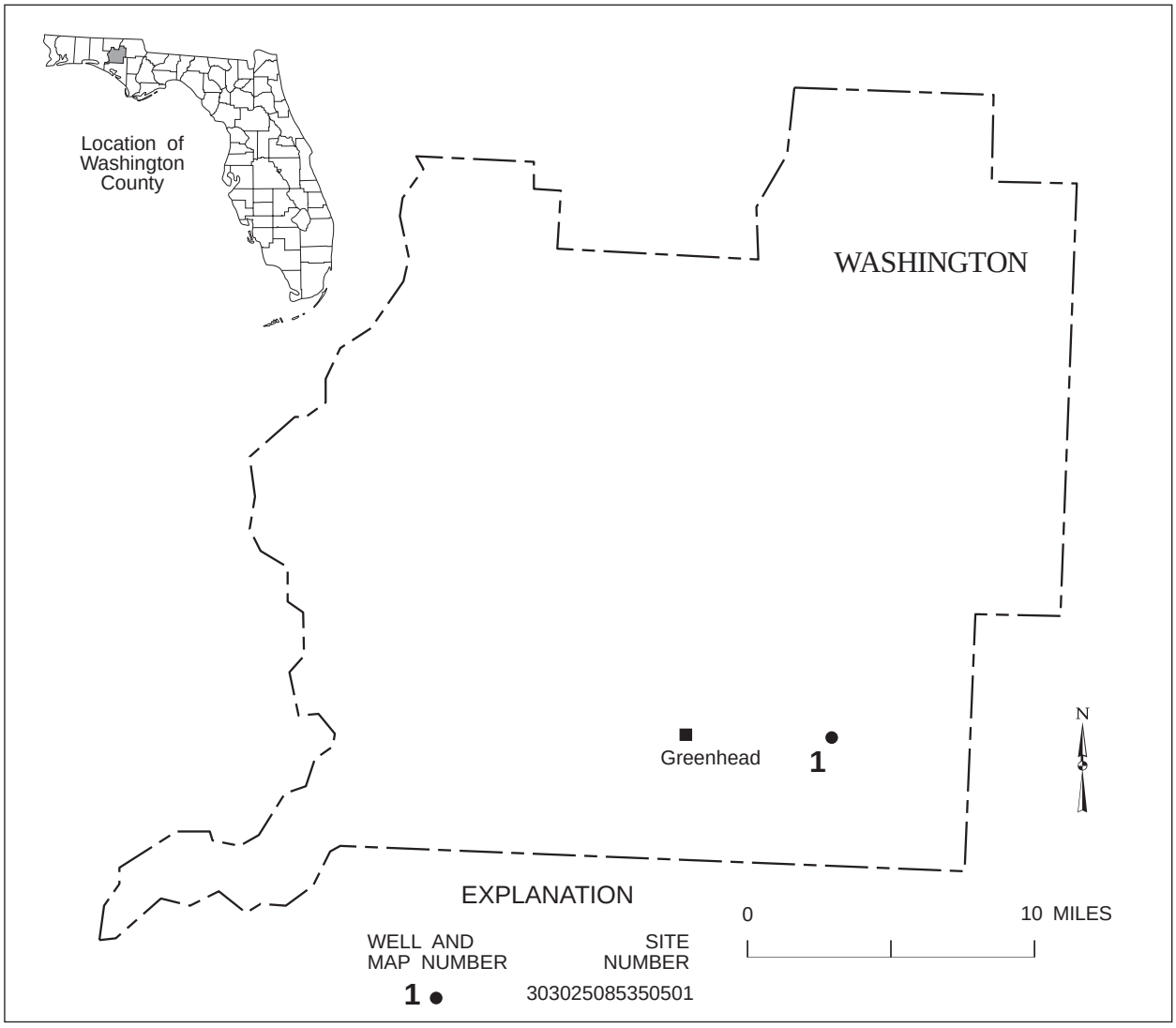


Figure 14. Location of wells in Washington County.

WELL NUMBER.--303025085350501. Local Number 422A. USGS Observation Well near Wausau, Fl.

LOCATION.--Lat 30°30'25", long 85°35'05", in SE¼NW¼NW¼ sec. 7, T. 1 N., R. 13 W., Hydrologic Unit 03140101, 0.6 mi east of road to Deadening Cemetery, 4.2 mi east of State Highway 77, and 8.6 mi south of Wausau.

AQUIFER.--Floridan aquifer of the Tertiary system, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 150 ft, cased to 110 ft.

INSTRUMENTATION.--Water-level recorder.

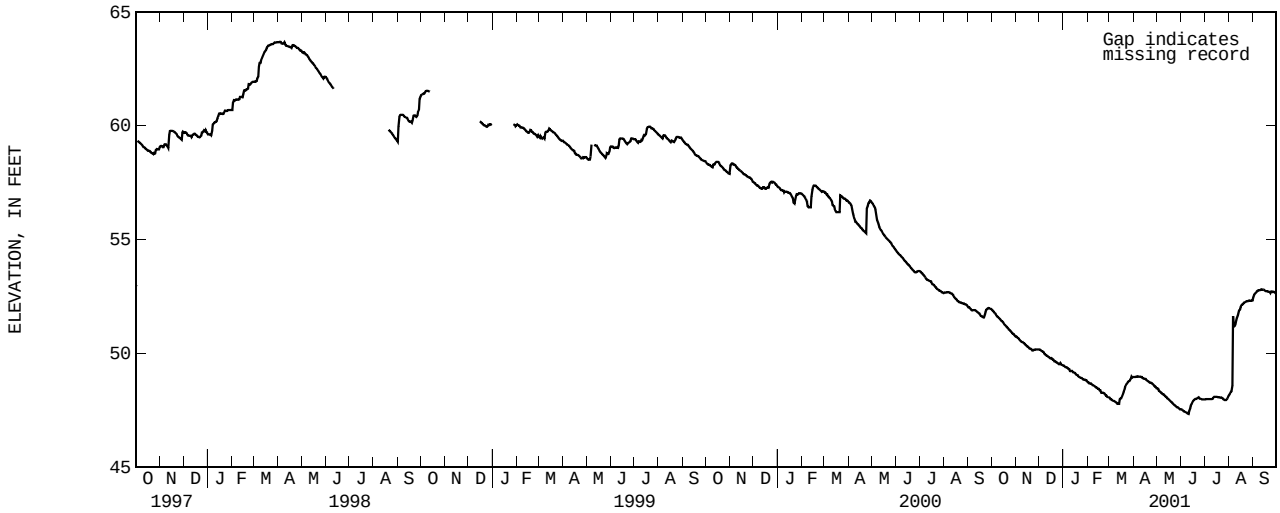
DATUM.--Land-surface datum is 66.11 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.90 ft above land-surface datum.

PERIOD OF RECORD.--October 1962 to September 1989, October 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.75 ft NGVD, Oct. 1,2, 1979; lowest, 47.33 ft NGVD, June 10, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.91	50.74	50.17	49.46	48.73	48.04	48.95	48.46	47.54	47.97	48.15	52.45
2	51.88	50.71	50.16	49.43	48.72	47.99	48.95	48.44	47.51	47.97	48.19	52.56
3	51.84	50.67	50.13	49.40	48.68	47.99	48.95	48.35	47.48	47.98	48.30	52.62
4	51.81	50.66	50.08	49.40	48.68	47.93	48.97	48.33	47.45	47.99	48.33	52.66
5	51.76	50.63	50.07	49.38	48.67	47.91	48.97	48.30	47.42	47.99	48.57	52.69
6	51.73	50.58	50.07	49.35	48.63	47.90	48.98	48.27	47.41	47.98	51.63	52.72
7	51.66	50.53	50.03	49.32	48.61	47.90	48.97	48.23	47.40	47.98	51.23	52.76
8	51.62	50.50	49.96	49.31	48.57	47.86	48.97	48.19	47.38	47.98	51.20	52.77
9	51.57	50.49	49.93	49.23	48.56	47.84	48.97	48.19	47.34	47.98	51.24	52.77
10	51.56	50.47	49.90	49.21	48.55	47.82	48.96	48.15	47.33	47.98	51.45	52.77
11	51.52	50.44	49.88	49.23	48.50	47.77	48.95	48.12	47.45	48.00	51.55	52.80
12	51.49	50.42	49.86	49.23	48.50	47.77	48.91	48.09	47.57	48.05	51.66	52.79
13	51.44	50.38	49.81	49.17	48.46	47.77	48.88	48.07	47.69	48.08	51.77	52.80
14	51.40	50.35	49.80	49.15	48.44	47.97	48.88	48.02	47.76	48.08	51.88	52.80
15	51.38	50.31	49.78	49.14	48.44	48.00	48.87	47.98	47.83	48.08	51.92	52.78
16	51.35	50.30	49.79	49.12	48.38	48.01	48.87	47.96	47.91	48.08	52.04	52.74
17	51.27	50.26	49.77	49.06	48.38	48.11	48.83	47.93	47.94	48.07	52.12	52.73
18	51.24	50.21	49.72	49.04	48.27	48.18	48.79	47.89	47.96	48.07	52.15	52.73
19	51.21	50.21	49.72	49.04	48.27	48.32	48.77	47.86	47.98	48.06	52.17	52.71
20	51.16	50.19	49.65	48.98	48.27	48.40	48.74	47.83	48.00	48.06	52.21	52.71
21	51.13	50.17	49.65	48.94	48.25	48.52	48.72	47.79	48.02	48.06	52.23	52.70
22	51.09	50.13	49.63	48.93	48.24	48.61	48.70	47.75	48.03	48.05	52.25	52.68
23	51.04	50.13	49.59	48.92	48.20	48.66	48.70	47.72	48.06	48.03	52.27	52.65
24	51.01	50.15	49.58	48.91	48.14	48.71	48.67	47.69	48.02	48.01	52.29	52.71
25	50.98	50.15	49.55	48.88	48.14	48.75	48.65	47.66	48.00	47.96	52.29	52.71
26	50.94	50.17	49.52	48.84	48.08	48.77	48.62	47.64	47.99	47.95	52.30	52.69
27	50.90	50.17	49.52	48.84	48.07	48.80	48.57	47.62	47.97	47.95	52.32	52.70
28	50.86	50.17	49.56	48.84	48.06	48.87	48.54	47.60	47.97	47.95	52.30	52.69
29	50.84	50.17	49.49	48.82	---	48.97	48.52	47.57	47.97	47.97	52.30	52.66
30	50.80	50.17	49.48	48.82	---	48.93	48.46	47.54	47.97	48.01	52.31	52.62
31	50.75	---	49.47	48.78	---	48.95	---	47.53	---	48.09	52.32	---
MEAN	51.33	50.35	49.78	49.10	48.41	48.26	48.81	47.96	47.74	48.01	51.39	52.71
MAX	51.91	50.74	50.17	49.46	48.73	48.97	48.98	48.46	48.06	48.09	52.32	52.80
MIN	50.75	50.13	49.47	48.78	48.06	47.77	48.46	47.53	47.33	47.95	48.15	52.45



MISCELLANEOUS WATER LEVEL MEASUREMENTS

STATION NUMBER	STATION NAME	DATE OF SAMPLE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)
	CLINCH, GA		
304738082265001	Perimeter Road Well near Fargo	10-17-00	7.63
		12-06-00	10.21
		01-29-01	9.17
		03-05-01	8.70
		04-04-01	6.59
		05-08-01	8.19
		06-04-01	9.74
		07-26-01	7.03
304741082263101	Bay Creek Well near Fargo	10-17-00	3.77
		12-06-00	5.34
		01-29-01	4.52
		03-05-01	3.13
		04-04-01	2.19
		05-08-01	5.35
		06-04-01	6.15
		07-26-01	3.07
304825082290401	Steedley Field Well near Fargo	10-17-00	3.68
		12-06-00	4.84
		01-29-01	3.94
		03-05-01	1.97
		04-04-01	1.44
		05-08-01	4.37
		06-04-01	7.56
		07-26-01	1.33