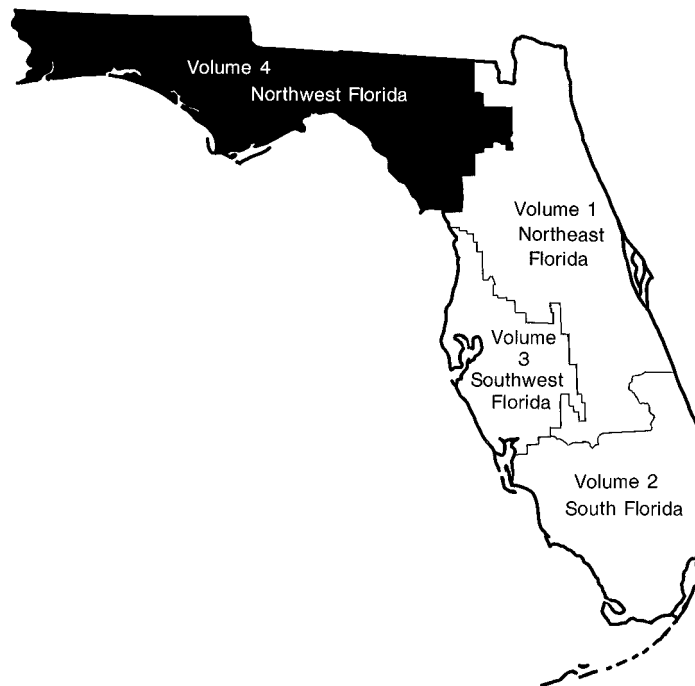




# Water Resources Data Florida Water Year 1996

## Volume 4. Northwest Florida

by M.A. Franklin and P.E. Meadows



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-96-4  
Prepared in cooperation with the State of Florida  
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U. S. GEOLOGICAL SURVEY

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

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WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida  
PREFACE

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

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

This report was prepared for publication by Patsy R. Mixson under the supervision of M.A. Franklin, and P.E. Meadows. The following individuals contributed significantly to the collection, processing, and tabulation of the data:

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 Volume 4: Northwest Florida

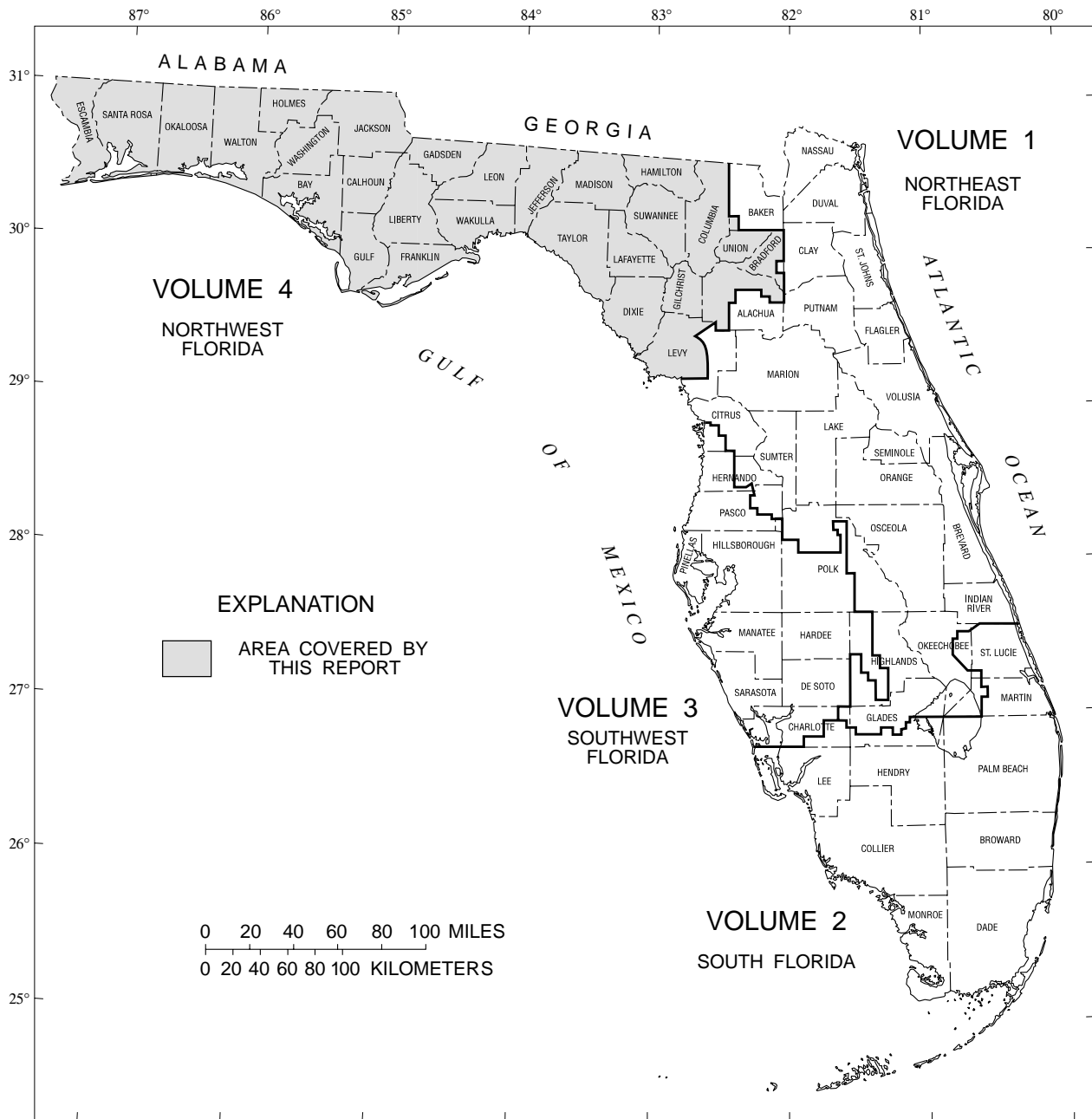


Figure 1. Geographic area covered by this report.



WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

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CONTENTS

---

Preface .....	iii
List of surface-water stations, in downstream order, for which records are published.....	ix
List of ground-water wells, by county, for which records are published.....	x
List of discontinued gaging stations.....	xi
Introduction .....	1
Cooperation .....	1
Summary of Hydrologic Conditions .....	2
Rainfall.....	2
Surface Water.....	2
Ground Water.....	2
Surface-Water Quality .....	2
Special Networks and Programs.....	12
Explanation of the Records .....	12
Station Identification Numbers .....	13
Downstream Order System.....	14
Latitude-Longitude System .....	14
Records of Stage and Water Discharge.....	14
Data Collection and Computation .....	15
Data Presentation .....	15
Station manuscript.....	16
Data table of daily mean values .....	16
Statistics of monthly mean data.....	17
Summary statistics.....	17
Accuracy of the Records.....	18
Other Records Available.....	18
Records of Surface-Water Quality.....	18
Classification of Records.....	18
Arrangement of Records.....	19
On-site Measurements and Sample Collection.....	19
Sediment .....	19
Laboratory Measurements .....	19
Data Presentation .....	19
Manuscript .....	20
Remarks Codes .....	20
Dissolved Trace-Element Concentrations .....	20
Change in National Trends Network Procedures .....	20
Records of Ground-Water Levels .....	20
Data Collection and Computation .....	20
Data Presentation .....	21
Records of Ground-Water Quality.....	21
Data Collection and Computation .....	22
Data Presentation .....	22
Access To Watstore Data .....	22
Definition of Terms .....	22
Publications on Techniques of Water-Resources Investigations .....	28

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

Stage, discharge, and water quality of streams .....	31
Crest-stage and flood-hydrograph partial-record stations.....	128
Annual maximum discharge at crest-stage stations .....	128
Miscellaneous sites .....	129
Well descriptions and ground-water data.....	149
Index.....	153

---

**ILLUSTRATIONS**

---

Figure 1. Geographic area covered by this report .....	v
Figure 2. Santa Fe River near Worthington Springs (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1932-1995, and (B) the monthly mean discharge for the period 1986-96.....	3
Figure 3. Suwannee River at Branford (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1931-95, and (B) the monthly mean discharge for the period 1986-96 .....	4
Figure 4. Steinhatchee River near Cross City (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1950-95 and (B) the monthly mean discharge for the period 1986-96 .....	5
Figure 5. Ochlockonee River near Havana (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1926-95, and (B) the monthly mean discharge for the period 1986-96 .....	6
Figure 6. Chipola River near Altha (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1943-95, and (B) the monthly mean discharge for the period 1986-96 .....	7
Figure 7. Shoal River near Crestview (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1938-95, and (B) the monthly mean discharge for the period 1986-96 .....	8
Figure 8. Escambia River near Century (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1934-95, and (B) the monthly mean discharge for the period 1986-96 .....	9
Figure 9. USGS Well near Crawfordville (A) Monthly maximum water level for the 1996 water year compared to maximum, minimum, and mean monthly maximum water levels for the period 1965-95 and (B) the monthly maximum water level for the period 1986-96. ....	10
Figure 10. Annual average specific conductance at sites on Suwannee, Apalachicola, and Escambia Rivers, 1965-96 .....	11
Figure 11. Annual average total phosphorus concentrations at sites on Suwannee, Apalachicola, and Escambia Rivers, 1971-96.....	11
Figure 12. NASQAN and NAWQA stations in the State of Florida.....	13
Figure 13. System for numbering wells and miscellaneous sites (latitude and longitude) .....	14
Figure 14. Location of stream gaging and lake gaging stations in Northwest Florida Water Management District.....	32
Figure 15. Location of stream gaging stations in Suwannee River Water Management District .....	32
Figure 16. Location of wells in Wakulla County .....	150



WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

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

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

	Station Number	Page
<u>SUWANNEE RIVER BASIN</u>		
Suwannee River near Benton, Fl. (d,e) .....	02315000	33
Deep Creek near Suwannee Valley, Fl. (d) .....	02315200	35
Suwannee River at White Springs, Fl. (d,e) .....	02315500	37
Suwannee River at Suwannee Springs, Fl. (d,e) .....	02315550	39
Withlacoochee River near Pinetta, Fl. (d) .....	02319000	41
Suwannee River at Ellaville, Fl. (d,e) .....	02319500	43
Suwannee River at Branford, Fl. (d,e,c,b,s,t) .....	02320500	45
Santa Fe River near Graham, Fl. (d) .....	02320700	51
New River near Lake Butler, Fl. (d) .....	02321000	53
Santa Fe River at Worthington Springs, Fl. (d) .....	02321500	55
Pareners Branch near Bland, Fl. (d) .....	02321900	57
Santa Fe River at Us Hwy 441 near High Springs, Fl. (d) .....	02321975	59
Santa Fe River near Fort White, Fl. (d) .....	02322500	61
Cannon Creek near Lake City, Fl. (d) .....	02322616	63
Suwannee River near Wilcox, Fl. (d,e) .....	02323500	65
<u>STEINHATCHEE RIVER BASIN</u>		
Steinhatchee River near Cross City, Fl. (d) .....	02324000	67
<u>FENHOLLOWAY RIVER BASIN</u>		
Fenholloway River near Foley, Fl. (d) .....	02324400	69
Fenholloway River near Perry, Fl. (d) .....	02325000	71
<u>ECONFINA RIVER BASIN</u>		
Econfina River near Perry, Fl. (d) .....	02326000	73
<u>AUCILLA RIVER BASIN</u>		
Aucilla River near Scanlon, Fl. (d) .....	02326512	75
<u>ST. MARKS RIVER BASIN</u>		
Lafayette Creek at Tallahassee, Fl. (d,e,b,s,t) .....	02326838	77
<u>OCHLOCKONEE RIVER BASIN</u>		
Ochlockonee River:		
Sopchoppy River near Sopchoppy, Fl. (d,c,b,s,t) .....	02327100	79
Ochlockonee River near Havana, Fl. (d,e,c,b,s,t) .....	02329000	82
Lake Jackson near Tallahassee, Fl. (e) .....	02329200	147

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

	Station Number	Page
<u>OCHLOCKONEE RIVER BASIN</u> --Continued		
Little River:		
Little River near Midway, Fl. (d) .....	02329600	85
Lake Talquin near Bloxham, Fl.(e) .....	02329900	148
Ochlockonee River near Bloxham, Fl. (d) .....	02330000	87
Telogia Creek near Bristol, Fl. (d) .....	02330100	89
 <u>APALACHICOLA RIVER BASIN</u>		
Apalachicola River:		
Apalachicola River at Chattahoochee, Fl. (d,e,s) .....	02358000	91
Apalachicola River near Blountstown, Fl. (d,e) .....	02358700	97
Apalachicola River near Wewahitchka, Fl. (d,e).....	02358754	99
Apalachicola River at Mile 36 near Wewahitchka, Fl. (d,e) .....	023587547	101
Chipola River near Altha, Fl. (d) .....	02359000	103
Chipola River at Cockran Landing near Wewahitchka, Fl. (d,e) .....	02359051	105
Apalachicola River near Sumatra, Fl. (d,e,s) .....	02359170	107
 <u>CHOCTAWHATCHEE RIVER BASIN</u>		
Choctawhatchee River at Caryville, Fl. (e) .....	02365500	116
Choctawhatchee River near Bruce, Fl. (d) .....	02366500	117
 <u>YELLOW CREEK BASIN</u>		
Shoal River near Crestview, Fl. (d) .....	02369000	119
 <u>ESCAMBIA RIVER BASIN</u>		
Escambia River near Century, Fl. (d) .....	02375500	121
 <u>ELEVENMILE CREEK BASIN</u>		
Elevenmile Creek near Pensacola, Fl. (d) .....	02376115	123
 <u>PERDIDO RIVER BASIN</u>		
Perdido River at Barrineau Park, Fl. (d,c,b,s,t) .....	02376500	125

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

<u>WAKULLA COUNTY</u>		
300740084293001 (e).....		151

WATER RESOURCES DATA FOR FLORIDA, 1996

Volume 4: Northwest Florida

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 <sup>2</sup> )	Period of record
Waccasassa River near Otter Creek, FL	02313500	300†	1944-53
Waccasassa River near Gulf Hammock, FL	02313700	480†	1963-78 1980-92
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
Robinson Creek near Suwannee Valley, FL	02315392	27.4	1976-81
Swift Creek at Facil, FL	02315520	65.3	1976-88
Alapaha River near Jennings, FL	02317620	1680	1976-87
Suwannee River at Luraville, FL	02320000	7280	1927-37
Swift Creek near Lake Butler, FL	02321700	46.0	1957-60
Olustee Creek near Providence, FL	02321800	163	1957-60
Santa Fe River near High Springs, FL	02322000	950	1931-71
Blues Creek near Gainesville, FL	02322016	5.12	1984-94
Suwannee River near Bell, FL	02323000	9390	1932-56
Fenholloway River at Foley, FL	02324500	120	1946-92 1993-95
Aucilla River at Lamont, FL	02326500	747	1950-79; 1981-82; 1983-92
Northeast Drainage Ditch at Weems Road, FL	02326845	17.1	1979-83
St. Marks River near Newport, FL	02326900	535	1956-94
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
Econfina Creek near Compass Lake, FL	02359350	40.5	1962-65
Econfina Creek near Fountain, FL	02359450	70.2	1965-78
Econfina Creek near Bennett, FL	02359500	122	1935-94
Bear Creek near Youngstown, FL	02359550	67.2	1962-65
Choctawhatchee River near Pittman, FL	02365200	3209	1976-81
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

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Rocky Creek near Niceville, FL	02367250	67.0	1966-68
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 Wynnepaven 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
Yellow River at Milligan, FL	02368000	624	1939-93
Baggett Creek near Milligan, FL	02368300	7.80	1965-82
Shoal River near Mossy Head, FL	02368500	123	1951-78
Pond Creek near Dorcas, FL	02368800	94.8	1966-68
Yellow River near Holt, FL	02369500	1210	1933-41
Titi Creek near Crestview, FL	02368990	62.9	1966-68
Blackwater River near Baker, FL	02370000	205	1950-92
Big Juniper Creek near Munson, FL	02370200	36.0	1958-67
West Fork Big Coldwater at Cobbtown, FL	02370300	39.5	1958-62
Big Coldwater Creek near Milton, FL	02370500	237	1937-79 1980-91
Pond Creek near Milton, FL	02370700	58.7	1958-79
Pine Barren Creek near Barth, FL	02376000	75.3	1952-94
Escambia River near Molino, FL	02376033	4,147	1960-81 1983-94
Bayou Marcus Creek near Pensacola, FL	02376100	10.8	1958-60 1987-91
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 1996 water year for the state of Florida consists of records for continuous or daily discharge for 319 streams, periodic discharge for 41 streams, continuous or daily stage for 97 streams, periodic stage for 8 streams, peak stage and discharge for 35 streams; continuous or daily elevations for 30 lakes, and periodic elevations for 56 lakes; continuous ground-water levels for 418 wells, and periodic ground-water levels for 1,360 wells; quality-of-water for 113 surface-water sites and 279 wells.

This volume (Volume 4, Northwest Florida) contains records of continuous or daily discharge for 35 streams, periodic discharge for 0 streams, continuous or daily stage for 1 stream, periodic stage for 0 streams, peak stage and discharge for 1 stream; continuous or daily elevations for 1 lakes, periodic elevations for 1 lake; continuous ground-water levels for 1 well, periodic ground-water levels for 0 wells; and quality-of-water for 4 surface-water sites.

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

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Florida were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, Earth Science Information Center, Open-File Reports Section, P.O. Box 25286, MS 517, Denver, CO 80225-0425.

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-96-4." 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 (904) 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  
Northwest Florida Water Management District  
Suwannee River Water Management District  
County of Walton

City of Century  
City of Perry  
City of Tallahassee  
Corps of Engineers, U.S. Army, Mobile District

Assistance with funds or services was given by the U.S. Army Corps of Engineer, Mobile District, in collecting records for 6 hydrologic gaging stations throughout northwest Florida.

## SUMMARY OF HYDROLOGIC CONDITIONS

### Rainfall

Rainfall across northwest Florida varied from about 15 in. above to almost 14 in. below normal for the 1996 water year. The eastern and Big Bend part of the area was generally well below normal, the costal area of Taylor and Dixie Counties about normal, the central panhandle slightly above normal and the western end well above normal. Based on preliminary rainfall data at five National Oceanic and Atmospheric Administration stations, (Perry, Lake City, Tallahassee, Chipley, and Milton), total rainfall for the 12-month period ranged from 47.92 in. at Lake City to 86.94 in. at Milton. The cumulative monthly departures for the water year ranged from -13.87 in. at Tallahassee to +15.34 in. at Milton. The distribution of rainfall generally differed geographically as well as seasonally. The fall quarter (October-December) ranged from 1.1 in. below to 17.4 in. above normal across northwest Florida. The winter quarter (January-March), normally the wet period in northwest Florida, ranged from 2.7 in. below at Lake City to 3.3 in. above average at Milton. The spring quarter (April-June) was deficient for the entire area ranging from -2.4 in. at Milton to -5.1 in. at Tallahassee. The summer quarter (July-September) ranged from 5.4 in. above normal at Perry to 6.3 in. below at Tallahassee. The following summary lists the cumulative rainfall and departure from the 30-year (1961-90) normal 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	7.63	-1.08	14.14	+0.86	9.23	-4.42	27.65	+5.14	58.65	+0.50
Lake City	10.54	+2.29	10.36	-2.69	11.73	-2.51	15.29	-4.66	47.92	-7.57
Tallahassee	11.04	-0.78	14.90	-1.64	10.30	-5.12	15.60	-6.33	51.84	-13.87
Chipley	13.58	+2.71	17.91	+1.81	9.42	-3.70	18.50	+1.93	59.41	+2.75
Milton	30.61	+17.40	21.01	+3.31	13.92	-2.40	21.40	-2.97	86.94	+15.34

### Surface Water

Annual mean streamflow for the 1996 water year in Northwest Florida ranged from 40 to 170 percent of the long-term average. Above normal flows occurred in the western panhandle, near normal in the central panhandle, below normal in the Big Bend, and well below normal in the Suwannee River Basin and coastal area of Taylor and Dixie Counties. Generally, the eastern half of the area started the year below to well below normal, recovered to near average during March and April and then declined to below average by the end of the year. The central panhandle ranged near average for the entire year, with the exception of Shoal River which set a new monthly high in November. The western panhandle was well above average at the start of the year, decreased to near average by March and remained near normal for the remainder of the year.

Discharge hydrographs for some representative streams in northwest Florida are shown in figures 2 through 8. The upper graph (A) shows the 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for all years. The lower graph (B) shows the monthly mean discharge for the period 1987-1996.

### Ground Water

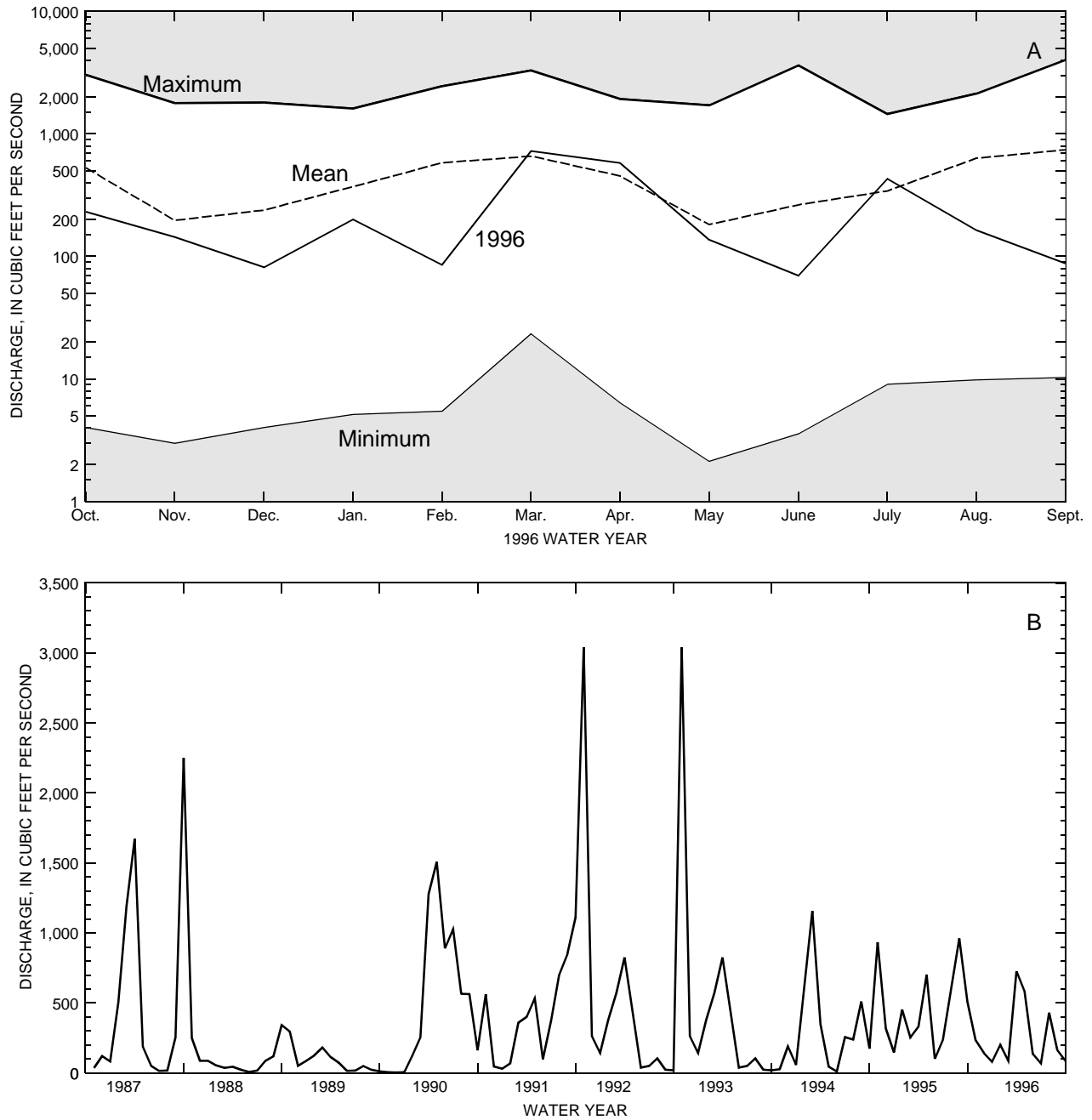
A water level hydrograph for the USGS well at Crawfordville, the only remaining well for which the USGS collects information in northwest Florida, is shown in figure 9. The upper graph (A) shows the 1996 monthly maximum water level compared to the maximum, minimum, and mean monthly maximum water level for the period of record. The lower graph (B) shows the monthly maximum water level for the period 1987-1996. Water levels were below average for most of the year except for April and May, which were slightly above average.

### Surface-Water Quality

Specific conductance and total phosphorus concentration were selected as measures of ambient water-quality conditions. Specific conductance can be used to estimate the amount of dissolved substances in water (see definition of terms). The average specific conductance by water year for three major rivers in northwest Florida is shown in figure 10. The water quality sampling was discontinued on the Escambia River in 1994 and the Apalachicola River in 1995; therefore only one site is shown for 1996. The average specific conductance for the 1996 water year was 209  $\mu\text{S}/\text{cm}$  at 25 °C (microsiemens per centimeter at 25 degrees Celsius) for the Suwannee River. The average specific conductance for the 1996 water year was slightly less than the long-term average of 230  $\mu\text{S}/\text{cm}$  at 25 °C for the Suwannee River. The average specific conductance for the sites being monitored does not indicate persistent trends as a function of time. The apparent variation in average specific conductance among water years for the Suwannee River is probably caused by variable mixes of springflow (ground water) and overland runoff.

Phosphorus is an important primary nutrient for aquatic plants and long-term changes in phosphorus concentrations could indicate effects of land-use change within a stream drainage basin. The average concentrations of total phosphorus by water year for three major rivers are shown in figure 11. The average total phosphorus concentration for the 1996 water year was 0.17 mg/L (milligrams per liter) for the Suwannee River. For the Suwannee River, total phosphorus concentrations in the 1996 water year ranged from 0.11 to 0.19 mg/L. The greater concentrations in the Suwannee River are probably the result of naturally occurring phosphate-bearing rock in the drainage basin.

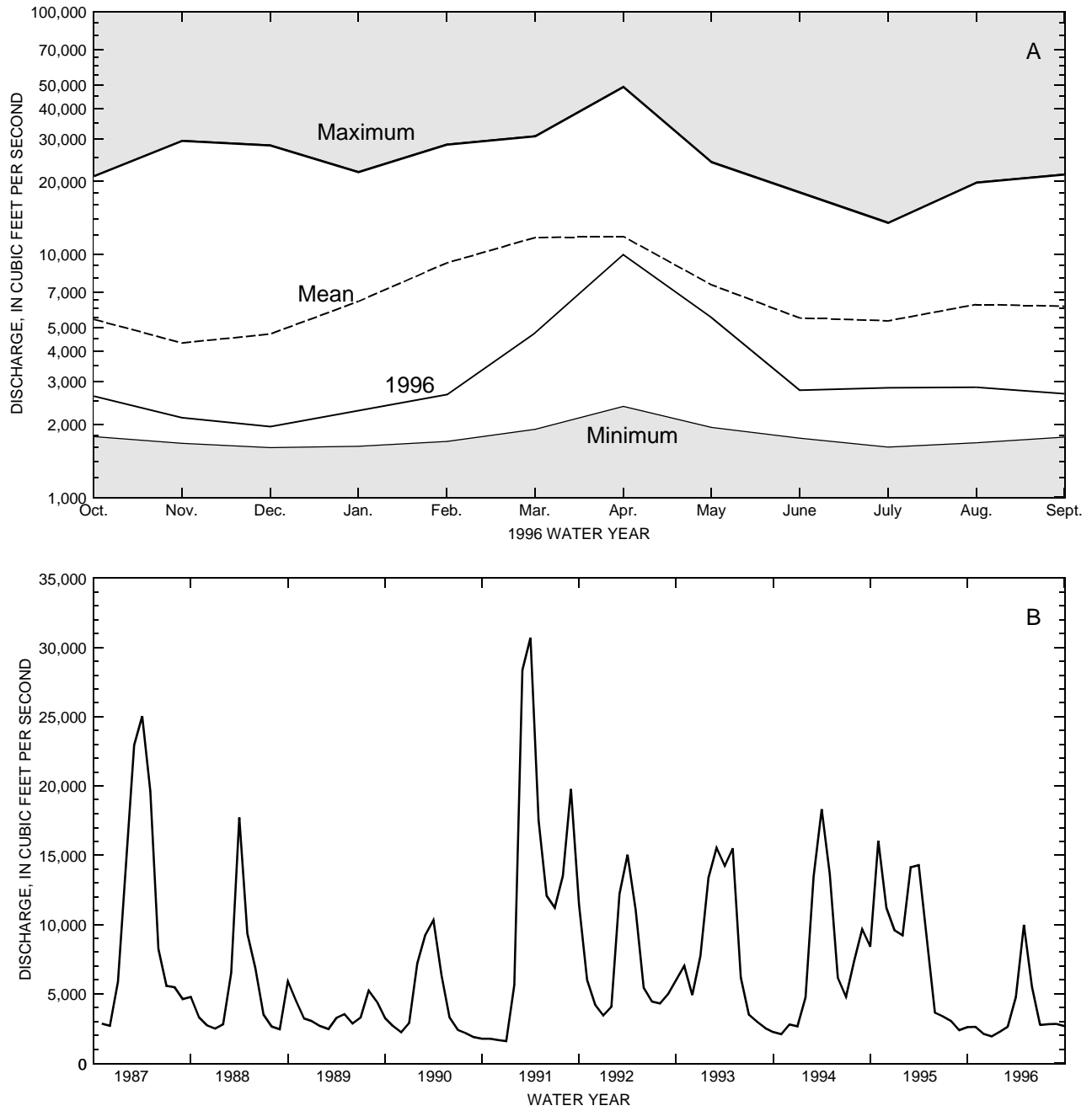
SANTA FE RIVER NEAR WORTHINGTON, FLORIDA



**Figure 2.** Santa Fe River near Worthington Springs (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1932-1995, and (B) the monthly mean discharge for the period 1987-96.

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

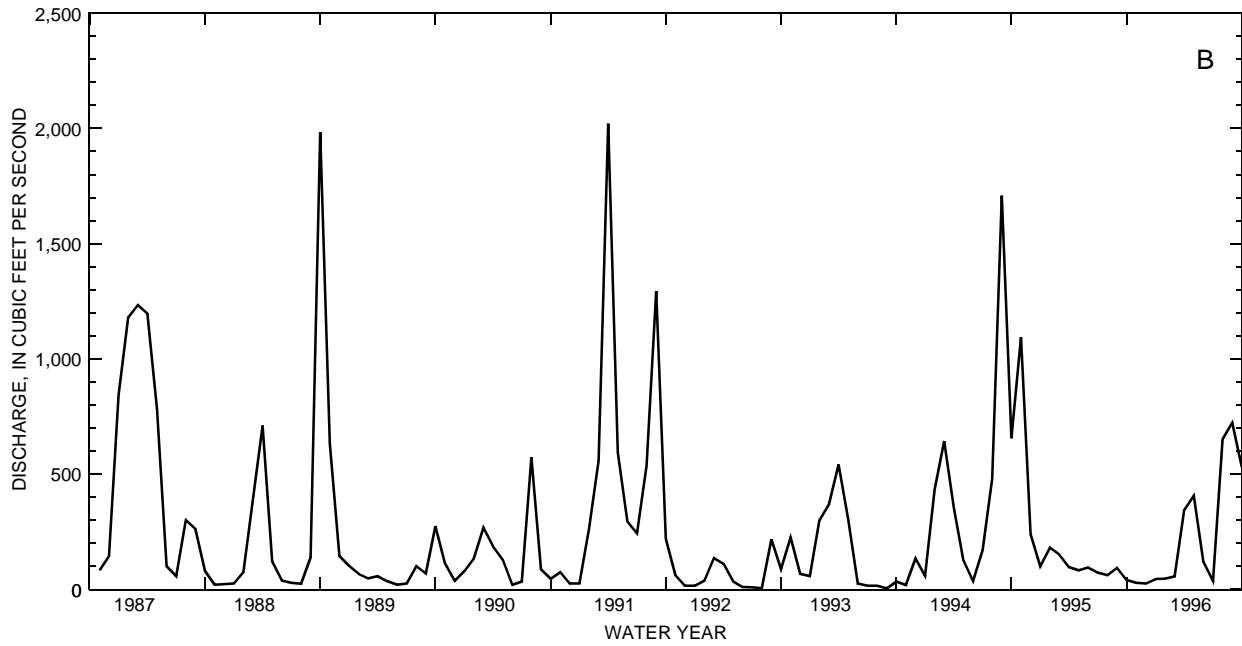
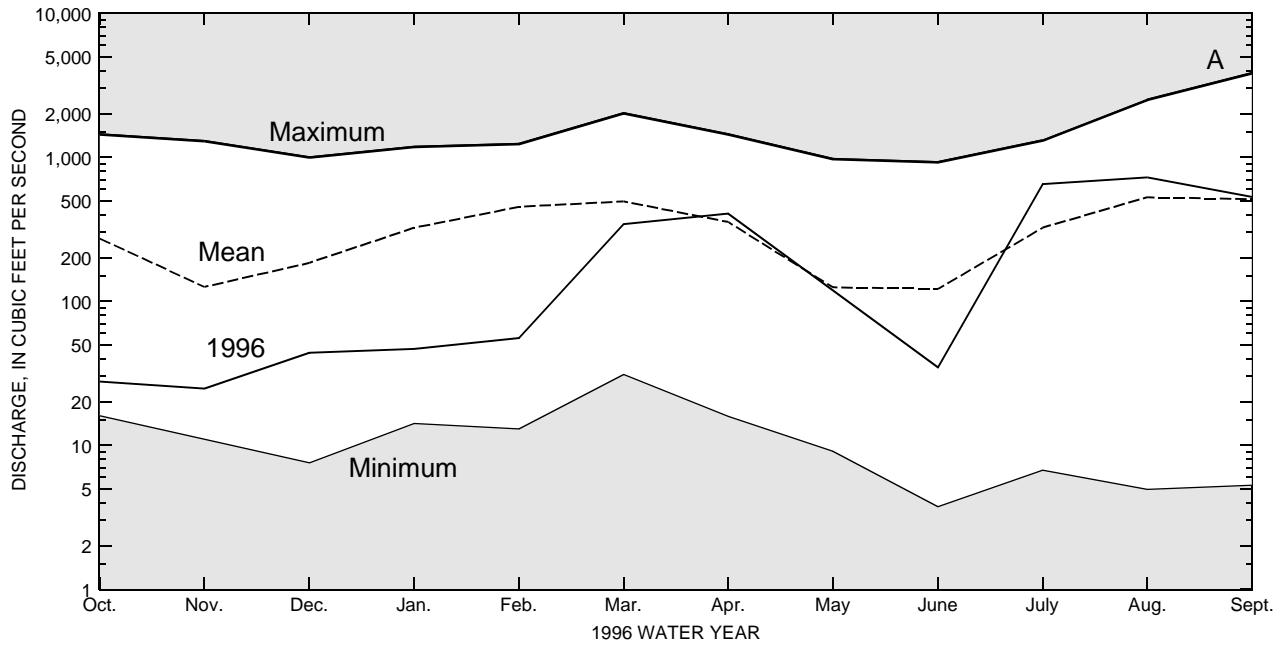
SUWANNEE RIVER AT BRANFORD, FLORIDA



**Figure 3.** Suwannee River at Branford (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1931-95, and (B) the monthly mean discharge for the period 1987-96.



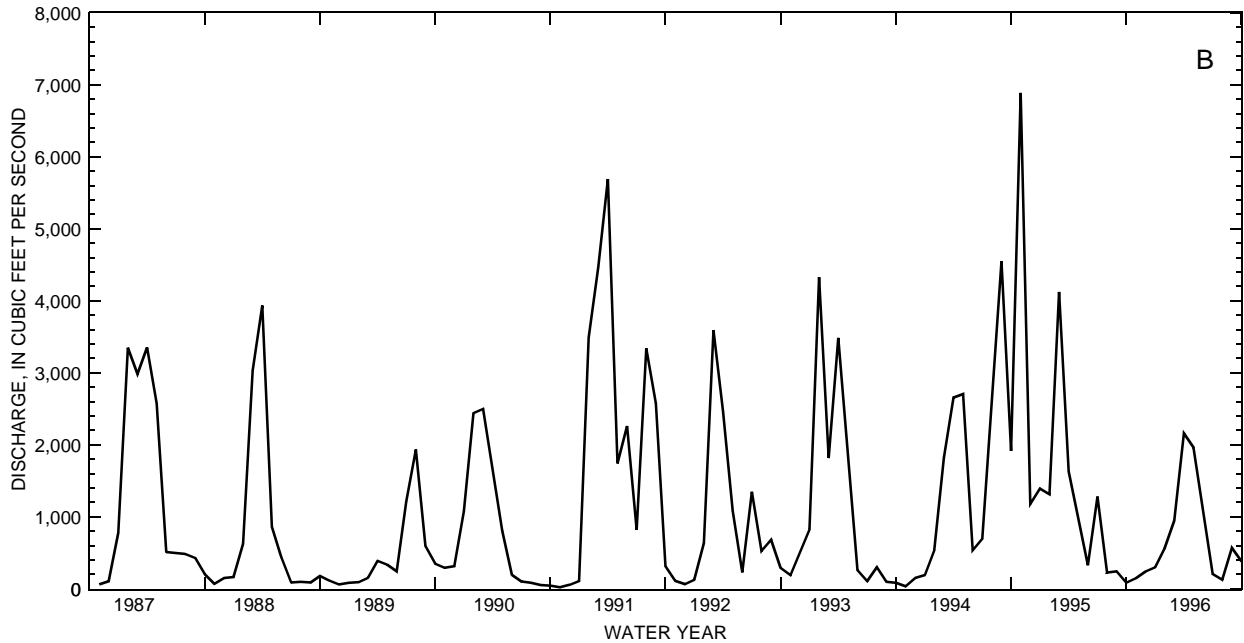
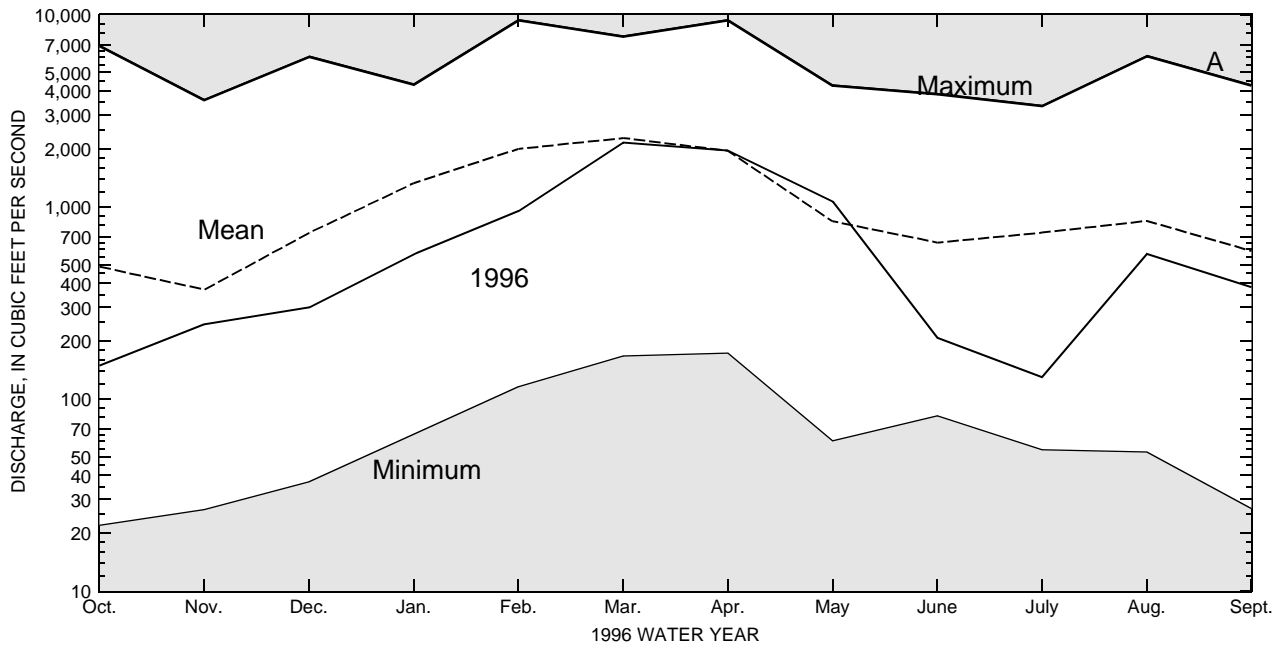
STEINHATCHEE RIVER NEAR CROSS CITY, FLORIDA



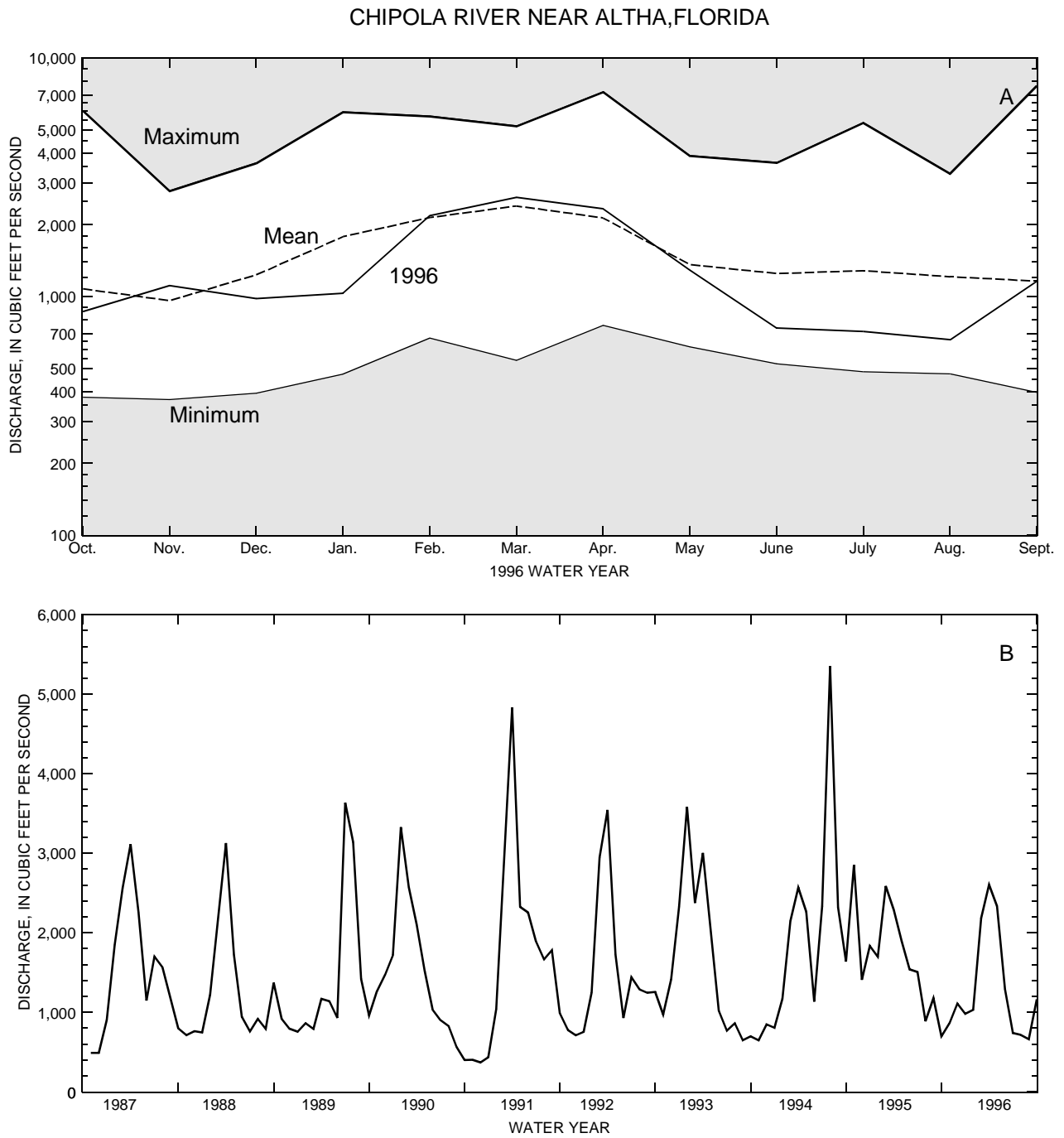
**Figure 4.** Steinhatchee River near Cross City (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1950-95, and (B) the monthly mean discharge for the period 1987-96.

WATER RESOURCES DATA FOR FLORIDA, 1996  
 Volume 4: Northwest Florida

OCHLOCKONEE RIVER NEAR HAVANA, FLORIDA



**Figure 5.** Ochlockonee River near Havana (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1926-95, and (B) the monthly mean discharge for the period 1987-96.



**Figure 6.** Chipola River near Altha (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1943-95, and (B) the monthly mean discharge for the period 1987-96.

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

SHOAL RIVER NEAR CRESTVIEW,FLORIDA

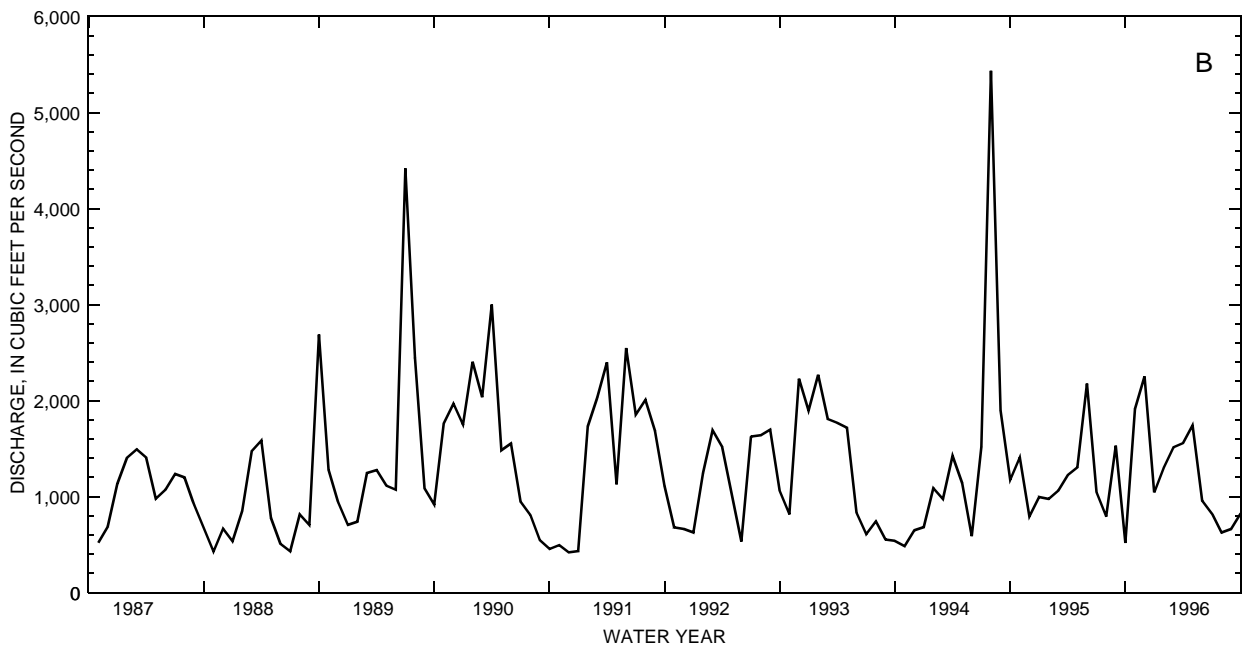
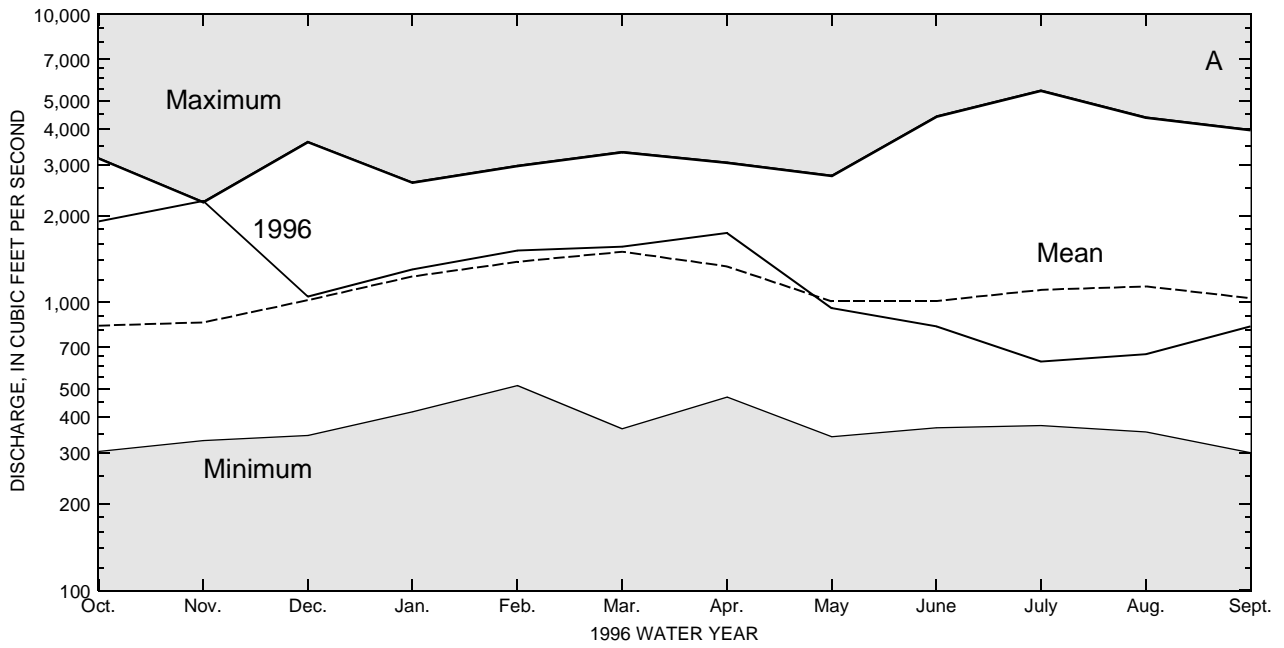
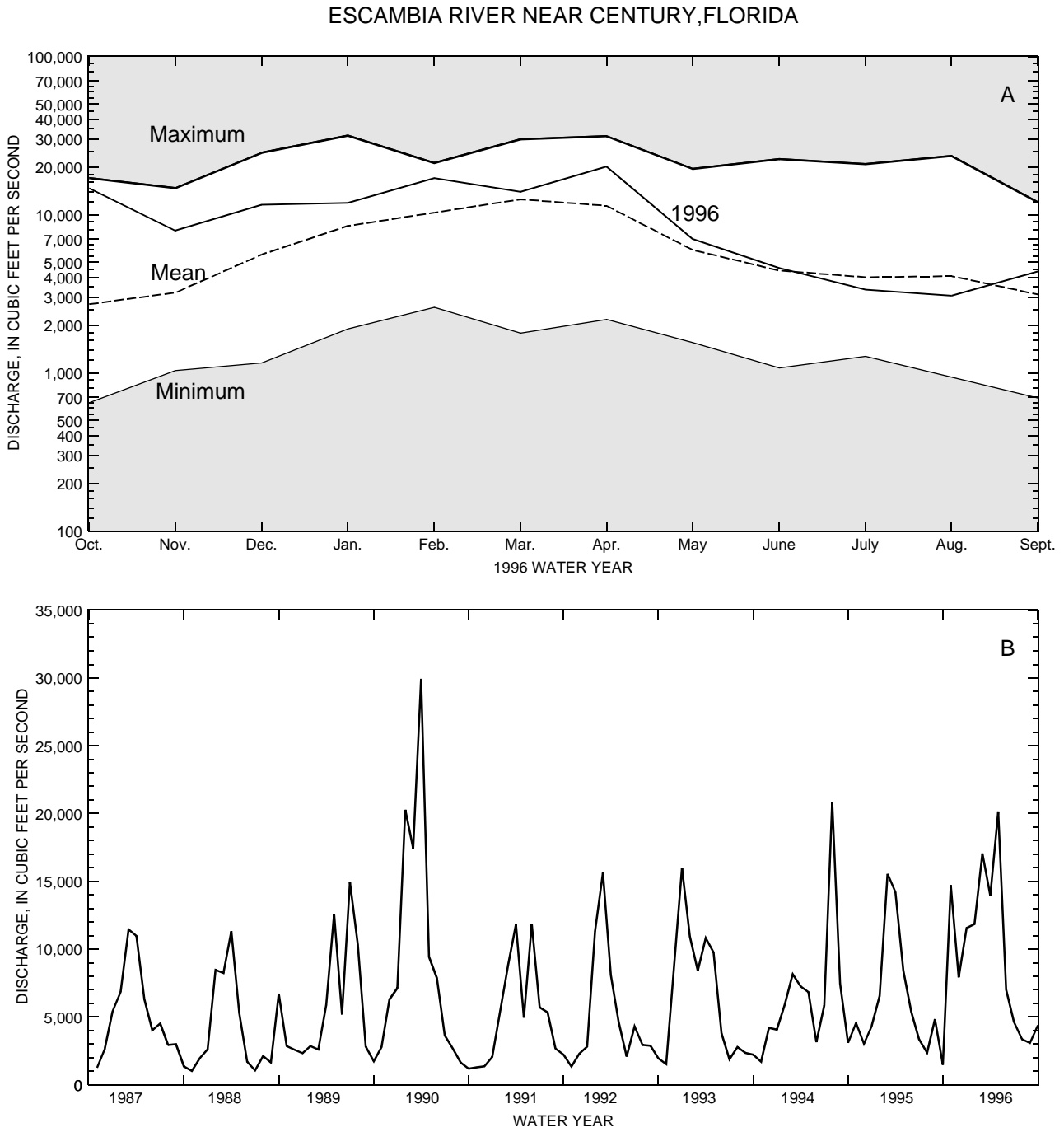
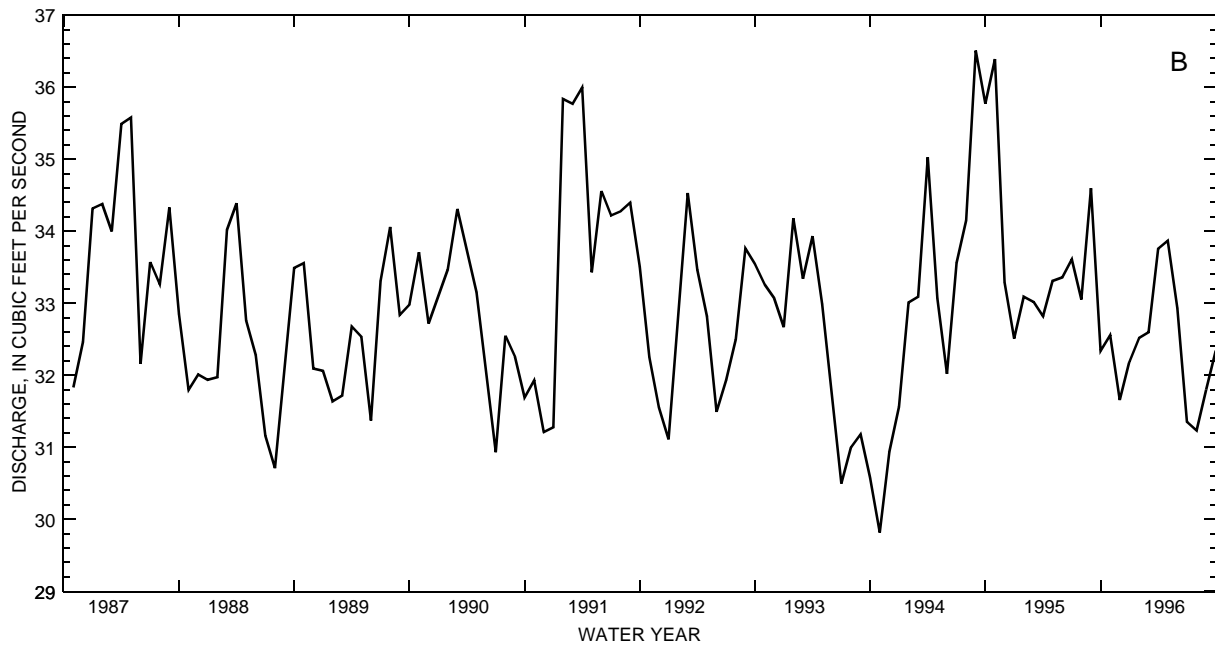
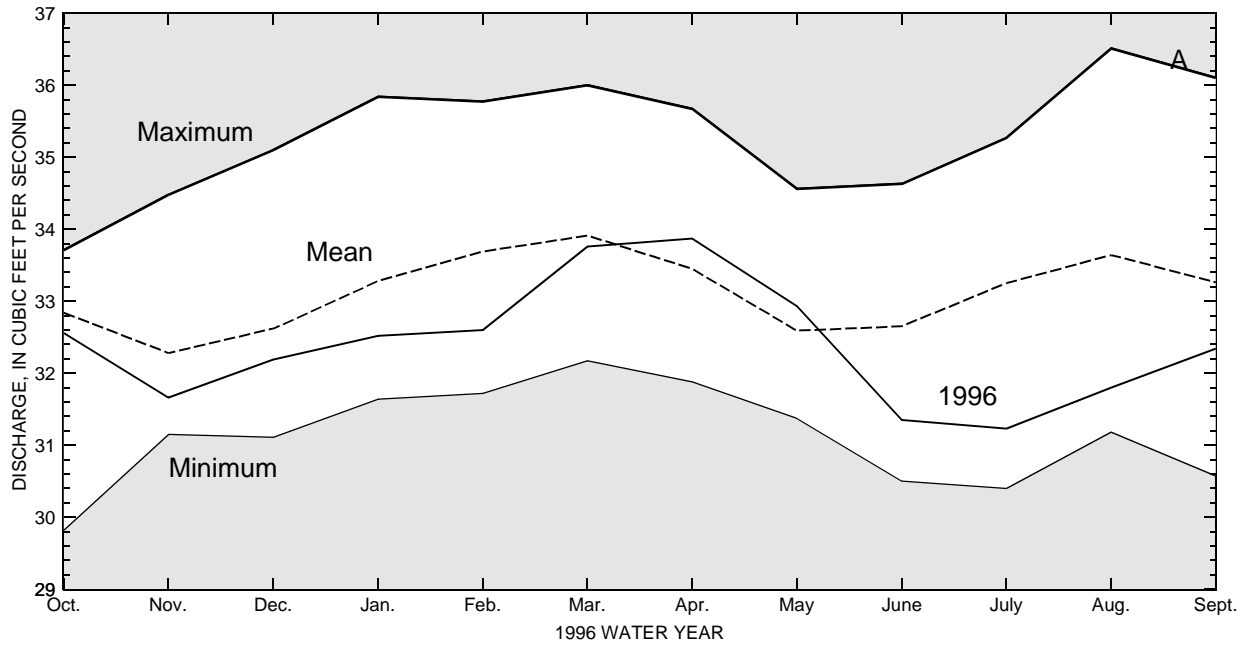


Figure 7. Shoal River near Crestview (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1938-95, and (B) the monthly mean discharge for the period 1987-96.



**Figure 8.** Escambia River near Century (A) 1996 monthly mean discharge compared to the maximum, minimum, and mean monthly mean discharge for the period 1934-95, and (B) the monthly mean discharge for the period 1987-96.

USGS WELL NEAR CRAWFORDVILLE, FLORIDA



**Figure 9.** USGS Well near Crawfordville (A) Monthly maximum water level for the 1996 water year compared to maximum, minimum, and mean monthly maximum water levels for the period 1965-95 and (B) the monthly maximum water level for the period 1987-96.

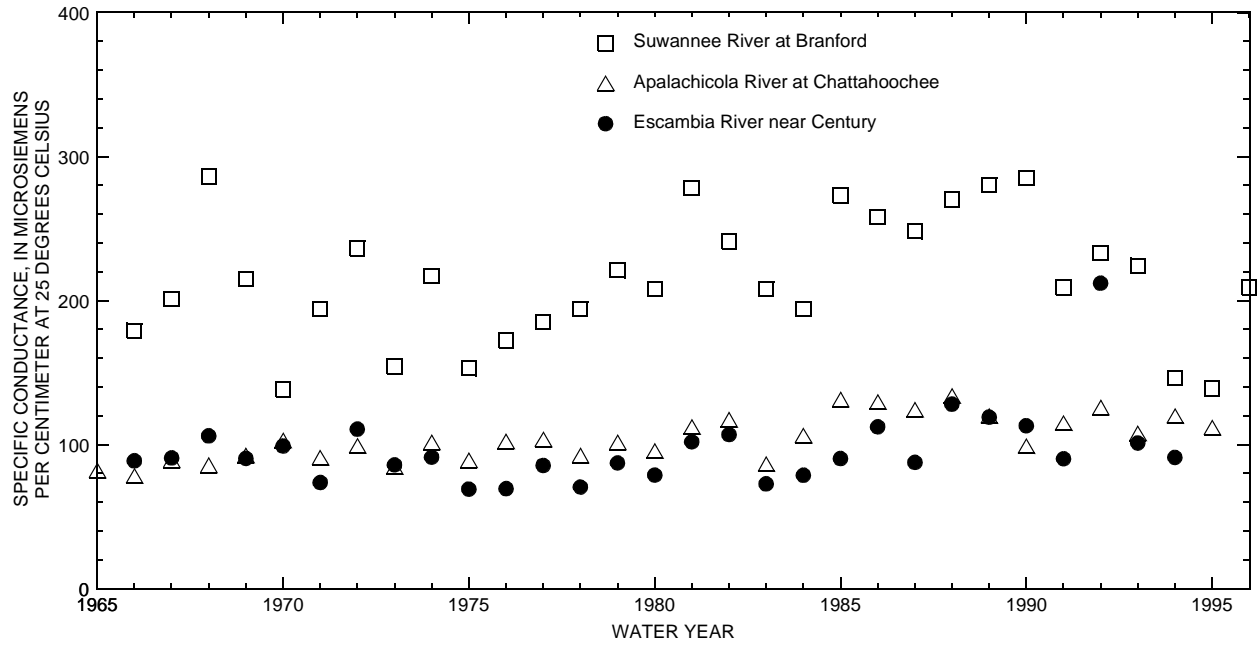


Figure 10. Annual average specific conductance at sites on Suwannee, Apalachicola, and Escambia Rivers, 1965-96.

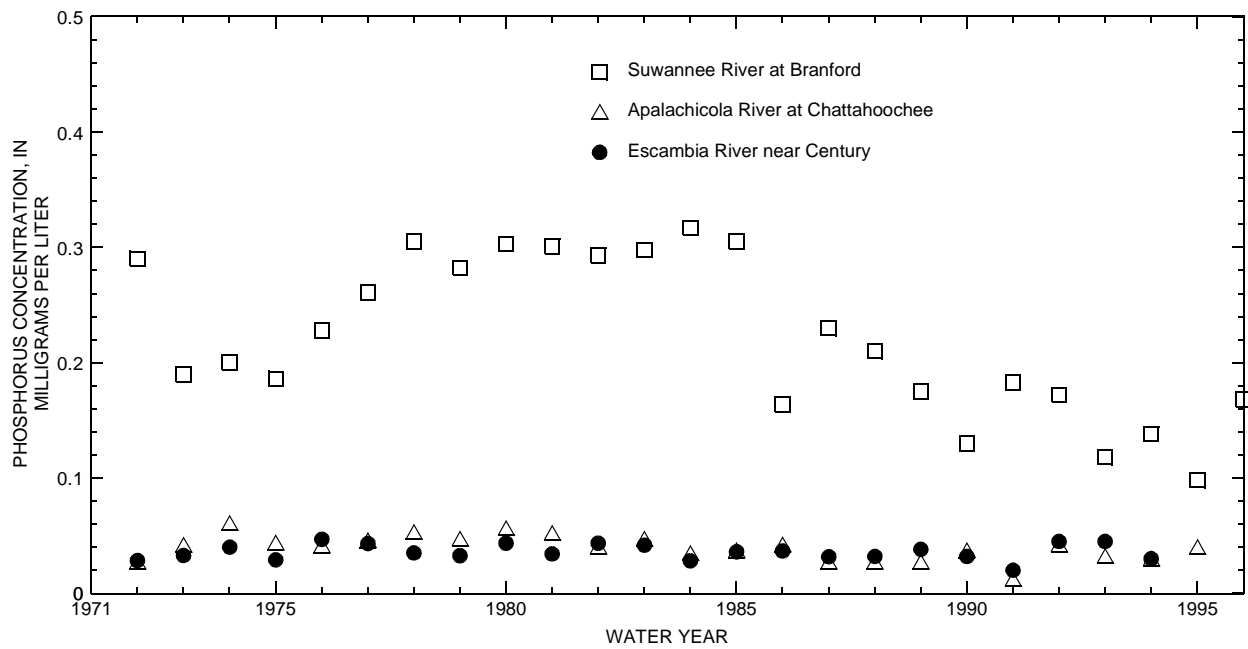


Figure 11. Annual average total phosphorus concentrations at sites on Suwannee, Apalachicola, and Escambia Rivers, 1971-96.

**SPECIAL NETWORKS AND PROGRAMS**

Hydrologic Bench-Mark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. 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.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO<sub>2</sub> emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO<sub>2</sub> and NO<sub>x</sub> scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.nrel.colostate.edu/NADP>

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 53 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 is available through the world wide web at:

[http://wwwrvares.er.usgs.gov/nawqa/nawqa\\_home.html](http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html)

**EXPLANATION OF THE RECORDS**

The surface-water and ground-water records published in this report are for the 1995 water year that began October 1, 1994, and ended September 30, 1995. 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.



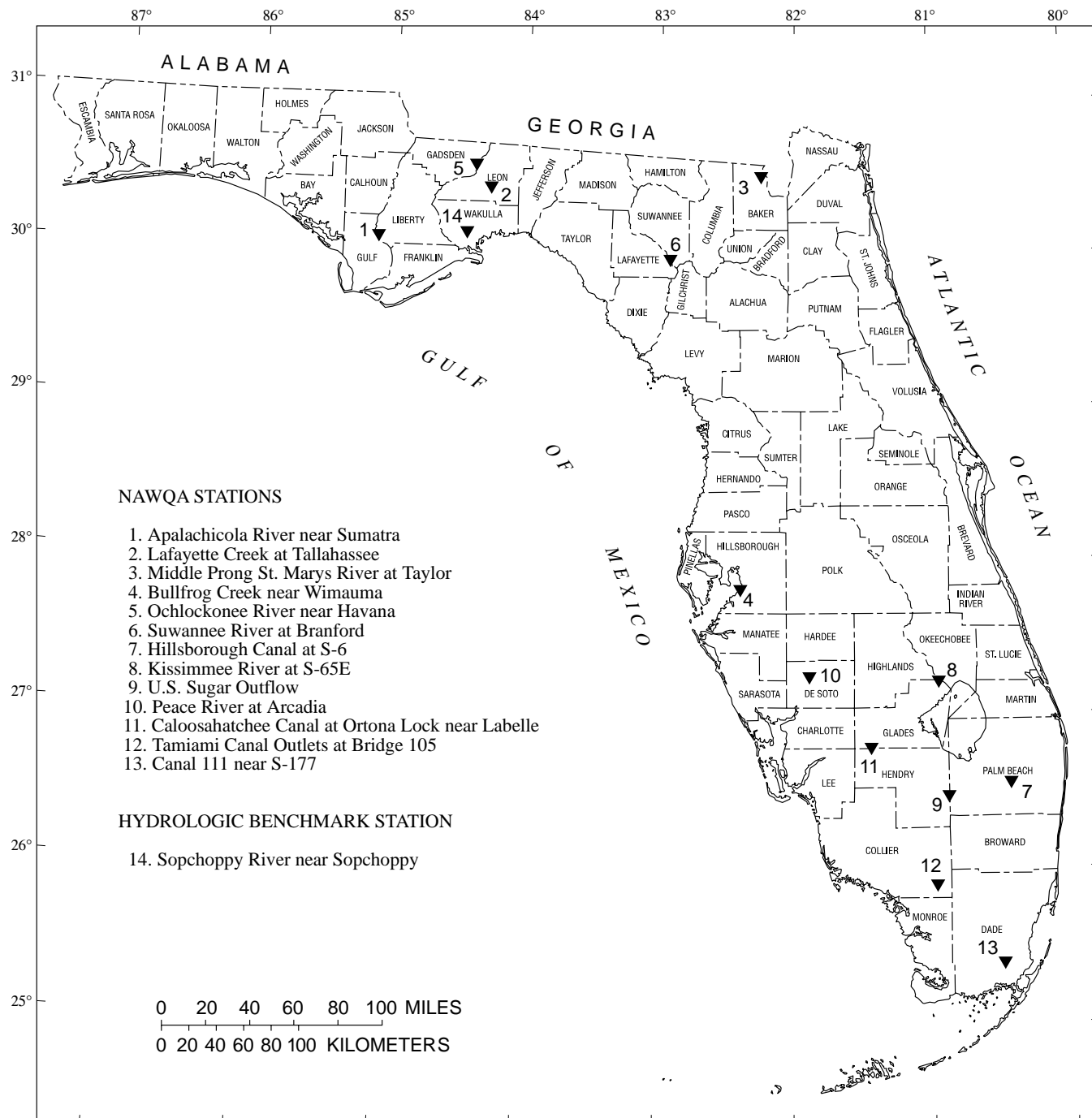


Figure 12. NASQAN and NAWQA stations in the State of Florida.

### 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.

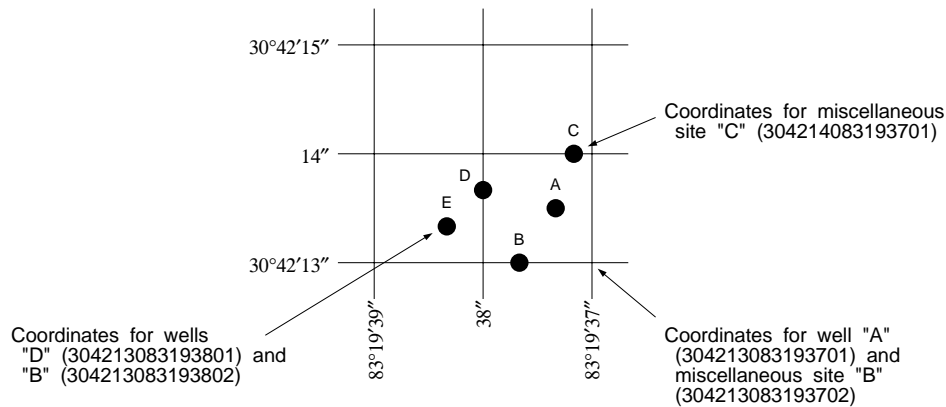
WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida  
Downstream Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 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 13.)



**Figure 13.** System for numbering wells and miscellaneous sites (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a 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 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."

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 1 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 glossary), 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 stream-flow 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:

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

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 ( $\text{ft}^3/\text{s}$ ) for values less than  $1 \text{ ft}^3/\text{s}$ ; to the nearest tenth between  $1.0$  and  $10 \text{ ft}^3/\text{s}$ ; to whole numbers between  $10$  and  $1,000 \text{ ft}^3/\text{s}$ ; and to 3 significant figures for more than  $1,000 \text{ ft}^3/\text{s}$ . The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

#### Other Records Available

Information used in the preparation of the records in this publication, such as discharge measurement notes, gage-height records, temperature measurements, and rating tables is on file in the 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.

## On-site 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 definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

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

## 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, Book1, 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

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

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:

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

Dissolved Trace-Element Concentrations

**NOTE:** Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ( $\mu\text{g/L}$ ) 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). Present data above the  $\mu\text{g/L}$  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 will begin using new trace-element protocols 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).

Records of Ground-Water Levels

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.

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida  
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 WATSTORE DATA**

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National WATER Data STORAGE and RETRIEVAL System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- Daily Values File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio chemical characteristics of both surface and ground water.
- Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey  
National Water Data Exchange  
421 National Center  
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5 1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. 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's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

**DEFINITION OF TERMS**

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

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

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

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

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

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

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

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

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

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

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

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter ( $g/m^3$ ), and periphyton and benthic organisms in grams per square mile ( $g/mi^2$ ).

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

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

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

Bottom material: See Bed material.

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

Cubic-feet-per-second day (CFS-Day) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

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

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

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

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

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

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

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

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

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

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

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

Annual 7-day minimum is 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.)

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

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

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

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

Elevation is a value given a gaging station or a ground-water well, for which the elevation of the gage datum has not been determined by leveling from a bench mark. The approximate elevation of the gage was then obtained by barometric observation or from topographic map.

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ( $\text{CaCO}_3$ ).

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

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

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

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

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

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

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

Organism is any living entity.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft<sup>3</sup>/s) x 0.0027.

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

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

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

7-day 10-year low flow (7 Q<sub>10</sub>) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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

Solute is any substance that is dissolved in water.

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

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

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

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1987, is called the "1987 water year."

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

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

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

**PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS**

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

The reports listed below are for sale by the U.S. Geological Survey, Branch of 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 sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 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, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.



- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-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, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R. L. Cooley and R. L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 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, Chapter B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-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, Chapter B7. 1992. 190 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L. C. Friedman, editors: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 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, Chapter A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greenson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 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, Chapter A2. 1991. 68 pages.
- 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, Chapter A3. 1993. 136 pages.
- 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, Chapter A4. 1992. 108 pages.
- 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, Chapter A5, 1993. 243 pages.
- 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. 1995. 125 pages.
- 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, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

## STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

WATER RESOURCES DATA FOR FLORIDA, 1996  
Volume 4: Northwest Florida

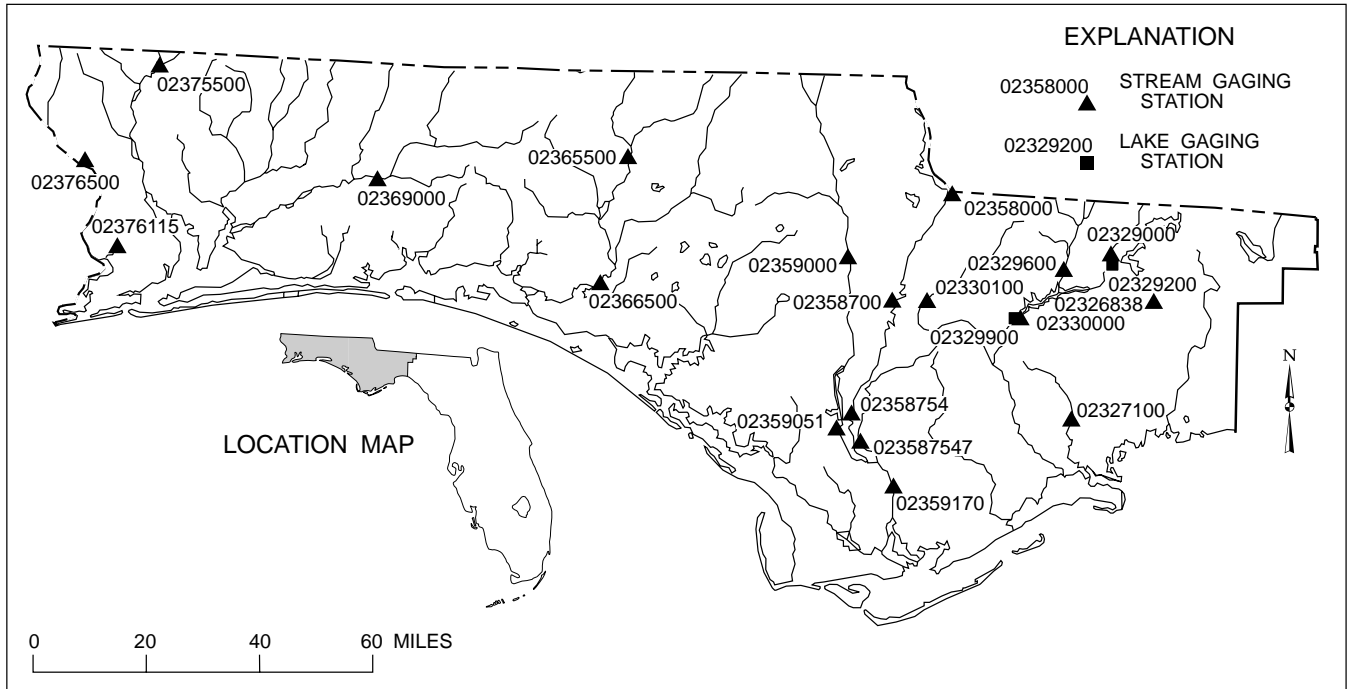


Figure 14. Location of stream gaging and lake gaging stations in Northwest Florida Water Management District.

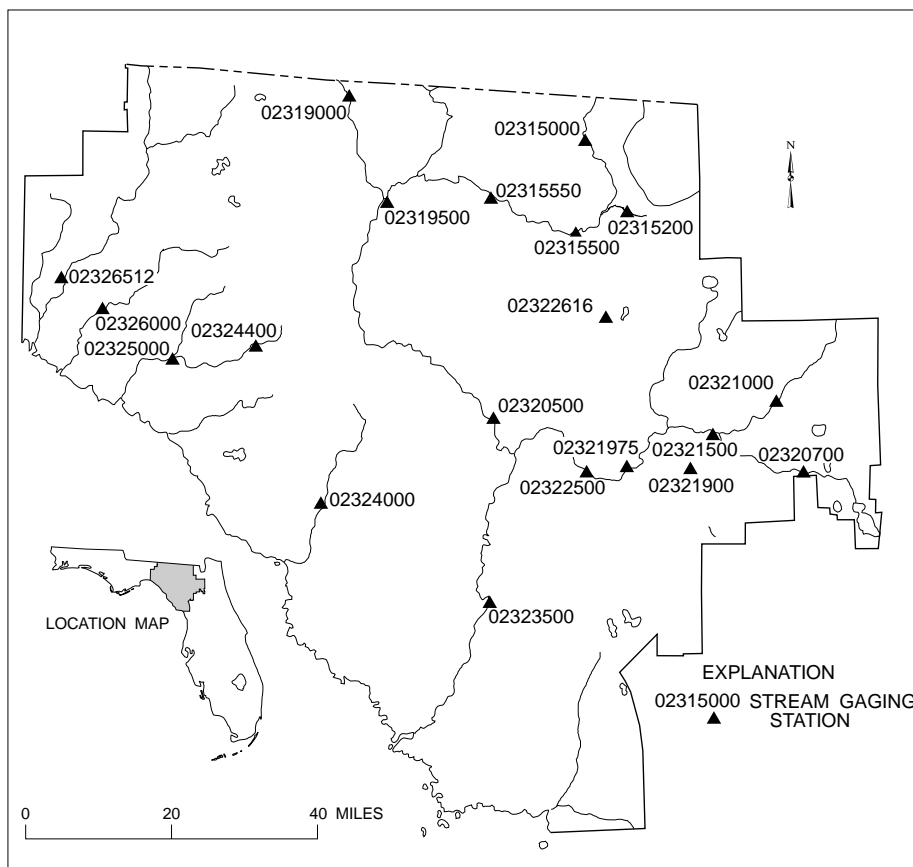


Figure 15. Location of stream gaging stations in Suwannee River Water Management District.

SUWANNEE RIVER BASIN  
02315000 SUWANNEE RIVER NEAR BENTON, FL

33

LOCATION.--Lat 30°30'26", long 82°42'59", in NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, 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, non-recording 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<sup>3</sup>/s Apr. 6, 1973, gage height, 102.80 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	301	218	215	365	310	3630	1010	82	77	80	e200
2	1190	291	221	264	359	441	3740	1010	73	70	90	e300
3	1150	287	216	373	422	508	3810	997	65	63	97	e400
4	1090	286	212	461	565	515	3840	977	59	59	118	e450
5	1050	277	205	487	606	501	3830	946	52	67	134	e440
6	988	261	202	493	604	484	3790	908	49	93	142	e430
7	919	247	200	493	590	482	3740	868	49	135	143	e415
8	849	290	197	492	573	539	3640	855	55	132	145	e400
9	785	317	197	493	559	604	3510	863	54	122	142	e375
10	732	334	199	491	548	629	3370	805	52	150	130	e350
11	686	340	206	488	533	676	3210	747	52	196	145	e440
12	646	357	222	484	514	734	3040	688	52	160	196	e420
13	610	368	225	479	491	764	2860	624	52	147	234	e360
14	579	363	223	473	465	779	2690	560	52	135	e400	e340
15	564	357	221	464	446	782	2540	504	50	123	e720	e300
16	565	344	220	457	432	784	2450	453	50	113	e700	e280
17	555	330	218	451	421	791	2320	405	49	102	e600	e275
18	550	321	217	443	401	1180	2180	349	58	94	e500	e290
19	542	311	227	440	381	1930	2050	287	48	86	e400	e275
20	522	301	243	437	362	2100	1910	225	56	83	e350	e250
21	502	288	262	426	347	2140	1780	195	104	78	e300	e240
22	481	278	271	416	335	2200	1640	176	99	76	e275	e230
23	462	259	267	406	322	2250	1510	157	95	89	e250	e220
24	442	241	262	400	312	2280	1380	138	93	100	e225	e200
25	423	230	255	399	301	2300	1260	119	92	105	e200	e190
26	403	221	245	395	289	2400	1140	105	88	119	e175	e180
27	380	213	238	395	277	2480	1040	97	84	120	e160	e170
28	363	207	232	397	261	2790	942	91	87	113	e155	e160
29	344	208	226	392	256	3060	855	84	88	104	e150	e150
30	327	211	219	383	---	3210	876	77	84	94	e145	e140
31	310	---	213	374	---	3450	---	73	---	85	e175	---
MEAN	652	288	225	428	425	1422	2486	497	67.4	106	248	296
MAX	1210	368	271	493	606	3450	3840	1010	104	196	720	450
MIN	310	207	197	215	256	310	855	73	48	59	80	140
IN.	.36	.15	.12	.24	.22	.78	1.33	.27	.04	.06	.14	.16

e Estimated

SUWANNEE RIVER BASIN  
02315000 SUWANNEE RIVER NEAR BENTON, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, BY WATER YEAR (WY)

MEAN	667	431	1110	1752	3228	3777	2531	806	607	702	966	787
MAX	3877	2240	9472	6679	8574	10750	12760	2979	3194	2966	5545	2738
(WY)	1995	1995	1977	1977	1986	1984	1984	1983	1976	1991	1991	1985
MIN	9.77	8.18	9.76	17.9	128	171	215	92.8	18.8	22.5	14.0	13.3
(WY)	1979	1979	1979	1979	1989	1989	1989	1989	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1976 - 1996		
ANNUAL MEAN	1060		594		1438		
HIGHEST ANNUAL MEAN					3297		
LOWEST ANNUAL MEAN					254		
HIGHEST DAILY MEAN	3340	Feb 25	3840	Apr 4	18200	Apr 6	1984
LOWEST DAILY MEAN	74	Jun 2	48	Jun 19	1.3	Oct 9	1990
ANNUAL SEVEN-DAY MINIMUM	98	May 27	51	Jun 11	3.3	Oct 3	1990
INSTANTANEOUS PEAK FLOW			3840	Apr 4	18300	Apr 6	1984
INSTANTANEOUS PEAK STAGE			87.78	Apr 4	99.90	Apr 6	1984
INSTANTANEOUS LOW FLOW			43	Jun 7	1.3	Oct 9	1990
ANNUAL RUNOFF (INCHES)	6.88		3.87		9.35		
10 PERCENT EXCEEDS	2940		1420		3800		
50 PERCENT EXCEEDS	619		334		566		
90 PERCENT EXCEEDS	205		87		42		

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.40	75.82	75.55	75.54	76.06	75.86	87.14	78.66	74.84	74.81	74.84	---
2	79.32	75.79	75.56	75.70	76.03	76.38	87.47	78.67	74.78	74.76	74.90	---
3	79.17	75.77	75.54	76.10	76.30	76.67	87.67	78.61	74.72	74.70	74.94	---
4	78.96	75.77	75.52	76.47	76.91	76.70	87.77	78.54	74.67	74.67	75.07	---
5	78.79	75.73	75.49	76.58	77.08	76.64	87.75	78.42	74.61	74.73	75.15	---
6	78.58	75.69	75.47	76.61	77.07	76.57	87.62	78.28	74.59	74.91	75.19	---
7	78.32	75.66	75.46	76.61	77.02	76.56	87.47	78.12	74.60	75.16	75.20	---
8	78.05	75.78	75.45	76.60	76.95	76.80	87.18	78.07	74.64	75.14	75.21	---
9	77.80	75.88	75.45	76.61	76.89	77.07	86.81	78.10	74.63	75.09	75.19	---
10	77.59	75.94	75.46	76.60	76.84	77.18	86.38	77.88	74.62	75.23	75.13	---
11	77.41	75.97	75.50	76.59	76.78	77.37	85.90	77.65	74.61	75.45	75.20	---
12	77.24	76.02	75.56	76.57	76.69	77.60	85.39	77.42	74.61	75.28	75.45	---
13	77.10	76.07	75.58	76.55	76.60	77.72	84.85	77.15	74.61	75.21	75.61	---
14	76.97	76.05	75.57	76.52	76.49	77.78	84.31	76.89	74.61	75.16	---	---
15	76.91	76.03	75.56	76.48	76.40	77.79	83.85	76.65	74.60	75.09	---	---
16	76.91	75.98	75.56	76.45	76.34	77.80	83.58	76.43	74.60	75.03	---	---
17	76.87	75.93	75.55	76.42	76.29	77.82	83.15	76.22	74.59	74.98	---	---
18	76.85	75.90	75.54	76.39	76.20	79.27	82.71	76.00	74.66	74.92	---	---
19	76.81	75.86	75.58	76.38	76.12	81.89	82.28	75.77	74.59	74.87	---	---
20	76.73	75.82	75.64	76.36	76.05	82.44	81.83	75.58	74.65	74.85	---	---
21	76.65	75.77	75.69	76.32	75.99	82.57	81.37	75.44	74.99	74.82	---	---
22	76.56	75.73	75.71	76.27	75.95	82.75	80.90	75.36	74.96	74.80	---	---
23	76.47	75.68	75.70	76.23	75.90	82.91	80.44	75.26	74.93	74.89	---	---
24	76.39	75.64	75.69	76.20	75.86	83.01	80.00	75.17	74.91	74.96	---	---
25	76.30	75.60	75.67	76.19	75.82	83.07	79.56	75.07	74.91	74.99	---	---
26	76.21	75.57	75.65	76.18	75.78	83.40	79.15	74.99	74.89	75.07	---	---
27	76.12	75.53	75.63	76.18	75.73	83.66	78.77	74.95	74.86	75.07	---	---
28	76.05	75.50	75.61	76.19	75.69	84.62	78.41	74.91	74.88	75.03	---	---
29	75.98	75.50	75.58	76.16	75.67	85.45	78.07	74.86	74.89	74.99	---	---
30	75.92	75.52	75.55	76.13	---	85.90	78.15	74.81	74.86	74.92	---	---
31	75.86	---	75.53	76.09	---	86.62	---	74.78	---	74.87	---	---
TOTAL	2394.29	2273.50	2342.60	2366.27	2213.50	2477.87	2505.93	2374.71	2241.91	2324.45	---	---
MEAN	77.24	75.78	75.57	76.33	76.33	79.93	83.53	76.60	74.73	74.98	---	---
MAX	79.40	76.07	75.71	76.61	77.08	86.62	87.77	78.67	74.99	75.45	---	---
MIN	75.86	75.50	75.45	75.54	75.67	75.86	78.07	74.78	74.59	74.67	---	---

CAL YR 1995 TOTAL 28695.98 MEAN 78.62 MAX 86.29 MIN 74.73

SUWANNEE RIVER BASIN  
02315200 DEEP CREEK NEAR SUWANNEE VALLEY, FL

35

LOCATION.--Lat 30°21'55", long 82°37'13", in NW<sup>1</sup>/<sub>4</sub> sec.33, T.1 N., R.17 E., Columbia County, Hydrologic Unit 03110201, near left bank on upstream side of bridge on U.S. Highway 441, 4.0 mi upstream from mouth, 7.2 mi northeast of Suwannee Valley, 12.2 mi north of Lake City.

DRAINAGE AREA.--88.6 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1976 to September 1981, October 1990 to current year. Miscellaneous discharge measurements for some periods prior to April 1976.

GAGE.--Water-stage recorder. Datum of gage is 82.56 ft National Geodetic Vertical Datum of 1929 (levels by L. L. Lee and Associates).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	15	13	10	5.2	14	317	31	.51	.54	4.6	50
2	7.8	22	12	15	5.3	38	275	29	.48	.51	6.3	55
3	7.2	26	12	17	9.0	36	226	26	.48	.48	28	61
4	7.0	25	11	15	11	28	191	22	.43	.48	37	57
5	9.1	22	11	14	10	23	165	19	.38	.54	54	51
6	8.6	19	10	13	9.0	19	151	16	.36	2.6	43	45
7	7.3	18	11	12	8.2	25	152	14	.71	4.0	41	39
8	6.0	20	10	12	7.7	53	139	13	.58	8.3	40	34
9	4.9	20	10	11	7.2	58	122	12	.54	15	30	30
10	4.6	18	11	10	6.6	48	106	10	.49	29	24	62
11	4.5	17	10	9.8	6.3	48	91	8.4	.48	22	34	180
12	4.2	19	9.9	10	5.9	51	80	7.0	.46	24	72	164
13	4.0	18	9.1	11	5.3	46	71	5.5	.46	21	88	99
14	6.2	17	8.7	9.9	4.8	42	63	4.3	1.5	20	96	75
15	69	16	8.4	9.2	4.7	38	74	3.5	2.5	22	88	63
16	94	15	8.1	8.5	4.6	35	104	2.9	1.6	28	72	59
17	65	14	7.8	8.0	4.4	33	91	2.3	3.2	27	63	69
18	51	13	7.5	7.9	3.9	147	75	1.9	4.4	23	60	72
19	43	13	12	8.0	3.6	309	64	1.4	2.8	21	59	64
20	38	12	19	7.5	3.4	283	56	.93	2.8	18	57	55
21	35	12	18	6.9	3.3	216	49	.69	2.6	16	53	50
22	31	11	16	6.4	3.0	173	44	.62	1.6	14	49	51
23	27	10	15	6.1	2.8	147	38	.60	1.3	13	45	47
24	25	9.6	14	6.2	2.7	131	33	.56	1.0	13	41	42
25	23	9.3	13	6.6	2.4	122	29	.54	.72	12	37	38
26	21	9.0	12	6.4	2.2	146	26	.48	.62	10	34	34
27	19	8.4	11	6.2	2.0	169	23	.45	.61	9.0	31	30
28	19	7.9	11	6.5	1.9	228	20	.52	.60	7.6	27	27
29	19	8.7	9.9	6.4	2.5	215	17	.58	.60	6.2	24	25
30	17	13	9.6	6.4	---	212	24	.72	.57	5.1	22	23
31	15	---	9.5	5.4	---	306	---	.54	---	4.2	40	---
MEAN	22.6	15.3	11.3	9.30	5.13	111	97.2	7.63	1.18	12.8	45.2	58.4
MAX	94	26	19	17	11	309	317	31	4.4	29	96	180
MIN	4.0	7.9	7.5	5.4	1.9	14	17	.45	.36	.48	4.6	23
IN.	.29	.19	.15	.12	.06	1.44	1.22	.10	.01	.17	.59	.74

SUWANNEE RIVER BASIN  
02315200 DEEP CREEK NEAR SUWANNEE VALLEY, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, BY WATER YEAR (WY)

MEAN	66.7	21.6	26.3	82.0	103	139	76.8	45.0	29.2	35.7	38.8	40.1
MAX	381	82.7	106	218	257	295	211	154	179	200	176	167
(WY)	1995	1994	1978	1978	1978	1980	1980	1976	1991	1991	1991	1979
MIN	.16	.17	.35	1.63	5.13	24.3	4.78	1.01	.40	.31	1.64	.55
(WY)	1991	1991	1991	1979	1996	1979	1976	1993	1993	1981	1977	1993

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1976 - 1996	
ANNUAL MEAN	24.2		33.1		58.2	
HIGHEST ANNUAL MEAN					109	1991
LOWEST ANNUAL MEAN					24.1	1992
HIGHEST DAILY MEAN	182	Jan 16	317	Apr 1	937	Mar 11 1980
LOWEST DAILY MEAN	.18	Jul 14	.36	Jun 6	.09	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	.19	Jul 10	.45	May 31	.09	Dec 21 1990
INSTANTANEOUS PEAK FLOW			330	Mar 31	961	Mar 11 1980
INSTANTANEOUS PEAK STAGE			8.33	Mar 31	15.08	Mar 11 1980
INSTANTANEOUS LOW FLOW			.29	Jun 2	.09	Dec 22 1990
ANNUAL RUNOFF (INCHES)	3.71		5.09		8.92	
10 PERCENT EXCEEDS	67		75		159	
50 PERCENT EXCEEDS	12		14		18	
90 PERCENT EXCEEDS	.25		.98		.44	



SUWANNEE RIVER BASIN  
02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL

37

LOCATION.--Lat 30°19'32", long 82°44'18", in SW<sup>1</sup>/<sub>4</sub> 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<sup>2</sup> 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.--Nonrecording gage. 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.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290	329	247	e255	353	313	4430	1170	117	117	143	314
2	1290	431	249	269	332	392	4470	1180	107	105	156	460
3	1250	382	252	322	387	607	4480	1140	101	87	208	600
4	1190	358	243	426	524	604	4470	e1100	85	77	264	624
5	1180	339	236	493	626	e565	4440	1080	82	80	259	602
6	1080	320	232	498	634	527	e4400	1040	75	174	260	570
7	1020	e300	234	506	618	516	4390	993	72	288	250	532
8	929	338	232	500	602	755	4270	956	110	284	262	499
9	884	346	228	500	583	e760	4100	956	99	299	239	466
10	819	365	230	500	e565	767	3950	935	87	908	210	454
11	758	377	230	493	548	793	3730	866	81	415	267	911
12	713	384	e235	495	535	869	3470	793	67	432	568	894
13	670	384	245	488	498	899	3300	735	62	358	519	711
14	626	e380	247	477	500	911	e3000	657	59	337	617	599
15	770	377	241	470	475	911	2900	583	e75	328	870	526
16	790	367	243	457	429	905	3040	511	94	318	1090	478
17	718	348	243	447	411	911	2780	447	77	278	1120	466
18	679	334	241	439	394	1050	2610	387	125	257	1040	462
19	654	327	267	436	375	2640	2390	304	125	245	919	442
20	623	320	278	424	355	2690	2260	278	134	219	807	414
21	572	311	285	411	332	2630	2060	245	155	192	705	373
22	540	290	278	402	325	2580	1940	228	161	181	616	351
23	527	274	e275	389	306	2600	1730	215	154	174	534	318
24	e500	267	272	384	294	2600	1590	184	142	198	458	290
25	472	e260	e280	384	285	2610	1470	e175	138	202	391	269
26	452	e250	285	375	276	2760	1310	e160	134	201	337	250
27	e440	e245	258	e374	267	e3000	1230	e150	129	199	297	234
28	426	236	256	e373	258	3210	1080	140	125	186	272	219
29	389	247	e252	372	258	e3500	1020	140	e124	177	257	205
30	365	252	e249	370	---	3800	1040	138	123	162	244	192
31	343	---	245	e360	---	4320	---	e125	---	148	276	---
MEAN	741	325	251	422	426	1677	2912	581	107	246	466	457
MAX	1290	431	285	506	634	4320	4480	1180	161	908	1120	911
MIN	343	236	228	255	258	313	1020	125	59	77	143	192
IN.	.35	.15	.12	.20	.19	.80	1.34	.28	.05	.12	.22	.21

e Estimated

SUWANNEE RIVER BASIN  
02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 1995, BY WATER YEAR (WY)

MEAN	1728	860	1042	1821	2714	3277	3160	1155	868	1282	1975	1963
MAX	13100	16450	9103	8401	9406	13040	23910	8288	6317	5274	10870	13310
(WY)	1929	1948	1977	1942	1986	1959	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 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1906 - 1996	
ANNUAL MEAN	1197		717		1822	
HIGHEST ANNUAL MEAN					6806	1948
LOWEST ANNUAL MEAN					155	1955
HIGHEST DAILY MEAN	3920	Feb 27	4480	Apr 3	38000	Apr 10 1973
LOWEST DAILY MEAN	110	Jun 1	59	Jun 14	2.8	Sep 26 1990
ANNUAL SEVEN-DAY MINIMUM	133	May 26	74	Jun 11	3.4	Sep 26 1990
INSTANTANEOUS PEAK FLOW			4480	Apr 3	38100	Apr 10 1973
INSTANTANEOUS PEAK STAGE			63.44	Apr 3	88.56	Apr 10 1973
INSTANTANEOUS LOW FLOW			56	Jul 6	2.8	Sep 26 1990
ANNUAL RUNOFF (INCHES)	6.69		4.02		10.19	
10 PERCENT EXCEEDS	3250		1630		5000	
50 PERCENT EXCEEDS	682		384		720	
90 PERCENT EXCEEDS	241		143		60	

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55.19	52.03	51.71	---	52.21	52.07	63.34	54.81	50.85	50.85	51.03	52.07
2	55.20	52.41	51.72	51.85	52.14	52.35	63.42	54.85	50.78	50.77	51.12	52.58
3	55.08	52.23	51.73	52.10	52.33	53.06	63.44	54.73	50.75	50.67	51.47	53.04
4	54.90	52.14	51.68	52.47	52.79	53.05	63.43	---	50.66	50.61	51.82	53.11
5	54.87	52.07	51.64	52.69	53.12	---	63.35	54.55	50.64	50.62	51.79	53.04
6	54.55	52.00	51.62	52.71	53.14	52.80	---	54.42	50.60	51.19	51.79	52.94
7	54.36	---	51.63	52.73	53.09	52.77	63.23	54.26	50.58	51.93	51.73	52.82
8	54.05	52.07	51.62	52.72	53.04	53.51	62.96	54.14	50.80	51.91	51.81	52.71
9	53.90	52.10	51.59	52.72	52.98	---	62.56	54.14	50.74	51.85	51.67	52.60
10	53.69	52.17	51.60	52.72	---	53.54	62.20	54.07	50.67	53.99	51.48	52.56
11	53.50	52.21	51.60	52.69	52.87	53.62	61.68	53.84	50.64	52.43	51.79	54.00
12	53.36	52.24	---	52.70	52.83	53.85	61.05	53.62	50.55	52.49	52.93	53.94
13	53.22	52.24	51.70	52.67	52.71	53.95	60.64	53.45	50.52	52.23	52.78	53.38
14	53.08	---	51.71	52.64	52.72	53.99	---	53.21	50.50	52.16	53.08	53.03
15	53.54	52.21	51.67	52.61	52.63	53.99	59.65	52.98	---	52.12	53.86	52.80
16	53.60	52.18	51.69	52.57	52.48	53.97	60.00	52.75	50.71	52.09	54.59	52.64
17	53.38	52.11	51.68	52.54	52.42	53.99	59.32	52.54	50.61	51.90	54.67	52.60
18	53.25	52.05	51.67	52.51	52.36	54.44	58.90	52.33	50.91	51.78	54.41	52.59
19	53.17	52.02	51.84	52.50	52.29	58.98	58.32	52.03	50.91	51.70	54.02	52.52
20	53.07	52.00	51.91	52.46	52.22	59.11	57.96	51.91	50.98	51.54	53.66	52.43
21	52.90	51.96	51.95	52.42	52.14	58.94	57.42	51.71	51.13	51.36	53.36	52.28
22	52.79	51.88	51.91	52.38	52.11	58.81	57.10	51.60	51.17	51.29	53.08	52.20
23	52.75	51.82	---	52.34	52.04	58.86	56.49	51.52	51.11	51.25	52.83	52.09
24	---	51.79	51.87	52.32	52.00	58.87	56.08	51.31	51.03	51.40	52.57	51.97
25	52.56	---	---	52.32	51.94	58.88	55.75	---	51.00	51.43	52.35	51.85
26	52.48	---	51.95	52.29	51.89	59.27	55.27	---	50.97	51.43	52.16	51.74
27	---	---	51.78	---	51.84	---	55.00	---	50.93	51.41	52.00	51.64
28	52.39	51.64	51.77	---	51.79	60.42	54.55	51.02	50.91	51.33	51.87	51.54
29	52.26	51.71	---	52.28	51.79	---	54.35	51.02	---	51.27	51.78	51.45
30	52.17	51.73	---	52.27	---	61.86	54.40	51.00	50.89	51.17	51.70	51.37
31	52.09	---	51.71	---	---	63.07	---	---	---	51.07	51.89	---
TOTAL	---	---	---	---	---	---	---	---	---	1599.24	1627.09	1575.53
MEAN	---	---	---	---	---	---	---	---	---	51.59	52.49	52.52
MAX	---	---	---	---	---	---	---	---	---	53.99	54.67	54.00
MIN	---	---	---	---	---	---	---	---	---	50.61	51.03	51.37

SUWANNEE RIVER BASIN  
02315550 SUWANNEE RIVER AT SUWANNEE SPRINGS, FL

39

LOCATION.--Lat 30°23'34", long 82°56'00", in NE<sup>1</sup>/<sub>4</sub> sec.20, T.1 S., R.14 E., Suwannee County, Hydrologic Unit 03110201, on left bank 0.2 mi upstream from springs at town of Suwannee Springs, 7.5 mi north of Live Oak, and 150 mi upstream from mouth.

DRAINAGE AREA.--2,630 mi<sup>2</sup>, approximately, includes part of watershed in Okefenokee Swamp, which is indeterminate.

PERIOD OF RECORD.--October 1974 to September 1996, discontinued. Prior to November 1960, six miscellaneous discharge measurements made in 1906, 1951 and 1956. November 1960 to September 1974 (gage heights and discharge measurements only).

REVISED RECORDS.--WSP 2105: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Dec. 13, 1960 to Apr. 26, 1972 and Aug. 21, 1974 to May 8, 1980, auxiliary nonrecording gage 0.3 mi downstream from base gage at same datum. Since Oct. 1, 1982 water stage recorder at Suwannee River at Ellaville (02319500), about 23 mi. downstream from base gage, used to determine discharge during backwater conditions.

REMARKS.--Records good, except for estimated daily discharges which are fair. Flow affected by backwater from Withlacoochee and Alapaha Rivers at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	416	321	313	501	403	e4500	1320	e270	232	256	514
2	1310	457	320	340	492	596	4480	1350	e260	226	264	589
3	1290	474	319	405	521	716	4450	1310	e250	219	308	731
4	1260	443	312	530	585	724	4440	1270	e240	212	385	793
5	1310	429	306	635	705	707	4420	1220	e230	211	453	787
6	1290	432	334	684	751	667	4380	1160	e220	304	424	752
7	1200	401	375	709	745	641	4380	1080	e210	509	425	720
8	1100	395	380	673	732	775	4360	995	e275	564	448	671
9	988	461	399	612	715	886	4310	952	e250	552	448	616
10	889	474	401	598	697	884	4240	942	e225	937	403	575
11	814	490	369	605	689	886	4150	924	212	963	446	771
12	761	500	315	641	676	929	4030	915	e180	834	e700	1030
13	717	512	308	663	648	972	3880	878	e170	780	e650	897
14	684	536	309	655	617	987	3700	820	e160	718	801	756
15	720	520	306	637	582	986	3580	758	e200	683	962	663
16	799	474	303	621	553	981	3620	685	e240	666	1200	609
17	776	457	301	562	529	981	3450	629	e200	629	1310	583
18	724	434	298	531	512	1360	3220	581	e225	574	1260	571
19	697	412	316	548	496	2520	2990	523	e250	521	1150	552
20	678	394	362	577	480	3040	2800	469	e275	485	1030	531
21	652	425	369	602	460	3060	2600	427	e300	441	923	501
22	620	419	360	577	445	2990	2420	405	e325	400	834	462
23	595	382	354	553	435	2940	2240	384	e300	382	751	432
24	572	356	347	543	415	2910	2070	360	e280	380	668	400
25	549	341	339	545	398	2910	1900	340	261	386	596	369
26	530	335	338	530	380	3000	1730	324	254	375	540	341
27	505	323	337	527	366	e3250	1580	305	246	363	486	323
28	503	306	327	526	354	e3500	1430	303	240	350	453	301
29	484	310	317	525	349	e3750	1300	303	237	328	440	287
30	448	320	311	519	---	e4000	1300	290	e235	306	418	275
31	425	---	310	512	---	e4300	---	278	---	277	445	---
MEAN	813	421	334	564	546	1847	3265	726	241	478	641	580
MAX	1310	536	401	709	751	4300	4500	1350	325	963	1310	1030
MIN	425	306	298	313	349	403	1300	278	160	211	256	275
IN.	.36	.18	.15	.25	.22	.81	1.39	.32	.10	.21	.28	.25

e Estimated

SUWANNEE RIVER BASIN  
02315550 SUWANNEE RIVER AT SUWANNEE SPRINGS, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, BY WATER YEAR (WY)

	951	597	1206	2074	3638	4243	3319	1323	931	1066	1412	1154
MEAN	951	597	1206	2074	3638	4243	3319	1323	931	1066	1412	1154
MAX	4760	2798	8474	7684	8629	10260	14030	4229	3960	4331	6963	3331
(WY)	1995	1995	1977	1977	1991	1991	1984	1975	1991	1991	1991	1985
MIN	92.0	72.7	87.1	97.3	220	246	251	186	127	122	92.4	80.9
(WY)	1991	1979	1979	1979	1989	1989	1989	1989	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1975 - 1996	
ANNUAL MEAN	1256		870		1816	
HIGHEST ANNUAL MEAN					3761	
LOWEST ANNUAL MEAN					340	
HIGHEST DAILY MEAN	3830	Feb 28	4500	Apr 1	17800	Apr 10 1984
LOWEST DAILY MEAN	231	Jun 2	160	Jun 14	49	Oct 5 1990
ANNUAL SEVEN-DAY MINIMUM	245	May 28	195	Jun 11	53	Sep 29 1990
INSTANTANEOUS PEAK FLOW			4500	Apr 1	30100	Apr 12 1973
INSTANTANEOUS PEAK STAGE			51.23	Apr 7	78.91	Apr 12 1973
INSTANTANEOUS LOW FLOW			160	Jun 14	46	Oct 5 1990
ANNUAL RUNOFF (INCHES)	6.48		4.51		9.38	
10 PERCENT EXCEEDS	3100		2120		4660	
50 PERCENT EXCEEDS	730		530		872	
90 PERCENT EXCEEDS	317		279		177	

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.70	39.34	38.92	38.89	39.63	39.26	---	42.82	---	38.38	38.39	39.61
2	42.69	39.52	38.92	39.00	39.59	40.03	50.86	42.97	---	38.33	38.44	39.91
3	42.64	39.59	38.91	39.27	39.71	40.49	50.93	42.88	---	38.27	38.72	40.44
4	42.54	39.46	38.88	39.78	39.96	40.52	51.06	42.77	---	38.22	39.07	40.67
5	42.69	39.40	38.85	40.17	40.42	40.47	51.13	42.66	---	38.21	39.36	40.64
6	42.65	39.41	38.98	40.34	40.59	40.32	51.17	42.52	---	38.77	39.24	40.52
7	42.37	39.28	39.17	40.43	40.57	40.23	51.21	42.34	---	39.70	39.24	40.40
8	42.03	39.26	39.19	40.30	40.54	40.71	51.15	42.16	---	39.89	39.34	40.22
9	41.67	39.54	39.27	40.07	40.49	41.11	50.96	42.09	---	39.81	39.34	40.01
10	41.34	39.59	39.28	40.01	40.43	41.14	50.67	42.08	---	41.15	39.15	39.85
11	41.08	39.65	39.14	40.04	40.40	41.18	50.31	41.94	38.22	41.25	39.33	40.57
12	40.89	39.70	38.90	40.18	40.34	41.37	49.92	41.79	---	40.81	---	41.48
13	40.73	39.75	38.86	40.26	40.23	41.56	49.48	41.58	---	40.62	---	41.03
14	40.61	39.84	38.86	40.23	40.12	41.64	48.97	41.32	---	40.39	40.69	40.53
15	40.74	39.78	38.85	40.16	39.98	41.65	48.58	41.05	---	40.26	41.24	40.19
16	41.03	39.59	38.84	40.10	39.86	41.64	48.55	40.73	---	40.20	42.02	39.99
17	40.93	39.52	38.83	39.87	39.76	41.65	48.17	40.46	---	40.06	42.35	39.89
18	40.71	39.42	38.82	39.75	39.68	42.69	47.65	40.21	---	39.85	42.21	39.84
19	40.59	39.33	38.90	39.82	39.62	45.50	47.12	39.95	---	39.64	41.87	39.76
20	40.49	39.25	39.11	39.93	39.55	46.54	46.65	39.70	---	39.49	41.47	39.68
21	40.37	39.38	39.14	40.03	39.47	46.56	46.17	39.50	---	39.31	41.12	39.56
22	40.22	39.36	39.10	39.93	39.42	46.47	45.71	39.39	---	39.14	40.81	39.40
23	40.09	39.20	39.07	39.84	39.38	46.46	45.25	39.29	---	39.06	40.51	39.28
24	39.98	39.08	39.04	39.80	39.31	46.50	44.79	39.17	---	39.05	40.21	39.14
25	39.89	39.02	39.01	39.81	39.23	46.58	44.33	39.07	38.59	39.08	39.94	39.00
26	39.82	38.99	39.00	39.75	39.16	46.82	43.90	38.97	38.54	39.03	39.72	38.87
27	39.72	38.93	39.00	39.74	39.10	---	43.48	38.88	38.48	38.97	39.50	38.79
28	39.71	38.85	38.95	39.73	39.05	---	43.08	38.87	38.44	38.92	39.36	38.69
29	39.63	38.87	38.90	39.73	39.01	---	42.72	38.87	38.41	38.81	39.31	38.61
30	39.48	38.92	38.88	39.70	---	---	42.75	38.79	---	38.71	39.21	38.52
31	39.38	---	38.87	39.68	---	---	---	38.71	---	38.54	39.33	---
TOTAL	1269.41	1180.82	1208.44	1236.34	1154.60	---	---	1263.53	---	1221.92	---	1195.09
MEAN	40.95	39.36	38.98	39.88	39.81	---	---	40.76	---	39.42	---	39.84
MAX	42.70	39.84	39.28	40.43	40.59	---	---	42.97	---	41.25	---	41.48
MIN	39.38	38.85	38.82	38.89	39.01	---	---	38.71	---	38.21	---	38.52

CAL YR 1995    TOTAL 15594.33    MEAN 42.72    MAX 54.61    MIN 38.54

SUWANNEE RIVER BASIN  
02319000 WITHLACOOCHEE RIVER NEAR PINETTA, FL

41

LOCATION.--Lat 30°35'43", long 83°15'35", in NW<sup>1</sup>/<sub>4</sub> sec.7, T.2 N., R.11 E., Madison County, Hydrologic Unit 03110203, on right bank 30 ft downstream from 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<sup>2</sup>, 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 above 390 ft<sup>3</sup>/s.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	159	163	236	548	1080	7150	1440	287	174	184	195
2	170	153	163	393	593	1150	7630	1640	277	174	240	251
3	175	156	162	950	771	1240	7930	1830	269	174	323	240
4	192	157	159	917	1080	1230	8190	2110	261	171	387	227
5	193	189	158	705	1150	1180	8390	2530	258	187	307	231
6	190	198	158	550	1150	1150	8310	3110	251	213	290	225
7	196	186	167	508	1170	1150	7840	3720	247	239	261	211
8	190	195	162	520	1210	1190	6920	4200	246	237	276	202
9	182	333	161	539	1260	1440	5680	4230	247	219	265	196
10	175	340	167	531	1230	1730	4370	3430	252	240	225	199
11	174	307	177	493	1130	2050	3400	2100	252	254	216	295
12	273	282	200	477	1030	2490	2830	1450	240	222	246	468
13	468	276	196	466	930	2760	2490	1150	228	201	247	353
14	359	266	192	445	825	2700	2250	968	222	194	255	266
15	272	241	192	431	733	2540	2050	845	221	191	231	228
16	220	225	195	408	667	2420	1990	760	261	189	227	207
17	189	213	196	390	595	2290	1910	687	247	188	222	210
18	173	207	196	376	558	2160	1780	627	234	181	197	233
19	163	203	213	366	555	2280	1660	580	245	173	178	310
20	158	196	237	328	576	2430	1570	528	238	170	173	268
21	152	189	296	328	760	2600	1470	480	222	170	168	229
22	145	180	292	336	947	2920	1360	446	211	170	169	207
23	138	172	289	322	1020	3490	1250	415	206	168	169	182
24	133	167	288	314	1050	3810	1150	383	201	176	167	166
25	132	160	278	320	1100	3900	1050	358	195	220	167	163
26	132	152	270	362	1130	3960	976	343	190	255	170	157
27	132	149	263	387	1150	4010	923	325	185	250	170	148
28	155	149	254	438	1130	4170	889	322	184	223	170	129
29	164	172	240	503	1090	4790	859	329	180	207	169	142
30	176	166	233	524	---	5460	998	340	176	191	167	168
31	172	---	231	536	---	6170	---	309	---	180	177	---
MEAN	191	205	211	464	936	2643	3509	1354	231	200	220	224
MAX	468	340	296	950	1260	6170	8390	4230	287	255	387	468
MIN	132	149	158	236	548	1080	859	309	176	168	167	129
IN.	.10	.11	.11	.25	.48	1.44	1.85	.74	.12	.11	.12	.12

SUWANNEE RIVER BASIN  
02319000 WITHLACOOCHEE RIVER NEAR PINETTA, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1996, BY WATER YEAR (WY)

MEAN	660	515	1215	2122	3554	4071	3339	1382	1004	1054	1190	792
MAX	8178	9450	11280	8134	14720	12500	17320	8154	6043	6003	6759	6625
(WY)	1995	1948	1965	1993	1986	1948	1948	1964	1973	1991	1991	1935
MIN	85.7	78.1	92.4	116	133	238	253	214	161	88.3	89.7	96.5
(WY)	1955	1955	1955	1934	1934	1955	1968	1938	1954	1955	1955	1954

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1932 - 1996	
ANNUAL MEAN	1679		863		1732	
HIGHEST ANNUAL MEAN					5364	1948
LOWEST ANNUAL MEAN					236	1955
HIGHEST DAILY MEAN	18900	Feb 19	8390	Apr 5	73600	Apr 5 1948
LOWEST DAILY MEAN	132	Oct 25	129	Sep 28	73	Aug 21 1955
ANNUAL SEVEN-DAY MINIMUM	138	Oct 21	138	Oct 21	77	Aug 17 1955
INSTANTANEOUS PEAK FLOW			8430	Apr 5	79400	Apr 5 1948
INSTANTANEOUS PEAK STAGE			18.77	Apr 5	38.64	Apr 5 1948
INSTANTANEOUS LOW FLOW			129	Sep 28	70	Aug 23 1955
ANNUAL RUNOFF (INCHES)	10.75		5.54		11.10	
10 PERCENT EXCEEDS	5030		2330		4600	
50 PERCENT EXCEEDS	345		262		623	
90 PERCENT EXCEEDS	162		167		150	

SUWANNEE RIVER BASIN  
02319500 SUWANNEE RIVER AT ELLAVILLE, FL

43

LOCATION.--Lat 30°23'04", long 83°10'19", in NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, 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<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2570	1670	1610	1610	2120	2660	11700	5000	2310	1650	1510	1880
2	2570	1660	1600	1650	2150	2650	12300	5240	2260	1620	1520	1980
3	2590	1700	1590	1910	2170	2780	12800	5380	2210	1610	1640	2080
4	2670	1670	1590	2200	2190	2860	13200	5490	2170	1620	1750	2140
5	2670	1640	1580	2240	2390	2930	13600	5710	2130	1640	1870	2170
6	2670	1660	1580	2220	2490	2920	13900	6090	2100	1720	1840	2140
7	2670	1660	1610	2190	2550	2920	14000	6560	2060	1870	1810	2110
8	2620	1640	1610	2020	2750	2900	13900	7030	2040	1970	1800	2070
9	2520	1650	1630	2010	2820	3110	13700	7400	2040	1970	1820	2020
10	2390	1820	1620	2000	2850	3370	13200	7510	2020	2010	1770	1970
11	2200	1850	1620	1980	2820	3610	12600	7100	2010	2220	1780	1970
12	2110	1830	1600	2030	2760	3940	12100	6480	2000	2120	1860	2250
13	2210	1820	1580	2140	2700	4320	11500	6040	2060	2060	2060	2360
14	2220	1820	1580	2140	2650	4550	11000	5680	2050	2000	2130	2280
15	2120	1690	1580	2120	2590	4660	10500	5300	2060	1970	2220	2180
16	2160	1610	1570	2100	2520	4710	10100	4910	2060	1930	2360	2120
17	2240	1640	1570	2070	2380	4750	9710	4470	2050	1900	2480	2070
18	2170	1670	1570	2020	2340	4940	9280	3980	2030	1860	2520	2060
19	2110	1720	1610	1960	2310	5520	8800	3620	2030	1810	2510	2050
20	2060	1750	1610	1890	2310	6180	8370	3350	2000	1760	2440	2060
21	2010	1740	1650	1900	2320	6600	7920	3160	1950	1730	2310	2020
22	1950	1740	1670	1900	2490	6920	7480	3020	1920	1720	2220	1970
23	1910	1710	1670	1970	2570	7330	7040	2900	1890	1720	2150	1850
24	1860	1670	1650	1970	2640	7750	6600	2810	1870	1690	2090	1790
25	1830	1650	1640	1940	2660	8050	6180	2720	1830	1680	2030	1810
26	1800	1630	1510	1970	2690	8300	5820	2640	1790	1660	1980	1770
27	1770	1620	1500	2000	2700	8590	5460	2570	1760	1670	1920	1730
28	1800	1600	1480	2010	2700	8950	5140	2520	1720	1650	1870	1710
29	1740	1610	1460	2060	2630	9490	4900	2480	1690	1620	1890	1680
30	1710	1610	1440	2100	---	10200	4860	2440	1670	1580	1850	1660
31	1700	---	1530	2120	---	10900	---	2380	---	1550	1800	---
MEAN	2181	1692	1584	2014	2526	5463	9922	4580	1993	1793	1994	1998
MAX	2670	1850	1670	2240	2850	10900	14000	7510	2310	2220	2520	2360
MIN	1700	1600	1440	1610	2120	2650	4860	2380	1670	1550	1510	1660
IN.	.36	.27	.26	.33	.39	.90	1.59	.76	.32	.30	.33	.32

SUWANNEE RIVER BASIN  
02319500 SUWANNEE RIVER AT ELLAVILLE, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1996, BY WATER YEAR (WY)

MEAN	4910	3418	4160	6249	9345	11780	11450	6272	4315	4575	5887	5385
MAX	32940	35590	30600	21150	30720	33680	53180	25380	17800	14380	34990	30760
(WY)	1929	1948	1948	1977	1991	1991	1948	1928	1973	1991	1928	1928
MIN	1006	951	978	1014	1189	1240	1702	1245	1084	917	1010	1082
(WY)	1991	1991	1955	1956	1957	1955	1968	1932	1955	1955	1955	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1927 - 1996		
ANNUAL MEAN	5415		3140		6508		
HIGHEST ANNUAL MEAN					19710		
LOWEST ANNUAL MEAN					1296		
HIGHEST DAILY MEAN	21000	Feb 26	14000	Apr 7	94700	Apr 8	1948
LOWEST DAILY MEAN	1440	Dec 30	1440	Dec 30	835	Nov 8	1990
ANNUAL SEVEN-DAY MINIMUM	1510	Dec 25	1500	Dec 26	862	Nov 3	1990
INSTANTANEOUS PEAK FLOW			14000	Apr 7	95300	Apr 7	1948
INSTANTANEOUS PEAK STAGE			13.78	Apr 7	40.88	Apr 7	1948
INSTANTANEOUS LOW FLOW			1440	Dec 30	835	Nov 8	1990
ANNUAL RUNOFF (INCHES)	10.55		6.13		12.69		
10 PERCENT EXCEEDS	13100		6950		14700		
50 PERCENT EXCEEDS	2670		2060		3930		
90 PERCENT EXCEEDS	1650		1620		1540		

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.86	2.29	2.23	2.23	2.68	3.16	11.54	5.27	2.74	2.13	2.00	2.33
2	2.86	2.28	2.23	2.27	2.71	3.15	12.17	5.49	2.68	2.10	2.02	2.41
3	2.88	2.30	2.22	2.50	2.72	3.26	12.64	5.63	2.63	2.09	2.12	2.50
4	2.95	2.28	2.21	2.75	2.75	3.34	13.04	5.73	2.60	2.10	2.21	2.57
5	2.95	2.26	2.21	2.79	2.92	3.39	13.38	5.93	2.55	2.12	2.32	2.59
6	2.95	2.28	2.21	2.76	3.01	3.39	13.65	6.28	2.52	2.19	2.29	2.57
7	2.94	2.28	2.23	2.74	3.06	3.39	13.77	6.72	2.48	2.32	2.27	2.54
8	2.89	2.26	2.23	2.59	3.24	3.38	13.69	7.15	2.47	2.40	2.26	2.50
9	2.83	2.26	2.25	2.59	3.30	3.56	13.45	7.49	2.47	2.41	2.28	2.45
10	2.74	2.38	2.25	2.58	3.33	3.79	12.98	7.60	2.45	2.45	2.24	2.41
11	2.62	2.40	2.24	2.56	3.30	4.01	12.43	7.22	2.44	2.64	2.24	2.41
12	2.57	2.38	2.22	2.60	3.25	4.31	11.90	6.64	2.43	2.54	2.32	2.68
13	2.63	2.38	2.21	2.70	3.19	4.65	11.41	6.23	2.49	2.49	2.49	2.79
14	2.63	2.38	2.21	2.70	3.15	4.86	10.90	5.90	2.48	2.44	2.56	2.71
15	2.57	2.30	2.21	2.68	3.10	4.96	10.43	5.55	2.49	2.41	2.64	2.60
16	2.59	2.23	2.20	2.66	3.03	5.01	10.02	5.19	2.49	2.37	2.79	2.54
17	2.65	2.26	2.20	2.64	2.91	5.05	9.67	4.79	2.48	2.35	2.91	2.50
18	2.60	2.28	2.20	2.60	2.87	5.22	9.26	4.35	2.46	2.31	2.95	2.48
19	2.57	2.32	2.24	2.54	2.85	5.75	8.81	4.02	2.46	2.27	2.93	2.48
20	2.54	2.34	2.24	2.48	2.85	6.37	8.40	3.78	2.43	2.23	2.87	2.49
21	2.50	2.33	2.27	2.48	2.86	6.75	7.99	3.59	2.39	2.20	2.73	2.45
22	2.46	2.33	2.29	2.48	3.00	7.05	7.57	3.45	2.37	2.19	2.64	2.41
23	2.43	2.31	2.28	2.55	3.07	7.43	7.16	3.33	2.34	2.19	2.58	2.30
24	2.41	2.29	2.27	2.55	3.14	7.83	6.75	3.24	2.32	2.17	2.52	2.25
25	2.39	2.27	2.26	2.53	3.16	8.11	6.36	3.15	2.29	2.15	2.46	2.27
26	2.36	2.25	2.15	2.55	3.18	8.34	6.03	3.07	2.26	2.14	2.42	2.23
27	2.35	2.24	2.14	2.58	3.20	8.62	5.70	3.00	2.22	2.14	2.36	2.20
28	2.37	2.23	2.12	2.58	3.19	8.95	5.40	2.94	2.19	2.13	2.32	2.18
29	2.33	2.23	2.10	2.63	3.13	9.46	5.18	2.91	2.16	2.10	2.34	2.15
30	2.31	2.23	2.09	2.66	---	10.10	5.14	2.87	2.14	2.07	2.30	2.14
31	2.30	---	2.17	2.68	---	10.78	---	2.80	---	2.04	2.26	---
TOTAL	81.03	68.85	68.58	80.23	88.15	177.42	296.82	151.31	72.92	69.88	75.64	73.13
MEAN	2.61	2.29	2.21	2.59	3.04	5.72	9.89	4.88	2.43	2.25	2.44	2.44
MAX	2.95	2.40	2.29	2.79	3.33	10.78	13.77	7.60	2.74	2.64	2.95	2.79
MIN	2.30	2.23	2.09	2.23	2.68	3.15	5.14	2.80	2.14	2.04	2.00	2.14
CAL YR 1995	TOTAL 2067.73	MEAN 5.67	MAX 20.60	MIN 2.09								
WTR YR 1996	TOTAL 1303.96	MEAN 3.56	MAX 13.77	MIN 2.00								



SUWANNEE RIVER BASIN  
02320500 SUWANNEE RIVER AT BRANFORD, FL  
(National water-quality assessment network station)

45

LOCATION.--Lat 29°57'20", long 82°55'40", in NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Nonrecording gage. Datum of gage is 4.81 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--1995: Records good. 1996: No estimated daily discharges, records good.

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

REVISIONS.--Revised figures for daily gage heights and discharges for the water year 1995 superseding those published in the 1995 report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7390	15800	7590	8290	12000	19300	11400	5840	3570	4000	3250	3190
2	7300	15400	7620	8180	12200	19200	11200	5730	3540	3880	3210	3240
3	7420	15000	8040	7940	12300	18800	11200	5600	3520	3810	3210	3230
4	7830	14600	8620	7900	12500	18200	11100	5400	3510	3750	3270	3190
5	9200	14200	9090	7760	12700	17600	11100	5260	3530	3700	3230	3140
6	11000	13900	9360	7610	12700	17100	11200	5120	3650	3650	3210	3110
7	12700	13600	9470	7610	12700	16500	11000	4980	3630	3640	3210	3090
8	14000	13400	9520	7510	12600	16100	10900	4850	3720	3630	3190	3080
9	14900	13100	9570	7460	12400	15700	10800	4740	3890	3600	3220	3080
10	15700	12800	9600	7840	12200	15300	10600	4650	4010	3550	3180	3080
11	16500	12500	9720	7980	11900	14900	10300	4570	4080	3490	3140	3040
12	17200	12100	9750	8050	11700	14500	10100	4700	4220	3450	3120	3000
13	18100	11700	9850	8070	11500	14100	9870	4580	4400	3390	3100	2990
14	18900	11400	10000	8120	11500	13700	9570	4450	4570	3320	3010	2940
15	19400	11100	10200	8230	11700	13300	9350	4380	4730	3230	2970	2930
16	19600	10800	10400	8370	12000	13000	9090	4310	4850	3150	2920	2910
17	19800	10500	10800	8710	12400	12600	8840	4280	4920	3090	2880	2910
18	19900	10300	10800	9100	13300	12200	8630	4250	4920	3110	2830	2900
19	20000	10000	11000	9530	14400	12000	8430	4200	4850	3040	2790	2860
20	20000	9810	11000	9980	15500	12000	8190	4190	4770	3040	2820	2830
21	19900	9590	11000	10300	16500	12000	7910	4080	4610	3060	2910	2800
22	19700	9350	10900	10500	17200	12200	7660	4030	4510	3080	2800	2790
23	19500	9130	10700	10700	17700	12400	7370	3980	4440	3070	2880	2780
24	19200	8880	10400	10900	18100	12700	7200	3860	4330	3060	2890	2760
25	18800	8640	10000	11000	18400	e12800	6920	3820	4200	3060	2880	2710
26	18400	8470	9680	11100	18800	e12900	6650	3810	4340	3050	2880	2700
27	17900	8270	9390	11300	19100	e13000	6530	3800	4390	3110	2940	2740
28	17500	8100	9100	11400	19300	13000	6290	3790	4310	3160	2950	2800
29	17000	7940	8850	11600	---	12700	6120	3740	4220	3230	3010	2840
30	16600	7770	8640	11700	---	12200	5990	3690	4100	3240	3090	2890
31	16200	---	8450	11800	---	11700	---	3630	---	3260	3150	---
MEAN	16050	11270	9649	9243	14120	14310	9050	4462	4211	3352	3037	2952
MAX	20000	15800	11000	11800	19300	19300	11400	5840	4920	4000	3270	3240
MIN	7300	7770	7590	7460	11500	11700	5990	3630	3510	3040	2790	2700
IN.	2.35	1.60	1.41	1.35	1.87	2.09	1.28	.65	.60	.49	.44	.42

e Estimated

SUWANNEE RIVER BASIN  
02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1995, BY WATER YEAR (WY)

MEAN	5448	4355	4748	6479	9342	11860	11900	7537	5511	5371	6277	6174
MAX	21020	29380	28130	21830	28370	30710	49040	24020	18120	13510	19810	21340
(WY)	1965	1948	1948	1948	1991	1991	1948	1973	1973	1991	1945	1964
MIN	1778	1666	1602	1623	1699	1905	2366	1937	1752	1610	1678	1769
(WY)	1991	1991	1991	1956	1957	1955	1955	1932	1955	1955	1955	1990

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1931 - 1995	
ANNUAL MEAN	10270		8447		7079	
HIGHEST ANNUAL MEAN					19260	1948
LOWEST ANNUAL MEAN					1950	1955
HIGHEST DAILY MEAN	21600	Mar 15	20000	Oct 19	82800	Apr 11 1948
LOWEST DAILY MEAN	3240	Jan 1	2700	Sep 26	1530	Jul 1 1955
ANNUAL SEVEN-DAY MINIMUM	3470	Jan 1	2750	Sep 21	1550	Jan 8 1956
INSTANTANEOUS PEAK FLOW			20000	Oct 19	83900	Apr 11 1948
INSTANTANEOUS PEAK STAGE			20.38	Oct 19	34.07	Apr 11 1948
INSTANTANEOUS LOW FLOW			2700	Sep 26	1530	Jul 1 1955
ANNUAL RUNOFF (INCHES)	17.70		14.55		12.21	
10 PERCENT EXCEEDS	17100		16100		14600	
50 PERCENT EXCEEDS	9090		8070		5040	
90 PERCENT EXCEEDS	4450		3040		2370	

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2910	2170	1980	1970	2290	2810	9110	6150	3320	2350	2600	2660
2	2950	2180	1980	1990	2290	2820	9740	6070	3270	2330	2590	2660
3	2950	2160	1970	2010	2400	2820	10400	6150	3200	2320	2600	2720
4	2990	2150	1970	2070	2350	2890	11000	6230	3140	2310	2640	2750
5	3120	2130	1970	2230	2400	2990	11500	6280	3090	2290	2660	2780
6	3110	2110	1960	2340	2540	3050	11900	6370	3030	2480	2700	2800
7	2990	2130	1960	2420	2660	3090	12300	6510	2960	2590	2710	2800
8	2930	2210	1960	2420	2760	3170	12500	6750	2900	2620	2740	2770
9	2850	2160	1940	2390	2800	3090	12700	7000	2880	2750	2720	2750
10	2780	2090	1970	2400	2860	3190	12600	7210	2870	3030	2720	2760
11	2730	2150	1950	2400	2890	3400	12400	7350	2820	3090	2710	2760
12	2680	2260	1950	2410	2900	3550	12100	7220	2760	3240	2790	2710
13	2600	2190	1950	2390	2840	3760	11900	7000	2740	3280	2850	2800
14	2600	2180	1950	2350	2800	4010	11600	6700	2700	3300	2880	2880
15	2720	2170	1950	2350	2780	4180	11200	6420	2670	3280	3020	2840
16	2600	2180	1940	2350	2740	4320	10900	6190	2710	3240	3030	2790
17	2500	2160	1930	2340	2730	4410	10500	5890	2670	3200	3080	2760
18	2520	2140	1920	2320	2610	4580	10200	5540	2670	3160	3150	2750
19	2520	2130	1910	2320	2590	4720	9880	5270	2640	3090	3180	2680
20	2490	2110	1990	2280	2580	4900	9480	4960	2620	3040	3170	2650
21	2460	2110	1950	2240	2570	5260	9160	4710	2630	2980	3110	2630
22	2410	2090	1950	2240	2550	5560	8790	4500	2620	2920	3060	2630
23	2380	2070	1970	2230	2590	5840	8430	4280	2590	2880	3000	2590
24	2360	2080	1960	2240	2650	6150	8060	4130	2560	2860	2970	2530
25	2330	2080	1950	2230	2670	6470	7700	3980	2510	2830	2880	2500
26	2300	2050	1950	2200	2690	6820	7360	3850	2480	2790	2830	2470
27	2290	2030	1950	2230	2710	7010	7030	3740	2550	2750	2790	2450
28	2300	2030	1950	2220	2730	7320	6700	3630	2460	2720	2750	2400
29	2260	2080	1940	2210	2760	7950	6410	3600	2400	2700	2700	2380
30	2180	2020	1920	2240	---	8420	6360	3550	2370	2660	2680	2350
31	2170	---	1920	2270	---	8960	---	3430	---	2630	2680	---
MEAN	2612	2127	1952	2268	2646	4758	9997	5505	2761	2829	2838	2667
MAX	3120	2260	1990	2420	2900	8960	12700	7350	3320	3300	3180	2880
MIN	2170	2020	1910	1970	2290	2810	6360	3430	2370	2290	2590	2350
IN.	.38	.30	.29	.33	.36	.70	1.42	.81	.39	.41	.42	.38

SUWANNEE RIVER BASIN  
02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1996, BY WATER YEAR (WY)

MEAN	5404	4321	4705	6415	9237	11750	11880	7506	5468	5332	6225	6121
MAX	21020	29380	28130	21830	28370	30710	49040	24020	18120	13510	19810	21340
(WY)	1965	1948	1948	1948	1991	1991	1948	1973	1973	1991	1945	1964
MIN	1778	1666	1602	1623	1699	1905	2366	1937	1752	1610	1678	1769
(WY)	1991	1991	1991	1956	1957	1955	1955	1932	1955	1955	1955	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1931 - 1996		
ANNUAL MEAN	5900		3576		7025		
HIGHEST ANNUAL MEAN					19260		1948
LOWEST ANNUAL MEAN					1950		1955
HIGHEST DAILY MEAN	19300	Feb 28	12700	Apr 9	82800	Apr 11 1948	
LOWEST DAILY MEAN	1910	Dec 19	1910	Dec 19	1530	Jul 1 1955	
ANNUAL SEVEN-DAY MINIMUM	1940	Dec 13	1940	Dec 13	1550	Jan 8 1956	
INSTANTANEOUS PEAK FLOW			12700	Apr 9	83900	Apr 11 1948	
INSTANTANEOUS PEAK STAGE			14.48	Apr 9	34.07	Apr 11 1948	
INSTANTANEOUS LOW FLOW			1910	Dec 19	1530	Jul 1 1955	
ANNUAL RUNOFF (INCHES)	10.17		6.18		12.11		
10 PERCENT EXCEEDS	12600		7000		14500		
50 PERCENT EXCEEDS	3630		2720		4980		
90 PERCENT EXCEEDS	2080		2030		2360		

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.12	17.69	10.84	11.56	14.89	19.99	14.42	8.85	5.77	6.41	5.43	5.34
2	10.02	17.42	10.87	11.45	15.03	19.89	14.21	8.70	5.71	6.24	5.36	5.41
3	10.15	17.13	11.30	11.21	15.15	19.63	14.19	8.55	5.68	6.14	5.37	5.39
4	10.56	16.85	11.88	11.16	15.30	19.30	14.18	8.30	5.67	6.04	5.46	5.33
5	11.88	16.58	12.34	11.01	15.40	18.91	14.15	8.12	5.69	5.97	5.40	5.26
6	13.48	16.36	12.60	10.86	15.46	18.55	14.20	7.95	5.89	5.90	5.36	5.20
7	14.92	16.15	12.70	10.86	15.46	18.21	14.09	7.76	5.85	5.87	5.37	5.18
8	15.97	15.95	12.74	10.75	15.39	17.93	13.98	7.60	6.00	5.85	5.33	5.16
9	16.71	15.76	12.78	10.69	15.21	17.65	13.88	7.45	6.25	5.81	5.38	5.15
10	17.32	15.53	12.82	11.09	15.02	17.34	13.69	7.33	6.42	5.73	5.32	5.15
11	17.93	15.27	12.93	11.24	14.83	17.05	13.47	7.22	6.54	5.64	5.25	5.09
12	18.49	14.93	12.95	11.32	14.68	16.77	13.28	7.40	6.73	5.57	5.23	5.02
13	19.09	14.63	13.04	11.34	14.47	16.49	13.06	7.24	6.99	5.47	5.19	5.01
14	19.63	14.37	13.20	11.38	14.46	16.21	12.79	7.06	7.22	5.40	5.05	4.93
15	19.97	14.11	13.37	11.49	14.68	15.93	12.58	6.95	7.44	5.32	4.97	4.91
16	20.14	13.88	13.55	11.64	14.84	15.64	12.34	6.87	7.59	5.24	4.89	4.87
17	20.27	13.66	13.90	11.97	15.23	15.34	12.10	6.82	7.68	5.18	4.82	4.87
18	20.33	13.44	13.92	12.35	15.88	15.07	11.89	6.78	7.68	5.21	4.75	4.86
19	20.38	13.22	14.04	12.75	16.70	14.91	11.69	6.71	7.60	5.10	4.68	4.80
20	20.38	13.01	14.05	13.16	17.49	14.84	11.46	6.69	7.48	5.10	4.73	4.74
21	20.31	12.81	14.05	13.46	18.15	14.92	11.17	6.54	7.28	5.13	4.87	4.70
22	20.22	12.59	13.94	13.66	18.63	15.07	10.90	6.47	7.14	5.15	4.70	4.67
23	20.08	12.37	13.76	13.81	18.98	15.23	10.60	6.39	7.05	5.14	4.82	4.66
24	19.89	12.14	13.51	13.99	19.21	15.40	10.41	6.21	6.89	5.13	4.85	4.62
25	19.65	11.91	13.21	14.05	19.44	---	10.10	6.15	6.71	5.12	4.82	4.54
26	19.38	11.74	12.89	14.16	19.66	---	9.80	6.13	6.90	5.11	4.82	4.51
27	19.11	11.54	12.62	14.28	19.84	---	9.67	6.12	6.98	5.20	4.92	4.59
28	18.81	11.36	12.35	14.38	19.95	15.64	9.38	6.10	6.86	5.28	4.95	4.69
29	18.52	11.21	12.11	14.55	---	15.43	9.18	6.03	6.74	5.39	5.05	4.76
30	18.27	11.03	11.91	14.66	---	15.08	9.02	5.95	6.56	5.42	5.17	4.84
31	17.97	---	11.72	14.75	---	14.66	---	5.85	---	5.45	5.27	---
TOTAL	539.95	424.64	397.89	385.03	459.43	---	365.88	218.29	200.99	170.71	157.58	148.25
MEAN	17.42	14.15	12.84	12.42	16.41	---	12.20	7.04	6.70	5.51	5.08	4.94
MAX	20.38	17.69	14.05	14.75	19.95	---	14.42	8.85	7.68	6.41	5.46	5.41
MIN	10.02	11.03	10.84	10.69	14.46	---	9.02	5.85	5.67	5.10	4.68	4.51

SUWANNEE RIVER BASIN  
02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.88	3.91	3.52	3.47	3.96	4.77	11.77	8.93	5.36	3.89	4.35	4.45
2	4.94	3.92	3.51	3.49	3.97	4.78	12.28	8.85	5.28	3.85	4.33	4.45
3	4.94	3.89	3.50	3.51	4.14	4.79	12.78	8.93	5.17	3.82	4.35	4.55
4	5.01	3.86	3.49	3.60	4.07	4.89	13.22	9.02	5.07	3.80	4.42	4.61
5	5.23	3.83	3.49	3.90	4.15	5.02	13.61	9.07	4.99	3.77	4.44	4.66
6	5.20	3.78	3.48	4.07	4.36	5.11	13.94	9.17	4.89	4.13	4.52	4.69
7	5.03	3.82	3.48	4.18	4.54	5.18	14.22	9.31	4.80	4.32	4.53	4.69
8	4.96	3.98	3.47	4.18	4.69	5.29	14.39	9.56	4.72	4.38	4.58	4.64
9	4.86	3.89	3.43	4.13	4.75	5.17	14.48	9.80	4.70	4.61	4.56	4.60
10	4.77	3.75	3.49	4.14	4.85	5.33	14.44	10.01	4.68	5.07	4.56	4.63
11	4.70	3.86	3.45	4.15	4.88	5.64	14.30	10.15	4.62	5.18	4.54	4.62
12	4.64	4.06	3.44	4.17	4.90	5.87	14.10	10.02	4.54	5.42	4.68	4.54
13	4.54	3.95	3.44	4.13	4.81	6.16	13.90	9.80	4.50	5.47	4.78	4.69
14	4.54	3.93	3.44	4.07	4.75	6.50	13.68	9.51	4.44	5.50	4.83	4.82
15	4.69	3.90	3.44	4.08	4.73	6.73	13.41	9.22	4.41	5.47	5.06	4.76
16	4.53	3.92	3.42	4.08	4.67	6.92	13.20	8.98	4.46	5.42	5.07	4.67
17	4.40	3.89	3.40	4.05	4.65	7.02	12.90	8.65	4.40	5.35	5.15	4.63
18	4.42	3.85	3.38	4.02	4.47	7.24	12.64	8.27	4.41	5.28	5.27	4.60
19	4.42	3.82	3.37	4.02	4.44	7.41	12.38	7.95	4.37	5.18	5.32	4.49
20	4.38	3.79	3.54	3.94	4.43	7.64	12.05	7.58	4.34	5.10	5.30	4.43
21	4.34	3.78	3.45	3.86	4.41	8.05	11.78	7.27	4.35	4.99	5.21	4.40
22	4.27	3.74	3.44	3.87	4.39	8.39	11.46	7.00	4.33	4.90	5.12	4.40
23	4.23	3.70	3.49	3.85	4.45	8.69	11.15	6.73	4.30	4.82	5.03	4.32
24	4.20	3.72	3.48	3.86	4.53	9.02	10.82	6.52	4.25	4.79	4.98	4.21
25	4.16	3.71	3.46	3.85	4.57	9.35	10.48	6.31	4.17	4.75	4.83	4.16
26	4.12	3.65	3.46	3.80	4.59	9.70	10.16	6.13	4.12	4.67	4.74	4.10
27	4.10	3.61	3.45	3.84	4.62	9.89	9.83	5.98	4.26	4.60	4.68	4.06
28	4.12	3.61	3.44	3.83	4.65	10.19	9.51	5.82	4.09	4.56	4.61	3.98
29	4.05	3.71	3.43	3.81	4.69	10.77	9.21	5.77	3.98	4.52	4.52	3.94
30	3.93	3.60	3.39	3.87	---	11.18	9.16	5.69	3.92	4.45	4.48	3.89
31	3.90	---	3.39	3.93	---	11.65	---	5.52	---	4.40	4.48	---
TOTAL	140.50	114.43	107.06	121.75	131.11	224.34	371.25	251.52	135.92	146.46	147.32	133.68
MEAN	4.53	3.81	3.45	3.93	4.52	7.24	12.37	8.11	4.53	4.72	4.75	4.46
MAX	5.23	4.06	3.54	4.18	4.90	11.65	14.48	10.15	5.36	5.50	5.32	4.82
MIN	3.90	3.60	3.37	3.47	3.96	4.77	9.16	5.52	3.92	3.77	4.33	3.89

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1954 to September 1957, October 1962 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER-QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	
JAN 1996													
12...	1630	2410	--	--	--	--	120	35	8.2	8.7	13	0.3	
12...	1815	2410	--	--	--	--	120	34	8.1	8.7	14	0.3	
MAR													
12...	0929	3550	139	6.6	14.0	7.7	--	--	--	--	--	--	
MAY													
14...	0910	6700	172	6.3	23.5	5.1	--	--	--	--	--	--	
AUG													
14...	0905	2880	317	7.6	25.0	5.3	--	--	--	--	--	--	
DATE		POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
JAN 1996													
12...	1.1	100	23	6.8	0.30	8.9	174	156	0.24	1130	0.690	0.690	
12...	1.1	100	23	7.5	0.30	8.9	174	155	0.24	1130	0.680	0.680	
MAR													
12...	--	--	--	--	--	--	--	--	--	--	--	0.360	--
MAY													
14...	--	--	--	--	--	--	--	--	--	--	--	0.380	0.380
AUG													
14...	--	--	--	--	--	--	--	--	--	--	--	0.890	--
DATE		NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
JAN 1996													
12...	0.010	--	0.700	0.060	0.08	3.1	0.03	0.44	1.1	0.34	0.50	0.40	
12...	0.010	--	0.690	0.060	0.08	3.0	0.03	0.54	1.1	0.34	0.60	0.40	
MAR													
12...	<0.010	--	0.360	0.030	0.04	--	--	0.60	0.92	0.53	0.63	0.56	
MAY													
14...	0.010	--	0.390	0.020	0.03	1.7	0.03	0.72	1.0	0.64	0.74	0.66	
AUG													
14...	<0.010	--	0.890	0.025	0.03	--	--	0.29	1.2	0.33	0.31	0.35	

SUWANNEE RIVER BASIN  
02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996--Continued

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTH, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN 1996											
12...	1.2	0.190	0.190	0.170	0.52	180	6.0	10	1	6.5	100
12...	1.3	0.180	0.190	0.160	0.49	170	6.0	9.9	1	6.5	100
MAR											
12...	0.99	0.180	0.140	0.130	0.40	--	--	--	--	--	--
MAY											
14...	1.1	0.110	0.100	0.080	0.25	--	--	--	--	--	--
AUG											
14...	1.2	0.180	0.170	0.190	0.58	--	--	--	--	--	--

SUWANNEE RIVER BASIN  
02320700 SANTA FE RIVER NEAR GRAHAM, FL

51

LOCATION.--Lat 29°50'46", long 82°13'11", in NE<sup>1</sup>/<sub>4</sub> sec.32, T.7 S., R.21 E., Alachua County, Hydrologic Unit 03110206, near left bank on upstream side of bridge on State Highway 225, 1.0 mi south of Graham, 1.5 mi upstream from Sampson River, and 71 mi upstream from mouth.

DRAINAGE AREA.--94.9 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 2105: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 103.55 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Records do not include diversions during periods of high stages from Santa Fe Lake through Lochloosa Creek in St. Johns River basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	e16	17	16	12	12	213	e20	e2.1	7.3	2.6	7.0
2	28	e18	17	23	11	34	218	e18	e1.9	6.0	4.2	6.7
3	27	e20	16	28	14	30	201	e16	e1.6	5.0	4.3	5.6
4	e26	e19	16	26	14	28	177	e14	1.4	6.0	4.0	4.3
5	e25	e18	15	25	12	30	150	e12	1.2	5.8	3.7	3.5
6	e24	e20	15	24	12	28	125	e11	.95	31	9.6	2.7
7	e23	21	17	24	11	29	105	e17	.73	102	6.4	2.0
8	e22	26	16	23	11	53	88	e21	.61	93	5.4	1.6
9	e21	27	15	22	10	45	76	e18	1.3	107	5.1	1.2
10	e22	26	15	21	9.9	45	67	e16	1.3	151	4.2	1.0
11	e25	27	14	20	9.6	60	59	e14	1.2	139	3.9	1.3
12	e30	32	14	19	9.2	64	53	e13	.93	117	6.2	2.5
13	e35	32	13	18	8.5	56	e47	e11	.60	102	6.8	2.8
14	e40	32	13	17	7.9	53	e43	9.7	.70	105	6.2	2.0
15	e45	31	13	16	7.8	46	40	8.6	2.5	80	11	1.9
16	e50	30	13	15	7.8	40	43	7.5	8.2	62	8.4	1.8
17	e55	29	13	15	7.3	34	40	6.7	5.5	50	7.3	1.7
18	e52	28	12	14	6.8	72	e38	6.1	4.7	41	6.5	1.5
19	e49	26	14	14	6.6	138	e35	5.4	8.1	33	5.8	1.2
20	e46	25	17	14	6.4	103	e32	e4.6	9.9	27	5.6	.87
21	e43	24	15	13	6.3	106	29	e4.5	9.5	21	4.6	.66
22	e40	23	15	13	6.1	97	e27	e4.3	9.0	17	4.0	.63
23	e37	22	15	13	5.9	81	e24	e4.1	9.8	14	3.6	.58
24	e34	21	14	13	5.8	66	e21	e3.8	9.2	11	3.2	.54
25	e32	20	13	12	5.5	55	e19	e3.1	8.5	8.8	2.9	.59
26	e29	19	13	12	5.0	52	e17	e2.9	7.1	6.9	2.5	.61
27	e26	18	13	12	4.5	47	e16	e2.8	7.5	5.8	2.1	.54
28	e23	18	12	11	4.4	51	14	e2.7	8.2	4.6	1.9	.54
29	e20	18	12	11	4.3	49	13	e2.7	8.8	3.7	1.6	.54
30	e17	18	12	11	---	81	e19	e2.8	9.4	2.9	2.4	.48
31	e15	---	11	11	---	268	---	e2.5	---	2.3	7.9	---
MEAN	31.9	23.5	14.2	17.0	8.37	63.0	68.3	9.22	4.75	44.1	4.96	1.96
MAX	55	32	17	28	14	268	218	21	9.9	151	11	7.0
MIN	15	16	11	11	4.3	12	13	2.5	.60	2.3	1.6	.48
IN.	.39	.28	.17	.21	.10	.77	.80	.11	.06	.54	.06	.02

e Estimated

SUWANNEE RIVER BASIN  
02320700 SANTA FE RIVER NEAR GRAHAM, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1996, BY WATER YEAR (WY)

MEAN	43.9	21.2	29.4	49.1	78.6	92.6	59.1	24.1	27.5	42.3	74.6	78.6
MAX	218	102	168	221	420	387	259	254	236	271	414	436
(WY)	1993	1970	1970	1970	1970	1959	1970	1959	1972	1960	1978	1964
MIN	.41	.31	.44	.71	1.67	.89	.76	.051	.14	.15	.34	.22
(WY)	1978	1978	1992	1981	1991	1985	1976	1981	1981	1977	1977	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1957 - 1996	
ANNUAL MEAN	46.7		24.4		51.7	
HIGHEST ANNUAL MEAN					155	1970
LOWEST ANNUAL MEAN					5.67	1990
HIGHEST DAILY MEAN	278	Aug 26	268	Mar 31	1870	Sep 12 1964
LOWEST DAILY MEAN	10	Jun 1	.48	Sep 30	.03	May 28 1981
ANNUAL SEVEN-DAY MINIMUM	12	Dec 25	.55	Sep 24	.03	May 28 1981
INSTANTANEOUS PEAK FLOW			292	Mar 31	2360	Sep 12 1964
INSTANTANEOUS PEAK STAGE			10.27	Mar 31	14.97	Sep 12 1964
INSTANTANEOUS LOW FLOW			.47	Jun 13	.02	Jun 1 1981
ANNUAL RUNOFF (INCHES)	6.67		3.49		7.40	
10 PERCENT EXCEEDS	104		53		136	
50 PERCENT EXCEEDS	29		14		20	
90 PERCENT EXCEEDS	15		2.0		.69	



SUWANNEE RIVER BASIN  
02321000 NEW RIVER NEAR LAKE BUTLER, FL

LOCATION.--Lat 29°59'53", long 82°16'27", in SW 1/4 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, 4.4 miles southeast of Lake Butler.

DRAINAGE AREA.--191 mi<sup>2</sup>.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	32	31	46	27	51	778	277	8.2	e60	e30	34
2	115	38	31	109	29	189	726	264	7.2	e40	e40	59
3	102	37	29	214	53	384	623	196	6.7	e20	e50	95
4	91	38	27	373	61	364	499	162	6.3	e50	e60	130
5	82	36	25	353	57	293	366	128	6.0	e100	e70	145
6	82	32	24	304	48	232	238	96	5.7	e150	e80	152
7	82	30	23	231	43	200	185	70	5.7	e200	e70	153
8	76	57	24	184	39	275	152	52	5.6	e300	e60	141
9	69	92	25	146	36	365	126	40	6.2	e400	e50	118
10	70	80	26	114	34	321	107	32	9.0	e500	e35	95
11	85	73	25	93	32	299	90	27	11	e600	e30	90
12	99	107	25	80	30	347	77	23	8.4	e500	e40	97
13	110	137	24	71	27	333	67	20	6.8	e450	e50	84
14	115	125	23	64	25	262	59	18	6.0	e400	e60	71
15	147	107	22	57	24	207	54	16	e10	e350	77	59
16	195	92	22	51	23	179	60	14	e20	e300	98	50
17	190	78	21	47	21	148	64	13	e40	e250	121	44
18	169	66	20	44	20	197	59	12	e60	e200	137	40
19	155	57	27	43	19	745	52	11	e80	e160	147	36
20	137	49	42	42	18	847	46	11	e100	e120	139	31
21	114	44	51	40	18	752	40	10	e90	e100	111	27
22	93	39	46	37	17	643	35	9.9	e80	e80	80	25
23	76	35	41	35	16	501	30	9.5	e70	e60	58	22
24	64	32	38	34	16	351	26	8.8	e60	e50	44	20
25	56	30	36	33	15	222	23	8.2	e50	e40	35	18
26	49	28	33	31	15	183	21	7.7	e40	e30	29	16
27	45	26	31	30	14	168	19	7.3	e50	e25	25	14
28	41	25	29	28	14	165	17	7.0	e60	e20	22	13
29	38	25	27	27	14	174	16	7.4	e70	e15	19	12
30	34	28	26	25	---	182	95	8.5	e80	e10	18	11
31	31	---	25	25	---	509	---	9.0	---	e20	20	---
MEAN	94.8	55.8	29.0	97.1	27.8	325	158	50.8	35.3	181	61.5	63.4
MAX	195	137	51	373	61	847	778	277	100	600	147	153
MIN	31	25	20	25	14	51	16	7.0	5.6	10	18	11
IN.	.57	.33	.18	.59	.16	1.96	.93	.31	.21	1.09	.37	.37

e Estimated

SUWANNEE RIVER BASIN  
02321000 NEW RIVER NEAR LAKE BUTLER, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1996, BY WATER YEAR (WY)

MEAN	245	48.9	99.9	136	243	283	147	107	84.1	164	271	273
MAX	1461	459	781	607	992	1491	1014	801	556	519	772	1845
(WY)	1993	1970	1954	1970	1970	1959	1991	1959	1957	1950	1970	1964
MIN	1.53	1.23	2.01	5.64	4.28	7.82	2.52	1.16	.85	3.55	2.51	4.20
(WY)	1991	1991	1991	1957	1950	1950	1956	1955	1955	1954	1954	1993

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1950 - 1996	
ANNUAL MEAN	150		98.9		176	
HIGHEST ANNUAL MEAN					457	
LOWEST ANNUAL MEAN					9.66	
HIGHEST DAILY MEAN	1570	Aug 28	847	Mar 20	10400	Sep 13 1964
LOWEST DAILY MEAN	3.3	Jun 1	5.6	Jun 8	.20	Jun 10 1955
ANNUAL SEVEN-DAY MINIMUM	4.0	May 26	6.0	Jun 3	.37	Jun 19 1955
INSTANTANEOUS PEAK FLOW			896	Mar 19	11400	Sep 12 1964
INSTANTANEOUS PEAK STAGE			7.87	Mar 19	15.33	Sep 12 1964
INSTANTANEOUS LOW FLOW			5.4	Jun 6	.20	Jun 10 1955
ANNUAL RUNOFF (INCHES)	10.70		7.05		12.50	
10 PERCENT EXCEEDS	376		254		451	
50 PERCENT EXCEEDS	77		49		33	
90 PERCENT EXCEEDS	12		14		3.8	

SUWANNEE RIVER BASIN  
02321500 SANTA FE RIVER AT WORTHINGTON SPRINGS, FL

55

LOCATION.--Lat 29°55'18", long 82°25'35", in SE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

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 discharge. 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, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	108	83	101	81	104	1450	461	28	53	34	137
2	300	120	81	201	84	351	1770	473	25	44	45	109
3	293	132	81	309	138	468	1840	469	23	36	56	108
4	266	135	78	354	181	474	1680	446	21	35	57	119
5	238	125	75	377	169	496	1490	384	20	40	52	137
6	218	112	72	421	153	495	1290	316	18	225	225	155
7	205	103	72	443	137	472	1110	253	27	976	349	165
8	196	117	77	426	122	604	892	198	31	1560	283	167
9	185	129	77	389	112	649	688	154	38	1510	193	165
10	174	149	82	339	104	603	561	123	49	1450	141	153
11	169	174	81	287	98	641	485	100	107	1290	172	135
12	172	233	76	243	92	737	424	85	71	1170	289	119
13	182	240	71	211	84	723	373	74	47	991	333	122
14	195	249	69	188	78	683	329	67	35	797	285	112
15	245	256	67	168	74	616	301	62	43	581	301	95
16	326	238	65	154	71	552	303	56	113	480	266	80
17	348	212	63	142	67	489	286	51	210	397	225	74
18	357	189	62	133	63	506	266	47	212	327	210	65
19	361	169	79	131	60	928	247	43	172	269	205	57
20	340	151	119	128	58	1240	224	40	114	220	207	50
21	317	137	119	120	57	1480	202	37	96	178	202	45
22	287	123	113	114	55	1520	180	36	80	142	183	41
23	252	112	110	108	54	1370	160	34	68	113	149	37
24	218	102	103	104	52	1200	139	32	58	92	110	33
25	190	96	93	104	51	997	121	30	49	76	87	30
26	168	91	87	99	48	817	108	28	41	65	69	27
27	151	86	82	95	46	644	96	26	47	57	57	25
28	137	81	78	90	45	580	86	24	92	51	49	23
29	145	79	74	85	45	553	78	28	88	44	44	21
30	135	82	71	81	---	545	236	37	65	39	49	25
31	118	---	71	80	---	964	---	34	---	34	143	---
MEAN	232	144	81.6	201	85.5	726	580	137	69.6	430	164	87.7
MAX	361	256	119	443	181	1520	1840	473	212	1560	349	167
MIN	118	79	62	80	45	104	78	24	18	34	34	21
IN.	.47	.28	.16	.40	.16	1.46	1.13	.27	.14	.86	.33	.17

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1996, BY WATER YEAR (WY)

	532	197	239	371	582	659	454	182	264	343	634	743
MEAN	3043	1788	1801	1607	2461	3303	1927	1716	3646	1459	2137	4033
(WY)	1993	1948	1954	1970	1970	1959	1973	1959	1934	1946	1978	1964
MIN	4.00	2.98	4.00	5.12	5.44	23.4	6.41	2.13	3.58	9.05	9.86	10.3
(WY)	1932	1932	1932	1932	1932	1935	1935	1932	1935	1981	1954	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1932 - 1996	
ANNUAL MEAN	384		246		432	
HIGHEST ANNUAL MEAN					1163	1948
LOWEST ANNUAL MEAN					54.8	1956
HIGHEST DAILY MEAN	2420	Aug 29	1840	Apr 3	19000	Sep 13 1964
LOWEST DAILY MEAN	38	Jun 1	18	Jun 6	.60	Jun 24 1955
ANNUAL SEVEN-DAY MINIMUM	48	May 27	23	Jun 1	1.3	Jun 20 1955
INSTANTANEOUS PEAK FLOW			1880	Apr 3	20000	Sep 13 1964
INSTANTANEOUS PEAK STAGE			16.58	Apr 3	28.40	Sep 13 1964
INSTANTANEOUS LOW FLOW			18	Jun 6	.50	Jun 24 1955
ANNUAL RUNOFF (INCHES)	9.06		5.83		10.22	
10 PERCENT EXCEEDS	866		580		1130	
50 PERCENT EXCEEDS	249		122		145	
90 PERCENT EXCEEDS	81		41		19	

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.39	9.34	8.97	9.22	8.95	9.19	15.83	12.67	7.83	8.36	8.08	9.71
2	11.40	9.49	8.95	10.44	8.99	11.80	16.40	12.76	7.75	8.17	8.30	9.36
3	11.33	9.65	8.94	11.47	9.71	12.73	16.53	12.74	7.69	8.01	8.52	9.33
4	11.08	9.69	8.90	11.85	10.22	12.77	16.26	12.56	7.63	7.98	8.54	9.49
5	10.82	9.57	8.84	12.04	10.10	12.93	15.90	12.09	7.60	8.08	8.45	9.72
6	10.62	9.39	8.80	12.38	9.90	12.92	15.51	11.53	7.56	10.59	10.54	9.93
7	10.48	9.27	8.80	12.54	9.71	12.75	15.10	10.96	7.79	14.60	11.81	10.05
8	10.39	9.46	8.88	12.41	9.53	13.61	14.56	10.41	7.88	16.04	11.23	10.08
9	10.28	9.62	8.87	12.13	9.39	13.84	13.96	9.92	8.05	15.94	10.36	10.05
10	10.15	9.85	8.95	11.73	9.28	13.65	13.37	9.53	8.29	15.82	9.76	9.91
11	10.09	10.14	8.94	11.28	9.20	13.80	12.85	9.23	9.32	15.52	10.12	9.69
12	10.13	10.76	8.86	10.87	9.11	14.12	12.40	9.00	8.73	15.24	11.28	9.49
13	10.24	10.84	8.79	10.55	8.98	14.07	12.00	8.80	8.24	14.82	11.67	9.53
14	10.38	10.92	8.74	10.30	8.89	13.95	11.65	8.64	7.98	14.29	11.25	9.39
15	10.87	10.99	8.72	10.09	8.83	13.70	11.40	8.52	8.15	13.49	11.40	9.15
16	11.61	10.82	8.69	9.92	8.78	13.31	11.42	8.42	9.35	12.81	11.08	8.93
17	11.80	10.56	8.65	9.78	8.71	12.88	11.26	8.32	10.53	12.20	10.69	8.82
18	11.88	10.32	8.62	9.67	8.64	12.98	11.09	8.24	10.56	11.62	10.54	8.67
19	11.90	10.09	8.89	9.64	8.59	14.64	10.91	8.16	10.13	11.11	10.49	8.54
20	11.73	9.88	9.49	9.60	8.55	15.41	10.68	8.09	9.42	10.64	10.50	8.41
21	11.54	9.71	9.48	9.50	8.53	15.89	10.45	8.03	9.17	10.19	10.45	8.31
22	11.27	9.54	9.40	9.41	8.51	15.96	10.22	8.01	8.91	9.77	10.25	8.23
23	10.95	9.38	9.37	9.34	8.48	15.68	9.99	7.97	8.68	9.40	9.85	8.14
24	10.62	9.26	9.26	9.28	8.45	15.31	9.74	7.92	8.44	9.10	9.36	8.06
25	10.33	9.16	9.13	9.28	8.42	14.83	9.51	7.86	8.27	8.86	9.04	7.98
26	10.09	9.09	9.03	9.20	8.37	14.35	9.33	7.81	8.13	8.68	8.74	7.92
27	9.88	9.02	8.95	9.15	8.34	13.80	9.17	7.76	8.24	8.54	8.53	7.85
28	9.72	8.94	8.89	9.08	8.31	13.51	9.02	7.72	9.09	8.42	8.39	7.79
29	9.81	8.91	8.83	9.00	8.31	13.32	8.89	7.82	9.03	8.30	8.28	7.74
30	9.69	8.96	8.78	8.95	---	13.27	10.63	8.03	8.60	8.18	8.39	7.85
31	9.47	---	8.78	8.92	---	14.73	---	7.96	---	8.07	9.76	---
TOTAL	331.94	292.62	277.19	319.02	259.78	425.70	366.03	287.48	257.04	342.84	305.65	268.12
MEAN	10.71	9.75	8.94	10.29	8.96	13.73	12.20	9.27	8.57	11.06	9.86	8.94
MAX	11.90	10.99	9.49	12.54	10.22	15.96	16.53	12.76	10.56	16.04	11.81	10.08
MIN	9.47	8.91	8.62	8.92	8.31	9.19	8.89	7.72	7.56	7.98	8.08	7.74

SUWANNEE RIVER BASIN  
02321900 PARENERS BRANCH NEAR BLAND, FL

57

LOCATION.--Lat 29°54'26", long 82°32'07", in SW1/4 sec.5, T.7 S., R.18 E., Alachua County, Hydrologic Unit 03110206, on right bank 50 ft below culvert, at State Highway 1491, 0.9 mi north of New Oak Grove cemetery, and 2.1 mi west of Bland.

DRAINAGE AREA.--4.5 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1992 to September 1996 (discontinued).

REVISED RECORDS.--WRD FL-94-4: 1993 (M).

GAGE.--Water-stage recorder.

REMARKS.--Records poor above 20 cfs and fair below..

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.93	1.0	77	1.4	4.8	4.9	4.7	.19	.24	.68	1.3
2	1.0	.88	1.0	105	1.3	3.1	3.5	2.8	.19	.19	1.3	1.2
3	.94	.93	.97	45	2.7	1.3	2.7	2.0	.16	.18	1.3	1.2
4	1.6	1.0	.97	16	1.7	.76	2.4	1.6	.15	.20	1.2	1.1
5	1.4	.73	.97	9.4	1.4	.52	2.2	1.4	.91	2.4	.86	1.0
6	1.1	.64	.97	7.0	1.3	.41	2.2	1.1	.84	29	1.8	1.0
7	.99	.71	1.0	7.3	1.2	2.3	2.2	.95	.48	7.4	1.2	.97
8	.61	2.3	1.0	5.6	1.1	3.9	2.2	.77	.63	3.6	1.0	.95
9	.56	1.2	1.1	4.4	1.1	1.4	2.2	1.3	.41	4.4	.92	1.0
10	.62	1.1	1.5	4.0	1.0	1.2	2.0	.93	.45	4.7	.74	1.4
11	.67	2.6	1.2	3.5	1.0	2.4	1.9	.50	.51	2.2	.76	1.9
12	.58	2.8	1.1	4.0	.83	1.8	1.8	.47	.42	1.6	1.7	1.3
13	.54	1.8	1.1	3.0	.70	1.4	1.7	.37	.26	1.3	1.9	1.1
14	.80	1.5	1.1	2.2	.80	1.2	1.7	.31	.29	1.5	1.6	.96
15	2.1	1.3	1.1	1.6	.78	1.0	1.7	.58	.58	1.2	1.4	.92
16	1.1	1.2	1.1	1.5	.70	.89	2.3	.74	1.2	1.0	1.2	.87
17	.81	1.2	1.1	1.5	.70	.72	2.2	.46	.72	.96	1.1	.87
18	.70	1.1	1.1	1.5	.70	7.1	1.9	.21	.57	.81	1.0	.87
19	.63	1.1	72	3.2	.70	3.9	1.8	.18	.46	.59	1.0	.86
20	.61	1.1	19	2.2	.65	2.2	1.6	.15	1.1	.46	1.1	.77
21	.52	1.1	8.7	1.6	.61	1.7	1.5	.16	1.3	.38	1.1	.70
22	.42	1.0	6.7	1.0	.60	1.4	1.4	.94	.82	.32	1.0	.73
23	.40	.97	5.5	.70	.59	1.3	1.4	1.2	.60	.27	.96	.69
24	.40	.99	4.4	1.5	.56	1.2	1.3	.62	.42	.27	.91	.63
25	.38	1.0	4.0	2.0	.56	1.3	1.3	.21	.30	.27	.93	.63
26	.38	1.0	3.6	1.3	.53	1.8	1.2	.20	.29	.23	1.0	.63
27	.36	.98	3.6	1.2	.48	1.6	1.2	.19	1.5	.21	1.0	.62
28	2.1	.97	3.6	1.0	.54	2.4	1.1	.23	.78	.17	.99	.56
29	1.3	1.2	2.9	.70	.56	1.9	1.5	.51	.54	.15	1.0	.58
30	1.0	1.2	3.3	.79	---	5.4	24	.63	.33	.13	1.6	1.4
31	.94	---	3.6	1.2	---	8.4	---	.28	---	.12	1.4	---
TOTAL	26.66	36.53	160.28	317.89	26.79	70.70	81.0	26.69	17.40	66.45	35.65	28.71
MEAN	.86	1.22	5.17	10.3	.92	2.28	2.70	.86	.58	2.14	1.15	.96
MAX	2.1	2.8	72	105	2.7	8.4	24	4.7	1.5	29	1.9	1.9
MIN	.36	.64	.97	.70	.48	.41	1.1	.15	.15	.12	.68	.56
IN.	.22	.30	1.32	2.63	.22	.58	.67	.22	.14	.55	.29	.24

SUWANNEE RIVER BASIN  
 02321900 PARENERS BRANCH NEAR BLAND, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

MEAN	2.62	1.37	2.13	4.72	2.05	2.90	1.90	.78	1.08	1.48	2.07	2.63
MAX	4.92	1.82	5.17	10.3	4.94	5.52	2.70	1.03	1.81	2.14	4.54	6.79
(WY)	1993	1994	1996	1996	1993	1993	1996	1995	1995	1996	1994	1994
MIN	.86	.72	.80	1.41	.84	1.04	.54	.53	.58	.51	.40	.96
(WY)	1996	1995	1995	1995	1995	1995	1994	1994	1996	1993	1993	1996

SUMMARY STATISTICS            FOR 1995 CALENDAR YEAR            FOR 1996 WATER YEAR            WATER YEARS 1992 - 1996

ANNUAL TOTAL	623.34		894.75		2.15		1996
ANNUAL MEAN	1.71		2.44		2.44		1995
HIGHEST ANNUAL MEAN					1.51		1995
LOWEST ANNUAL MEAN					105		Jan 2 1996
HIGHEST DAILY MEAN	72	Dec 19	105	Jan 2	105	Jan 2	1996
LOWEST DAILY MEAN	.09	Jun 21	.12	Jul 31	.01	May 27	1994
ANNUAL SEVEN-DAY MINIMUM	.19	May 24	.18	Jul 25	.03	May 31	1994
INSTANTANEOUS PEAK FLOW			329		390		Oct 4 1992
INSTANTANEOUS PEAK STAGE			4.52		5.40		Oct 4 1992
INSTANTANEOUS LOW FLOW			.00		.00		May 17 1994
ANNUAL RUNOFF (INCHES)	5.15		7.40		6.49		
10 PERCENT EXCEEDS	2.8		3.5		4.4		
50 PERCENT EXCEEDS	1.0		1.1		1.0		
90 PERCENT EXCEEDS	.40		.38		.27		

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

59

LOCATION.--Lat 29°51'09", long 82°36'31", in NW.  $\frac{1}{4}$  sec.27, T.7 S., R.17 E., Columbia County, Hydrologic Unit 03110206, at highway bridge on U.S. 441, 1.9 miles northwest of the intersection of U.S. 441 and U.S. 27, and 18 miles upstream from mouth.

DRAINAGE AREA.--859 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Wire weight gage on downstream side of bridge. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	413	342	301	267	208	868	464	260	363	e413	508
2	653	420	335	321	260	214	900	553	254	377	e406	538
3	645	427	328	342	254	241	1020	568	247	392	e399	546
4	630	420	321	370	241	294	1200	599	241	406	e392	538
5	614	413	314	384	254	363	1250	614	234	435	420	531
6	584	406	301	413	280	377	1160	599	227	464	449	523
7	568	399	294	427	301	399	1090	568	221	622	479	516
8	553	392	287	427	287	413	1020	538	214	852	523	508
9	538	377	294	435	274	435	942	523	208	1040	538	501
10	523	399	308	442	260	464	860	508	202	1180	e553	523
11	508	406	321	442	254	493	763	493	208	1310	e568	606
12	501	427	335	449	241	523	708	479	224	1340	e576	614
13	493	435	342	413	227	553	630	464	234	1310	e591	599
14	479	457	335	392	221	561	568	442	254	1220	e606	630
15	508	464	328	377	214	568	508	420	280	1180	e622	661
16	523	471	321	363	208	576	501	413	301	1140	653	692
17	538	479	314	e356	208	584	493	406	321	1090	e684	708
18	553	471	308	349	202	591	479	399	349	1020	e700	692
19	568	464	301	342	202	614	464	392	377	917	e692	676
20	584	449	294	335	195	645	449	377	399	819	e684	661
21	568	435	301	328	195	708	435	363	420	692	e668	630
22	553	427	314	321	202	755	413	342	442	630	e653	606
23	546	420	328	314	202	779	399	321	464	584	e637	584
24	531	406	342	301	208	803	392	314	471	538	e606	568
25	516	399	335	280	214	819	377	308	442	508	e561	553
26	486	384	328	274	221	803	363	301	413	479	523	538
27	464	377	321	287	214	779	356	294	392	464	508	531
28	442	363	314	294	208	755	349	287	370	449	493	523
29	435	356	308	287	202	723	342	280	363	435	479	516
30	427	349	294	280	---	715	392	274	356	427	464	523
31	420	---	280	274	---	708	---	267	---	420	486	---
MEAN	536	417	316	352	232	563	656	425	313	745	549	578
MAX	661	479	342	449	301	819	1250	614	471	1340	700	708
MIN	420	349	280	274	195	208	342	267	202	363	392	501
IN.	.72	.54	.42	.47	.29	.76	.85	.57	.41	1.00	.74	.75

e Estimated

SUWANNEE RIVER BASIN  
02321975 SANTA FE RIVER AT US HWY 441 NEAR HIGH SPRINGS, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1996, BY WATER YEAR (WY)

MEAN	1365	571	412	654	781	817	786	385	310	499	585	543
MAX	3505	1006	788	985	1171	1502	1226	527	341	745	793	828
(WY)	1993	1993	1993	1993	1994	1993	1993	1993	1995	1996	1995	1995
MIN	146	353	228	352	232	535	377	250	258	379	259	226
(WY)	1994	1994	1994	1996	1996	1995	1994	1994	1994	1993	1993	1993

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1993 - 1996	
ANNUAL MEAN	562		475		642	
HIGHEST ANNUAL MEAN					993	1993
LOWEST ANNUAL MEAN					470	1994
HIGHEST DAILY MEAN	1540	Aug 30	1340	Jul 12	8450	Oct 6 1992
LOWEST DAILY MEAN	176	Jun 2	195	Feb 20	99	Oct 29 1993
ANNUAL SEVEN-DAY MINIMUM	185	May 31	201	Feb 17	113	Oct 23 1993
INSTANTANEOUS PEAK FLOW			1340	Jul 12	8470	Oct 6 1992
INSTANTANEOUS PEAK STAGE			33.98	Jul 12	45.23	Oct 6 1992
INSTANTANEOUS LOW FLOW			195	Feb 20	99	Oct 29 1993
ANNUAL RUNOFF (INCHES)	8.89		7.52		10.16	
10 PERCENT EXCEEDS	937		708		1180	
50 PERCENT EXCEEDS	486		435		464	
90 PERCENT EXCEEDS	308		254		234	



SUWANNEE RIVER BASIN  
02322500 SANTA FE RIVER NEAR FORT WHITE, FL

61

LOCATION.--Lat 29°50'55", long 82°42'55", in SE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1160	886	869	852	946	947	1500	1170	937	1100	1300	1160
2	1140	883	e869	844	946	940	1540	1220	937	1090	1280	1170
3	1130	879	869	844	946	938	1630	1260	934	1080	1270	1160
4	1150	876	869	844	946	948	1740	1290	932	1070	1250	1160
5	1130	869	869	864	946	975	1780	1290	929	1120	1230	1160
6	1090	869	865	875	946	1020	1800	1270	926	1250	1220	1160
7	1060	874	861	897	946	1060	1790	1250	941	1310	1220	1160
8	1040	872	861	914	946	1070	1740	1220	939	1560	1260	1160
9	1040	869	859	924	946	1090	1700	1190	937	2000	1270	1160
10	1010	869	860	949	946	1140	1640	1160	937	2220	1260	1190
11	1000	900	860	962	946	1210	1570	1150	937	2290	1280	1210
12	986	892	861	963	946	1230	1530	1130	936	2320	1280	1170
13	977	886	860	957	946	1260	1490	1100	936	2310	1280	1170
14	981	886	861	951	946	1280	1440	1070	938	2280	1310	1160
15	994	886	861	939	946	1300	1430	1050	944	2240	1340	1160
16	966	886	861	937	943	1310	1400	1040	947	2190	1330	1180
17	964	886	861	937	937	1310	1350	1030	951	2110	1340	1190
18	987	886	861	937	937	1340	1340	1010	978	2040	1340	1180
19	999	886	863	934	937	1330	1320	1000	1070	1960	1330	1160
20	1010	883	855	929	937	1360	1310	996	1110	1880	1320	1140
21	994	878	852	929	937	1420	1290	992	1150	1800	1300	1130
22	974	878	852	929	937	1500	1280	985	1150	1720	1290	1110
23	960	878	852	929	937	1560	1230	979	1130	1660	1270	1090
24	951	878	852	929	937	1590	1200	967	1120	1590	1250	1070
25	941	878	852	936	937	1590	1170	960	1100	1530	1220	1060
26	926	871	852	946	937	1580	1150	956	1120	1480	1200	1040
27	917	869	852	946	937	1560	1130	950	1120	1440	1190	1020
28	908	869	852	946	937	1540	1100	950	1080	1390	1170	1020
29	895	869	852	946	937	1520	1080	961	1080	1350	1150	1010
30	886	869	852	946	---	1520	1190	953	1090	1330	1160	993
31	886	---	852	946	---	1500	---	942	---	1300	1140	---
MEAN	1002	879	859	922	942	1288	1429	1080	1008	1678	1260	1130
MAX	1160	900	869	963	946	1590	1800	1290	1150	2320	1340	1210
MIN	886	869	852	844	937	938	1080	942	926	1070	1140	993
IN.	1.14	.96	.97	1.05	1.00	1.46	1.57	1.23	1.11	1.90	1.43	1.24

e Estimated

SUWANNEE RIVER BASIN  
02322500 SANTA FE RIVER NEAR FORT WHITE, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1996, BY WATER YEAR (WY)

MEAN	1817	1420	1298	1424	1592	1816	1753	1423	1338	1418	1718	1985
MAX	4357	3840	2778	3415	4044	5345	4668	3409	4063	2728	3545	6344
(WY)	1993	1948	1965	1942	1970	1948	1948	1959	1959	1972	1928	1964
MIN	730	691	641	678	691	670	671	636	679	773	808	756
(WY)	1956	1991	1991	1956	1956	1957	1956	1957	1956	1990	1990	1955

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1928 - 1996	
ANNUAL MEAN	1161		1124		1583	
HIGHEST ANNUAL MEAN					3112	1948
LOWEST ANNUAL MEAN					724	1956
HIGHEST DAILY MEAN	2180	Sep 1	2320	Jul 12	16900	Sep 16 1964
LOWEST DAILY MEAN	852	Dec 21	844	Jan 2	608	Jan 7 1991
ANNUAL SEVEN-DAY MINIMUM	852	Dec 21	849	Dec 29	611	Jan 4 1991
INSTANTANEOUS PEAK FLOW			2320	Jul 12	17000	Sep 16 1964
INSTANTANEOUS PEAK STAGE			2.53	Jul 12	15.34	Sep 16 1964
INSTANTANEOUS LOW FLOW			844	Jan 2	608	Jan 7 1991
ANNUAL RUNOFF (INCHES)	15.50		15.05		21.14	
10 PERCENT EXCEEDS	1570		1520		2600	
50 PERCENT EXCEEDS	1090		1020		1310	
90 PERCENT EXCEEDS	869		869		882	

SUWANNEE RIVER BASIN  
02322616 CANNON CREEK NEAR LAKE CITY, FL

63

LOCATION.--Lat 30°09'30", long 82°40'02", in NE<sup>1</sup>/<sub>4</sub> sec.12, T.4 S., R.16 E., Columbia County, Hydrologic Unit 03110206, on left bank, 8 ft above railroad culvert, at county road 341, 2.9 mi southwest of courthouse in Lake City and 3.2 mi upstream from mouth.

DRAINAGE AREA.--2.33 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Records fair below 25 cfs, and poor above.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.18	2.0	.55	.15	17	9.3	.65	.00	.01	.00	2.4
2	.00	.18	1.2	.79	.22	15	4.3	.14	.00	.00	.33	2.1
3	.00	.18	.87	.56	1.6	5.2	2.9	.04	.00	.00	13	2.5
4	.03	.20	.66	.46	.67	2.9	2.1	.02	.00	.00	4.2	1.8
5	1.2	.19	.60	.32	.49	1.8	1.5	.00	.00	9.4	2.0	1.1
6	.45	.10	.42	.25	.43	1.5	1.6	.00	.00	51	.98	.69
7	.13	5.8	.35	.26	.39	6.0	1.7	.00	.00	37	.59	.34
8	.03	16	.28	.17	.40	11	1.2	.00	.00	17	.49	.24
9	.03	3.3	.35	.18	.29	4.2	.93	.00	.00	30	.24	.11
10	.03	1.7	.63	.15	.25	2.7	.64	.00	.00	16	.12	3.0
11	.02	3.5	.41	.15	.25	3.6	.47	.00	.00	4.9	.22	20
12	.02	4.1	.33	.31	.21	3.0	.36	.00	.00	2.5	1.4	3.3
13	.01	2.2	.31	.24	.13	2.2	.31	.00	.00	1.4	1.7	2.1
14	9.6	1.3	.25	.18	.12	1.5	.25	.00	.00	.92	1.1	1.7
15	40	.86	.26	.18	.16	1.2	3.3	.00	3.2	.86	1.0	.83
16	9.9	.67	.28	.15	.19	.93	3.7	.00	23	1.0	.59	.62
17	2.4	.46	.23	.15	.12	.76	2.7	.00	9.3	.77	.33	1.1
18	1.6	.36	.21	.15	.05	36	2.0	.00	2.7	.51	.16	1.5
19	1.2	.30	2.9	.18	.04	17	1.5	.00	1.4	.33	.19	.84
20	.97	.25	1.9	.13	.10	5.1	1.2	.00	.89	.18	.77	.52
21	.77	.23	1.5	.08	.12	2.9	.76	.00	.91	.05	.30	.33
22	.56	.15	.90	.07	.17	2.1	.21	.00	.43	.03	.22	.24
23	.38	.09	.66	.05	.22	1.3	.11	.00	.26	.02	.04	.11
24	.32	.10	.49	.18	.16	.98	.05	.00	.19	.01	.02	.04
25	.28	.12	.37	.32	.12	1.5	.03	.00	.05	.00	2.5	.03
26	.25	.07	.31	.19	.05	3.6	.02	.00	.03	.02	2.6	.01
27	.23	.05	.26	.16	.04	2.8	.01	.00	.56	.00	.88	.00
28	.32	.07	.21	.14	.03	4.9	.00	.00	.20	.00	.37	.00
29	.27	8.1	.17	.12	.71	3.6	.00	.60	.34	.00	.20	.00
30	.19	3.6	.16	.08	---	18	1.4	.90	.05	.00	2.4	.00
31	.18	---	.21	.13	---	27	---	.06	---	.00	6.0	---
MEAN	2.30	1.81	.63	.23	.27	6.69	1.48	.078	1.45	5.61	1.45	1.58
MAX	40	16	2.9	.79	1.6	36	9.3	.90	23	51	13	20
MIN	.00	.05	.16	.05	.03	.76	.00	.00	.00	.00	.00	.00
IN.	1.14	.87	.31	.11	.13	3.31	.71	.04	.69	2.78	.72	.76

SUWANNEE RIVER BASIN  
 02322616 CANNON CREEK NEAR LAKE CITY, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1996, BY WATER YEAR (WY)

MEAN	8.22	1.24	.46	4.67	3.23	3.17	1.04	.081	.79	2.20	1.11	.85
MAX	18.3	1.81	.63	8.29	9.64	6.69	2.02	.25	1.45	5.61	2.56	1.58
(WY)	1995	1996	1996	1994	1993	1996	1995	1995	1996	1996	1995	1996
MIN	.14	.44	.32	.23	.27	.82	.23	.000	.081	.39	.000	.000
(WY)	1994	1993	1995	1996	1996	1995	1994	1993	1993	1994	1993	1993

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1993 - 1996
ANNUAL MEAN	1.46	1.98	2.26
HIGHEST ANNUAL MEAN			2.82 1993
LOWEST ANNUAL MEAN			1.48 1994
HIGHEST DAILY MEAN	40 Oct 15	51 Jul 6	204 Oct 3 1992
LOWEST DAILY MEAN	.00 Apr 22	.00 Oct 1	.00 Apr 24 1993
ANNUAL SEVEN-DAY MINIMUM	.00 Apr 27	.00 May 5	.00 Apr 24 1993
INSTANTANEOUS PEAK FLOW		93 Jun 16	283 Feb 22 1993
INSTANTANEOUS PEAK STAGE		3.43 Jun 16	6.03 Feb 22 1993
INSTANTANEOUS LOW FLOW		.00 Oct 1	.00 Apr 24 1993
ANNUAL RUNOFF (INCHES)	8.53	11.57	13.19
10 PERCENT EXCEEDS	2.8	3.6	3.4
50 PERCENT EXCEEDS	.32	.30	.32
90 PERCENT EXCEEDS	.00	.00	.00

SUWANNEE RIVER BASIN  
02323500 SUWANNEE RIVER NEAR WILCOX, FL

65

LOCATION.--Lat 29°35'22", long 82°56'12", in NW<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, 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.

GAGE.--Water-stage recorder. 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. Since Feb. 1, 1951, 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.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Flow generally affected by tide when discharge is less than 17,500 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4320	4690	6370	4400	5390	6650	9950	9410	6260	e4990	e4980	5360
2	4060	4960	6180	4620	4790	5940	11500	8720	6060	e4970	e4920	5430
3	3870	4990	5710	5320	5960	6900	11300	8350	5770	e4950	e4880	5520
4	3580	6320	5740	6920	8140	6750	11100	8360	5700	e4940	e4850	5650
5	4690	6650	5630	5840	8750	5360	11400	8450	5770	e4930	e4890	5670
6	5940	5360	5620	5680	6800	4900	11700	8490	5940	e5000	e4940	5570
7	5550	4690	5100	5280	6520	5310	12400	8770	5870	e5200	e5000	5700
8	5690	5840	5830	8730	5780	7560	12800	9000	5680	e5400	e5050	5530
9	5920	7750	4970	7160	5510	9020	12900	9520	5270	e5600	e5100	5290
10	5390	5580	8100	6580	5750	9550	13700	9770	5600	e5800	e5160	5280
11	5150	4480	7480	5980	5560	9910	13800	9940	5440	e5900	e5220	5370
12	5590	7620	6250	5510	7170	8460	13400	10000	5440	e6000	e5280	5320
13	5220	6070	5860	7800	7570	7230	12700	10100	5460	e6060	e5340	5360
14	4700	6240	5470	6400	5920	7370	12300	9850	5590	e6090	e5400	5460
15	6650	7060	5750	6240	5640	7170	12100	9510	5540	e6140	e5500	5350
16	7630	6470	5240	6110	6340	6950	12100	8980	e5500	e6180	e5600	4980
17	7420	5680	5500	5600	8220	6910	12300	8680	e5450	e6150	e5680	5120
18	5920	5630	4630	5070	6040	6610	11600	8360	e5400	e6080	e5740	5420
19	4980	5320	4380	5740	5230	6740	11200	8160	e5350	e6000	e5790	5690
20	5010	5210	5780	6920	5160	7940	11000	7840	e5300	e5900	e5830	5610
21	5910	5230	5990	6010	5960	8710	11000	7470	e5260	e5800	e5860	5150
22	5550	6120	5800	7070	5920	8710	10800	7480	e5230	e5700	5900	5260
23	4930	5040	5940	5910	5940	8660	10500	7310	e5200	e5600	5880	5680
24	5110	4900	6620	5010	6020	8680	10600	7350	e5160	e5500	5780	5080
25	4970	5860	6060	7490	6560	8610	10300	7200	e5130	e5400	5700	4920
26	4580	5650	5680	5470	6610	9280	9700	6910	e5100	e5300	5650	4680
27	4480	4930	5580	5580	6490	9240	9710	6760	e5070	e5230	5370	4840
28	3990	3970	5960	7820	6110	9150	9470	6510	e5050	e5170	5300	4830
29	6950	5020	6820	5900	7080	9770	8680	6270	e5030	e5120	5520	4840
30	6150	7180	5700	5830	---	9850	8160	6280	e5010	e5070	5410	4930
31	5160	---	4750	5400	---	9710	---	6330	---	e5020	5400	---
MEAN	5325	5684	5822	6109	6308	7858	11340	8262	5454	5522	5385	5296
MAX	7630	7750	8100	8730	8750	9910	13800	10100	6260	6180	5900	5700
MIN	3580	3970	4380	4400	4790	4900	8160	6270	5010	4930	4850	4680
IN.	.64	.66	.70	.73	.71	.94	1.31	.99	.63	.66	.64	.61

e Estimated

SUWANNEE RIVER BASIN  
02323500 SUWANNEE RIVER NEAR WILCOX, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1996, BY WATER YEAR (WY)

MEAN	8746	7657	8037	10070	12720	15460	15940	11350	8662	8443	9339	9413
MAX	25810	33030	32630	27320	27390	32210	57260	28690	21690	17550	22190	27910
(WY)	1965	1948	1948	1948	1987	1948	1948	1973	1959	1973	1991	1964
MIN	3703	3718	3575	3610	3602	3796	4631	4422	4174	3844	3925	4104
(WY)	1982	1956	1956	1956	1957	1957	1956	1955	1955	1981	1981	1981

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1931 - 1996	
ANNUAL MEAN	8317		6527		10470	
HIGHEST ANNUAL MEAN					24560	1948
LOWEST ANNUAL MEAN					4291	1955
HIGHEST DAILY MEAN	21500	Mar 2	13800	Apr 11	84700	Apr 14 1948
LOWEST DAILY MEAN	3580	Oct 4	3580	Oct 4	2960	Oct 25 1981
ANNUAL SEVEN-DAY MINIMUM	3950	Sep 22	4570	Oct 1	3350	Oct 21 1981
INSTANTANEOUS PEAK FLOW			14300	Apr 11	84700	Apr 14 1948
INSTANTANEOUS PEAK STAGE			6.89	Apr 9	22.32	Apr 14 1948
ANNUAL RUNOFF (INCHES)	11.71		9.22		14.76	
10 PERCENT EXCEEDS	15900		9590		18500	
50 PERCENT EXCEEDS	5810		5780		8360	
90 PERCENT EXCEEDS	4330		4950		4800	

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.27	3.11	2.38	3.30	2.81	2.56	5.54	4.44	3.12	---	---	3.29
2	3.31	3.16	2.53	3.38	3.24	2.83	5.45	4.32	3.15	---	---	3.27
3	3.65	3.19	2.66	3.04	3.07	2.67	5.65	4.50	3.28	---	---	3.22
4	4.58	2.81	2.69	2.41	2.30	2.61	6.02	4.62	3.34	---	---	3.07
5	5.60	2.51	2.76	2.64	1.73	3.01	6.33	4.66	3.26	---	---	2.98
6	4.26	2.80	2.77	2.73	2.20	3.45	6.55	4.68	3.06	---	---	3.13
7	3.73	3.36	2.94	3.21	2.49	3.63	6.70	4.67	2.94	---	---	3.05
8	3.42	3.19	2.63	2.33	2.88	2.90	6.75	4.72	3.00	---	---	3.15
9	3.10	2.40	2.90	2.16	3.00	2.30	6.85	4.70	3.39	---	---	3.25
10	3.30	2.60	2.29	2.55	2.98	2.25	6.80	4.72	3.15	---	---	3.37
11	3.46	3.26	1.76	2.64	3.01	2.17	6.73	4.77	3.14	---	---	3.39
12	3.18	2.66	2.19	2.85	2.75	2.51	6.72	4.80	3.09	---	---	3.37
13	3.20	2.58	2.44	2.33	2.45	2.88	6.77	4.65	3.05	---	---	3.37
14	3.40	2.60	2.65	2.44	2.73	3.15	6.76	4.55	2.96	---	---	3.41
15	3.15	2.44	2.63	2.62	2.97	3.46	6.74	4.45	3.00	---	---	3.44
16	2.59	2.55	2.69	2.67	2.97	3.84	6.64	4.46	---	---	---	3.68
17	2.53	2.66	2.72	2.77	2.30	3.97	6.34	4.42	---	---	---	3.73
18	2.70	2.76	2.94	3.09	2.76	4.28	6.23	4.34	---	---	---	3.48
19	2.93	2.87	3.61	3.27	3.04	4.51	6.20	4.18	---	---	---	3.07
20	3.29	2.97	3.21	2.49	3.25	3.89	6.08	4.05	---	---	---	2.95
21	3.18	3.05	2.59	2.65	2.83	3.76	5.90	4.00	---	---	---	3.16
22	2.90	2.77	2.74	2.35	2.79	3.84	5.72	3.81	---	---	3.25	3.31
23	3.17	3.02	2.67	2.51	2.76	4.01	5.58	3.68	---	---	3.31	2.93
24	3.33	3.20	2.42	3.00	2.74	4.19	5.33	3.44	---	---	3.37	3.22
25	3.41	2.92	2.45	2.37	2.62	4.46	5.14	3.31	---	---	3.32	3.36
26	3.51	2.71	2.62	2.62	2.56	4.58	5.06	3.31	2.70	---	3.30	3.52
27	3.70	2.93	2.63	2.71	2.59	4.57	4.87	3.32	---	---	3.38	3.47
28	3.72	2.98	2.55	2.16	2.63	4.90	4.65	3.40	---	---	3.45	3.46
29	2.67	2.89	2.27	2.41	2.59	4.84	4.70	3.45	---	---	3.33	3.42
30	2.61	2.38	2.51	2.64	---	5.00	5.05	3.38	---	---	3.30	3.26
31	2.82	---	2.83	2.78	---	5.36	---	3.20	---	---	3.28	---
MEAN	3.34	2.84	2.63	2.68	2.73	3.63	5.99	4.16	---	---	---	3.29
MAX	5.60	3.36	3.61	3.38	3.25	5.36	6.85	4.80	---	---	---	3.73
MIN	2.53	2.38	1.76	2.16	1.73	2.17	4.65	3.20	---	---	---	2.93

STEINHATCHEE RIVER BASIN  
02324000 STEINHATCHEE RIVER NEAR CROSS CITY, FL

67

LOCATION.--Lat 29°47'11", long 83°19'18", in NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, 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 fair. Below about 500 ft<sup>3</sup>/s, all flow enters sinkhole 0.5 mi downstream from gage. Above about 4,000 ft<sup>3</sup>/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<sup>2</sup>.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	e8.6	55	45	43	106	789	518	26	61	299	726
2	29	e8.2	50	54	43	264	791	492	21	56	356	825
3	29	e8.6	46	54	89	278	766	444	18	51	470	1010
4	36	12	41	51	100	225	715	377	16	47	529	956
5	46	13	39	49	92	170	644	295	15	65	535	869
6	49	11	36	47	81	143	589	225	14	373	492	785
7	47	11	34	51	73	157	561	170	13	634	468	709
8	44	20	32	51	69	348	511	141	13	726	617	629
9	39	23	37	48	65	304	472	116	14	784	625	565
10	36	23	50	47	62	256	429	97	14	973	577	528
11	34	25	48	45	60	276	361	82	21	1160	693	543
12	33	45	48	50	57	281	298	71	17	1270	901	602
13	32	50	47	52	53	250	249	61	14	1290	1280	680
14	30	46	46	50	51	216	208	53	12	1270	1490	615
15	30	39	45	49	50	183	335	48	12	1240	1510	547
16	30	34	43	48	51	162	580	43	14	1170	1400	515
17	33	31	41	47	47	148	548	39	32	1080	1250	533
18	31	28	40	46	45	299	503	35	53	971	1100	547
19	29	26	43	45	44	499	463	31	51	848	948	528
20	26	25	50	43	45	563	421	27	56	743	859	508
21	25	25	50	42	46	586	346	23	61	648	748	478
22	21	22	50	41	46	575	275	24	73	571	651	455
23	18	20	49	40	45	531	217	24	78	514	579	403
24	17	19	47	40	45	480	169	32	66	560	518	326
25	16	19	45	46	43	438	141	30	53	580	490	259
26	14	19	44	44	42	445	124	25	43	551	515	210
27	13	18	43	45	41	415	112	20	41	503	481	165
28	12	17	42	47	40	443	99	17	52	463	466	143
29	11	37	41	45	43	437	87	19	67	417	443	130
30	9.6	60	39	44	---	471	400	32	66	341	483	127
31	e9.1	---	40	43	---	725	---	32	---	274	657	---
MEAN	27.7	24.8	43.9	46.7	55.6	344	407	118	34.9	653	724	531
MAX	49	60	55	54	100	725	791	518	78	1290	1510	1010
MIN	9.1	8.2	32	40	40	106	87	17	12	47	299	127
IN.	.09	.08	.14	.15	.17	1.13	1.30	.39	.11	2.15	2.38	1.69

e Estimated

STEINHATCHEE RIVER BASIN  
 02324000 STEINHATCHEE RIVER NEAR CROSS CITY, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1996, BY WATER YEAR (WY)

MEAN	273	126	185	324	453	494	355	125	122	325	528	511
MAX	1436	1291	998	1181	1234	2022	1443	972	925	1305	2496	3820
(WY)	1958	1952	1954	1987	1987	1991	1982	1978	1957	1964	1970	1964
MIN	16.0	11.1	7.53	14.2	13.0	31.0	15.9	9.09	3.75	4.94	5.28	29.5
(WY)	1956	1956	1956	1956	1957	1950	1956	1962	1981	1992	1993	1956

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1950 - 1996
ANNUAL MEAN	80.1	252	319
HIGHEST ANNUAL MEAN			901
LOWEST ANNUAL MEAN			35.4
HIGHEST DAILY MEAN	314	Jan 17	16400
LOWEST DAILY MEAN	8.2	Nov 2	2.6
ANNUAL SEVEN-DAY MINIMUM	9.6	Oct 28	2.8
INSTANTANEOUS PEAK FLOW		1530	17600
INSTANTANEOUS PEAK STAGE		11.07	18.90
INSTANTANEOUS LOW FLOW		8.1	2.5
ANNUAL RUNOFF (INCHES)	3.11	9.80	12.40
10 PERCENT EXCEEDS	166	684	861
50 PERCENT EXCEEDS	56	54	120
90 PERCENT EXCEEDS	19	20	16



FENHOLLOWAY RIVER BASIN

02324400 FENHOLLOWAY RIVER NEAR FOLEY, FL

LOCATION.--Lat 30°05'53", long 83°28'19", in NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup> 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.--No estimated daily discharges. Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	.97	1.1	.76	.68	1.4	77	31	3.0	1.0	27	27
2	2.2	.98	.96	.88	.78	2.2	75	29	2.3	.96	34	30
3	2.2	.95	.91	.96	1.9	3.6	68	28	1.9	.91	43	35
4	3.6	.95	.90	1.0	2.6	5.4	61	26	1.6	.91	57	33
5	4.6	.95	.91	.97	2.2	3.2	56	24	1.4	1.0	75	29
6	5.1	.91	.90	.93	1.8	2.2	53	22	1.2	5.5	78	26
7	4.9	.90	.93	.98	1.6	2.1	52	21	1.1	25	70	24
8	4.3	.97	.91	.97	1.6	3.8	49	19	1.0	28	67	22
9	3.8	.97	.96	.95	1.0	4.2	46	17	1.1	33	73	20
10	3.4	.97	.93	.96	.94	4.0	43	16	1.2	50	72	18
11	3.6	1.2	.92	1.0	.84	4.1	40	14	1.1	51	64	17
12	4.5	1.7	.91	1.3	.78	4.2	37	13	1.0	53	61	16
13	2.8	2.3	.91	1.4	.70	4.0	34	11	.95	50	62	14
14	2.5	2.5	1.0	1.2	.65	3.6	32	9.9	.91	47	62	13
15	2.2	2.3	.89	1.2	.65	3.1	33	8.8	.87	47	69	12
16	1.9	2.0	.83	1.2	.66	2.7	39	7.7	.89	45	67	13
17	1.7	1.8	.78	1.2	.62	2.4	38	6.8	1.1	42	61	17
18	1.6	1.6	.73	1.2	.57	25	35	5.8	3.0	39	54	23
19	1.7	1.6	.86	1.2	.55	34	33	5.0	3.7	36	49	23
20	1.6	1.4	1.0	1.2	.56	30	31	4.0	3.4	33	44	21
21	1.3	1.4	.96	1.1	.55	26	29	3.2	2.7	31	39	19
22	1.1	1.3	1.0	.78	.56	24	28	2.8	2.3	28	35	18
23	1.1	1.2	1.0	.68	.55	22	26	3.1	2.7	26	32	16
24	1.1	1.2	.92	.66	.57	20	24	2.4	4.1	30	29	14
25	1.1	1.2	.86	.64	.57	20	22	1.9	3.7	39	27	13
26	1.1	1.2	.83	.64	.53	33	21	1.6	2.7	48	25	11
27	1.0	1.1	.79	.64	.56	33	19	1.3	2.0	46	24	10
28	1.0	1.1	.77	.68	.56	40	18	1.2	1.8	41	22	9.3
29	1.0	1.1	.70	.69	.60	44	16	1.5	1.6	37	20	8.6
30	1.0	1.1	.66	.67	---	51	25	2.7	1.2	32	25	8.2
31	.96	---	.69	.69	---	74	---	3.3	---	29	26	---
MEAN	2.32	1.33	.88	.95	.92	17.2	38.7	11.1	1.92	31.5	48.2	18.7
MAX	5.1	2.5	1.1	1.4	2.6	74	77	31	4.1	53	78	35
MIN	.96	.90	.66	.64	.53	1.4	16	1.2	.87	.91	20	8.2
IN.	.04	.02	.02	.02	.02	.33	.72	.21	.04	.61	.93	.35

## FENHOLLOWAY RIVER BASIN

02324400 FENHOLLOWAY RIVER NEAR FOLEY, FL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1996, BY WATER YEAR (WY)

MEAN	36.4	12.6	26.4	47.7	72.5	87.3	74.8	26.6	33.0	50.8	85.3	61.7
MAX	389	81.5	185	179	200	377	413	147	478	194	580	560
(WY)	1958	1977	1977	1987	1987	1991	1973	1964	1957	1964	1970	1964
MIN	.53	.70	.88	.95	.92	1.22	.79	.56	.70	.75	.50	.64
(WY)	1994	1969	1996	1996	1996	1989	1989	1989	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1956 - 1996
ANNUAL MEAN	18.7	14.5	51.2
HIGHEST ANNUAL MEAN			154
LOWEST ANNUAL MEAN			4.42
HIGHEST DAILY MEAN	76 May 15	78 Aug 6	2710 Sep 12 1964
LOWEST DAILY MEAN	.66 Dec 30	.53 Feb 26	.35 Aug 25 1993
ANNUAL SEVEN-DAY MINIMUM	.76 Dec 25	.56 Feb 20	.41 Aug 20 1993
INSTANTANEOUS PEAK FLOW		79 Aug 5	3210 Sep 12 1964
INSTANTANEOUS PEAK STAGE		4.94 Apr 1	15.21 Sep 12 1964
INSTANTANEOUS LOW FLOW		.52 Feb 26	.32 Aug 25 1993
ANNUAL RUNOFF (INCHES)	4.23	3.30	11.59
10 PERCENT EXCEEDS	40	44	142
50 PERCENT EXCEEDS	18	2.7	15
90 PERCENT EXCEEDS	.98	.78	1.4

FENHOLLOWAY RIVER BASIN  
 02325000 FENHOLLOWAY RIVER NEAR PERRY, FL

LOCATION.--Lat 30°04'16", long 83°39'45", in SE<sup>1</sup>/<sub>4</sub> sec.6, T.5 S., R.7 E., Taylor County, Hydrologic Unit 03110102, near right bank on downstream side of bridge on 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<sup>2</sup>, 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, crest-stage gage at same site and datum.

REMARKS.--No estimated daily discharges. Records fair. 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 1995 TO SEPTEMBER 1996  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	102	90	91	78	96	248	146	108	90	144	172
2	114	101	91	94	79	99	253	150	104	90	192	180
3	110	101	91	88	91	93	253	149	102	88	215	198
4	113	102	90	86	80	92	239	145	103	94	220	191
5	116	100	90	85	79	93	227	141	102	100	225	184
6	113	97	90	84	81	96	231	137	102	129	232	178
7	112	98	91	85	84	100	234	133	100	153	232	169
8	110	105	91	86	74	108	224	132	106	144	235	162
9	108	98	90	81	82	100	215	129	109	144	254	157
10	109	95	90	82	83	99	206	125	105	159	268	155
11	110	99	89	84	84	101	197	122	103	160	274	157
12	110	112	88	86	84	103	189	120	99	175	279	154
13	111	105	88	85	83	101	181	119	97	182	282	149
14	114	104	80	85	82	101	177	117	95	189	276	144
15	110	101	87	83	84	103	182	113	95	197	263	140
16	107	100	87	81	84	103	197	114	102	194	254	154
17	108	99	88	80	76	102	189	115	109	189	252	184
18	106	99	89	78	82	138	185	113	106	183	243	175
19	106	98	93	83	82	151	180	113	103	176	228	172
20	105	97	89	81	78	137	173	111	103	169	215	170
21	103	96	85	80	83	135	167	112	101	160	203	165
22	102	95	85	81	84	135	162	113	109	152	188	163
23	103	95	84	81	86	134	157	102	102	145	181	157
24	103	95	84	83	87	132	151	119	99	153	178	152
25	95	95	86	82	88	135	144	112	99	155	181	147
26	100	94	85	80	86	150	144	110	95	170	177	143
27	102	94	84	81	83	148	141	109	95	171	171	139
28	103	93	84	80	82	166	136	109	95	170	165	139
29	102	94	83	80	83	168	132	115	92	163	155	139
30	101	89	86	79	---	188	146	120	90	154	156	153
31	101	---	89	77	---	239	---	113	---	144	161	---
MEAN	107	98.4	87.6	83.0	82.5	124	189	122	101	153	216	161
MAX	116	112	93	94	91	239	253	150	109	197	282	198
MIN	95	89	80	77	74	92	132	102	90	88	144	139

## FENHOLLOWAY RIVER BASIN

02325000 FENHOLLOWAY RIVER NEAR PERRY, FL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1996, BY WATER YEAR (WY)

MEAN	163	141	149	190	241	286	278	165	148	202	246	181
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	86.7	84.7	83.0	82.5	112	104	93.0	99.2	94.8	82.8	94.2
(WY)	1991	1991	1991	1996	1996	1989	1989	1989	1990	1993	1993	1993

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1977 - 1996	
ANNUAL MEAN	143		127		200	
HIGHEST ANNUAL MEAN					317	
LOWEST ANNUAL MEAN					125	
HIGHEST DAILY MEAN	233	Jul 28	282	Aug 13	1130	Jul 31 1982
LOWEST DAILY MEAN	80	Dec 14	74	Feb 8	35	Oct 8 1990
ANNUAL SEVEN-DAY MINIMUM	84	Dec 23	79	Jan 27	48	Oct 4 1990
INSTANTANEOUS PEAK FLOW			282	Aug 12	1360	Sep 18 1964
INSTANTANEOUS PEAK STAGE			14.87	Aug 12	24.39	Sep 13 1964
INSTANTANEOUS LOW FLOW			71	Feb 8	35	Oct 8 1990
10 PERCENT EXCEEDS	203		191		360	
50 PERCENT EXCEEDS	140		107		153	
90 PERCENT EXCEEDS	95		83		103	

SUWANNEE RIVER BASIN  
02326000 ECONFINA RIVER NEAR PERRY, FL.

LOCATION.--Lat 30°10'14", long 83°49'26", in NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

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

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.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	261	93	198	317	229	163	418	272	213	317	120
2	231	243	129	191	303	222	154	412	244	190	318	108
3	274	223	128	185	290	214	147	392	219	163	357	98
4	297	206	127	179	286	205	140	366	197	143	397	88
5	327	192	125	173	e280	195	134	337	180	128	441	78
6	349	181	125	176	e270	184	127	310	168	128	461	70
7	432	170	165	175	e260	173	132	285	156	115	447	64
8	959	164	210	170	e250	163	130	261	145	111	417	59
9	1200	158	211	192	e240	155	123	239	132	125	448	54
10	1150	152	214	220	e230	147	114	219	121	153	433	50
11	1090	146	218	227	e220	140	105	200	110	158	387	48
12	1030	139	219	235	e210	132	100	183	104	150	345	47
13	977	132	214	246	e200	126	96	172	100	142	305	45
14	918	126	206	250	e280	124	91	160	96	137	269	42
15	863	120	197	245	e290	134	89	149	96	127	242	40
16	808	114	189	272	e300	139	85	148	85	116	221	39
17	756	109	187	292	e295	143	79	153	76	105	212	42
18	709	105	197	286	e290	150	73	151	72	97	200	52
19	658	102	235	275	e280	154	68	141	72	98	186	66
20	607	100	251	267	e270	152	63	129	79	133	171	56
21	567	99	258	258	e260	160	60	122	87	166	158	47
22	525	109	266	247	e255	170	56	112	100	247	203	42
23	486	107	270	236	e250	162	70	109	132	257	206	40
24	456	104	266	226	244	154	92	143	162	243	191	41
25	424	100	257	238	240	146	95	187	171	216	176	41
26	394	96	246	266	245	148	103	247	189	188	158	41
27	366	92	236	272	243	168	254	299	189	168	142	44
28	341	89	228	276	236	161	326	348	192	163	130	58
29	320	86	219	284	---	156	372	347	216	162	121	57
30	300	83	212	309	---	157	402	326	231	232	110	54
31	280	---	205	321	---	169	---	300	---	290	106	---
MEAN	589	137	203	238	262	162	135	238	146	163	267	57.7
MAX	1200	261	270	321	317	229	402	418	272	290	461	120
MIN	153	83	93	170	200	124	56	109	72	97	106	39
IN.	3.43	.77	1.18	1.39	1.38	.95	.76	1.38	.83	.95	1.55	.33

e Estimated

SUWANNEE RIVER BASIN  
02326000 ECONFINA RIVER NEAR PERRY, FL.--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	114	60.9	98.8	143	220	247	228	90.8	92.0	115	181	147
MAX	816	288	771	624	814	828	1176	379	432	381	756	1266
(WY)	1995	1952	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL MEAN	157		217		144	
HIGHEST ANNUAL MEAN					317	
LOWEST ANNUAL MEAN					18.1	
HIGHEST DAILY MEAN	1200	Oct 9	1200	Oct 9	2480	Sep 18 1957
LOWEST DAILY MEAN	25	Feb 19	39	Sep 16	2.4	Jul 8 1955
ANNUAL SEVEN-DAY MINIMUM	26	Feb 15	42	Sep 21	2.6	Jul 3 1955
INSTANTANEOUS PEAK FLOW			1210	Oct 9	2540	Sep 17 1957
INSTANTANEOUS PEAK STAGE			11.51	Oct 9	12.78	Sep 17 1957
INSTANTANEOUS LOW FLOW			38	Sep 16	2.3	Jul 8 1955
ANNUAL RUNOFF (INCHES)	10.77		14.90		9.91	
10 PERCENT EXCEEDS	304		352		376	
50 PERCENT EXCEEDS	111		181		65	
90 PERCENT EXCEEDS	29		79		18	

AUCILLA RIVER BASIN  
02326512 AUCILLA RIVER NEAR SCANLON, FL

75

LOCATION.--Lat 30°13'52", long 83°55'08", in SW<sup>1</sup>/<sub>4</sub> sec.10, T.3 S., R.4 E., Taylor County, Hydrologic Unit 03110103, on left bank, 3 mi west of Cabbage Grove, 6.9 mi north of Scanlon, 12 mi southwest of Lamont and 14 mi upstream from mouth.

DRAINAGE AREA.--805 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1950 to November 1957, crest-stage partial-record station; May 1965, May 1967 (one discharge measurement made each water year); August 1976 to current year.

REVISED RECORDS.--WRD FL-88-4: 1986, 1987.

GAGE.--Water-stage recorder. Datum of gage is 3.14 ft above National Geodetic Vertical Datum of 1929, unadjusted. February 1950 to November 1957, crest-stage gage at same site at present datum. August 30, 1976 to April 24, 1982, water-stage recorder at same site and datum. April 25, 1982 to October 24, 1984, nonrecording gage.

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 9, 1973, reached a stage of about 23.5 ft, from floodmarks, (discharge not determined).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	51	60	70	100	143	1520	465	69	42	51	114
2	46	50	62	77	103	187	1670	443	63	40	76	115
3	46	49	61	102	135	205	1760	415	60	40	71	114
4	62	48	60	115	159	202	1790	399	58	40	67	115
5	154	47	60	112	150	201	1770	380	56	49	64	119
6	54	47	59	111	138	202	1720	353	53	60	68	107
7	54	49	62	118	133	209	1690	323	49	66	71	94
8	53	55	64	123	130	269	1660	294	52	70	74	89
9	50	49	65	124	128	289	1610	267	55	69	68	82
10	54	48	67	121	125	278	1530	241	60	74	64	90
11	76	54	67	117	123	280	1440	220	62	61	64	126
12	105	59	66	115	120	289	1340	203	56	57	61	122
13	131	55	65	115	116	282	1250	188	51	54	60	112
14	117	55	63	113	113	269	1150	173	48	54	63	99
15	107	55	62	109	110	258	1150	164	45	55	68	91
16	103	53	62	106	109	247	1190	153	46	58	67	112
17	94	52	62	104	108	236	1170	144	48	58	65	170
18	85	50	61	101	104	325	1130	135	53	56	61	183
19	79	49	72	100	101	473	1060	126	53	54	57	161
20	75	46	77	98	112	477	987	118	63	52	54	139
21	71	46	84	95	130	460	920	109	57	51	55	129
22	67	46	84	92	134	461	851	102	54	48	55	125
23	63	45	81	89	129	449	776	95	53	49	50	120
24	60	45	77	89	125	428	701	88	53	63	48	113
25	57	45	74	92	122	419	628	81	50	59	51	107
26	55	45	72	98	120	509	565	74	48	62	53	102
27	53	45	70	98	117	547	510	68	46	59	68	98
28	53	45	69	104	115	733	458	66	45	56	70	94
29	53	66	67	107	117	849	414	68	45	53	64	101
30	51	61	66	105	---	1010	446	78	44	50	77	123
31	51	---	65	102	---	1290	---	76	---	47	88	---
MEAN	71.8	50.3	67.3	104	122	402	1162	197	53.2	55.0	63.6	116
MAX	154	66	84	124	159	1290	1790	465	69	74	88	183
MIN	46	45	59	70	100	143	414	66	44	40	48	82
IN.	.10	.07	.10	.15	.16	.58	1.61	.28	.07	.08	.09	.16

AUCILLA RIVER BASIN  
02326512 AUCILLA RIVER NEAR SCANLON, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, BY WATER YEAR (WY)

MEAN	296	166	489	658	1076	1400	1028	327	204	293	423	263
MAX	3907	891	2455	2680	3296	3737	4436	1483	689	950	2421	1405
(WY)	1995	1995	1977	1987	1991	1991	1984	1983	1983	1994	1994	1994
MIN	21.8	18.5	21.4	60.8	74.1	116	103	45.4	42.0	38.8	29.4	25.6
(WY)	1991	1991	1991	1985	1989	1985	1985	1985	1990	1993	1993	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1976 - 1996
ANNUAL MEAN	320	204	550
HIGHEST ANNUAL MEAN			1200
LOWEST ANNUAL MEAN			160
HIGHEST DAILY MEAN	1490	1790	7220
LOWEST DAILY MEAN	45	40	17
ANNUAL SEVEN-DAY MINIMUM	45	42	17
INSTANTANEOUS PEAK FLOW		1790	7460
INSTANTANEOUS PEAK STAGE		14.16	20.47
INSTANTANEOUS LOW FLOW		38	16
ANNUAL RUNOFF (INCHES)	5.40	3.45	9.28
10 PERCENT EXCEEDS	925	462	1530
50 PERCENT EXCEEDS	89	83	175
90 PERCENT EXCEEDS	50	49	47



ST. MARKS RIVER BASIN  
02326838 LAFAYETTE CREEK AT TALLAHASSEE, FL

(National water-quality assessment network station)

LOCATION.--Lat 30°27'50", long 84°14'24", in SW1/4 sec.21, T.1 N., R.1 E., Leon County, Hydrologic Unit 03120001, on right bank, 20 ft upstream from culverts on Miccosukee Road 3.1 mi northeast of the Florida Capitol Building at Tallahassee.

DRAINAGE AREA.--9.83 mi<sup>2</sup>, of which .19 mi<sup>2</sup> are noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to September 1989 (published as Northeast drainage ditch at Miccosukee Road at Tallahassee) (annual peak stage and discharge); March 1993 to current year.

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

REMARKS.--No discharge due to road construction.

COOPERATION.--Gage Height records were collected by the Northwest Florida Water Management District.

WATER-QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
OCT 1995												
06...	1030	0.15	122	6.9	24.0	2.7	32	45	13	3.1	4.3	16
DEC 06...	1125	2.2	77	6.1	17.0	5.5	57	30	8.2	2.3	2.9	17
JAN 1996												
22...	1229	0.50	189	6.2	8.0	8.6	71	46	13	3.4	4.9	18
31...	1450	--	119	6.7	18.5	8.0	85	43	12	3.1	4.6	18
FEB 22...	0855	0.35	100	6.3	15.0	6.4	64	39	11	2.8	3.0	14
MAR 27...	1120	11	92	6.9	17.5	6.8	71	38	11	2.6	3.3	15
APR 22...	0855	0.23	123	6.4	20.0	3.7	41	52	15	3.6	3.8	13

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT 1995												
06...	0.3	1.9	37	37	30	7.1	9.1	<0.10	4.2	74	61	0.10
DEC 06...	0.2	1.5	29	30	23	2.0	3.5	<0.10	3.0	48	38	0.06
JAN 1996												
22...	0.3	1.6	41	43	34	3.6	10	0.10	0.55	77	58	0.10
31...	0.3	1.3	46	41	38	3.5	9.2	0.20	0.62	61	57	0.08
FEB 22...	0.2	1.4	38	35	32	4.6	5.2	<0.10	1.3	54	48	0.07
MAR 27...	0.2	1.3	39	37	32	3.2	4.6	<0.10	1.9	57	48	0.08
APR 22...	0.2	1.0	61	49	50	2.6	6.3	0.10	1.8	68	65	0.09

ST. MARKS RIVER BASIN  
02326838 LAFAYETTE CREEK AT TALLAHASSEE, FL--Continued

WATER-QUALITY DATA--Continued

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE (MG/L AS N) (00620)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT 1995												
06...	0.03	--	<0.010	--	<0.050	0.020	0.03	0.48	--	0.28	0.50	0.30
DEC												
06...	0.29	--	<0.010	--	<0.050	<0.015	--	0.50	--	--	0.50	0.30
JAN 1996												
22...	0.10	--	<0.010	--	<0.050	<0.015	--	--	--	--	<0.20	0.20
31...	--	--	<0.010	--	<0.050	<0.015	--	0.30	--	--	0.30	<0.20
FEB												
22...	0.05	--	<0.010	--	<0.050	<0.015	--	0.20	--	--	0.20	0.20
MAR												
27...	1.69	--	<0.010	--	<0.050	<0.015	--	0.40	--	--	0.40	0.30
APR												
22...	0.04	--	<0.010	--	<0.050	0.050	0.06	0.35	--	0.35	0.40	0.40

DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1995											
06...	0.50	0.130	0.100	0.080	0.25	280	28	5.7	8	0.00	100
DEC											
06...	0.50	0.120	0.080	0.060	0.18	170	17	5.8	10	0.06	69
JAN 1996											
22...	--	0.100	0.020	0.020	0.06	170	7.0	3.4	11	0.02	95
31...	0.30	0.140	0.020	0.020	0.06	60	14	3.6	22	--	96
FEB											
22...	0.20	0.120	0.050	0.050	0.15	110	16	3.7	8	0.01	93
MAR											
27...	0.40	0.110	0.050	0.050	0.15	300	28	4.6	16	0.48	98
APR											
22...	0.40	0.110	0.060	0.060	0.18	360	140	4.5	7	0.00	91

OCHLOCKONEE RIVER BASIN  
02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL

79

(Hydrologic bench-mark station)

LOCATION.--Lat 30°07'45", long 84°29'40" in NW<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

WATER-DISCHARGE RECORDS

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, non-recording gage and crest-stage gage at same site at datum 9.63 ft higher.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	e30	e70	71	59	166	1060	236	2.3	e10	4.3	e100
2	16	e70	e55	194	60	268	1010	228	2.1	e8.0	3.2	e300
3	13	e200	e45	252	134	295	787	187	2.0	e15	3.2	e450
4	37	e310	e40	245	171	276	598	146	2.4	e20	4.6	e650
5	e150	e370	e35	220	177	236	467	113	5.2	e30	6.9	e500
6	e250	e190	e70	191	163	199	379	85	3.8	e50	8.0	e350
7	e290	e90	173	214	146	191	341	61	2.6	e80	8.8	e250
8	e120	e95	240	237	130	307	295	43	2.3	e40	11	e200
9	e50	e140	263	225	116	350	247	33	3.1	e20	47	e150
10	e40	e100	315	203	102	338	202	25	3.1	12	45	e100
11	e110	e75	332	179	90	306	162	19	2.3	9.9	97	e80
12	e670	e90	311	167	78	280	130	15	2.0	8.1	105	e70
13	e850	e100	270	160	65	243	104	12	1.9	7.5	111	e50
14	e300	e80	232	147	54	207	90	10	1.7	27	98	e40
15	e170	e60	201	132	46	175	151	8.5	1.9	27	76	e30
16	e120	e55	176	119	43	147	304	7.4	3.9	23	57	e25
17	e90	e50	154	106	40	128	326	6.7	4.5	27	43	e30
18	e60	e48	134	94	35	238	297	6.0	3.1	29	34	e40
19	e50	e46	166	86	30	363	246	5.2	2.5	24	27	e50
20	e45	e45	253	78	133	412	199	4.7	2.8	19	21	e60
21	e40	e44	273	70	264	374	161	4.2	3.9	14	16	e70
22	e35	e42	249	61	310	307	128	3.8	10	11	13	e80
23	e30	e40	216	54	301	251	100	3.6	74	8.6	11	e100
24	e29	e45	186	51	266	206	76	3.2	33	8.2	8.7	118
25	e28	e50	160	69	229	197	57	2.9	26	7.5	7.5	144
26	e27	e60	140	76	194	393	43	2.7	20	10	6.7	205
27	e26	e50	122	76	165	473	32	2.6	17	10	5.7	217
28	e25	e45	107	74	140	555	23	3.0	18	8.5	5.6	215
29	e40	e60	93	73	127	543	18	3.6	e15	6.9	e10	211
30	e50	e80	81	70	---	555	164	3.1	e12	5.3	e20	218
31	e40	---	74	65	---	876	---	2.5	---	5.2	e75	---
TOTAL	3821	2760	5236	4059	3868	9855	8197	1286.7	284.4	581.7	990.2	5103
MEAN	123	92.0	169	131	133	318	273	41.5	9.48	18.8	31.9	170
MAX	850	370	332	252	310	876	1060	236	74	80	111	650
MIN	13	30	35	51	30	128	18	2.5	1.7	5.2	3.2	25
MED	45	60	166	106	130	280	181	7.4	3.1	12	13	109
AC-FT	7580	5470	10390	8050	7670	19550	16260	2550	564	1150	1960	10120
CFSM	1.21	.90	1.66	1.28	1.31	3.12	2.68	.41	.09	.18	.31	1.67
IN.	1.39	1.01	1.91	1.48	1.41	3.59	2.99	.47	.10	.21	.36	1.86

e Estimated

OCHLOCKONEE RIVER BASIN  
02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996, BY WATER YEAR (WY)

MEAN	108	63.7	153	267	299	309	194	67.2	146	254	306	191
MAX	783	470	843	849	753	957	1065	424	520	763	1005	628
(WY)	1995	1986	1965	1991	1986	1991	1973	1991	1982	1975	1994	1994
MIN	1.86	1.58	2.87	11.1	22.4	31.2	8.81	1.70	2.00	3.06	6.14	4.76
(WY)	1994	1991	1992	1985	1989	1985	1966	1992	1990	1977	1990	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1964 - 1996	
ANNUAL TOTAL	60323.5		46042.0			
ANNUAL MEAN	165		126		195	
HIGHEST ANNUAL MEAN					334	
LOWEST ANNUAL MEAN					43.4	
HIGHEST DAILY MEAN	1750	Aug 5	1060	Apr 1	5100	Jul 31 1975
LOWEST DAILY MEAN	2.9	Sep 8	1.7	Jun 14	.94	Oct 13 1993
ANNUAL SEVEN-DAY MINIMUM	3.4	Jul 7	2.3	Jun 9	1.1	Oct 9 1993
INSTANTANEOUS PEAK FLOW			1090	Apr 1	5260	Jul 31 1975
INSTANTANEOUS PEAK STAGE			19.51	Apr 1	34.47	Jul 31 1975
INSTANTANEOUS LOW FLOW			1.6	Jun 15	.90	Jun 5 1989
ANNUAL RUNOFF (AC-FT)	119700		91320		141200	
ANNUAL RUNOFF (CFSM)	1.62		1.23		1.91	
ANNUAL RUNOFF (INCHES)	22.00		16.79		25.96	
10 PERCENT EXCEEDS	365		300		532	
50 PERCENT EXCEEDS	93		70		65	
90 PERCENT EXCEEDS	6.9		5.0		3.2	

OCHLOCKONEE RIVER BASIN  
02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
JAN 1996	11... 1430	176	--	--	--	0.50	--	--	6	1.6	0.38	2.2
JUN 1996	11... 0930	2.4	238	7.2	25.5	0.20	6.8	83	110	39	3.6	2.3
DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	
JAN 1996	11... --	0.4	<0.10	--	--	--	0.90	4.5	0.20	5.6	63	
JUN 1996	11... 4	0.1	0.40	115	112	95	1.5	3.9	0.20	6.9	143	
DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	
JAN 1996	11... --	--	--	--	<0.010	--	<0.050	<0.015	--	0.80	0.80	
JUN 1996	11... 115	0.19	0.95	0.060	<0.010	--	0.060	0.030	0.04	0.27	0.30	
DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	
JAN 1996	11... --	0.80	0.010	0.020	0.010	0.03	50	3.0	<3.0	320	<4	
JUN 1996	11... --	0.36	0.070	0.060	0.050	0.15	46	9.0	<3.0	200	<4	
DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-SOLVED, CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
JAN 1996	11... 4.0	<10	9.0	<1	<1.0	5.0	<6	0.12	2	--	73	
JUN 1996	11... 3.0	<10	1.0	<1	<1.0	91	<6	0.31	2	0.01	89	

OCHLOCKONEE RIVER BASIN  
02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL  
(National water-quality assessment network station)

LOCATION.--Lat 30°33'14", long 84°23'03", in SE<sup>1</sup>/<sub>4</sub> sec.24, T.2 N., R.2 W., Leon County, Hydrologic Unit 03120003, near left bank on downstream side 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<sup>2</sup>, approximately. At site used prior to January 1929, 1,220 mi<sup>2</sup>, approximately.

WATER-DISCHARGE RECORDS

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.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	134	191	256	797	1150	4040	1070	232	127	150	352
2	150	130	199	312	810	1110	4860	1560	238	116	135	469
3	126	134	194	425	883	1050	5130	2510	223	108	156	626
4	124	151	190	585	913	1030	4760	3410	201	100	212	669
5	144	177	189	689	974	1020	4190	3610	182	98	335	699
6	164	221	183	730	1050	999	3550	3350	168	98	432	718
7	191	241	184	729	1110	995	3060	2820	158	97	491	706
8	214	260	187	699	1130	1030	2560	2320	151	101	477	606
9	200	272	202	667	1120	1050	2250	1930	147	117	434	482
10	176	360	235	643	1070	1170	2000	1560	154	135	407	408
11	185	418	271	615	1010	1450	1780	1240	168	159	379	447
12	185	433	339	592	937	1890	1560	997	169	160	420	384
13	166	410	370	564	868	2290	1400	811	162	148	490	323
14	156	388	374	548	808	2440	1280	670	162	137	687	286
15	164	367	374	556	752	2330	1210	574	179	129	1220	273
16	165	334	371	562	698	2110	1230	506	171	115	1840	281
17	177	304	360	551	648	1870	1280	455	185	110	1960	338
18	172	279	342	531	608	1790	1330	410	203	109	1730	392
19	151	255	345	510	569	1800	1320	370	215	109	1230	389
20	138	235	355	494	733	1800	1250	341	243	106	843	399
21	130	219	396	489	821	2160	1170	315	269	106	602	364
22	122	204	434	486	899	3020	1090	290	282	99	459	309
23	114	192	427	480	1040	3920	991	268	327	90	374	262
24	108	184	405	488	1150	4240	901	245	364	90	319	231
25	103	178	381	492	1220	3910	816	225	330	113	280	209
26	98	172	354	497	1250	3530	750	210	257	112	254	191
27	94	166	328	571	1260	3110	728	195	221	176	244	176
28	100	165	307	627	1240	3010	753	190	186	250	284	164
29	134	175	285	667	1190	3000	787	203	160	243	275	156
30	140	180	269	738	---	3130	920	205	141	203	245	153
31	140	---	260	784	---	3570	---	217	---	171	265	---
MEAN	149	245	300	567	950	2160	1965	1067	208	130	569	382
MAX	214	433	434	784	1260	4240	5130	3610	364	250	1960	718
MIN	94	130	183	256	569	995	728	190	141	90	135	153
IN.	.15	.24	.30	.57	.90	2.19	1.92	1.08	.20	.13	.58	.37

OCHLOCKONEE RIVER BASIN  
02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1996, BY WATER YEAR (WY)

MEAN	488	371	732	1328	2003	2279	1960	840	652	734	845	589
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	81.6	54.3	52.8	26.8
(WY)	1955	1934	1934	1934	1957	1955	1927	1927	1977	1977	1990	1954

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1926 - 1996	
ANNUAL MEAN	887		723		1063	
HIGHEST ANNUAL MEAN					2854	1948
LOWEST ANNUAL MEAN					209	1968
HIGHEST DAILY MEAN	10100	Feb 16	5130	Apr 3	53100	Apr 4 1948
LOWEST DAILY MEAN	59	Sep 15	90	Jul 23	17	Oct 23 1954
ANNUAL SEVEN-DAY MINIMUM	62	Sep 10	101	Jul 18	17	Oct 22 1954
INSTANTANEOUS PEAK FLOW			5200	Apr 3	55900	Apr 4 1948
INSTANTANEOUS PEAK STAGE			25.66	Apr 3	35.08	Apr 4 1948
INSTANTANEOUS LOW FLOW			85	Jul 24	17	Oct 23 1954
ANNUAL RUNOFF (INCHES)	10.56		8.64		12.67	
10 PERCENT EXCEEDS	2140		1810		2610	
50 PERCENT EXCEEDS	342		368		459	
90 PERCENT EXCEEDS	119		135		86	

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.26	12.65	13.30	13.91	17.22	19.03	24.85	18.78	13.73	12.55	12.83	14.49
2	12.83	12.59	13.38	14.31	17.29	18.83	25.44	20.48	13.77	12.42	12.65	15.37
3	12.55	12.64	13.33	15.04	17.70	18.58	25.62	22.87	13.63	12.30	12.90	16.41
4	12.51	12.84	13.28	15.93	17.86	18.48	25.37	24.26	13.40	12.21	13.51	16.68
5	12.77	13.14	13.27	16.57	18.18	18.40	24.97	24.51	13.20	12.18	14.46	16.86
6	13.00	13.61	13.21	16.83	18.59	18.32	24.42	24.18	13.04	12.18	15.11	16.97
7	13.30	13.80	13.21	16.82	18.86	18.30	23.80	23.47	12.92	12.16	15.53	16.90
8	13.54	13.94	13.25	16.63	18.93	18.50	23.07	22.57	12.85	12.22	15.44	16.29
9	13.40	14.02	13.41	16.43	18.87	18.56	22.37	21.53	12.79	12.43	15.13	15.46
10	13.13	14.64	13.75	16.28	18.69	19.10	21.72	20.51	12.88	12.66	14.95	14.93
11	13.22	15.01	14.02	16.10	18.37	20.15	21.10	19.47	13.04	12.94	14.76	15.22
12	13.23	15.12	14.49	15.95	17.99	21.40	20.54	18.43	13.05	12.95	15.03	14.75
13	13.02	14.96	14.70	15.80	17.62	22.50	20.06	17.48	12.97	12.81	15.52	14.26
14	12.90	14.82	14.73	15.72	17.28	22.86	19.62	16.68	12.97	12.68	16.73	13.95
15	12.99	14.68	14.73	15.76	16.96	22.59	19.35	16.08	13.16	12.58	18.88	13.83
16	13.01	14.46	14.71	15.79	16.63	22.02	19.44	15.64	13.07	12.40	20.45	13.90
17	13.14	14.25	14.64	15.74	16.31	21.35	19.63	15.28	13.23	12.35	20.81	14.38
18	13.09	14.07	14.52	15.63	16.05	21.12	19.81	14.96	13.42	12.33	20.18	14.81
19	12.85	13.90	14.53	15.52	15.83	21.14	19.77	14.70	13.56	12.33	18.92	14.79
20	12.70	13.74	14.60	15.44	16.83	21.14	19.52	14.51	13.81	12.28	17.52	14.87
21	12.60	13.60	14.87	15.41	17.35	22.15	19.20	14.33	14.01	12.29	16.26	14.59
22	12.49	13.44	15.12	15.39	17.78	23.74	18.85	14.16	14.10	12.19	15.30	14.14
23	12.39	13.30	15.08	15.36	18.51	24.75	18.41	13.99	14.41	12.07	14.67	13.73
24	12.31	13.22	14.93	15.40	19.03	25.01	17.96	13.82	14.66	12.07	14.22	13.45
25	12.24	13.15	14.77	15.42	19.31	24.75	17.51	13.65	14.43	12.37	13.89	13.23
26	12.18	13.09	14.60	15.45	19.46	24.39	17.15	13.50	13.92	12.37	13.66	13.05
27	12.12	13.02	14.42	15.85	19.49	23.87	17.03	13.34	13.61	13.12	13.57	12.90
28	12.20	13.01	14.28	16.17	19.41	23.75	17.17	13.29	13.24	13.86	13.93	12.77
29	12.64	13.12	14.12	16.43	19.20	23.73	17.36	13.43	12.95	13.80	13.85	12.69
30	12.71	13.17	14.00	16.88	---	23.90	18.05	13.45	12.73	13.42	13.58	12.65
31	12.71	---	13.93	17.15	---	24.45	---	13.57	---	13.07	13.76	---
MEAN	12.81	13.70	14.17	15.84	17.99	21.51	20.64	17.32	13.42	12.57	15.42	14.61
MAX	13.54	15.12	15.12	17.15	19.49	25.01	25.62	24.51	14.66	13.86	20.81	16.97
MIN	12.12	12.59	13.21	13.91	15.83	18.30	17.03	13.29	12.73	12.07	12.65	12.65

CAL YR 1995 MEAN 16.16 MAX 27.74 MIN 11.61  
WTR YR 1996 MEAN 15.82 MAX 25.62 MIN 12.07

OCHLOCKONEE RIVER BASIN  
02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1962 to June 1972, October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	
DEC 1995	12... 1745	355	217	7.2	10.0	7.9	70	35	8.0	3.6	28	61	
DATE	RATIO	SODIUM AD-SORP-TION (MG/L AS K) (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
DEC 1995	12... 2		3.5	24	23	19	7.0	43	0.20	7.9	133	119	0.18
DATE	PER DAY) (70302)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	
DEC 1995	12... 131	0.980	0.980	0.020	--	1.00	<0.015	4.3	0.07	0.50	1.4	0.50	
DATE	AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
DEC 1995	12... 0.40	1.5	0.150	0.120	0.090	0.28	830	15	7.5	10	9.9	92	



OCHLOCKONEE RIVER BASIN  
02329600 LITTLE RIVER NEAR MIDWAY, FL

85

LOCATION.--Lat 30°30'44", long 84°31'25", in SW<sup>1</sup>/<sub>4</sub> sec.3, T.1 N., R.3 W., Gadsden 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<sup>2</sup>.

PERIOD OF RECORD.--Annual maximums, water years 1965-85. October 1985 to current year.

GAGE.--Water-stage recorder and crest-stage gage. 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.--Records good, except those below 200 ft<sup>3</sup>/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	144	212	e510	264	495	1990	950	63	56	106	657
2	145	180	183	657	332	622	1900	756	55	57	87	637
3	161	267	181	748	965	499	1330	478	56	55	294	884
4	524	483	207	656	937	346	651	281	56	54	402	725
5	1280	442	188	459	789	273	448	229	55	70	323	394
6	922	302	121	320	515	275	401	184	53	200	220	370
7	594	233	194	298	342	327	408	131	52	182	135	253
8	304	282	269	307	301	613	399	116	60	217	145	139
9	223	250	275	281	285	595	360	100	97	253	307	91
10	177	290	380	255	271	470	298	80	107	206	575	128
11	265	294	436	250	263	346	276	94	85	112	787	237
12	428	990	360	246	254	308	255	96	70	81	591	102
13	307	712	260	280	240	298	244	75	63	88	1050	70
14	291	e505	239	279	225	279	243	64	62	121	717	54
15	466	e395	231	258	220	256	398	58	61	100	264	50
16	374	e285	200	224	207	285	633	59	70	102	177	93
17	251	e175	213	203	191	283	610	64	117	104	129	319
18	193	e85	225	220	194	820	446	74	174	78	99	535
19	113	e115	322	248	211	1540	306	86	110	64	65	348
20	111	164	539	263	995	1650	248	97	90	56	50	218
21	114	192	553	237	1410	1890	232	92	90	58	45	119
22	116	129	e485	221	1190	1170	224	76	102	49	41	93
23	98	119	e415	222	867	470	203	66	205	49	39	73
24	76	146	e370	254	475	355	200	54	212	50	41	58
25	83	202	e325	330	332	440	213	46	167	94	200	55
26	91	196	e280	339	285	1280	215	42	101	104	117	55
27	103	127	e265	389	266	1430	185	42	229	136	107	54
28	186	145	e245	514	265	1630	141	52	156	157	91	50
29	341	229	e280	451	287	1530	133	122	76	102	72	76
30	250	244	e350	382	---	1370	702	267	57	90	163	330
31	172	---	e415	309	---	2030	---	145	---	93	377	---
MEAN	287	277	297	342	461	780	476	164	98.4	104	252	242
MAX	1280	990	553	748	1410	2030	1990	950	229	253	1050	884
MIN	76	85	121	203	191	256	133	42	52	49	39	50
IN.	1.08	1.02	1.12	1.29	1.63	2.95	1.74	.62	.36	.39	.95	.89

e Estimated

OCHLOCKONEE RIVER BASIN  
02329600 LITTLE RIVER NEAR MIDWAY, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1996, BY WATER YEAR (WY)

MEAN	346	281	363	757	843	844	391	266	376	336	386	268
MAX	2542	749	875	1694	2139	1791	755	1136	875	1003	1617	1249
(WY)	1995	1986	1986	1991	1986	1991	1994	1991	1989	1994	1994	1994
MIN	24.0	90.9	93.8	96.0	155	247	146	82.6	83.5	60.1	66.0	49.3
(WY)	1991	1989	1989	1989	1989	1989	1989	1990	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1986 - 1996	
ANNUAL MEAN	354		315		453	
HIGHEST ANNUAL MEAN					709	
LOWEST ANNUAL MEAN					228	
HIGHEST DAILY MEAN	5220	Jun 7	2030	Mar 31	30300	Oct 3 1994
LOWEST DAILY MEAN	54	Aug 3	39	Aug 23	13	Oct 17 1990
ANNUAL SEVEN-DAY MINIMUM	73	Sep 3	54	May 22	14	Oct 12 1990
INSTANTANEOUS PEAK FLOW			2130	Mar 31	49200	Sep 22 1969
INSTANTANEOUS PEAK STAGE			73.96	Mar 31	86.25	Sep 22 1969
INSTANTANEOUS LOW FLOW			33	May 28	13	Oct 16 1990
ANNUAL RUNOFF (INCHES)	15.77		14.05		20.20	
10 PERCENT EXCEEDS	658		656		981	
50 PERCENT EXCEEDS	248		229		220	
90 PERCENT EXCEEDS	109		61		76	

OCHLOCKONEE RIVER BASIN  
02330000 OCHLOCKONEE RIVER NEAR BLOXHAM, FL

87

LOCATION.--Lat 30°23'10", long 84°38'59", in NE<sup>1</sup>/<sub>4</sub> sec.20, T.1 S., R.4 W., Leon County, Hydrologic Unit 03120003, on left bank 900 ft upstream from bridge on State Highway 20, 1,200 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<sup>2</sup>, 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 700 ft upstream at datum 5.00 ft higher. Apr. 9, 1930 to Jan. 19, 1939, water-stage recorder at present site at datum 5.00ft higher. Jan. 20, 1939 to Sept. 30, 1954, water-stage recorder at site 2,000 ft downstream at datum 5.00 ft higher. Oct. 1, 1954 to Sept. 30, 1985, water-stage recorder at site 2,000 ft downstream at present datum.

REMARKS.--Records fair, except those below 150 ft<sup>3</sup>/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<sup>3</sup>/s, Sept. 23, 1969, gage height, 29.2 ft, from floodmark; minimum discharge, since October 1954, 1.0 ft<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	150	982	1310	1370	2300	6330	2700	471	191	381	1580
2	135	1560	199	1760	1740	2620	6300	2330	202	191	227	1830
3	314	1530	158	1650	3000	2240	5920	2480	240	191	718	1990
4	6650	773	174	1630	2430	1860	6110	3170	315	204	1630	2230
5	2250	1050	1000	1300	1770	1360	5830	3970	326	257	962	1330
6	631	824	1360	507	1700	864	5450	4060	280	373	1900	1140
7	191	429	252	1480	1680	2690	5140	3880	253	834	1880	1210
8	267	1240	862	1630	1680	3000	4620	3320	286	812	1680	1110
9	478	676	1490	1480	1670	2030	3630	2760	287	275	644	738
10	585	213	883	473	1580	1690	3110	2410	286	285	1360	816
11	1710	1470	393	1040	1490	2160	2390	1480	285	365	e1400	1300
12	1620	1450	1510	1610	1370	2220	2510	1530	280	292	e1440	838
13	984	535	961	1110	1410	2240	2280	1590	260	361	e1480	635
14	807	1440	157	404	1390	2340	2240	1050	238	278	e1520	535
15	1690	440	979	867	1250	2780	2800	854	292	276	1560	280
16	1080	165	1240	1590	1170	2990	2990	563	529	852	1670	e660
17	400	883	218	934	882	3120	2460	411	740	962	1680	1050
18	497	1040	142	401	623	3440	2330	226	1090	265	2120	1400
19	754	231	1730	538	804	3540	2280	215	742	183	1950	1140
20	142	184	1650	1510	3430	3670	1950	217	559	180	1260	881
21	139	436	1560	1160	3010	3990	1500	666	549	188	925	590
22	139	1140	526	415	2190	3440	1670	706	551	191	622	568
23	980	197	325	374	2240	4490	1590	665	554	193	498	499
24	255	135	507	610	1860	3780	1470	566	503	195	203	452
25	139	135	1330	1310	2610	4040	1280	533	578	190	175	223
26	147	911	1250	1370	1790	5610	964	418	358	226	177	201
27	150	935	424	1370	1640	6370	1010	222	494	300	175	461
28	644	152	330	1380	1730	5450	1080	322	677	263	412	397
29	534	145	323	1370	2400	5120	1290	842	613	288	1090	195
30	408	917	324	1370	---	4730	3080	580	354	698	898	873
31	304	---	323	1370	---	6130	---	963	---	1390	957	---
MEAN	814	713	760	1139	1790	3300	3053	1474	440	379	1084	905
MAX	6650	1560	1730	1760	3430	6370	6330	4060	1090	1390	2120	2230
MIN	135	135	142	374	623	864	964	215	202	180	175	195
IN.	.55	.47	.52	.77	1.14	2.24	2.00	1.00	.29	.26	.74	.59
e	Estimated											

OCHLOCKONEE RIVER BASIN  
 02330000 OCHLOCKONEE RIVER NEAR BLOXHAM, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1996, BY WATER YEAR (WY)

MEAN	981	751	1326	2066	2888	3325	2906	1394	1205	1322	1517	1293
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	361	172	102	115	194	120
(WY)	1955	1955	1959	1935	1957	1955	1927	1927	1955	1952	1990	1958

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1926 - 1996	
ANNUAL MEAN	1433		1319		1716	
HIGHEST ANNUAL MEAN					4516	
LOWEST ANNUAL MEAN					315	
HIGHEST DAILY MEAN	9450	Feb 18	6650	Oct 4	73200	Sep 23 1969
LOWEST DAILY MEAN	133	Sep 12	135	Oct 2	1.2	Nov 1 1957
ANNUAL SEVEN-DAY MINIMUM	134	Sep 10	189	Jul 19	2.6	Sep 26 1958
INSTANTANEOUS PEAK FLOW			9540	Oct 4	89400	Sep 25 1969
INSTANTANEOUS PEAK STAGE			18.96	Oct 4	29.20	Sep 23 1969
INSTANTANEOUS LOW FLOW			135	Oct 1	1.0	Nov 1 1957
ANNUAL RUNOFF (INCHES)	11.44		10.56		13.71	
10 PERCENT EXCEEDS	3360		2990		4190	
50 PERCENT EXCEEDS	883		961		1020	
90 PERCENT EXCEEDS	155		200		156	

OCHLOCKONEE RIVER BASIN  
02330100 TELOGIA CREEK NEAR BRISTOL, FL

89

LOCATION.--Lat 30°25'35", long 84°55'40", in NW<sup>1</sup>/<sub>4</sub> 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.

DRAINAGE AREA.--126 mi<sup>2</sup>.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	90	139	119	118	199	1170	762	107	51	135	187
2	50	125	122	152	129	295	618	594	86	49	244	441
3	50	249	113	213	239	308	324	239	76	55	212	632
4	88	371	107	226	374	183	226	168	72	66	170	771
5	213	436	106	156	322	147	195	144	71	73	152	565
6	316	251	136	134	172	133	186	129	68	136	117	247
7	347	154	269	135	146	149	195	119	65	171	100	153
8	173	166	333	147	137	250	198	110	71	161	90	129
9	114	203	290	144	129	359	181	102	98	154	79	110
10	94	168	260	129	123	271	164	96	101	131	79	99
11	176	140	266	122	119	170	151	92	85	105	102	93
12	732	153	195	126	116	149	143	91	72	91	117	90
13	905	169	154	130	111	140	139	87	65	78	103	94
14	376	156	138	125	108	130	138	82	63	79	105	85
15	226	133	130	117	104	122	188	78	74	83	92	75
16	183	123	127	112	104	127	276	76	89	81	78	78
17	144	116	125	110	101	144	329	74	140	123	71	111
18	119	111	121	108	98	327	220	72	142	148	66	145
19	108	109	164	122	99	679	169	70	122	125	61	143
20	103	107	219	143	279	833	149	67	107	86	57	111
21	101	108	254	138	686	376	137	67	106	72	55	93
22	94	108	178	119	759	189	130	66	95	64	53	89
23	89	103	145	111	303	156	123	65	97	62	51	85
24	87	107	135	119	184	147	122	63	87	64	53	77
25	85	118	129	149	158	179	139	69	74	106	142	70
26	84	128	123	167	142	435	131	74	65	153	89	66
27	84	119	120	148	131	747	119	78	61	233	78	70
28	84	115	118	163	126	537	110	80	59	130	63	97
29	96	128	115	179	136	320	108	140	56	90	65	157
30	109	151	113	144	---	335	371	178	53	79	96	198
31	97	---	112	125	---	770	---	145	---	78	154	---
MEAN	180	157	163	140	198	300	228	138	84.2	102	101	179
MAX	905	436	333	226	759	833	1170	762	142	233	244	771
MIN	49	90	106	108	98	122	108	63	53	49	51	66
IN.	1.65	1.39	1.49	1.28	1.70	2.75	2.02	1.26	.75	.94	.92	1.58

OCHLOCKONEE RIVER BASIN  
02330100 TELOGIA CREEK NEAR BRISTOL, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1996, BY WATER YEAR (WY)

MEAN	176	156	203	268	307	337	244	169	178	216	221	215
MAX	867	446	749	766	812	1100	615	788	605	510	726	1268
(WY)	1995	1977	1965	1991	1986	1991	1958	1991	1965	1956	1994	1969
MIN	35.4	46.9	69.3	71.1	81.6	45.1	61.2	57.3	44.0	48.3	47.0	38.4
(WY)	1955	1991	1991	1989	1957	1955	1985	1968	1955	1968	1954	1954

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1950 - 1996	
ANNUAL MEAN	170		164		224	
HIGHEST ANNUAL MEAN					478	1965
LOWEST ANNUAL MEAN					87.9	1968
HIGHEST DAILY MEAN	2170	Jun 6	1170	Apr 1	16600	Sep 22 1969
LOWEST DAILY MEAN	46	Sep 5	49	Oct 1	28	Sep 14 1954
ANNUAL SEVEN-DAY MINIMUM	48	Sep 3	55	Jun 27	31	Oct 22 1954
INSTANTANEOUS PEAK FLOW			1340	Apr 1	20600	Sep 22 1969
INSTANTANEOUS PEAK STAGE			7.21	Apr 1	16.65	Sep 22 1969
INSTANTANEOUS LOW FLOW			47	Jul 3	28	Oct 26 1954
ANNUAL RUNOFF (INCHES)	18.28		17.73		24.11	
10 PERCENT EXCEEDS	281		297		446	
50 PERCENT EXCEEDS	119		123		134	
90 PERCENT EXCEEDS	65		70		63	

APALACHICOLA RIVER BASIN  
02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL

91

LOCATION.--Lat 30°42'03", long 84°51'33", in NW<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7230	14700	14800	16300	61700	29200	46800	29100	16700	9520	6370	8640
2	7180	15400	14600	16300	66400	30600	46500	29300	19300	9580	7060	8800
3	7130	15500	14100	16400	77100	34100	46400	28600	19600	9650	8610	9210
4	7210	15700	14100	16200	78700	34500	46200	26300	19600	9730	8740	10900
5	7730	15100	13900	16200	86100	28900	42900	24300	19600	9810	8690	12400
6	13700	13600	13800	18900	94200	25700	37400	23800	19600	11600	8690	12200
7	25600	13300	13900	22700	82500	29800	34100	23700	e19600	15700	8730	10300
8	27600	13500	13900	23600	73800	53000	30400	23800	19700	16200	8700	8860
9	22800	18200	14200	26100	74800	83000	27500	23000	19700	17000	8780	8850
10	22300	24300	14700	26900	63300	97200	27200	21400	19600	e18200	8840	9670
11	22000	30400	14500	29800	49700	90300	27200	21400	19400	17900	9350	9750
12	19100	31100	14500	28800	46300	76900	27100	19500	19400	17600	13600	9790
13	17200	31100	14600	27800	44100	68400	27100	19300	18800	16600	14000	8860
14	16000	30300	15000	25900	36600	63800	26400	19300	16400	16600	13900	12600
15	16100	28500	15300	23000	30400	57800	25800	19000	14800	16500	13900	12800
16	15900	25800	15400	21100	27100	56000	21100	18700	14000	15500	13800	12700
17	15800	25500	15300	20600	27000	55700	29400	18700	12100	15400	13800	12500
18	15600	28000	15700	19900	26900	e56000	27300	18600	9970	15400	13900	12400
19	15500	28900	18000	19500	27000	62600	21500	18600	9790	15300	13800	12400
20	15600	23800	23100	19900	29500	62700	25100	18800	9810	15300	13800	12400
21	15600	21000	32300	21300	32300	58200	24600	18600	9800	14400	13800	12800
22	15100	20700	33800	21300	32400	47800	18600	18600	9790	e13000	13900	13000
23	14500	20800	35300	21400	35200	42800	19400	18500	9770	e11800	13900	12800
24	14100	19700	36800	21600	42400	41800	30400	18500	9700	e10900	13800	12800
25	14000	18600	37100	22400	41300	43000	24600	16500	9620	e9400	12600	12700
26	13800	18400	31600	24800	36000	49700	23900	13700	9370	7950	9630	12700
27	13900	18100	27300	33100	30400	50500	23700	11900	9350	7740	9010	11600
28	13900	16500	24800	38100	29400	48800	20500	9440	9540	7410	8760	9270
29	13800	16300	20500	45600	29100	46400	e17600	9440	9510	7580	8120	8430
30	14000	15800	18100	57300	---	46600	23300	9430	9500	7250	6470	8440
31	14300	---	17400	60600	---	46900	---	10500	---	6350	7140	---
MEAN	15300	20950	19950	25920	48680	52220	29000	19360	14450	12670	10780	11020
MAX	27600	31100	37100	60600	94200	97200	46800	29300	19700	18200	14000	13000
MIN	7130	13300	13800	16200	26900	25700	17600	9430	9350	6350	6370	8430
IN.	1.03	1.36	1.34	1.74	3.05	3.50	1.88	1.30	.94	.85	.72	.71

e Estimated

APALACHICOLA RIVER BASIN  
02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1996, BY WATER YEAR (WY)

MEAN	12650	13420	20330	28160	34000	41110	34960	22160	16710	17120	15250	12340
MAX	38500	31790	70390	62470	64920	171600	80700	53260	39460	87780	31950	25440
(WY)	1965	1993	1949	1936	1936	1929	1944	1964	1973	1994	1994	1994
MIN	5319	5524	7614	7262	10420	12780	13980	9530	7148	6510	4750	6092
(WY)	1955	1932	1982	1956	1989	1955	1986	1986	1941	1988	1988	1954

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1929 - 1996	
ANNUAL MEAN	22280		23270		22300	
HIGHEST ANNUAL MEAN					35680	1929
LOWEST ANNUAL MEAN					11280	1955
HIGHEST DAILY MEAN	97600	Feb 20	97200	Mar 10	291000	Mar 20 1929
LOWEST DAILY MEAN	7130	Oct 3	6350	Jul 31	3900	Nov 15 1987
ANNUAL SEVEN-DAY MINIMUM	7240	Sep 28	7110	Jul 27	4530	Aug 10 1988
INSTANTANEOUS PEAK FLOW			99000	Mar 10	293000	Mar 20 1929
INSTANTANEOUS PEAK STAGE			65.01	Mar 10	79.55	Mar 20 1929
INSTANTANEOUS LOW FLOW			4650	Aug 2	2570	Aug 6 1986
ANNUAL RUNOFF (INCHES)	17.59		18.42		17.61	
10 PERCENT EXCEEDS	48000		46400		43800	
50 PERCENT EXCEEDS	17400		18400		16300	
90 PERCENT EXCEEDS	8450		9350		8940	

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40.45	44.57	44.83	45.52	59.65	50.78	56.63	50.72	45.68	42.26	40.45	41.78
2	40.43	44.91	44.72	45.51	60.40	51.30	56.54	50.80	46.83	42.29	40.85	41.87
3	40.41	44.94	44.49	45.55	62.04	52.54	56.52	50.53	46.93	42.32	41.77	42.09
4	40.46	45.05	44.50	45.46	62.27	52.71	56.45	49.65	46.94	42.37	41.84	42.97
5	40.76	44.77	44.44	45.44	63.28	50.65	55.46	48.87	46.96	42.41	41.81	43.71
6	43.73	44.08	44.37	46.61	64.38	49.45	53.69	48.68	46.94	43.30	41.81	43.61
7	48.76	43.93	44.42	48.23	62.80	50.96	52.54	48.66	---	45.25	41.83	42.67
8	49.53	44.05	44.41	48.60	61.55	57.86	51.21	48.67	46.97	45.44	41.82	41.90
9	47.76	46.16	44.56	49.59	61.69	62.87	50.14	48.35	46.99	45.83	41.86	41.89
10	47.57	48.73	44.77	49.90	59.90	64.77	50.03	47.68	46.93	---	41.89	42.34
11	47.47	51.06	44.70	50.98	57.41	63.87	50.02	47.68	46.86	46.18	42.15	42.38
12	46.31	51.34	44.70	50.62	56.49	62.00	49.99	46.91	46.86	46.08	44.28	42.40
13	45.51	51.33	44.76	50.23	55.83	60.73	49.98	46.81	46.60	45.63	44.45	41.89
14	45.01	51.08	44.92	49.52	53.41	60.00	49.69	46.81	45.54	45.64	44.44	43.81
15	45.04	50.40	45.07	48.37	51.22	58.99	49.45	46.66	44.83	45.57	44.42	43.90
16	44.98	49.36	45.11	47.58	49.99	58.69	47.54	46.54	44.46	45.14	44.39	43.83
17	44.92	49.26	45.08	47.37	49.95	58.64	50.86	46.55	43.54	45.09	44.38	43.76
18	44.86	50.24	45.24	47.07	49.91	---	50.04	46.52	42.49	45.09	44.40	43.71
19	44.82	50.60	46.22	46.88	49.94	59.80	47.73	46.50	42.40	45.09	44.38	43.73
20	44.86	48.60	48.35	47.06	50.89	59.82	49.17	46.58	42.41	45.05	44.40	43.71
21	44.86	47.51	51.91	47.64	51.90	59.05	49.01	46.52	42.41	44.66	44.37	43.91
22	44.68	47.39	52.46	47.68	51.94	56.91	46.51	46.50	42.40	---	44.43	43.99
23	44.38	47.41	52.99	47.69	52.95	55.46	46.81	46.47	42.39	---	44.44	43.88
24	44.20	46.97	53.51	47.77	55.34	55.16	51.21	46.48	42.35	---	44.39	43.88
25	44.16	46.49	53.58	48.10	54.98	55.52	49.01	45.60	42.31	---	43.78	43.87
26	44.10	46.42	51.63	49.07	53.21	57.45	48.71	44.33	42.17	41.40	42.31	43.83
27	44.12	46.27	50.07	52.17	51.21	57.67	48.66	43.45	42.16	41.28	41.98	43.32
28	44.14	45.60	49.09	53.96	50.85	57.19	47.30	42.21	42.26	41.09	41.85	42.12
29	44.09	45.51	47.31	56.25	50.74	56.51	---	42.22	42.25	41.18	41.48	41.66
30	44.22	45.26	46.28	58.91	---	56.57	48.47	42.21	42.24	40.99	40.52	41.67
31	44.37	---	45.98	59.48	---	56.67	---	42.74	---	40.44	40.90	---
MEAN	44.55	47.31	46.92	49.19	55.73	---	---	46.74	---	---	42.84	43.00
MAX	49.53	51.34	53.58	59.48	64.38	---	---	50.80	---	---	44.45	43.99
MIN	40.41	43.93	44.37	45.44	49.91	---	---	42.21	---	---	40.45	41.66



WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1962 to June 1972, January 1974 to current year.

SUSPENDED SEDIMENT DISCHARGE, WATER YEARS OCTOBER 1993 TO SEPTEMBER 1996

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	GAGE HEIGHT (FEET)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 1995						
25...	1600	850	14600	44.18	19	749
25...	1605	850	14600	44.18	19	749
25...	1620	1100	14500	44.16	18	705
25...	1625	1100	14500	44.16	18	705
25...	1630	1180	14500	44.16	22	861
25...	1635	1180	14500	44.16	19	744
25...	1640	1250	14500	44.17	23	900
DEC						
13...	1150	880	15200	44.45	1	41
13...	1155	880	14800	44.44	5	200
13...	1200	1030	14800	44.44	5	200
13...	1205	1030	14800	44.44	4	160
13...	1210	1140	14400	44.43	3	117
13...	1215	1140	14400	44.43	3	117
13...	1240	1200	14100	44.44	3	114
13...	1245	1200	14100	44.44	13	495
13...	1250	1290	14100	44.44	9	343
FEB 1996						
02...	1050	780	62800	59.82	16	2710
02...	1053	780	62800	59.82	14	2370
02...	1058	930	62800	59.82	19	3220
02...	1102	930	62800	59.82	16	2710
02...	1106	1020	62800	59.82	13	2200
02...	1109	1020	62800	59.82	16	2710
02...	1113	1180	62800	59.82	14	2370
02...	1116	1180	62800	59.82	15	2540
02...	1120	1310	62800	59.82	19	3220
02...	1124	1310	62800	59.82	21	3560
02...	1145	840	62800	59.82	--	--
02...	1205	1070	62800	59.83	--	--
02...	1230	1250	62800	59.83	--	--
APR						
10...	0945	825	27300	50.06	22	1620
10...	0948	825	27300	50.06	22	1620
10...	0957	980	27300	50.05	14	1030
10...	1000	980	27300	50.05	16	1180
10...	1002	1120	27300	50.05	16	1180
10...	1004	1120	27300	50.04	17	1250
10...	1006	1200	27300	50.04	15	1110
10...	1009	1200	27200	50.03	15	1100
10...	1011	1300	27200	50.03	14	1030
10...	1013	1300	27200	50.02	10	734
10...	1105	895	27200	50.02	--	--
10...	1122	1120	27200	50.01	--	--
10...	1130	1260	27200	50.02	--	--
MAY 1996						
30...	1025	892	9470	42.23	--	--
30...	1028	892	9470	42.23	11	281
30...	1031	1050	9470	42.23	7	179
30...	1036	1050	9470	42.23	--	--
30...	1040	1150	9490	42.24	7	179
30...	1043	1150	9490	42.24	11	282
30...	1046	1200	9490	42.24	8	205
30...	1050	1200	9490	42.23	9	231
30...	1053	1280	9450	42.23	10	255
30...	1057	1280	9450	42.22	8	204
30...	1120	960	9450	42.22	--	--
30...	1145	1150	9450	42.22	--	--
30...	1210	1250	9420	42.21	--	--
JUN						
26...	1040	895	9720	42.30	6	157
26...	1045	895	9720	42.36	7	184
26...	1050	1050	9650	42.32	10	261
26...	1055	1050	9510	42.29	6	154
26...	1100	1150	9510	42.25	7	180
26...	1105	1150	9510	42.25	6	154
26...	1110	1200	9490	42.24	5	128
26...	1115	1200	9490	42.24	7	179
26...	1120	1290	9490	42.24	4	102
26...	1125	1290	9450	42.23	6	153

APALACHICOLA RIVER BASIN  
02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEARS OCTOBER 1993 TO SEPTEMBER 1995--Continued

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	GAGE HEIGHT (FEET)	SEDI- MENT, DIS- CHARGE, SUS- PEN- DED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PEN- DED (T/DAY)
AUG						
13...	1005	880	14000	44.45	10	378
13...	1008	880	14000	44.44	8	302
13...	1011	1030	14000	44.44	7	265
13...	1013	1030	14000	44.44	8	302
13...	1016	1140	14000	44.44	9	340
13...	1018	1140	14000	44.44	10	378
13...	1021	1200	14000	44.44	9	340
13...	1023	1200	14000	44.44	7	265
13...	1026	1290	14000	44.45	6	227
13...	1029	1290	14000	44.45	6	227

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	GAGE HEIGHT (FEET)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT 1995							
25...	1600	14600	44.18	--	--	--	--
25...	1605	14600	44.18	--	--	--	--
25...	1620	14500	44.16	--	--	--	--
25...	1625	14500	44.16	--	--	--	--
25...	1630	14500	44.16	--	--	--	--
25...	1635	14500	44.16	--	--	--	--
25...	1640	14500	44.17	--	--	--	--
DEC							
13...	1150	15200	44.45	--	--	--	--
13...	1155	14800	44.44	--	--	--	--
13...	1200	14800	44.44	--	--	--	--
13...	1205	14800	44.44	--	--	--	--
13...	1210	14400	44.43	--	--	--	--
13...	1215	14400	44.43	--	--	--	--
13...	1240	14100	44.44	--	--	--	--
13...	1245	14100	44.44	--	--	--	--
13...	1250	14100	44.44	--	--	--	--
FEB 1996							
02...	1050	62800	59.82	--	--	--	--
02...	1053	62800	59.82	--	--	--	--
02...	1058	62800	59.82	--	--	--	--
02...	1102	62800	59.82	--	--	--	--
02...	1106	62800	59.82	--	--	--	--
02...	1109	62800	59.82	--	--	--	--
02...	1113	62800	59.82	--	--	--	--
02...	1116	62800	59.82	--	--	--	--
02...	1120	62800	59.82	--	--	--	--
02...	1124	62800	59.82	--	--	--	--
02...	1145	62800	59.82	0	0	0	10
02...	1205	62800	59.83	0	0	1	6
02...	1230	62800	59.83	0	0	0	11
APR							
10...	0945	27300	50.06	--	--	--	--
10...	0948	27300	50.06	--	--	--	--
10...	0957	27300	50.05	--	--	--	--
10...	1000	27300	50.05	--	--	--	--
10...	1002	27300	50.05	--	--	--	--
10...	1004	27300	50.04	--	--	--	--
10...	1006	27300	50.04	--	--	--	--
10...	1009	27200	50.03	--	--	--	--
10...	1011	27200	50.03	--	--	--	--
10...	1013	27200	50.02	--	--	--	--
10...	1105	27200	50.02	0	0	19	84
10...	1122	27200	50.01	0	0	7	69
10...	1130	27200	50.02	1	1	19	86

APALACHICOLA RIVER BASIN  
02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL--Continued

DATE	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM	% FINER THAN 64.0 MM
OCT 1995							
25...	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--
DEC							
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
FEB 1996							
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	41	56	76	89	99	100	100
02...	22	36	63	82	99	99	100
02...	42	53	77	86	98	100	100
APR							
10...	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--
10...	98	100	100	100	100	100	100
10...	98	100	100	100	100	100	100
10...	99	100	100	100	100	100	100
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	GAGE HEIGHT (FEET)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
MAY 1996							
30...	1025	9470	42.23	--	--	--	--
30...	1028	9470	42.23	--	--	--	--
30...	1031	9470	42.23	--	--	--	--
30...	1036	9470	42.23	--	--	--	--
30...	1040	9490	42.24	--	--	--	--
30...	1043	9490	42.24	--	--	--	--
30...	1046	9490	42.24	--	--	--	--
30...	1050	9490	42.23	--	--	--	--
30...	1053	9450	42.23	--	--	--	--
30...	1057	9450	42.22	--	--	--	--
30...	1120	9450	42.22	0	0	0	10
30...	1145	9450	42.22	0	1	1	3
30...	1210	9420	42.21	19	62	96	99
JUN							
26...	1040	9720	42.30	--	--	--	--
26...	1045	9720	42.36	--	--	--	--
26...	1050	9650	42.32	--	--	--	--
26...	1055	9510	42.29	--	--	--	--
26...	1100	9510	42.25	--	--	--	--



APALACHICOLA RIVER BASIN  
02358700 APALACHICOLA RIVER NEAR BLOUNTSTOWN, FL

97

LOCATION.--Lat 30°25'30", long 85°01'53", in NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, 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, except for estimated daily discharges, which are fair. Discharge is for main channel only, since 1990 water-year.

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, 209,000 ft<sup>3</sup>/s, July 10, 1994; maximum gage height, 27.21 ft, July 10, 1994; minimum daily discharge, 4,680 ft<sup>3</sup>/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, 79,200 ft<sup>3</sup>/s, Mar. 11, gage height, 21.22 ft; minimum daily, 7,350 ft<sup>3</sup>/s, Oct. 3.

DISCHARGE, MAIN CHANNEL ONLY, IN CUBIC FEET PER SECOND, WATER YEAR  
OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7390	14700	15400	17500	56900	29900	45300	27500	14100	9900	7550	9310
2	7380	16200	14900	17000	59100	30300	44700	29100	18600	9930	7640	10300
3	7350	17000	14400	17100	64600	32400	44300	29300	19600	9930	9250	10900
4	7500	17400	14200	16800	68600	34600	44000	29600	19700	10100	9630	11400
5	7730	16600	14200	16600	70500	31900	43300	30000	19800	10200	9630	12900
6	9430	14800	14100	17500	78500	27500	39000	29600	19900	10600	9600	13100
7	17900	14100	14400	21200	79100	27500	35300	27100	19900	14200	9590	12300
8	e19900	13700	14600	24200	70300	38700	31400	25700	20100	16000	9540	10200
9	22000	15700	14400	25300	67800	54200	28300	25000	20100	16600	9460	9590
10	21700	19600	15100	26500	64700	69800	26800	23500	20000	18000	9540	9460
11	21700	e23000	14800	28500	56900	79200	26300	22800	19800	18500	9690	9510
12	20200	e26600	14600	28900	50200	73200	26100	21800	19800	18500	12100	9450
13	19000	30600	14600	28400	46900	65600	25900	20800	19600	17700	14200	9340
14	16900	30500	14800	27100	41800	60800	25400	20500	17700	17500	14400	11600
15	16600	29400	15200	25000	34800	57100	25300	20300	16200	17500	14500	13600
16	16200	27100	15300	22200	29800	54400	22300	19900	15200	16800	14400	13900
17	15900	25900	15400	21400	28100	53400	24900	19800	14100	16400	14400	13800
18	15700	26500	15500	20600	27500	54400	27200	19700	11700	16300	14400	13700
19	15600	29000	16800	20100	27400	56300	22800	19600	10700	16200	14400	13600
20	15500	26200	20500	20000	29200	56700	22700	19700	11300	16100	14500	13500
21	15500	22500	28000	21200	32000	56200	24500	19600	10600	15700	14500	13700
22	15400	21300	31800	21600	32400	51800	20800	19500	10500	14600	14500	13900
23	14800	21000	33300	21700	32500	45700	17700	19400	10400	12600	14600	13800
24	14300	20600	34700	21900	38900	42400	26500	19400	e10400	10600	14500	13700
25	14100	19200	35600	22400	40000	41500	25400	18600	10200	9420	14000	13700
26	14000	18700	34200	24000	38300	44800	24000	16000	10200	9050	11800	13600
27	13900	18400	29500	29000	33400	47400	23800	14200	9900	8890	10200	13300
28	14100	17200	27200	35600	30800	47900	22300	11600	10000	8800	9660	11300
29	14000	16700	23200	39900	29900	46100	18900	10900	9990	8540	9540	9960
30	14000	16800	19800	47800	---	45400	21700	10700	9930	8640	8190	9850
31	14700	---	18300	53900	---	45800	---	10400	---	7760	7970	---
MEAN	14850	20900	19960	25190	46930	48480	28560	21020	15000	13280	11540	11940
MAX	22000	30600	35600	53900	79100	79200	45300	30000	20100	18500	14600	13900
MIN	7350	13700	14100	16600	27400	27500	17700	10400	9900	7760	7550	9310
IN.	.97	1.33	1.31	1.65	2.88	3.18	1.81	1.38	.95	.87	.76	.76

CAL YR 1995 MEAN 21780 MAX 84300 MIN 7350 IN. 16.81  
WTR YR 1996 MEAN 23050 MAX 79200 MIN 7350 IN. 17.83

e Estimated

APALACHICOLA RIVER BASIN  
02358700 APALACHICOLA RIVER NEAR BLOUNTSTOWN, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.22	6.65	7.31	8.22	18.90	12.95	17.47	12.28	6.35	3.95	2.34	3.56
2	2.21	7.42	7.11	8.01	19.19	13.10	17.37	12.81	8.51	3.96	2.40	4.18
3	2.19	7.82	6.85	8.02	19.84	13.80	17.30	12.83	8.96	3.96	3.53	4.56
4	2.30	8.01	6.76	7.88	20.26	14.47	17.27	12.89	9.03	4.05	3.77	4.87
5	2.47	7.63	6.73	7.78	20.45	13.66	17.12	12.99	9.08	4.13	3.77	5.70
6	3.64	6.78	6.72	8.17	21.04	12.16	16.20	12.84	9.10	4.39	3.76	5.81
7	8.20	6.41	6.88	9.79	21.09	12.15	15.26	11.97	9.10	6.38	3.74	5.36
8	9.10	6.22	6.97	10.99	20.43	15.61	14.09	11.43	9.17	7.31	3.71	4.11
9	10.00	7.24	6.91	11.43	20.18	18.58	13.01	11.18	9.20	7.61	3.66	3.74
10	9.88	9.08	7.28	11.85	19.86	20.49	12.51	10.58	9.16	8.27	3.72	3.66
11	9.88	10.49	7.12	12.56	18.89	21.22	12.34	10.34	9.07	8.47	3.81	3.69
12	9.25	11.90	7.03	12.71	17.86	20.80	12.27	9.89	9.04	8.49	5.28	3.65
13	8.71	13.32	7.03	12.54	17.29	20.12	12.23	9.47	8.97	8.13	6.39	3.58
14	7.74	13.29	7.12	12.03	16.25	19.57	12.06	9.38	8.12	8.04	6.53	4.97
15	7.59	12.92	7.28	11.23	14.52	19.13	12.03	9.28	7.39	8.02	6.55	6.07
16	7.39	12.11	7.36	10.13	12.93	18.73	10.85	9.09	6.91	7.69	6.51	6.23
17	7.26	11.69	7.37	9.79	12.33	18.59	11.87	9.06	6.33	7.52	6.51	6.18
18	7.17	11.91	7.43	9.44	12.11	18.77	12.68	9.02	5.02	7.46	6.51	6.12
19	7.10	12.84	7.98	9.24	12.07	19.08	10.96	8.97	4.45	7.43	6.52	6.08
20	7.07	11.83	9.65	9.16	12.70	19.15	10.86	9.00	4.77	7.36	6.55	6.03
21	7.09	10.41	12.59	9.67	13.68	19.10	11.56	8.98	4.38	7.19	6.56	6.13
22	7.01	9.92	13.90	9.85	13.81	18.43	9.99	8.95	4.32	6.61	6.57	6.27
23	6.72	9.79	14.39	9.87	13.85	17.39	8.58	8.88	4.28	5.52	6.60	6.21
24	6.46	9.64	14.83	9.94	15.81	16.73	12.17	8.90	4.23	4.38	6.58	6.15
25	6.38	9.04	15.10	10.14	16.12	16.58	11.74	8.52	4.17	3.63	6.33	6.12
26	6.32	8.81	14.63	10.77	15.63	17.26	11.16	7.29	4.11	3.39	5.12	6.09
27	6.26	8.71	13.07	12.63	14.12	17.80	11.02	6.39	3.95	3.29	4.15	5.93
28	6.34	8.18	12.22	14.74	13.25	17.90	10.40	5.00	4.02	3.22	3.79	4.79
29	6.30	7.94	10.71	15.83	12.97	17.57	8.92	4.55	4.00	3.04	3.71	3.98
30	6.32	8.01	9.27	17.47	---	17.46	10.06	4.45	3.96	3.11	2.80	3.91
31	6.68	---	8.62	18.44	---	17.55	---	4.25	---	2.49	2.64	---
TOTAL	203.25	286.01	284.22	340.32	477.43	535.90	381.35	291.46	199.15	178.49	150.41	153.73
MEAN	6.56	9.53	9.17	10.98	16.46	17.29	12.71	9.40	6.64	5.76	4.85	5.12
MAX	10.00	13.32	15.10	18.44	21.09	21.22	17.47	12.99	9.20	8.49	6.60	6.27
MIN	2.19	6.22	6.72	7.78	12.07	12.15	8.58	4.25	3.95	2.49	2.34	3.56
WTR YR 1996	TOTAL	3481.72	MEAN	9.51	MAX	21.22	MIN	2.19				

APALACHICOLA RIVER BASIN  
02358754 APALACHICOLA RIVER NEAR WEWAHITCHKA, FL

99

LOCATION.--Lat 30°08'02", long 85°08'39", NE<sup>1</sup>/<sub>4</sub> sec.16, T.4 S., R.9 W., Gulf County, Hydrologic Unit 03130011, on right bank at George C. Gaskins State Park, 3.7 mi northeast of Wewahitchka and 44.2 mi upstream from mouth.

DRAINAGE AREA.--17,800 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--January 1950 to February 1954, August 1955 to September 1980, October 1980 to September 1987, October 1988 to current year. Prior to October 1984, discharge records are available in files of the U.S. Army Corps of Engineers, Mobile, Alabama District.

GAGE.--Water-stage recorder. Datum of gage is 12.136 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Water-stage recorder January 17, 1950 to February 8, 1954 and August 2, 1955 to August 17, 1955, at site 200 ft downstream of present location at datum 3.405 ft higher. Water stage recorder, August 17, 1955 to October 18, 1955, at site 200 ft downstream of present location at datum 1.278 ft higher. Water-stage recorder, October 18, 1955 to August 30, 1979, at site 200 ft downstream at present datum. Since August 1979, at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Discharge for main channel only.

COOPERATION.--Records from October 1957 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, (51,000 ft<sup>3</sup>/s, estimated, main channel), July 12, 1994, gage height 16.00 ft; minimum 4,590ft<sup>3</sup>/s, Nov. 5, 1981; minimum gage height, -1.56 ft, Nov. 5, 1981, and Aug. 5, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929, reached a stage of 19.20 ft (from flood profile by U.S. Army Corps of Engineers).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 38,700 ft<sup>3</sup>/s, Feb. 8, gage height, 12.77 ft; minimum daily discharge, 7,280 ft<sup>3</sup>/s, Oct. 4.

DISCHARGE, MAIN CHANNEL ONLY, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER  
1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7200	---	17300	21000	32300	26700	---	20900	10500	10000	8270	9220
2	7220	15300	16500	20000	33900	26200	---	22200	12800	10000	8070	10800
3	7240	16700	16000	19400	34900	26100	---	23200	15000	10000	8330	11900
4	7280	17800	15500	19100	35700	26300	---	23600	16000	10000	9630	12400
5	7520	18400	15200	18700	36600	26700	---	23500	16500	10200	10100	12700
6	7830	18000	15200	18500	37200	26600	---	23000	16800	10500	10200	13100
7	10100	16900	15400	19400	38100	25900	---	22400	17000	11500	10100	14000
8	10300	16200	15700	21100	38700	25500	---	21900	17300	13700	10100	14000
9	8680	15800	15900	22200	37900	26800	---	21600	17500	15100	10100	13100
10	8450	17500	16100	23300	37000	29500	---	21300	17600	16000	10200	12100
11	8190	20400	16200	24200	36300	33200	---	20700	17600	16900	10400	11500
12	7800	22700	16000	25200	35200	36400	---	20200	17600	17300	10900	11200
13	7910	24300	15900	25800	33700	36700	---	19400	17600	17300	12800	10800
14	8630	25400	15900	26100	32500	35700	---	18800	17400	17100	13800	10500
15	9550	25900	15900	25900	31300	34600	---	18400	16600	17100	14100	10500
16	10000	25900	16100	25200	29900	33700	---	18000	15600	17000	14300	11900
17	---	25500	16200	24000	29600	33000	24100	17600	14800	16600	14200	12900
18	---	24900	16200	23100	26800	32700	24100	17400	13700	16300	14200	13300
19	---	24700	16700	22400	25900	32700	24400	17200	12200	16100	14200	13400
20	---	25000	18000	21800	25900	32900	23700	17000	11500	15900	14100	13400
21	---	24700	20200	21600	26000	33200	23200	17000	11200	15700	14100	13300
22	---	23500	22800	21900	26600	---	23100	16800	11100	15200	14100	13300
23	---	22300	24800	22100	27000	---	21900	16700	11100	14300	14100	13400
24	---	21700	26200	22200	27300	---	21100	16600	11000	12800	14100	13500
25	---	21000	27200	22300	28000	---	22200	16500	10800	11400	14100	13400
26	---	22700	28000	22500	28800	---	22700	15800	10700	10500	13500	13300
27	---	19500	28100	23200	29000	---	22500	14200	10400	10000	12100	13200
28	---	19100	27400	24700	28300	---	22200	12700	10200	9710	11100	13100
29	---	18400	26200	26700	27300	---	21400	11400	10200	9360	10600	12700
30	---	17800	24500	28600	---	---	20600	10600	10100	9140	10200	11700
31	---	---	22500	30500	---	---	---	10300	---	8880	9330	---
MEAN	---	---	19350	22990	31640	---	---	18290	13950	13280	11790	12450
MAX	---	---	28100	30500	38700	---	---	23600	17600	17300	14300	14000
MIN	---	---	15200	18500	25900	---	---	10300	10100	8880	8070	9220
IN.	---	---	1.25	1.49	1.92	---	---	1.18	.87	.86	.76	.78

APALACHICOLA RIVER BASIN  
02358754 APALACHICOLA RIVER NEAR WEWAHITCHKA, FL.--Continued  
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.49	---	5.62	6.96	10.70	9.35	---	7.60	3.26	2.15	.93	1.55
2	.48	4.40	5.30	6.53	11.22	9.21	---	8.12	4.58	2.11	.80	2.51
3	.47	5.01	5.08	6.29	11.55	9.16	---	8.50	5.62	2.07	.97	3.19
4	.47	5.50	4.86	6.13	11.80	9.25	---	8.69	6.05	2.05	1.81	3.44
5	.63	5.77	4.76	5.97	12.10	9.41	---	8.68	6.24	2.15	2.10	3.60
6	.83	5.63	4.75	5.85	12.30	9.37	---	8.50	6.35	2.35	2.14	3.82
7	2.27	5.17	4.88	6.22	12.59	9.12	---	8.31	6.40	2.93	2.13	4.28
8	2.38	4.85	5.04	6.86	12.77	9.01	---	8.15	6.50	4.13	2.11	4.27
9	1.33	4.69	5.12	7.27	12.57	9.44	---	8.04	6.57	4.81	2.10	3.80
10	1.15	5.45	5.20	7.67	12.30	10.38	---	7.93	6.57	5.22	2.15	3.28
11	.96	6.68	5.29	7.99	12.12	11.58	---	7.72	6.55	5.60	2.29	2.96
12	.65	7.58	5.22	8.32	11.80	12.54	---	7.54	6.51	5.78	2.59	2.73
13	.70	8.20	5.14	8.54	11.35	12.64	---	7.27	6.48	5.80	3.66	2.55
14	1.17	8.59	5.10	8.62	11.00	12.33	---	7.03	6.40	5.70	4.19	2.37
15	1.73	8.80	5.12	8.54	10.65	12.00	---	6.87	6.01	5.68	4.34	2.35
16	2.00	8.81	5.17	8.25	10.18	11.73	---	6.74	5.52	5.64	4.40	3.16
17	---	8.67	5.21	7.82	10.11	11.52	8.49	6.61	5.14	5.48	4.38	3.72
18	---	8.47	5.20	7.45	9.17	11.42	8.51	6.53	4.55	5.33	4.36	3.91
19	---	8.41	5.40	7.17	8.89	11.40	8.64	6.46	3.76	5.23	4.35	3.97
20	---	8.54	5.94	6.94	8.89	11.49	8.41	6.41	3.31	5.14	4.34	3.97
21	---	8.43	6.82	6.83	8.95	11.56	8.26	6.40	3.11	5.05	4.33	3.94
22	---	8.00	7.81	6.92	9.17	---	8.22	6.38	3.05	4.82	4.31	3.93
23	---	7.59	8.54	7.00	9.33	---	7.79	6.35	3.01	4.42	4.30	3.98
24	---	7.34	9.05	7.06	9.45	---	7.50	6.33	2.90	3.68	4.30	4.00
25	---	7.10	9.37	7.12	9.71	---	7.95	6.31	2.79	2.90	4.30	3.96
26	---	7.76	9.62	7.20	10.00	---	8.16	6.00	2.66	2.35	4.03	3.91
27	---	6.52	9.65	7.49	10.09	---	8.13	5.30	2.49	2.04	3.26	3.87
28	---	6.35	9.39	8.07	9.85	---	8.04	4.56	2.35	1.86	2.71	3.83
29	---	6.09	8.95	8.79	9.54	---	7.75	3.84	2.30	1.64	2.40	3.60
30	---	5.85	8.33	9.46	---	---	7.45	3.40	2.22	1.50	2.16	3.02
31	---	---	7.55	10.09	---	---	---	3.15	---	1.33	1.62	---
TOTAL	---	---	198.48	231.42	310.15	---	---	209.72	139.25	116.94	93.86	103.47
MEAN	---	---	6.40	7.47	10.69	---	---	6.77	4.64	3.77	3.03	3.45
MAX	---	---	9.65	10.09	12.77	---	---	8.69	6.57	5.80	4.40	4.28
MIN	---	---	4.75	5.85	8.89	---	---	3.15	2.22	1.33	.80	1.55



APALACHICOLA RIVER BASIN  
023587547 APALACHICOLA RIVER AT MILE 36 NEAR WEWAHITCHKA, FL

101

LOCATION.--Lat 30°05'18", long 85°08'56", sec.33, T.4S., R.9 W., Gulf County, Hydrologic Unit 03130011, 5.35 mi southeast of Wewahitchka, on left bank of the Apalachicola River at Navigation Mile 36.

DRAINAGE AREA.--Not Determined.

PERIOD OF RECORD.--February 1981 to current. Prior to October 1991, discharge records are available in files of the U.S. Army Corps of Engineers, Mobile, Alabama District.

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 for periods of no gage height record. Records good. Discharge for main channel only.

COOPERATION.--Records from February 1981 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 daily discharge, 24,900 ft<sup>3</sup>/s, July 12, 1994; maximum gage height, 25.00 ft, July 12, 1994; minimum gage height and discharge, not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 20,100 ft<sup>3</sup>/s, Feb. 4-12, Mar. 12-14;; maximum gage height, 20.46 ft, Feb. 8; minimum daily discharge, not estimated.

DISCHARGE, MAIN CHANNEL ONLY, IN CUBIC FEET PER SECOND, WATER YEAR  
OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9730	11900	---	18800	16600	18700	13400	e8530	6850	e6350	6390
2	---	10200	11500	---	19500	16400	18600	14000	8570	6890	e6360	7300
3	---	10500	11200	---	19900	16200	18600	14600	9920	6860	e6480	8400
4	---	11200	10900	---	20100	16200	18500	14900	10600	6890	e6600	8730
5	---	11600	10700	---	20100	16400	18400	15000	11000	7040	6720	8900
6	---	11000	10700	---	20100	16400	18400	14800	11200	7380	6870	9270
7	---	11100	10800	---	20100	16100	18200	14500	11400	7870	6900	9770
8	10400	10800	11000	---	20100	15800	17800	14200	11500	9190	6930	9780
9	12400	10500	11100	---	20100	16100	17300	14000	11600	10000	6940	9300
10	12900	11100	11200	---	20100	17200	16800	13900	11700	10500	7010	8740
11	13200	12500	11400	---	20100	18900	16200	13600	11700	11000	7230	8290
12	13600	13800	11400	---	20100	20100	e16000	13300	11700	11300	7600	7890
13	13600	14700	---	---	19700	20100	e15800	12900	11700	11400	8700	7590
14	13300	15300	---	---	19300	20100	e15700	12500	11700	11300	9350	7300
15	12600	15700	---	---	18900	19900	e15500	12200	11300	11300	9630	7230
16	12000	15900	---	---	18300	19600	e15300	12000	10700	11300	9700	8110
17	11700	15800	---	---	17500	19300	15100	11800	10200	11100	9690	8870
18	11300	15500	---	---	16800	19200	15000	11600	9640	10900	9660	9190
19	11100	15400	---	---	16300	19100	15200	11500	e9330	10800	9640	9310
20	10900	15500	---	---	16200	19200	15000	11400	e9000	10600	9600	9320
21	10700	15500	---	---	16100	19300	14700	11300	e8710	10500	9580	9340
22	10600	15100	---	---	16300	19300	14600	11300	e8380	10300	9560	9360
23	10400	14500	---	---	16500	19200	14200	11200	e8020	9860	9540	9410
24	10200	14200	---	---	16700	19000	13600	11200	e7660	9130	9530	9450
25	9970	13800	---	14300	16900	18600	13900	11100	e7330	8250	9540	9440
26	9840	13400	---	14400	17300	18400	14300	10800	e7000	7470	9340	9390
27	9710	13100	---	14600	17600	18300	14300	10100	6670	6990	8620	9370
28	9670	12800	---	15200	17500	18400	14200	9220	6820	6660	7860	9370
29	9630	12500	---	16100	17000	18600	14000	8600	6840	6370	7490	9220
30	9570	12200	---	17100	---	18700	13500	e8570	6840	e6340	7290	9000
31	9590	---	---	17900	---	18700	---	e8490	---	e6330	6570	---
MEAN	---	13160	---	---	18410	18240	15910	12190	9575	8989	8157	8768
MAX	---	15900	---	---	20100	20100	18700	15000	11700	11400	9700	9780
MIN	---	9730	---	---	16100	15800	13500	8490	6670	6330	6350	6390

e Estimated

APALACHICOLA RIVER BASIN  
023587547 APALACHICOLA RIVER AT MILE 36 NEAR WEWAHITCHKA, FL.--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.06	12.56	---	18.10	16.80	18.62	14.31	10.49	8.59	8.10	8.14
2	---	11.50	12.23	---	18.82	16.59	18.58	14.80	10.50	8.61	8.11	8.95
3	---	11.70	11.96	---	19.20	16.46	18.51	15.32	11.73	8.57	8.22	9.86
4	---	12.28	11.70	---	19.40	16.50	18.45	15.65	12.34	8.59	8.33	10.14
5	---	12.63	11.56	---	19.69	16.66	18.38	15.72	12.64	8.73	8.44	10.30
6	---	12.11	11.51	---	19.90	16.70	18.35	15.56	12.81	9.02	8.58	10.65
7	---	12.23	11.60	---	20.16	16.45	18.22	15.31	12.90	9.43	8.60	11.10
8	11.66	11.89	11.77	---	20.43	16.21	17.88	15.10	13.02	10.57	8.63	11.11
9	13.30	11.64	11.87	---	20.36	16.45	17.45	14.94	13.10	11.31	8.64	10.67
10	13.67	12.13	11.94	---	20.11	17.38	16.98	14.81	13.13	11.76	8.70	10.15
11	13.91	13.29	12.05	---	19.91	18.84	16.50	14.59	13.13	12.18	8.89	9.77
12	14.24	14.35	12.04	---	19.62	19.98	16.35	14.34	13.10	12.41	9.21	9.45
13	14.29	15.07	---	---	19.20	20.28	16.20	14.04	13.07	12.50	10.11	9.20
14	14.01	15.61	---	---	18.84	20.11	16.05	13.74	13.02	12.45	10.72	8.95
15	13.43	15.96	---	---	18.46	19.78	15.90	13.52	12.70	12.43	10.97	8.89
16	13.02	16.06	---	---	17.94	19.47	15.75	13.36	12.19	12.40	11.04	9.63
17	12.71	15.98	---	---	17.29	19.24	15.60	13.20	11.77	12.27	11.03	10.27
18	12.44	15.77	---	---	16.67	19.12	15.50	13.10	11.23	12.09	11.00	10.57
19	12.22	15.63	---	---	16.27	19.04	15.65	13.01	10.93	11.97	10.98	10.68
20	12.06	15.70	---	---	16.25	19.10	15.53	12.94	10.62	11.87	10.95	10.69
21	11.92	15.68	---	---	16.16	19.18	15.25	12.91	10.32	11.77	10.93	10.71
22	11.81	15.30	---	---	16.34	19.21	15.19	12.88	10.02	11.58	10.91	10.73
23	11.69	14.81	---	---	16.56	19.14	14.84	12.87	9.72	11.18	10.89	10.77
24	11.49	14.50	---	---	16.70	18.88	14.36	12.82	9.41	10.52	10.88	10.81
25	11.28	14.20	---	14.09	16.94	18.58	14.66	12.81	9.11	9.74	10.89	10.80
26	11.16	13.82	---	14.18	17.30	18.38	15.01	12.55	8.81	9.10	10.71	10.76
27	11.05	13.54	---	14.41	17.56	18.26	15.05	11.90	8.50	8.68	10.04	10.74
28	11.01	13.35	---	14.94	17.44	18.40	14.95	11.17	8.61	8.39	9.42	10.74
29	10.97	13.08	---	15.74	17.07	18.55	14.74	10.60	8.62	8.12	9.11	10.60
30	10.92	12.80	---	16.55	---	18.65	14.38	10.55	8.60	8.09	8.94	10.40
31	10.94	---	---	17.28	---	18.65	---	10.48	---	8.08	8.31	---
MEAN	---	13.79	---	---	18.23	18.29	16.30	13.51	11.20	10.42	9.69	10.21
MAX	---	16.06	---	---	20.43	20.28	18.62	15.72	13.13	12.50	11.04	11.11
MIN	---	11.06	---	---	16.16	16.21	14.36	10.48	8.50	8.08	8.10	8.14

APALACHICOLA RIVER BASIN  
02359000 CHIPOLA RIVER NEAR ALTHA, FL

103

LOCATION.--Lat 30°32'02", long 85°09'55", in NW<sup>1</sup>/<sub>4</sub> sec.32, T.2 N., R.9 W., Calhoun County, Hydrologic Unit 03130012, near center of span on downstream side of bridge on 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<sup>2</sup>.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	640	789	910	954	1770	2080	3810	1970	919	662	634	891
2	633	1110	894	1230	2010	2120	3650	1960	945	648	642	1120
3	636	1370	881	1230	2530	2090	3500	2130	849	650	715	1560
4	720	1540	875	1170	2380	2080	3440	2350	772	643	715	1990
5	881	1270	869	1120	2290	2080	3340	2380	728	658	708	2150
6	852	1130	869	1140	2370	2030	3180	2160	675	730	696	2210
7	858	1100	1090	1230	2570	2120	3000	1780	666	731	729	2230
8	868	1240	1160	1180	2740	2670	2760	1520	718	804	726	2050
9	896	1270	1140	1110	2740	2840	2530	1480	702	818	748	1650
10	943	1230	1210	1080	2530	2820	2370	1440	669	802	756	1300
11	1430	1220	1170	1070	2260	2770	2200	1390	639	764	747	1100
12	1520	1440	1140	1080	2000	2730	2070	1400	668	741	746	1030
13	1180	1380	1100	1050	1800	2640	1990	1390	688	736	751	950
14	1010	1280	1040	941	1650	2460	1900	1350	674	741	740	888
15	1000	1190	987	915	1550	2250	1970	1250	631	739	709	853
16	924	1150	957	927	1490	2120	2120	1190	628	734	686	861
17	886	1140	937	931	1420	2060	2120	1110	830	732	662	938
18	854	1090	922	914	1370	2920	2100	1040	808	727	638	1010
19	823	1030	1030	912	1370	3350	2230	968	794	736	621	929
20	804	1000	1020	890	2350	3110	2240	929	780	718	589	867
21	790	974	1010	875	2730	2920	2070	902	782	689	577	942
22	774	960	992	870	2650	2840	1850	859	809	682	551	976
23	758	939	988	875	2580	2820	1850	820	794	695	529	862
24	752	945	983	906	2620	2730	1790	783	767	725	555	804
25	746	946	954	923	2640	2630	1670	759	734	709	538	769
26	739	939	922	923	2550	2770	1760	712	721	732	549	739
27	730	932	901	958	2310	2590	1660	691	678	724	608	746
28	844	931	889	1090	2070	2600	1530	716	689	693	606	746
29	806	933	877	1060	1970	2720	1470	851	707	682	608	784
30	772	922	868	1080	---	3090	1910	906	677	677	645	878
31	761	---	865	1390	---	3740	---	926	---	648	768	---
MEAN	865	1113	982	1033	2183	2606	2336	1294	738	715	661	1161
MAX	1520	1540	1210	1390	2740	3740	3810	2380	945	818	768	2230
MIN	633	789	865	870	1370	2030	1470	691	628	643	529	739
IN.	1.28	1.59	1.45	1.53	3.02	3.85	3.34	1.91	1.05	1.06	.98	1.66

APALACHICOLA RIVER BASIN  
02359000 CHIPOLA RIVER NEAR ALTHA, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1996, BY WATER YEAR (WY)

MEAN	1078	962	1234	1784	2146	2399	2139	1363	1250	1284	1212	1161
MAX	6000	2763	3617	5936	5687	5178	7200	3890	3636	5353	3273	7642
(WY)	1927	1948	1948	1926	1926	1948	1948	1964	1989	1994	1946	1926
MIN	379	370	394	473	671	540	757	616	522	484	475	397
(WY)	1969	1991	1956	1956	1955	1955	1968	1968	1968	1968	1968	1990

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1913 - 1996	
ANNUAL MEAN	1429		1302		1502	
HIGHEST ANNUAL MEAN					2977	1948
LOWEST ANNUAL MEAN					613	1955
HIGHEST DAILY MEAN	3940	Feb 17	3810	Apr 1	21000	Sep 19 1926
LOWEST DAILY MEAN	633	Oct 2	529	Aug 23	312	Jun 18 1972
ANNUAL SEVEN-DAY MINIMUM	654	Sep 27	555	Aug 20	336	Oct 27 1968
INSTANTANEOUS PEAK FLOW			3860	Apr 1	25000	Sep 20 1926
INSTANTANEOUS PEAK STAGE			17.28	Apr 1	33.55	Sep 20 1926
INSTANTANEOUS LOW FLOW			496	Aug 23	309	Nov 18 1990
ANNUAL RUNOFF (INCHES)	24.84		22.70		26.13	
10 PERCENT EXCEEDS	2410		2560		2780	
50 PERCENT EXCEEDS	1140		952		1120	
90 PERCENT EXCEEDS	753		681		626	

APALACHICOLA RIVER BASIN  
02359051 CHIPOLA RIVER AT COCKRAN LANDING NEAR WEWAHITCHKA, FL

105

LOCATION.--Lat 30°06'01", long 85°10'53", NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, 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 discharges for periods of no gage height record. 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<sup>3</sup>/s, Aug. 9, 1988, gage height, 9.10 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of January 1978 reached a stage of 25.64 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,000 ft<sup>3</sup>/s, Feb. 9, gage height 20.21 ft; minimum discharge 3,220 ft<sup>3</sup>/s, Oct. 3.

DISCHARGE, MAIN CHANNEL ONLY, CUBIC FEET PER SECOND, WATER YEAR  
OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3270	---	---	8270	10200	10200	12200	8650	5120	4290	e4000	4150
2	3240	---	---	7910	10900	10100	12200	8690	5480	4250	e3960	4680
3	3220	---	---	7660	11600	10000	12000	8920	6050	4200	e3990	5190
4	3280	---	---	7500	12200	9940	11900	9140	6530	4180	e4050	5440
5	3440	---	---	7340	12600	9940	11800	9250	6830	4270	e4180	5630
6	3530	---	---	7210	13000	9940	11700	9280	7010	4510	e4290	5920
7	---	---	---	7260	13400	9910	11500	9190	7110	4720	e4410	6020
8	---	---	---	7520	13900	9830	11300	9030	7250	5240	4500	5860
9	---	---	---	7770	13900	9960	11000	8890	7340	5820	4470	5480
10	---	---	---	8040	13600	10400	10600	8780	7350	6180	4490	5150
11	---	---	---	8440	13200	11200	10200	8680	7350	6480	4600	4880
12	---	---	6570	8640	12800	12600	9850	8530	7320	6690	4800	4650
13	---	---	6520	8850	12300	13600	9640	8300	7320	6790	5200	4440
14	---	---	6450	8990	11800	13600	9500	8110	7280	6810	5550	4290
15	---	---	6430	9060	11400	13100	9640	7910	7140	6820	5720	4470
16	---	---	6430	8950	11000	12600	9680	7810	6870	6800	5790	4740
17	---	---	6430	8590	10500	12300	9580	7670	6590	6710	5780	4920
18	---	---	6400	8380	10000	12200	9480	7590	6240	6570	5760	5010
19	---	---	6580	8210	9680	12200	9450	7500	5750	6460	5750	5020
20	---	---	6870	7970	9690	12400	9360	7420	5340	6360	5710	4990
21	---	---	7320	7810	9710	12500	9280	7370	5130	6280	5680	4960
22	---	---	7910	7730	9910	12500	9190	7340	4990	6150	5650	4940
23	---	---	8430	7730	10100	12300	9050	7290	4950	5950	5620	4920
24	---	---	8890	7780	10200	12000	8810	7260	4860	5580	5620	4890
25	---	---	9270	7820	10300	11800	8790	7260	4770	5130	5620	4800
26	---	---	9560	7830	10500	11800	8790	7160	4660	4770	5570	4740
27	---	---	9720	8020	10600	11700	8830	6800	4570	4530	5280	4700
28	---	---	9720	8360	10500	11700	8810	6380	4470	4370	4950	4610
29	---	---	9560	8690	10400	11700	8740	5870	4400	4200	4720	4390
30	---	---	9290	9180	---	11900	8660	5480	4350	4060	4570	4150
31	5580	---	8760	9650	---	12000	---	5220	---	e4020	4250	---
MEAN	---	---	---	8166	11380	11550	10050	7831	6014	5458	4985	4934
MAX	---	---	---	9650	13900	13600	12200	9280	7350	6820	5790	6020
MIN	---	---	---	7210	9680	9830	8660	5220	4350	4020	3960	4150
IN.	---	---	---	7.81	10.18	11.04	9.30	7.49	5.57	5.22	4.77	4.57

e Estimated

APALACHICOLA RIVER BASIN  
02359051 CHIPOLA RIVER AT COCKRAN LANDING NEAR WEWAHITCHKA, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.75	---	---	16.80	18.26	18.27	19.35	17.12	13.52	12.41	11.98	12.20
2	10.70	---	---	16.48	18.69	18.18	19.34	17.15	13.98	12.35	11.92	12.99
3	10.67	---	---	16.26	19.10	18.13	19.28	17.33	14.66	12.28	11.97	13.69
4	10.77	---	---	16.11	19.35	18.09	19.22	17.50	15.18	12.25	12.06	14.04
5	11.05	---	---	15.96	19.56	18.09	19.15	17.59	15.48	12.37	12.24	14.32
6	11.20	---	---	15.84	19.73	18.09	19.12	17.61	15.65	12.71	12.41	14.70
7	---	---	---	15.89	19.90	18.07	19.04	17.54	15.75	13.00	12.58	14.85
8	---	---	---	16.13	20.15	18.02	18.90	17.42	15.88	13.68	12.70	14.70
9	---	---	---	16.36	20.16	18.10	18.71	17.31	15.96	14.39	12.65	14.28
10	---	---	---	16.60	19.99	18.40	18.48	17.22	15.97	14.81	12.68	13.91
11	---	---	---	16.95	19.84	18.88	18.23	17.14	15.97	15.13	12.84	13.60
12	---	---	15.22	17.11	19.65	19.56	18.03	17.02	15.94	15.34	13.10	13.34
13	---	---	15.17	17.28	19.40	20.00	17.88	16.83	15.94	15.44	13.62	13.09
14	---	---	15.10	17.39	19.16	19.98	17.78	16.66	15.91	15.46	14.06	12.92
15	---	---	15.08	17.44	18.95	19.76	17.88	16.48	15.77	15.47	14.27	13.20
16	---	---	15.08	17.36	18.72	19.56	17.91	16.39	15.52	15.45	14.35	13.61
17	---	---	15.08	17.07	18.42	19.40	17.84	16.27	15.24	15.36	14.34	13.89
18	---	---	15.05	16.90	18.14	19.34	17.76	16.19	14.87	15.22	14.32	14.04
19	---	---	15.23	16.75	17.91	19.35	17.74	16.11	14.30	15.11	14.30	14.09
20	---	---	15.52	16.54	17.92	19.45	17.67	16.04	13.80	15.01	14.26	14.10
21	---	---	15.94	16.39	17.93	19.50	17.61	15.99	13.53	14.92	14.22	14.10
22	---	---	15.48	16.32	18.07	19.50	17.54	15.96	13.36	14.77	14.18	14.11
23	---	---	16.94	16.32	18.17	19.43	17.43	15.92	13.30	14.54	14.15	14.13
24	---	---	17.31	16.37	18.24	19.29	17.25	15.89	13.19	14.10	14.14	14.12
25	---	---	17.60	16.40	18.30	19.17	17.23	15.89	13.06	13.54	14.15	14.05
26	---	---	17.82	16.41	18.41	19.15	17.23	15.79	12.92	13.06	14.09	14.01
27	---	---	17.94	16.58	18.50	19.11	17.26	15.45	12.79	12.74	13.72	13.99
28	---	---	17.94	16.88	18.44	19.14	17.25	15.03	12.66	12.51	13.30	13.91
29	---	---	17.82	17.15	18.36	19.14	17.19	14.45	12.56	12.27	13.00	13.64
30	---	---	17.62	17.53	---	19.20	17.13	13.98	12.49	12.08	12.79	13.34
31	14.10	---	17.21	17.89	---	19.28	---	16.65	---	12.01	12.35	---
MEAN	---	---	---	16.69	18.88	18.99	18.08	16.45	14.50	13.86	13.31	13.83
MAX	---	---	---	17.89	20.16	20.00	19.35	17.61	15.97	15.47	14.35	14.85
MIN	---	---	---	15.84	17.91	18.02	17.13	13.98	12.49	12.01	11.92	12.20

APALACHICOLA RIVER BASIN  
02359170 APALACHICOLA RIVER NEAR SUMATRA, FL  
(National water-quality assessment network station)

107

LOCATION.--Lat 29°56'57", Long 85°00'56", in SW<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1977 to current year.

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

REMARKS.--Records fair. Discharges below 15,000 ft<sup>3</sup>/s are tide affected.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8560	15000	18700	28000	36600	38000	56500	25000	12500	10200	8790	9150
2	8840	15100	17500	25800	42700	36400	55700	24600	13200	10100	8210	9420
3	9070	15300	16700	23500	49000	34600	54800	25400	14700	10000	8210	11700
4	11100	15800	16200	21400	54600	33500	53700	26900	16400	10000	8630	13100
5	15100	16400	15900	20100	59800	33400	52600	28200	19500	11200	9480	14400
6	12500	17100	15600	19400	66000	34100	51800	28800	22000	11900	9920	15100
7	10900	17500	15600	19600	71900	34900	50700	28600	23300	12300	10100	15500
8	13500	17000	15600	19600	78600	34400	48500	27900	25200	13600	10100	15500
9	15900	16100	16100	20800	84600	32900	45200	27100	26700	14800	10100	14900
10	18600	15900	16100	22400	85000	33700	41300	26400	27200	15300	10100	13600
11	20900	17400	16000	23900	81800	38800	37500	25700	27300	15900	11000	12200
12	22700	19800	16200	25700	77700	50200	34400	24900	27300	16700	11200	11500
13	24000	22400	16300	26800	72000	68600	32400	23900	27100	17100	12300	10900
14	24800	24900	16300	28000	64900	80100	31200	22900	26900	17700	14400	10400
15	24200	26900	16200	29000	58200	81000	31500	21900	25800	18500	15000	10700
16	22300	28600	16300	29300	51900	76700	31700	21200	24500	18400	15200	12100
17	20700	29800	16300	28700	45000	71700	30900	20500	21200	17900	15300	13500
18	19500	30200	16500	27500	39300	68700	29900	19900	17400	17000	15200	14100
19	18500	29800	17200	26200	35300	65400	29300	19400	15100	16600	15100	14100
20	17800	29300	17200	24400	35400	63000	29300	19000	13500	16300	15000	14300
21	16900	29400	18300	23100	33600	62700	28800	18800	e13000	16000	15000	14500
22	16400	29100	21100	22300	32400	63600	28100	18700	e12500	15800	15000	14700
23	16300	28000	23900	22000	32700	64000	27500	18500	e12100	15400	14900	14500
24	16000	26900	26500	22700	33600	62700	26400	18300	e11700	15000	14800	14500
25	15600	25600	29300	22700	34500	59800	25200	18100	e11300	14100	14800	14600
26	15300	24100	32100	22900	35900	57300	25400	17900	e10900	11300	14700	14700
27	15300	22900	34500	23500	37900	53400	25900	17000	10600	10400	12500	15000
28	15200	22200	35700	24000	39400	51200	26100	16100	10300	9970	11600	14900
29	15000	21600	35200	25600	39100	51400	26000	15200	10200	9670	10700	14300
30	14800	20000	33500	28300	---	53600	26400	14300	10100	9230	10800	12600
31	14900	---	30800	31900	---	56300	---	13000	---	9130	9750	---
MEAN	16490	22340	20950	24490	52050	53100	36490	21750	17980	13790	12190	13350
MAX	24800	30200	35700	31900	85000	81000	56500	28800	27300	18500	15300	15500
MIN	8560	15000	15600	19400	32400	32900	25200	13000	10100	9130	8210	9150
IN.	.99	1.30	1.26	1.47	2.92	3.19	2.12	1.31	1.05	.83	.73	.78

e Estimated

APALACHICOLA RIVER BASIN  
02359170 APALACHICOLA RIVER NEAR SUMATRA, FL

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	14610	15850	24510	30160	42310	47110	37810	24920	19840	23300	19790	16530							
MAX	37250	32420	52700	53720	68390	75080	78430	46350	29450	99630	39420	28780							
(WY)	1995	1978	1993	1993	1978	1990	1980	1991	1980	1994	1994	1994							
MIN	7326	6577	9808	10380	10130	17090	19300	10940	9984	8042	7384	8441							
(WY)	1987	1982	1988	1981	1989	1989	1985	1981	1986	1988	1986	1986							

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1978 - 1996
ANNUAL MEAN	23190	25300	26320
HIGHEST ANNUAL MEAN			35840
LOWEST ANNUAL MEAN			14060
HIGHEST DAILY MEAN	89400	Feb 24	221000
LOWEST DAILY MEAN	8560	Oct 1	5800
ANNUAL SEVEN-DAY MINIMUM	8960	Sep 1	6010
INSTANTANEOUS PEAK FLOW			85900
INSTANTANEOUS PEAK STAGE			9.83
INSTANTANEOUS LOW FLOW			8210
ANNUAL RUNOFF (INCHES)	16.40	17.94	18.62
10 PERCENT EXCEEDS	44800	51500	48700
50 PERCENT EXCEEDS	18000	19800	20100
90 PERCENT EXCEEDS	10200	11000	9990



APALACHICOLA RIVER BASIN  
02359170 APALACHICOLA RIVER NEAR SUMATRA, FL.--Continued

109

DISCHARGE, MAIN CHANNEL ONLY, IN CUBIC FEET PER SECOND, WATER YEAR  
OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8560	15000	16100	17200	18000	18100	19400	16900	12500	10200	8790	9150
2	8840	15000	15900	17000	18400	18000	19300	16800	13200	10100	8210	9420
3	9070	15200	15700	16700	18900	17800	19300	16900	14700	10000	8210	11700
4	11100	15400	15600	16400	19300	17700	19200	17100	15600	10000	8630	13100
5	15000	15600	15400	16300	19700	17700	19100	17200	16200	11200	9480	14400
6	12500	15800	15300	16200	20800	17800	19100	17300	16500	11900	9920	15000
7	10900	15900	15300	16200	22800	17900	19000	17300	16700	12300	10100	15300
8	13500	15800	15300	16200	25100	17800	18800	17200	16900	13600	10100	15300
9	15400	15500	15500	16400	27300	17700	18600	17100	17100	14800	10100	14900
10	16100	15400	15500	16600	27400	17800	18400	17000	17100	15200	10100	13600
11	16400	15900	15500	16700	26300	18200	18100	17000	17100	15400	11000	12200
12	16600	16200	15500	17000	24800	19000	17800	16900	17100	15700	11200	11500
13	16800	16600	15600	17100	22800	21800	17600	16800	17100	15800	12300	10900
14	16900	16900	15600	17200	20500	25700	17500	16600	17100	15900	14400	10400
15	16800	17100	15600	17300	19500	26000	17600	16500	17000	16100	15000	10700
16	16600	17300	15600	17300	19100	24500	17600	16400	16800	16000	15200	12100
17	16300	17400	15600	17300	18600	22700	17500	16300	16400	16000	15200	13500
18	16200	17400	15700	17200	18200	21700	17400	16200	15900	15800	15100	14100
19	16100	17400	15900	17000	17900	20600	17400	16200	15000	15700	15000	14100
20	16000	17400	15900	16800	17900	20000	17300	16100	13500	15600	15000	14300
21	15800	17400	16000	16700	17700	19900	17300	16100	e13000	15500	14900	14500
22	15600	17300	16400	16500	17600	20000	17200	16100	e12500	15400	14900	14700
23	15600	17200	16700	16500	17700	20200	17200	16100	e12100	15200	14900	14500
24	15500	17100	17000	16600	17800	19900	17000	16000	e11700	15000	14800	14500
25	15300	16900	17300	16600	17800	19700	16900	16000	e11300	14100	14800	14600
26	15200	16800	17600	16600	17900	19500	16900	16000	e10900	11300	14700	14700
27	15200	16600	17800	16700	18100	19200	17000	15800	10600	10400	12500	15000
28	15200	16500	17900	16800	18200	19000	17000	15500	10300	9970	11600	14800
29	14900	16500	17900	17000	18200	19000	17000	15100	10200	9670	10700	14200
30	14800	16300	17700	17200	---	19200	17000	14300	10100	9230	10800	12600
31	14900	---	17500	17600	---	19400	---	13000	---	9130	9750	---
MEAN	14630	16430	16190	16800	20150	19790	17880	16320	14410	13300	12170	13330
MAX	16900	17400	17900	17600	27400	26000	19400	17300	17100	16100	15200	15300
MIN	8560	15000	15300	16200	17600	17700	16900	13000	10100	9130	8210	9150

APALACHICOLA RIVER BASIN  
02359170 APALACHICOLA RIVER NEAR SUMATRA, FL.--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.87	4.85	5.68	6.52	7.08	7.16	8.08	6.27	3.92	3.32	3.08	3.53
2	2.95	4.89	5.56	6.34	7.40	7.06	8.03	6.24	4.13	3.29	2.93	3.81
3	3.27	5.01	5.42	6.14	7.71	6.96	7.98	6.31	4.68	3.25	2.94	4.49
4	4.04	5.18	5.30	5.94	7.98	6.90	7.93	6.43	5.30	3.26	3.15	4.67
5	4.88	5.35	5.19	5.83	8.28	6.89	7.88	6.53	5.76	3.53	3.44	4.77
6	3.91	5.51	5.12	5.75	8.65	6.93	7.84	6.58	6.00	3.75	3.62	4.95
7	3.42	5.55	5.11	5.78	9.02	6.98	7.79	6.56	6.12	3.88	3.68	5.07
8	4.25	5.48	5.13	5.78	9.42	6.95	7.69	6.50	6.29	4.25	3.72	5.09
9	5.20	5.26	5.26	5.89	9.76	6.86	7.53	6.44	6.42	4.73	3.72	4.91
10	5.67	5.21	5.25	6.04	9.79	6.90	7.34	6.39	6.45	5.00	3.83	4.66
11	5.90	5.52	5.24	6.17	9.60	7.20	7.13	6.33	6.46	5.21	4.04	4.41
12	6.06	5.80	5.28	6.33	9.37	7.77	6.95	6.26	6.46	5.42	4.30	4.20
13	6.18	6.04	5.31	6.42	9.02	8.82	6.83	6.18	6.44	5.51	4.54	3.99
14	6.25	6.26	5.30	6.51	8.59	9.51	6.74	6.08	6.43	5.57	4.77	3.83
15	6.20	6.43	5.29	6.59	8.18	9.56	6.77	6.00	6.34	5.66	4.93	3.95
16	6.03	6.56	5.30	6.61	7.85	9.31	6.78	5.92	6.23	5.65	5.01	4.38
17	5.88	6.65	5.32	6.57	7.52	9.00	6.73	5.86	5.92	5.59	5.02	4.64
18	5.77	6.67	5.37	6.48	7.23	8.82	6.66	5.81	5.52	5.50	4.99	4.71
19	5.66	6.65	5.52	6.37	7.00	8.62	6.61	5.76	4.89	5.39	4.95	4.72
20	5.59	6.61	5.53	6.22	7.01	8.46	6.61	5.72	4.21	5.31	4.94	4.74
21	5.45	6.62	5.64	6.10	6.90	8.45	6.58	5.70	---	5.23	4.92	4.80
22	5.34	6.60	5.92	6.02	6.83	8.50	6.52	5.68	---	5.16	4.92	4.83
23	5.31	6.51	6.17	6.00	6.85	8.53	6.48	5.66	---	5.05	4.90	4.78
24	5.23	6.43	6.39	6.06	6.90	8.45	6.39	5.64	---	4.91	4.88	4.79
25	5.12	6.32	6.61	6.07	6.95	8.28	6.29	5.62	---	4.57	4.87	4.79
26	5.04	6.19	6.81	6.08	7.04	8.13	6.30	5.60	---	4.11	4.83	4.83
27	5.01	6.09	6.95	6.14	7.15	7.91	6.34	5.48	3.43	3.71	4.66	4.93
28	4.99	6.02	7.02	6.18	7.23	7.81	6.36	5.26	3.34	3.50	4.34	4.89
29	4.83	5.96	7.00	6.32	7.22	7.82	6.36	4.95	3.29	3.38	4.07	4.75
30	4.74	5.81	6.89	6.53	---	7.92	6.39	4.46	3.32	3.29	4.09	4.50
31	4.77	---	6.72	6.79	---	8.07	---	4.09	---	3.25	3.76	---
TOTAL	155.81	178.03	178.60	192.57	229.53	246.53	209.91	182.31	---	139.23	131.84	137.41
MEAN	5.03	5.93	5.76	6.21	7.91	7.95	7.00	5.88	---	4.49	4.25	4.58
MAX	6.25	6.67	7.02	6.79	9.79	9.56	8.08	6.58	---	5.66	5.02	5.09
MIN	2.87	4.85	5.11	5.75	6.83	6.86	6.29	4.09	---	3.25	2.93	3.53

APALACHICOLA RIVER BASIN  
02359170 APALACHICOLA RIVER NEAR SUMATRA, FL.--Continued

111

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1987 to current year.

REMARKS.--Discharge for sediment samples represent main channel only.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	GAGE HEIGHT (FEET)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 1995						
24...	1420	135	15900	5.01	21	902
24...	1425	135	15900	5.01	20	859
24...	1430	225	15900	5.01	23	987
24...	1435	225	15900	5.01	23	987
24...	1440	295	15900	5.01	36	1550
24...	1445	295	15900	5.02	27	1160
24...	1450	395	15900	5.03	25	1070
24...	1455	395	15900	5.02	24	1030
24...	1500	505	15900	5.02	22	944
24...	1510	505	15900	5.02	22	944
DEC						
14...	1045	115	16300	5.82	13	572
14...	1100	115	16300	5.82	14	616
14...	1108	175	16300	5.82	16	704
14...	1110	175	16300	5.82	16	704
14...	1112	215	16300	5.82	18	792
14...	1115	215	16300	8.82	15	660
14...	1120	350	16300	5.82	13	572
14...	1125	350	16300	5.82	17	748
FEB 1996						
12...	1055	85.0	77900	9.38	18	3790
12...	1058	85.0	77900	9.38	20	4210
12...	1100	157	77900	9.38	25	5260
12...	1102	157	77900	9.38	22	4630
12...	1105	243	77900	9.38	38	7990
12...	1107	243	77900	9.38	87	18300
12...	1110	340	77900	9.38	42	8830
12...	1113	340	77900	9.38	36	7570
12...	1116	457	77900	9.38	30	6310
12...	1120	457	77900	9.38	23	4840
APR						
11...	1112	100	37500	7.13	24	2430
11...	1115	100	37500	7.13	28	2840
11...	1118	170	37500	7.13	43	4350
11...	1121	170	37500	7.13	38	3850
11...	1124	260	37500	7.13	42	4250
11...	1126	260	37500	7.13	42	4250
11...	1129	350	37500	7.13	28	2840
11...	1131	350	37500	7.13	27	2730
11...	1134	465	37500	7.13	20	2030
11...	1137	465	37500	7.13	21	2130
11...	1205	87.0	37500	7.13	--	--
11...	1220	269	37500	7.13	--	--
11...	1235	438	37500	7.12	--	--
MAY 1996						
29...	1000	130	15200	5.00	29	1190
29...	1003	130	15200	5.00	29	1190
29...	1005	220	15200	5.00	34	1400
29...	1008	220	15200	5.00	31	1270
29...	1012	290	15200	5.00	34	1400
29...	1014	290	15200	5.00	31	1270
29...	1016	390	15200	5.00	29	1190
29...	1018	390	15200	5.00	30	1230
29...	1020	500	15200	5.00	23	944
29...	1022	500	15200	5.00	25	1030
29...	1025	125	15200	5.00	--	--
29...	1035	290	15200	5.00	--	--
29...	1038	460	15200	5.00	--	--
JUN						
27...	1040	120	10900	3.42	21	618
27...	1045	120	10900	3.42	24	706
27...	1050	200	10900	3.42	22	647
27...	1055	200	10900	3.42	24	706
27...	1100	305	10900	3.42	32	942
27...	1105	305	10900	3.42	21	618
27...	1110	400	10900	3.42	23	677
27...	1115	400	10900	3.42	25	736
27...	1120	480	10900	3.42	23	677
27...	1125	480	10900	3.42	21	618

APALACHICOLA RIVER BASIN  
02359170 APALACHICOLA RIVER NEAR SUMATRA, FL.--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR  
OCTOBER 1995 TO SEPTEMBER 1996--Continued

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	GAGE HEIGHT (FEET)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
AUG						
14...	1024	140	14500	4.78	32	1250
14...	1025	140	14500	4.78	29	1140
14...	1031	175	14500	4.78	29	1140
14...	1034	175	14500	4.78	23	900
14...	1037	245	14500	4.78	22	861
14...	1040	245	14500	4.78	19	744
14...	1043	340	14500	4.78	27	1060
14...	1045	340	14500	4.78	29	1140
14...	1047	415	14600	4.79	27	1060
14...	1050	415	14600	4.79	31	1220

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	GAGE HEIGHT (FEET)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT 1995							
24...	1420	15900	5.01	--	--	--	--
24...	1425	15900	5.01	--	--	--	--
24...	1430	15900	5.01	--	--	--	--
24...	1435	15900	5.01	--	--	--	--
24...	1440	15900	5.01	--	--	--	--
24...	1445	15900	5.02	--	--	--	--
24...	1450	15900	5.03	--	--	--	--
24...	1455	15900	5.02	--	--	--	--
24...	1500	15900	5.02	--	--	--	--
24...	1510	15900	5.02	--	--	--	--
DEC							
14...	1045	16300	5.82	--	--	--	--
14...	1100	16300	5.82	--	--	--	--
14...	1108	16300	5.82	--	--	--	--
14...	1110	16300	5.82	--	--	--	--
14...	1112	16300	5.82	--	--	--	--
14...	1115	16300	8.82	--	--	--	--
14...	1120	16300	5.82	--	--	--	--
14...	1125	16300	5.82	--	--	--	--
FEB 1996							
12...	1055	77900	9.38	--	--	--	--
12...	1058	77900	9.38	--	--	--	--
12...	1100	77900	9.38	--	--	--	--
12...	1102	77900	9.38	--	--	--	--
12...	1105	77900	9.38	--	--	--	--
12...	1107	77900	9.38	--	--	--	--
12...	1110	77900	9.38	--	--	--	--
12...	1113	77900	9.38	--	--	--	--
12...	1116	77900	9.38	--	--	--	--
12...	1120	77900	9.38	--	--	--	--
APR							
11...	1112	37500	7.13	--	--	--	--
11...	1115	37500	7.13	--	--	--	--
11...	1118	37500	7.13	--	--	--	--
11...	1121	37500	7.13	--	--	--	--
11...	1124	37500	7.13	--	--	--	--
11...	1126	37500	7.13	--	--	--	--
11...	1129	37500	7.13	--	--	--	--
11...	1131	37500	7.13	--	--	--	--
11...	1134	37500	7.13	--	--	--	--
11...	1137	37500	7.13	--	--	--	--
11...	1205	37500	7.13	1	1	14	82
11...	1220	37500	7.13	0	0	5	51
11...	1235	37500	7.12	0	0	2	41

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL--Continued

DATE	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM	% FINER THAN 64.0 MM
OCT 1995							
24...	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--
DEC							
14...	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--
DATE	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM	% FINER THAN 64.0 MM
FEB 1996							
12...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
APR							
11...	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--
11...	98	100	100	100	100	100	100
11...	92	99	100	100	100	100	100
11...	89	98	100	100	100	100	100

APALACHICOLA RIVER BASIN  
02359170 APALACHICOLA RIVER NEAR SUMATRA, FL.--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	GAGE HEIGHT (FEET)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
MAY 1996							
29...	1000	15200	5.00	--	--	--	--
29...	1003	15200	5.00	--	--	--	--
29...	1005	15200	5.00	--	--	--	--
29...	1008	15200	5.00	--	--	--	--
29...	1012	15200	5.00	--	--	--	--
29...	1014	15200	5.00	--	--	--	--
29...	1016	15200	5.00	--	--	--	--
29...	1018	15200	5.00	--	--	--	--
29...	1020	15200	5.00	--	--	--	--
29...	1022	15200	5.00	--	--	--	--
29...	1025	15200	5.00	--	2	6	59
29...	1035	15200	5.00	1	1	19	74
29...	1038	15200	5.00	1	1	21	80
JUN							
27...	1040	10900	3.42	--	--	--	--
27...	1045	10900	3.42	--	--	--	--
27...	1050	10900	3.42	--	--	--	--
27...	1055	10900	3.42	--	--	--	--
27...	1100	10900	3.42	--	--	--	--
27...	1105	10900	3.42	--	--	--	--
27...	1110	10900	3.42	--	--	--	--
27...	1115	10900	3.42	--	--	--	--
27...	1120	10900	3.42	--	--	--	--
27...	1125	10900	3.42	--	--	--	--
AUG							
14...	1024	14500	4.78	--	--	--	--
14...	1025	14500	4.78	--	--	--	--
14...	1031	14500	4.78	--	--	--	--
14...	1034	14500	4.78	--	--	--	--
14...	1037	14500	4.78	--	--	--	--
14...	1040	14500	4.78	--	--	--	--
14...	1043	14500	4.78	--	--	--	--
14...	1045	14500	4.78	--	--	--	--
14...	1047	14600	4.79	--	--	--	--
14...	1050	14600	4.79	--	--	--	--







CHOCTAWHATCHEE RIVER BASIN  
02366500 CHOCTAWHATCHEE RIVER NEAR BRUCE, FL

117

LOCATION.--Lat 30°27'03", long 85°53'54" in NE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

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.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1983, water-stage recorder at same site at datum 3.94 ft lower. Prior to Apr. 6, 1934, nonrecording gage at site 1.0 mi downstream at datum 4.19 ft lower.

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

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<sup>3</sup>/s, from rating curve extended above 145,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2370	4570	5830	8570	9980	11600	20100	9580	4940	2990	3170	3840
2	2210	4780	5670	8820	13200	10800	21500	9100	5530	2760	3040	4600
3	2170	5190	5450	6840	16900	10400	24400	8760	5970	2640	3160	5210
4	2120	5600	5160	6520	17900	10600	26200	9390	6240	2600	3310	5890
5	3310	6250	4900	6970	17700	11000	26600	10900	6060	2790	3450	7090
6	4120	6730	4930	8060	17300	11200	25500	11500	5580	2930	4200	9130
7	4840	7550	4740	10100	18400	11000	23000	11100	4820	3200	3680	10800
8	6450	8740	4700	11600	22100	11100	19600	10100	4330	3520	3440	11200
9	6860	9340	4850	11900	22900	11100	18200	8870	3980	3620	3860	10600
10	10600	9570	5140	11700	21600	11800	16200	7610	4060	3510	4300	10000
11	20300	9440	5690	11000	20100	12500	14100	7210	4210	3620	4510	8930
12	22600	9370	6590	10700	17900	14000	13200	6550	4360	3550	4980	7950
13	21700	9350	7410	10000	16300	15500	12100	5790	4880	3450	4900	6380
14	19100	9800	8000	9020	14700	14700	11400	5390	4920	3390	5080	5800
15	17500	10400	7820	8500	12400	14100	11100	5320	5000	3450	5030	4990
16	16200	10700	7530	7840	10500	12800	10900	5190	4750	3570	4580	4310
17	12800	11700	6540	7370	9350	11400	11300	5170	4420	3660	3940	4240
18	11000	12100	6160	6930	8520	10900	12300	5090	4410	3580	3780	4320
19	8610	11800	5750	6660	7840	9580	14300	4660	4320	3470	3210	4240
20	6840	10600	5570	6490	8260	9170	16500	4210	4060	3790	2970	4280
21	6000	9280	5420	6250	9140	9280	18300	4070	3700	3800	2760	3960
22	5210	7730	5540	6200	12700	10100	18900	3810	3600	3790	2610	3660
23	4650	7050	5970	6280	15000	12800	17700	3670	3660	3580	2380	3340
24	4460	6400	6990	6450	16100	17900	15300	3520	3840	3450	2300	3250
25	4220	5950	9580	6700	17100	18800	14000	3480	3560	3620	2250	3080
26	4030	5650	11400	6810	16800	19100	12100	3430	3470	3700	2290	2960
27	3880	5560	13600	6850	16000	18200	11200	3380	3420	3640	2460	3270
28	3930	5580	14000	6870	14000	17300	10800	3370	3300	3390	2700	3880
29	4040	5730	13500	7160	12900	16700	10100	3900	3210	3250	2880	4340
30	3970	5860	11600	7500	---	17500	9950	4290	3100	3300	3070	4950
31	4260	---	10000	8650	---	18900	---	4480	---	3260	3570	---
MEAN	8076	7946	7291	8107	14950	13280	16230	6222	4390	3383	3479	5683
MAX	22600	12100	14000	11900	22900	19100	26600	11500	6240	3800	5080	11200
MIN	2120	4570	4700	6200	7840	9170	9950	3370	3100	2600	2250	2960
IN.	2.12	2.02	1.92	2.13	3.68	3.49	4.13	1.64	1.12	.89	.92	1.45

CHOCTAWHATCHEE RIVER BASIN  
02366500 CHOCTAWHATCHEE RIVER NEAR BRUCE, FL--Continued.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1996, BY WATER YEAR (WY)

MEAN	4249	4375	6359	9096	10580	12210	11120	6484	5234	5685	5981	4655
MAX	20840	13870	25970	29400	20460	28450	27210	20870	18080	48020	26770	24000
(WY)	1976	1931	1954	1936	1978	1948	1975	1946	1973	1994	1939	1937
MIN	1399	1742	1945	2344	3899	2534	3647	2580	1839	1865	1794	1626
(WY)	1969	1955	1956	1956	1951	1955	1967	1941	1988	1986	1968	1968

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1931 - 1996	
ANNUAL MEAN	7362		8213		7148	
HIGHEST ANNUAL MEAN					11620	
LOWEST ANNUAL MEAN					3454	
HIGHEST DAILY MEAN	32400	Feb 17	26600	Apr 5	164000	Jul 11 1994
LOWEST DAILY MEAN	2120	Oct 4	2120	Oct 4	1300	Oct 27 1968
ANNUAL SEVEN-DAY MINIMUM	2230	Sep 8	2430	Aug 22	1310	Oct 27 1968
INSTANTANEOUS PEAK FLOW			26700	Apr 5	165000	Jul 11 1994
INSTANTANEOUS PEAK STAGE			15.28	Apr 5	26.76	Jul 11 1994
INSTANTANEOUS LOW FLOW			2120	Oct 4	1290	Oct 27 1968
ANNUAL RUNOFF (INCHES)	22.80		25.51		22.15	
10 PERCENT EXCEEDS	13500		16700		14100	
50 PERCENT EXCEEDS	6140		6420		5040	
90 PERCENT EXCEEDS	2470		3310		2320	

YELLOW RIVER BASIN  
02369000 SHOAL RIVER NEAR CRESTVIEW, FL

119

LOCATION.--Lat 30°41'50", long 86°34'15" in SW<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

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, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	397	791	1040	1150	989	1620	4000	1900	1010	551	554	920
2	444	1960	1020	2000	1100	1890	3740	1800	820	536	604	991
3	489	5490	998	2260	2170	1690	2370	1270	733	524	587	1380
4	4170	6430	988	1780	3020	1310	1660	1080	734	535	558	1660
5	7910	6130	985	1280	2950	1160	1440	1020	701	646	519	1440
6	8610	4440	990	1210	1790	1120	1350	977	669	731	537	1580
7	8760	2590	1060	1860	1330	1360	1340	933	647	841	605	1190
8	5040	2440	1270	2240	1220	1920	1310	889	740	855	528	766
9	2120	2560	1320	1840	1160	2110	1230	854	1180	799	656	673
10	1410	2200	1300	1350	1100	1760	1150	843	1570	674	1070	642
11	1230	1960	1200	1190	1060	1320	1090	894	1200	611	1430	625
12	1200	2770	1080	1140	1030	1180	1050	1000	889	563	1190	609
13	1190	3460	1010	1140	982	1100	1030	1010	772	548	873	582
14	1110	3070	983	1090	952	1060	1040	917	866	610	680	558
15	1030	2130	965	1030	935	1020	1930	830	954	711	604	543
16	970	1670	956	998	962	998	3420	779	991	870	572	577
17	914	1460	948	977	978	987	3840	748	870	878	548	751
18	875	1360	941	977	941	1120	3100	733	762	701	530	699
19	847	1310	1140	1130	929	1690	1900	713	747	620	516	622
20	875	1260	1540	1270	1660	1940	1580	706	813	607	498	574
21	928	1230	1380	1150	3060	1500	1530	680	877	579	483	564
22	925	1190	1140	1020	3630	1140	1380	666	929	563	468	580
23	842	1140	1020	961	2530	1030	1270	650	880	528	466	552
24	796	1180	966	989	1540	978	1330	650	763	522	535	521
25	843	1290	935	1170	1280	1050	1360	738	650	548	540	505
26	839	1420	915	1190	1170	1680	1230	672	612	587	591	495
27	776	1270	899	1130	1100	2350	1140	634	603	571	619	553
28	844	1170	887	1230	1080	2440	1070	622	637	532	601	927
29	1090	1120	871	1400	1240	2140	1050	983	616	505	735	1470
30	945	1080	856	1220	---	2350	1360	1750	576	482	869	1190
31	816	---	857	1050	---	3380	---	1720	---	482	951	---
MEAN	1911	2252	1047	1304	1513	1561	1743	957	827	623	662	825
MAX	8760	6430	1540	2260	3630	3380	4000	1900	1570	878	1430	1660
MIN	397	791	856	961	929	978	1030	622	576	482	466	495
IN.	4.65	5.30	2.55	3.17	3.44	3.80	4.10	2.33	1.95	1.52	1.61	1.94

YELLOW RIVER BASIN  
02369000 SHOAL RIVER NEAR CRESTVIEW, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1996, BY WATER YEAR (WY)

MEAN	831	853	1019	1232	1384	1500	1335	1009	1012	1106	1137	1035
MAX	3163	2252	3601	2606	2974	3327	3056	2752	4421	5436	4385	3968
(WY)	1976	1996	1954	1978	1982	1948	1960	1978	1989	1994	1975	1975
MIN	304	331	345	417	515	365	469	342	367	374	355	301
(WY)	1955	1955	1956	1939	1951	1955	1967	1967	1968	1952	1972	1972

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1938 - 1996	
ANNUAL MEAN	1323		1266		1120	
HIGHEST ANNUAL MEAN					1781	1978
LOWEST ANNUAL MEAN					551	1955
HIGHEST DAILY MEAN	10400	May 11	8760	Oct 7	23500	Jul 8 1994
LOWEST DAILY MEAN	397	Sep 30	397	Oct 1	240	Oct 17 1972
ANNUAL SEVEN-DAY MINIMUM	428	Sep 26	499	Aug 18	241	Oct 13 1972
INSTANTANEOUS PEAK FLOW			9540	Oct 6	25200	Aug 1 1975
INSTANTANEOUS PEAK STAGE			10.10	Oct 6	15.58	Aug 1 1975
INSTANTANEOUS LOW FLOW			397	Oct 1	240	Oct 17 1972
ANNUAL RUNOFF (INCHES)	37.89		36.36		32.11	
10 PERCENT EXCEEDS	2220		2120		2040	
50 PERCENT EXCEEDS	945		1000		840	
90 PERCENT EXCEEDS	558		561		430	

ESCAMBIA RIVER BASIN  
02375500 ESCAMBIA RIVER NEAR CENTURY, FL

121

LOCATION.--Lat 30°57'54", long 87°14'03", in NW<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

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, except for estimated daily discharges, which are fair. Some gage-height fluctuation during periods of low flow are attributed to regulation by power plants at Point-A Dam, 85.4 mi and Gnat 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, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1280	e4000	4450	10200	19700	11500	35900	22600	5030	2470	4130	8420
2	1210	5010	4270	19000	20900	11200	35300	21300	4870	2270	4960	7040
3	1860	8830	4130	23100	30900	9950	34100	17600	4950	2220	4380	6330
4	4630	12300	4040	22800	35400	8840	33800	13900	4900	2040	3880	5370
5	45100	12000	4020	19900	33500	8740	33300	11600	4790	1960	3250	4770
6	61700	9640	4110	16100	32200	8740	31500	10300	4350	1960	2930	5130
7	53100	8020	5460	13300	30700	9240	28300	9030	3860	2080	3070	5030
8	42400	9170	7870	12300	29400	11600	24800	7950	4990	2280	2970	5210
9	36200	11300	8900	12000	27900	13900	21100	6800	7800	2420	2860	5820
10	32100	11500	8920	11300	25800	13300	16600	6030	7770	2580	3690	6720
11	28800	10400	8090	10400	22000	11200	12800	5550	5680	2410	3800	7620
12	25800	11400	7190	9520	16600	9650	10700	5230	4610	2030	4140	6710
13	22400	12000	6650	9110	11700	9060	9860	5230	4270	2240	3890	4590
14	17100	11100	5920	8460	9530	8640	10300	4810	5130	3670	3240	3500
15	11200	9480	5500	7780	8610	7980	14200	4630	6970	4580	3130	3070
16	8050	8200	6000	7360	8040	7500	24300	4420	6900	4630	2850	2940
17	6640	7660	6720	6830	8110	7300	30300	4340	5230	4840	2580	3910
18	5550	7020	6950	6610	7840	11100	30200	4020	4080	3830	2230	4110
19	5020	6680	15900	6770	7600	18900	27300	3920	3480	3250	2030	3080
20	4680	6420	26000	7010	9820	22500	23100	3680	3730	2990	1910	2620
21	4420	5870	29600	7090	11600	21700	17700	3610	3970	2690	1890	2420
22	4380	5440	28100	6650	12500	18100	13900	3550	4110	2480	1740	2310
23	4040	5140	26500	5820	12900	13800	11800	3230	3750	2370	1630	2380
24	3890	5340	24400	5960	12000	11300	11000	3280	3820	2250	1590	2350
25	3680	6450	21900	7020	10800	10500	10600	3610	3360	2430	1830	2130
26	3510	6700	19700	7650	10000	14100	9640	3730	3160	5600	2170	2160
27	3260	5900	17400	9570	9230	17100	8500	3440	3160	6790	2000	2200
28	3250	5370	13900	14800	9110	21300	7590	3280	3180	6290	2270	3030
29	3380	5010	10400	20200	10700	23400	7920	4770	3280	5890	2970	5060
30	3510	4750	8270	21500	---	27400	18400	6630	2920	5900	3780	5460
31	e3750	---	7190	21200	---	33500	---	5700	---	4810	7640	---
MEAN	14710	7937	11560	11850	17070	13970	20160	7025	4603	3363	3078	4383
MAX	61700	12300	29600	23100	35400	33500	35900	22600	7800	6790	7640	8420
MIN	1210	4000	4020	5820	7600	7300	7590	3230	2920	1960	1590	2130
IN.	4.44	2.32	3.49	3.58	4.83	4.22	5.89	2.12	1.35	1.02	.93	1.28

e Estimated

ESCAMBIA RIVER BASIN  
02375500 ESCAMBIA RIVER NEAR CENTURY, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1996, BY WATER YEAR (WY)

MEAN	2717	3220	5600	8488	10310	12510	11390	5981	4438	4022	4091	3130
MAX	17070	14740	24600	31530	21160	29910	31430	19520	22500	20850	23560	12010
(WY)	1976	1949	1954	1936	1965	1990	1980	1978	1970	1994	1975	1975
MIN	647	1033	1157	1895	2596	1783	2180	1556	1077	1271	939	693
(WY)	1969	1955	1955	1956	1989	1955	1967	1963	1988	1968	1954	1968

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1935 - 1996	
ANNUAL MEAN	7993		9945		6304	
HIGHEST ANNUAL MEAN					11690	1975
LOWEST ANNUAL MEAN					2889	1968
HIGHEST DAILY MEAN	61700	Oct 6	61700	Oct 6	97000	Mar 18 1990
LOWEST DAILY MEAN	1210	Oct 2	1210	Oct 2	582	Oct 23 1968
ANNUAL SEVEN-DAY MINIMUM	1270	Sep 22	1800	Aug 19	605	Oct 15 1972
INSTANTANEOUS PEAK FLOW			64200	Oct 6	103000	Mar 18 1990
INSTANTANEOUS PEAK STAGE			20.76	Oct 6	24.35	Mar 18 1990
INSTANTANEOUS LOW FLOW			1170	Oct 2	578	Oct 23 1968
ANNUAL RUNOFF (INCHES)	28.43		35.47		22.44	
10 PERCENT EXCEEDS	18100		23200		14400	
50 PERCENT EXCEEDS	5260		6720		3720	
90 PERCENT EXCEEDS	1740		2480		1360	

ELEVENMILE CREEK BASIN  
02376115 ELEVENMILE CREEK NEAR PENSACOLA, FL

123

LOCATION.--Lat 30°29'53", long 87°20'09", in SE<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

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.--Records good, except for estimated daily discharges, which are fair. Discharges are increased by about 30 cfs from a paper mill located about 10 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	415	95	193	91	181	240	137	61	70	123	200
2	65	2520	88	204	578	118	197	107	64	65	137	329
3	94	1850	88	137	351	102	174	98	63	67	111	143
4	2130	532	84	113	159	96	155	95	60	71	89	107
5	e1600	266	156	101	135	94	146	92	58	83	90	94
6	e600	227	133	125	124	93	165	86	56	85	83	82
7	e250	209	106	143	114	118	159	82	57	118	81	76
8	e180	218	95	105	108	123	135	78	73	228	73	85
9	e140	169	116	100	105	94	127	76	99	191	75	127
10	e120	151	100	92	103	88	122	74	74	145	117	88
11	e110	347	85	95	103	86	116	78	64	95	90	77
12	e100	260	92	101	98	82	111	84	62	87	80	73
13	91	170	84	92	98	84	114	77	60	253	75	71
14	89	157	83	88	100	80	129	75	226	197	71	69
15	84	137	83	87	107	79	2300	68	343	132	69	70
16	80	128	86	87	113	82	408	69	311	163	71	78
17	76	124	80	87	100	83	242	67	126	110	78	83
18	73	120	1890	102	98	150	207	67	101	98	80	66
19	79	117	900	114	101	118	185	65	108	91	74	60
20	92	117	277	97	136	94	171	64	93	87	75	58
21	82	112	209	90	114	91	157	65	88	98	68	71
22	76	107	172	87	104	95	138	66	198	81	65	77
23	77	106	146	85	98	89	231	62	95	76	64	73
24	71	145	131	110	92	90	230	61	82	79	67	70
25	71	122	122	104	88	410	137	64	78	86	75	69
26	67	106	118	95	90	334	121	64	74	86	167	87
27	69	103	115	179	91	565	111	62	73	83	87	151
28	70	103	111	124	103	442	102	63	71	77	82	118
29	66	96	109	99	114	200	205	71	73	74	89	123
30	72	95	106	98	---	1290	357	65	73	72	351	86
31	87	---	106	95	---	541	---	62	---	83	401	---
MEAN	223	311	199	111	132	200	246	75.6	102	107	105	98.7
MAX	2130	2520	1890	204	578	1290	2300	137	343	253	401	329
MIN	64	95	80	85	88	79	102	61	56	65	64	58

e Estimated

ELEVENMILE CREEK BASIN  
02376115 ELEVENMILE CREEK NEAR PENSACOLA, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1996, BY WATER YEAR (WY)

MEAN	91.4	107	88.0	111	104	138	104	86.7	117	117	101	95.7
MAX	223	311	199	200	134	210	246	168	323	252	183	211
(WY)	1996	1996	1996	1991	1988	1990	1996	1991	1989	1994	1995	1988
MIN	52.5	47.4	53.6	67.5	70.5	81.9	64.9	51.1	57.6	66.7	58.8	53.1
(WY)	1991	1991	1991	1989	1989	1992	1990	1988	1988	1990	1990	1990

SUMMARY STATISTICS      FOR 1995 CALENDAR YEAR      FOR 1996 WATER YEAR      WATER YEARS 1987 - 1996

ANNUAL MEAN	144		159		105	
HIGHEST ANNUAL MEAN					159	1996
LOWEST ANNUAL MEAN					76.8	1992
HIGHEST DAILY MEAN	2520	Nov 2	2520	Nov 2	2580	Mar 16 1990
LOWEST DAILY MEAN	48	Apr 28	56	Jun 6	33	Aug 24 1989
ANNUAL SEVEN-DAY MINIMUM	63	Apr 27	60	Jun 1	42	Nov 2 1990
INSTANTANEOUS PEAK FLOW			5330	Oct 4	6310	Jun 8 1989
INSTANTANEOUS PEAK STAGE			13.99	Oct 4	14.57	Jun 8 1989
INSTANTANEOUS LOW FLOW			56	Jun 6	29	Aug 25 1989
10 PERCENT EXCEEDS	209		227		148	
50 PERCENT EXCEEDS	86		95		74	
90 PERCENT EXCEEDS	70		68		58	



PERDIDO RIVER BASIN  
02376500 PERDIDO RIVER AT BARRINEAU PARK, FL

125

LOCATION.--Lat 30°41'25", long 87°26'25", in NW<sup>1</sup>/<sub>4</sub> 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<sup>2</sup>.

WATER-DISCHARGE RECORDS

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. Maximum discharge for period of record from rating curve extension, based on a slope-area study made in 1955.

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, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	576	649	1360	975	e1400	4090	3640	776	465	881	5760
2	364	1700	624	2480	1940	e1500	3480	2810	645	453	1260	5320
3	433	3340	611	3270	4040	1240	2180	1830	598	445	1540	3290
4	4720	3670	605	3540	4270	1050	1350	1190	580	445	1130	1870
5	20500	3630	610	2430	4270	897	1120	976	587	445	1570	1420
6	20300	3140	622	1410	2570	815	1090	873	572	615	1440	1120
7	11300	1890	640	1160	1450	864	1200	806	565	691	1360	850
8	4400	1510	654	1010	1160	1050	1170	761	930	739	929	785
9	2190	1430	686	922	1040	979	e1000	728	1910	1120	871	817
10	1290	1210	692	868	964	951	e920	703	1640	1150	995	689
11	970	1470	660	832	912	916	e850	687	945	798	799	640
12	810	2100	637	887	858	809	e820	722	688	636	763	601
13	737	2060	617	881	808	735	e850	679	589	843	761	568
14	690	1680	606	827	774	699	e3500	648	579	1570	727	544
15	655	1240	599	784	760	677	e6500	627	610	1790	637	529
16	630	999	598	754	763	665	e8000	616	690	1630	563	680
17	603	861	603	730	738	663	e5000	606	632	1340	523	874
18	575	784	1870	728	716	907	e2500	593	629	1150	501	837
19	559	745	3960	769	716	1280	e1800	578	684	895	508	720
20	559	715	5370	786	1600	1450	e1400	566	730	750	542	616
21	540	691	4910	790	2330	1560	e1200	551	783	641	529	586
22	520	665	3030	765	2880	1180	e1000	539	791	570	494	593
23	506	648	1670	723	e2200	864	e1200	529	1240	589	473	566
24	500	1060	1150	793	e1600	744	1290	551	749	718	467	532
25	497	1310	970	947	e1200	1350	1130	734	602	746	667	509
26	488	1080	877	885	e920	2240	1030	934	548	764	742	534
27	481	950	822	1430	e800	1900	999	765	521	713	735	636
28	485	862	783	1810	e900	2460	896	640	607	787	799	1060
29	482	768	750	1980	e1100	2260	1160	805	524	855	1130	1540
30	474	692	726	2000	---	3640	3830	996	484	830	1850	1280
31	479	---	730	1310	---	4850	---	961	---	729	3570	---
MEAN	2519	1449	1236	1286	1560	1374	2085	924	748	836	960	1212
MAX	20500	3670	5370	3540	4270	4850	8000	3640	1910	1790	3570	5760
MIN	364	576	598	723	716	663	820	529	484	445	467	509
IN.	7.37	4.10	3.62	3.76	4.27	4.02	5.91	2.70	2.12	2.45	2.81	3.43

e Estimated

PERDIDO RIVER BASIN  
02376500 PERDIDO RIVER AT BARRINEAU PARK, FL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1996, BY WATER YEAR (WY)

MEAN	500	609	718	936	984	1116	1047	728	662	685	719	712
MAX	2519	1865	2084	2373	2364	2791	3179	2402	2394	1359	2938	2342
(WY)	1996	1990	1954	1978	1990	1990	1983	1991	1989	1946	1975	1974
MIN	197	246	302	339	343	269	283	262	238	231	249	213
(WY)	1969	1956	1955	1957	1957	1955	1968	1988	1968	1968	1954	1968

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1941 - 1996	
ANNUAL MEAN	1196		1348		783	
HIGHEST ANNUAL MEAN					1348	1996
LOWEST ANNUAL MEAN					371	1968
HIGHEST DAILY MEAN	20500	Oct 5	20500	Oct 5	31600	Apr 15 1955
LOWEST DAILY MEAN	359	Jun 19	364	Oct 2	188	Oct 13 1972
ANNUAL SEVEN-DAY MINIMUM	362	Jun 18	466	Jun 29	190	Oct 11 1972
INSTANTANEOUS PEAK FLOW			21900	Oct 5	39000	Apr 15 1955
INSTANTANEOUS PEAK STAGE			20.32	Oct 5	23.94	Apr 15 1955
INSTANTANEOUS LOW FLOW			364	Oct 2	188	Oct 12 1972
ANNUAL RUNOFF (INCHES)	41.22		46.57		27.00	
10 PERCENT EXCEEDS	2290		2490		1430	
50 PERCENT EXCEEDS	636		821		510	
90 PERCENT EXCEEDS	402		543		295	

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

WATER-QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	COLI-FORM, FECAL, 0.7 CENT UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR PER (COLS./100 ML) (31673)	HARD-NESS TOTAL AS CACO3 (00900)
OCT 1995											
25...	1545	495	23	5.9	19.5	2.5	8.3	91	K100	280	4
JAN 1996											
18...	1200	723	22	5.8	15.0	2.7	8.8	88	K27	K17	4
JUN											
12...	1045	688	22	5.4	22.5	5.9	7.3	85	29	130	4
SEP											
05...	1100	1380	22	4.9	24.0	6.7	6.7	80	>300	630	4

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 1995											
25...	0.70	0.50	2.2	53	0.5	0.40	2	4.2	3	0.90	3.5
JAN 1996											
18...	0.70	0.50	1.8	48	0.4	0.30	1	2.0	1	1.3	3.4
JUN											
12...	0.70	0.50	1.9	48	0.4	0.50	1	4.4	1	0.90	3.2
SEP											
05...	0.80	0.50	2.3	50	0.5	0.80	0	2.6	0	1.4	3.0

PERDIDO RIVER BASIN  
02376500 PERDIDO RIVER AT BARRINEAU PARK, FL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

WATER-QUALITY DATA

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 1995 25...	<0.10	7.4	--	18	0.02	24.4	0.270	<0.010	--	0.270	<0.010
JAN 1996 18...	<0.10	6.0	34	16	0.05	66.4	0.250	<0.010	--	0.250	0.020
JUN 12...	<0.10	6.5	38	16	0.05	70.6	0.190	<0.010	--	0.190	0.010
SEP 05...	<0.10	6.5	32	17	0.04	119	0.090	<0.010	--	0.090	0.017

DATE	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
OCT 1995 25...	--	--	<0.20	--	--	0.020	0.020	<0.010	60	14
JAN 1996 18...	0.03	--	<0.20	--	--	<0.020	<0.020	<0.010	70	14
JUN 12...	0.01	0.39	0.40	0.59	2.6	<0.020	<0.020	<0.010	100	17
SEP 05...	0.02	0.22	0.24	0.33	1.5	<0.020	<0.020	<0.010	180	20

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)
OCT 1995 25...	<3.0	380	<4	17	<10	<1.0	<1	<1.0	2.0	<6
JAN 1996 18...	<3.0	200	<4	20	<10	<1.0	<1	<1.0	6.0	<6
JUN 12...	<3.0	390	<1	32	<2.0	2.0	<1	<1.0	7.0	<1
SEP 05...	<1.0	470	<1	45	<2.0	4.0	<1	<1.0	7.0	<1

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage and flood-hydrograph partial-record stations are presented in a table of annual maximum stage and discharge. Discharge measurements made at miscellaneous sites for both low flows and high flows are given in a second table.

**Crest-stage and flood-hydrograph partial-record stations**

The following table contains annual maximum discharges for crest-stage and flood hydrograph stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A flood hydrograph station is a continual-record station that records the river stage of storm events above a base stage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

**Annual maximum discharge at crest-stage stations**

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of Record	Annual Maximum		
					Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
<b>Alapaha River Basin</b>							
02317630	Alapaha River near Jasper, Fla.	Lat 30°31'42", long 83°02'17", in SE <sup>1</sup> / <sub>4</sub> sec.32, T.2 N., R.13 E., Hamilton County, Hydrologic Unit 03110202, at bridge on U.S. Highway 41, 5.4 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.	<sup>a</sup> b1720	1948 1966-77 1979-82 1985-95	04-01-96	61.27	2,640

<sup>a</sup>Approximately

<sup>b</sup> Does not include Little Alapaha River

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

129

Miscellaneous sites

Discharge measurements in the following table were made at miscellaneous sites throughout the North Florida Area.

Discharge measurements made at special study and miscellaneous sites during water year 1996

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
ALACHUA COUNTY						
02320692	Santa Fe River near Hampton, Fl.	Lat 29°50'21", long 82°09'49", in SE1/4 sec. 35, T. 7 S., R. 21 E., Alachua County, Hydrologic Unit 03110206, at bridge on U.S. Highway 301, 2.3 mi southwest of Hampton, and 75 mi upstream from mouth..	75.1	1956 1977 1995	06-04-96	1.10
02320820	Santa Fe River near Monteocha, Fl.	Lat 29°50'49", long 82°15'51", NE1/4 sec. 35, T. 7 S., R. 20 E., Alachua County, Hydrologic Unit 03110206, at bridge on Rock Church Road, 3.8 mi northeast of Monteocha, and 68 mi upstream from mouth..	178	1977 1995	11-07-95 06-04-96	45.0 6.92
02320827	Monteocha Creek at Monteocha, Fl.	Lat 29°47'47", long 82°17'20", in NW <sup>1</sup> / <sub>4</sub> sec. 15, T. 8 S., R. 20 E., Alachua County, Hydrologic Unit 03110206, at culvert on State Highway 340, at Monteocha, Fl.	7.04	1958 1977 1995	11-07-95 06-04-96	0.03 < 0.01
02320846	Rhuda Branch near Monteocha, Fl.	Lat 29°49'47", long 82°20'03", in NE <sup>1</sup> / <sub>4</sub> sec. 6, T. 8 S., R. 20 E., Alachua County, Hydrologic Unit 03110206, at culvert on NW 192 Avenue, 0.3 mi south of Sunshine Lake, 3.2 mi northwest of Monteocha, and 4.3 mi east of La Crosse, Fl.	1.45	1976-77 1995	11-07-95 06-04-96	0.06 0.01
02320858	Rocky Creek near Monteocha, Fl.	Lat 29°48'02", long 82°22'18", in NW <sup>1</sup> / <sub>4</sub> sec. 13, T. 8 S., R. 20 E., Alachua County, Hydrologic Unit 03110206, at wooden bridge on county road 0.8 mi east of State Road 121, 1.5 mi west of State Road 231, 3.5 mi southeast of La Crosse, and 5.0 mi west of Monteocha, Fl	11.1	1976-77 1995	11-07-95 06-04-96	< 0.01 Dry
02320867	University Creek near La Crosse, Fl.	Lat 29°49'11", long 82°23'05", in SW <sup>1</sup> / <sub>4</sub> sec. 2, T. 8 S., R. 19 E., Alachua County, Hydrologic Unit 03110206, at culvert on State Highway 121, 1.3 mi north of the junction of State Highway 121 with County Road 340, and 1.9 mi southwest of La Crosse, Fl.	5.16	1977 1995	11-07-95 06-04-96	0.13 No Flow
02320870	Rocky Creek near La Crosse, Fl.	Lat 29°50'23", long 82°22'36", in NE <sup>1</sup> / <sub>4</sub> sec. 35, T. 7 S., R. 19 E., Alachua County, Hydrologic Unit 03110206, at culvert on State Highway 235, and 1.7 mi east of La Crosse, Fl.	22.6	1958 1967 1976-77 1992 1995	11-07-95 06-04-96	No Flow No Flow
02320873	Rocky Creek tributary near La Crosse, Fl.	Lat 29°50'23", long 82°22'48", in NE <sup>1</sup> / <sub>4</sub> sec. 35, T. 8 S, R. 19 E., Alachua County, Hydrologic Unit 03110206, at bridge on State Highway 235, and 1.5 mi east of La Crosse, Fl.	2.55	1958 1968 1995	11-07-95 06-04-96	Dry No Flow

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
ALACHUA COUNTY--Continued						
02321898	Santa Fe River at Oleno State Park, Fl.	Lat 29°54'51", long 82°34'48", in NE <sup>1</sup> / <sub>4</sub> sec. 2, T. 7 S., R. 17 E., Alachua County, Hydrologic Unit 03110206, at suspended foot bridge in park, 0.4 mi upstream from where river enters sink, 6.1 mi north of High Springs, and 36 mi upstream from mouth.	820	1961 1977-82 1989-92	06-06-96	59.9
02321970	Hornsby Springs near High Springs, Fl.	Lat 29°50'59", long 82°35'36", in SE <sup>1</sup> / <sub>4</sub> sec. 27, T. 7 S., R. 17 E., Alachua County, Hydrologic Unit 03110206, 0.9 mi upstream from confluence with Santa Fe River, and 1.6 mi north of High Springs, Fl.	I	1972 1975 1985 1990-91 1995	12-01-95	44.0
02322020	Turkey Creek Tributary at Hague, Fl.	Lat 29°46'15", long 82°25'47", in SE <sup>1</sup> / <sub>4</sub> sec. 20, T. 8 S., R. 19 E., Alachua County, Hydrologic Unit 03110206, at culvert on U. S. Highway 441, 0.8 mi west of Hague, 4.0 mi east of Alachua, and 15.2 mi northwest of Gainesville, Fl.	1.68	1995	11-07-95 06-04-96	0.94 1.50
02322049	Bad Dog Run near Alachua, Fl.	Lat 29°49'33", long 82°28'06", in NE <sup>1</sup> / <sub>4</sub> sec. 1, T. 8 S., R. 18 E., Alachua County, Hydrologic Unit 03110206, at culvert on County Road 239, and 2.6 mi northeast of Alachua, Fl.	0.49		11-07-95 06-04-96	Dry Dry
02322050	Shiloh Run near Alachua, Fl.	Lat 29°49'06", long 82°28'21", in SW <sup>1</sup> / <sub>4</sub> sec. 1, T. 8 S., R. 18 E., Alachua County, Hydrologic Unit 03110206, at culvert on County Road 239, 0.7 mi above mouth, and 2.8 mi northeast of Alachua, Fl.	0.32	1983-88 1995	11-07-95 06-04-96	0.06 Dry
02322060	Mill Creek near High Springs, Fl.	Lat 29°50'41", long 82°30'07", in SW <sup>1</sup> / <sub>4</sub> sec. 27, T. 7 S., R. 18 E., Alachua County, Hydrologic Unit 03110206, at culvert on Old Bellamy Road, 3 mi southeast of Traxler, 3.8 mi north of Alachua, and 5.7 mi east of High Springs, Fl.	4.4	1976 1995	11-07-95 06-04-96	0.14 0.08
02322064	Townsend Branch near Alachua, Fl.	Lat 29°51'17", long 82°30'55", in SE <sup>1</sup> / <sub>4</sub> sec. 37, T. 7 S., R. 18 E., Alachua County, Hydrologic Unit 03110206, at culvert on Old Bellamy Road, 2 mi southeast of Traxler, and 4.3 mi north of Alachua, Fl.	2.44	1995	11-07-95 06-04-96	Dry Dry
02322140	Poe Springs near High Springs Fl.	Lat 29°49'33", long 82°38'58", in NE <sup>1</sup> / <sub>4</sub> sec. 6, T. 8 S., R. 17 E., Alachua County, Hydrologic Unit 03110206, on left bank of Santa Fe River, 2.8 mi west of High Springs, Fl.	I	1917 1929 1932 1942 1946 1956 1961 1972 1995	12-01-95 08-22-96	50.2 61.3
BRADFORD COUNTY						
02320730	Alligator Creek at State Highway 230 at Starke, Fl.	Lat 29°56'33", long 82°06'15", in SE <sup>1</sup> / <sub>4</sub> sec. 28, T. 6 S., R. 22 E., Bradford County, Hydrologic Unit 03110206, at bridge on State Road 230, and 0.5 mi east of the junction of State Highway 230 with U. S. Highway 301 at Starke Fl.	17.7	1976 1995	11-07-95 06-04-96	7.89 0.04

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
BRADFORD COUNTY--Continued						
02320732	Alligator Creek at Starke, Fl.	Lat 29°56'10", long 82°06'43", in NW1/4 sec. 33, T. 6 S., R. 22 E., Bradford County, Hydrologic Unit 03110206, at bridge on U.S. Highway 301 at Starke, 0.5 mi south of intersection of U. S. Highway 301 and State Highway 100, and 13 mi upstream from mouth.	19.4	1956 1963-65 1967 1976-77 1982 1989-90 1992 1995	11-07-95 06-04-96	9.47 0.09
02320800	Sampson River at Sampson City, Fl.	Lat 29°55'07", long 82°12'39", in NW1/4 sec. 4, T. 7 S., R. 21 E., Bradford County, Hydrologic Unit 03110206, at culvert on State Highway 225, 0.4 mi downstream from Lake Sampson, 5.9 mi upstream from mouth, and 6.3 mi southwest of Starke, Fl..	59.7	1958-60 1965 1967 1975-77 1989-90 1992 1995	11-07-95 06-04-96	19.6 2.99
02320815	Sampson River at Graham, Fl	Lat 29°51'36", long 82°13'47", in NW1/4 sec. 29, T. 7 S., R. 21 E., Bradford County, Hydrologic Unit 03110206 at bridge on State Highway 18, 0.7 mi west of Graham, and 1.0 mi upstream from mouth.	74.3	1958 1975-77 1990-91 1995	11-07-95 06-03-96	22.8 4.28
02320849	Santa Fe River at Brooker, Fl.	Lat 29°52'43", long 82°20'12", in SW1/4 sec. 17, T. 7 S., R. 20 E., Bradford County, Hydrologic Unit 03110206, at bridge on State Highway 231, and 0.7 mi south of Brooker, Fl.	245	1956 1990-92 1995	11-07-95 06-03-96	47.9 6.97
02320898	Alligator Creek near Lawtey, Fl.	Lat 30°03'30", long 82°08'20", in SE1/4 sec. 18, T. 5 S., R. 22 E., Bradford County, Hydrologic Unit 03110206, at bridge on State Highway 225A, 2.8 mi upstream from mouth, and 4.0 mi west of Lawtey, Fl.	28.0	1958 1976-77 1992 1995	11-07-95 06-04-96	0.25 Dry
02320940	Water Oak Creek at U. S. Highway 301 near Starke, Fl.	Lat 29°58'55", long 82°05'56", in NW1/4 sec. 15, T. 6 S., R. 22 E., Bradford County, Hydrologic Unit 03110206, , at bridge on U. S. Highway 301, and 2.2 mi north of Starke, Fl.	5.15	1995	11-07-95 06-04-96	0.12 Dry
02320943	Water Oak Creek at County Road 233 near Starke, Fl.	Lat 29°59'50", long 82°06'49", in NW1/4 sec. 9, T. 6 S., R. 22 E., Bradford County, Hydrologic Unit 03110206, at bridge on County Road 233, and 3.7 mi north of Starke, Fl.	6.86	1976-77 1995	11-07-95 06-04-96	0.48 Dry
02320950	Water Oak Creek near Starke, Fl.	Lat 30°01'40", long 82°09'20", in NE1/4 sec. 36, T. 5 S., R. 21 E., Bradford County, Hydrologic Unit 03110206, at bridge on State Highway 16, 0.1 mi north of Hillburn Spring, 4.5 mi upstream from mouth, and 7.6 mi northwest of Starke, FL.	20.6	1958-60 1965 1967 1977 1989-90 1992 1995	11-07-95 06-04-96	0.43 Dry
02320956	Gum Creek near Lawtey, Fl.	Lat 30°00'45", long 82°11'14", in SE1/4 sec. 34, T. 5 S., R. 21 E., Bradford County, Hydrologic Unit 03110206, at bridge on County Road 229, 1.2 mi upstream from mouth at Water Oak Creek, and 7.2 mi southwest of Lawtey,Fl.	13.6	1976-77 1995	11-07-95 06-04-96	Dry 0.23 Dry

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
BRADFORD COUNTY--Continued						
02320960	Water Oak Creek near Lawtey, Fla.	Lat 30°01'50", Long 82°11'25", in SE1/4 sec. 27, T. 5 S., R. 21 E., Bradford County, Hydrologic Unit 03110206, at bridge on State Highway 225, 2.0 mi upstream from mouth, 3.4 mi southeast of Raiford, and 7.1 mi west of Lawtey, Fl.	39.0	1958 1976-77 1979 1989-90 1992 1995	11-07-95 06-04-96	1.96 0.52
COLUMBIA COUNTY						
02315100	Little Creek near Benton, Fl.	Lat 30°24'56", long 82°38'14", in SW1/4 sec. 8, T. 1 S., R. 17 E., Columbia County, Hydrologic Unit 03110201, at bridge on U. S. Highway 441, 5.1 mi southeast of Benton, and 15.7 mi northwest of Lake City, Fl.	39.8	1989-91 1995	11-21-95 06-05-96	3.04 0.38
02315155	Caney Flat Branch near Suwannee Valley, Fl.	Lat 30°19'34", long 82°33'18", in SW1/4 sec. 7, T. 2 S., R. 18 E., Columbia County, Hydrologic Unit 03110201, at culvert on Osceola National Forest Road 233, 0.3 mi north of forest observation tower and 9 mi northeast of Suwannee Valley, Fl.	9.9A	1995	11-21-95 06-05-96	1.26 Dry
02315160	Deep Creek at Drew Grade Road near Suwannee Valley, Fl.	Lat 30°21'10", long 82°33'51", in NE1/4 sec. 1, T. 2 S., R. 17 E., Columbia County, Hydrologic Unit 03110201, at bridge on Drew Grade Road, 3.2 mi east of U. S. Highway 441, and 9 mi northeast of Suwannee Valley, Fl.	71A	1995	11-21-95 06-05-96	7.79 No Flow
02315392	Robinson Creek near Suwannee Valley, Fl.	Lat 30°18'56", long 82°38'41", in NW1/4 sec. 18, T. 2 S., R. 17 E., Columbia County, Hydrologic Unit 03110201, at bridge on State Highway 246, 3.4 mi upstream from mouth, 4.0 mi northeast of Suwannee Valley, and 8.7 mi north of Lake City, Fl.	27.4	1967 1976-81 1983 1989-91 1995	11-21-95 06-05-96	2.98 0.18
02315470	Falling Creek near Winfield, Fl.	Lat 30°15'40", long 82°40'06", in NE1/4 sec. 1, T. 3 S., R. 16 E., Columbia County, Hydrologic Unit 03110201, at bridge on State Highway 131, 1.1 mi north of intersection of State Highway 131 and U. S. 41, 1.2 mi east of Winfield, and 5.1 mi north of City Hall in Lake City, Fl.	52.9	1977-82 1989-91 1995	11-21-95 06-05-96	6.57 0.02
02321600	Olustee Creek near Lulu, Fl.	Lat 30°05'42", long 82°28'25", in SW1/4 sec. 36, T. 4 S., R. 18 E., Columbia County, Hydrologic Unit 03110206, at bridge on State Highway 100, 1.4 mi southeast of Lulu, 7.4 mi upstream from Swift Creek, and 18 mi upstream from mouth.	49.1	1965-67 1969-73 1975-78 1989 1992 1995	11-07-95 06-04-96	1.25 0.11
02321890	Hammock Branch near Ft. White, Fl.	Lat 29°56'07", long 82°36'46", in SE1/4 sec. 28, T. 6 S., R. 17 E., Columbia County, Hydrologic Unit 03110206, at bridge on State Highway 18, and 6.1 mi east of Ft. White, Fl.	1.23	1967 1995	11-08-95 06-04-96	Dry Dry
02322000	Santa Fe River near High Springs, Fl.	Lat 29°50'33", long 82°37'52", in NE1/4 sec. 32, T. 7 S., R. 17 E., Columbia County, Hydrologic Unit 03110206, at bridge on U. S. Highway 27, 100 ft upstream from Atlantic Coast Line Railroad bridge, and 2 mi northwest of High Springs, Fl.	950	1929-72 1976-77 1989 1991 1995	06-06-96	231



DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
COLUMBIA COUNTY--Continued						
02322597	Clay Hole Creek near Lake City, Fl.	Lat 30°08'20", long 82°36'19", in SW1/4 sec. 15, T. 4 S., R. 17 E., Columbia County, Hydrologic Unit 03110206, at culvert on County Road 133, 0.2 mi north of County Road 252, and 3.2 mi south of Lake City, Fl.	3.40	1995	11-07-95 06-04-96	Dry Dry
02322613	Clay Hole Creek near Columbia, Fl.	Lat 30°06'50", long 82°39'34", in SW1/4 sec. 34, T. 4 S., R. 16 E., Columbia County, Hydrologic Unit 03110206, at culvert, 0.2 mi south of I-75 interchange on State Highway 47, 3.7 mi southwest of Columbia, and 5.5 mi south of Lake City, Fl.	28.3	1995	11-07-95 06-04-96	Dry Dry
02322655	Rose Creek near Lake City, Fl.	Lat 30°05'34", long 82°35'37", in SW1/4 sec. 35, T. 4 S., R. 17 E., Columbia County, Hydrologic Unit 03110206, at bridge on Hopeful Church Road, 0.5 mi east of U. S. Highway 441, 1.9 mi north of Mytris, and 6.2 mi east of Columbia, Fl.	15.1	1995	11-07-95 06-04-96	Dry Dry
02322660	Rose Creek near Columbia, Fl.	Lat 30°04'23", long 82°40'38", in SW1/4 sec. 12, T. 5 S., R. 16 E., Columbia County, Hydrologic Unit 03110206, at bridge on County Road, and 1.3 mi east of Columbia, Fl.	26.2	1965 1967 1975-77 1989 1992 1995	11-07-95 06-04-96	Dry Dry
DIXIE COUNTY						
02324166	Sand Hill Creek near Steinhatchee, Fl.	Lat 29°40'36", long 82°20'27", in SE <sup>1</sup> / <sub>4</sub> sec. 20, T. 9 S., R. 10 E., Dixie County, Hydrologic Unit 03110102, at bridge on State Highway 358, 1.3 mi upstream from mouth, 1.8 mi northeast of Jena, and 2.9 mi east of Steinhatchee, Fl.	69A	1988-89 1995	06-03-96	2.65
GILCHRIST COUNTY						
02322350	Blue Springs near High Springs, Fl.	Lat 29°49'47", long 82°40'59", in SE <sup>1</sup> / <sub>4</sub> sec. 35, T. 7 S., R. 16 E., Gilchrist County, Hydrologic Unit 03110206, 0.2 mi upstream from left bank of Santa Fe River, 1.0 mi upstream from July Springs, 4.1 downstream from U. S. Highway 27, 4.2 mi west of High Springs, 6.4 mi south of Fort White, and 21 mi upstream from the mouth of the Santa Fe River.	I	1975 1990 1995	12-01-95 08-22-96	39.4 68.3
02322400	Ginnie Springs near Fort White, Fl.	Lat 29°50'10", long 82°42'01", in NW <sup>1</sup> / <sub>4</sub> sec. 34, T. 7 S., R. 16 E., Gilchrist County, Hydrologic Unit 03110206, 0.1 mi upstream from Santa Fe River, 5.3 mi downstream from U. S. Highway 27, 6.0 mi south of Fort White, and 20 mi upstream from the mouth of the Santa Fe River.	I	1975 1977 1993 1995	12-01-95 08-21-96	58.7 50.5
02322590	Cow Creek near Fort White, Fl.	Lat 29°51'21", long 82°45'24", in SW <sup>1</sup> / <sub>4</sub> sec. 19, T. 7 S., R. 16 E., Gilchrist County, Hydrologic Unit 03110206, at culvert on State Highway 138, 1.0 mi west of State Highway 47, 4.3 mi upstream from mouth, and 5.2 mi south of Fort White, Fl.	I	1975-77 1989-90 1992	11-21-95	0.53

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
GILCHRIST COUNTY--Continued						
02322800	Santa Fe near Hildreth, Fl.	Lat 29°54'41", long 82°51'38", in NE <sup>1</sup> / <sub>4</sub> sec. 1 T. 7 S., R. 14 E., Gilchrist County, Hydrologic Unit 03110205, at bridge on U. S. Highway 129, 2.4 mi upstream from mouth, and 4.4 mi southeast of Hildreth, Fl.	1374	1956 1977 1990 1992	12-06-95	1370
02322997	Rock Bluff Spring near Bell, Fl.	Lat 29°47'50", long 82°55'10", in SW <sup>1</sup> / <sub>4</sub> sec. 9 T. 8 S., R. 14 E., Gilchrist County, Hydrologic Unit 03110205, on left bank of Suwannee River, and 4.4 mi northwest of Bell, Fl.	I	1943 1956 1961 1973 1977 1990-91 1993 1995	12-05-95	31.5
02323095	Sun Spring near Wane, Fl.	Lat 29°42'16", long 82°56'01", in NW <sup>1</sup> / <sub>4</sub> sec. 17 T. 9 S., R. 14 E., Gilchrist County, Hydrologic Unit 03110205, on left bank of Suwannee River, 1.1 mi southeast of Wane, and 45.3 mi upstream from the mouth of the Suwannee River.	I	1973 1995	12-05-95	29.8
02323150	Hart Springs near Wilcox, Fl.	Lat 29°40'30", long 82°57'07", in NW <sup>1</sup> / <sub>4</sub> sec. 30, T. 9 S., R. 14 E., Gilchrist County, Hydrologic Unit 03110205, on left bank of Suwannee River, and 4.8 mi north of Wilcox, Fl.	I	1932 1946 1956 1961 1973 1977 1995	12-05-95	80.0
HAMILTON COUNTY						
02314970	Rocky Creek near Cypress Creek, Fl.	Lat 30°35'52", long 82°46'36", in SW <sup>1</sup> / <sub>4</sub> sec. 25, T. 2 N., R. 15 E., Hamilton County, Hydrologic Unit 03110201, at bridge on dirt road, 2.2 mi south of Cypress Creek, 3.8 mi south of Florida-Georgia State Line, and 4.4 mi upstream from mouth.	17A	1995	11-21-95 06-05-96	No Flow No Flow
02314982	Cypress Creek near Cypress Creek, Fl.	Lat 30°33'34", long 82°45'38", in SW <sup>1</sup> / <sub>4</sub> sec. 24, T. 2 N., R. 15 E., Hamilton County, Hydrologic Unit 03110201, at bridge on dirt road, 1.4 mi south of Cypress Creek, 2.2 mi upstream from confluence with Rocky Creek, 2.7 mi above Woodpecker Road, and 3 mi south of the Florida-Georgia State Line .	27A	1995	11-21-95 06-05-96	No Flow No Flow
02314986	Rocky Creek near Belmont, Fl.	Lat 30°32'40", long 82°44'02", in SE <sup>1</sup> / <sub>4</sub> sec. 29, T. 2 N., R. 16 E., Hamilton County, Hydrologic Unit 03110201, at bridge on Woodpecker Road, 1.4 mi upstream from mouth, 3.0 mi north of Belmont, 12 mi east of Bakers Mill and, 25.6 mi northeast of Jasper, Fl.	50A	1970-84 1989-91 1995	11-21-95 06-05-96	0.48 0.08
02315005	Hunter Creek near Belmont Fl.	Lat 30°29'08", long 82°42'44", in SE <sup>1</sup> / <sub>4</sub> sec. 16, T. 1 N., R. 16 E., Hamilton County, Hydrologic Unit 03110201, at bridge on State Highway 135, 0.8 mi upstream from mouth and, 1.6 mi southeast of Belmont, Fl.	I	1970-91 1995	11-21-95 06-05-96	3.56 3.08

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
HAMILTON COUNTY--Continued						
02315090	Roaring Creek near Belmont, Fl.	Lat 30°25'44", long 82°41'05", in SE <sup>1</sup> / <sub>4</sub> sec. 2, T. 1 S., R. 16 E., Hamilton County, Hydrologic Unit 03110201, at bridge on State Highway 135, 1.6 mi upstream from mouth, and 5.8 mi southeast of Belmont, Fl.	17.5	1970 1977-78 1984-89 1991 1995	11-21-95 06-05-96	0.52 0.02
02315520	Swift Creek at Facil, Fl.	Lat 30°22'14", long 82°48'00", in SE <sup>1</sup> / <sub>4</sub> sec. 27, T. 1 S., R. 15 E., Hamilton County, Hydrologic Unit 03110201, at bridge on U. S. Highway 41, 0.5 mi northwest of Facil, 2.8 mi upstream from mouth, and 3.0 mi southeast of Genoa, Fl.	I	1969-90 1995	11-06-95 06-05-96	30.3 35.9
02315542	Camp Branch near Genoa, Fl.	Lat 30°24'25", long 82°51'54", in NE <sup>1</sup> / <sub>4</sub> sec. 13, T. 1 S., R. 14 E., Hamilton County, Hydrologic Unit 03110201, at culvert on State Highway 132, 1.8 mi west of Genoa, 1.8 mi south of Camps Still, and 3.5 mi upstream from mouth.	6.1	1979-83 1995	11-06-95 06-05-96	0.20 Dry
02315603	Sugar Creek at County Road near Suwannee Springs, Fl.	Lat 30°26'14", long 82°55'22", in NW <sup>1</sup> / <sub>4</sub> sec. 4, T. 1 S., R. 14 E., Hamilton County, Hydrologic Unit 03110201, at bridge on dirt road, 0.5 mi west of I-75, 0.7 mi east of U. S. Highway 129, and 3.1 mi north of Suwannee Springs, Fl.	0.50	1995	11-21-95 06-05-96	0.02 0.11
02315604	Sugar Creek at County Road 132 near Suwannee Springs, Fl.	Lat 30°24'28", long 82°55'45", in SW <sup>1</sup> / <sub>4</sub> sec. 9, T. 1 S., R. 14 E., Hamilton County, Hydrologic Unit 03110201, at culvert on County Road 132, 0.3 mi east of U. S. Highway 129, and 1.1 mi north of Suwannee Springs, Fl.	4.16	1995	11-06-95 06-05-96	0.81 0.44
02315605	Sugar Creek at Old U. S. Highway 129 near Suwannee Springs, Fl.	Lat 30°23'54", long 82°56'01", in SE <sup>1</sup> / <sub>4</sub> sec. 17, T. 1 S., R. 14 E., Hamilton County, Hydrologic Unit 03110201, at bridge on Old U. S. Highway 129, 0.4 mi north of Suwannee Springs, Fl.	4.96	1995	11-07-95	1.32
02315606	Ratliff Creek near Suwannee Springs, Fl.	Lat 30°25'21", long 82°56'33", in SW <sup>1</sup> / <sub>4</sub> sec. 5, T. 1 S., R. 14 E., Hamilton County, Hydrologic Unit 03110201, at bridge on Old Dominon Church Road, about 0.2 mi east of railroad crossing, 0.7 mi west of U. S. Highway 129, and 2.1 mi north of Suwannee Springs, Fl.	1.63	1995	11-07-95 06-05-96	0.31 0.13
02315613	Mitchell Creek near Suwannee Springs, Fl.	Lat 30°26'35", long 82°59'08", in SE <sup>1</sup> / <sub>4</sub> sec. 35, T. 1 S., R. 13 E., Hamilton County, Hydrologic Unit 03110201, at bridge on County Road 158, 1.1 mi north of Suwannee River, 3.1 mi west of U. S. Highway 129, and 4.7 mi northwest of Suwannee Springs, Fl.	3.29	1995	11-07-95 06-05-96	0.38 0.39
02315620	Holton Spring near Ft. Union, Fl.	Lat 30°26'15", long 83°03'27", in SW <sup>1</sup> / <sub>4</sub> sec. 31, T. 1 S., R. 13 E., Hamilton County, Hydrologic Unit 03110201, at spring at head of Holton Creek, 0.7 mi upstream from mouth, 2.2 mi north of Fort Union, and 139 mi upstream from the mouth of the Suwannee River.	I	1976 1985 1995	11-28-95	Dry

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
HAMILTON COUNTY--Continued						
02315642	Tiger Creek near Jasper, Fl.	Lat 30°30'09", long 82°59'11", in NE <sup>1</sup> / <sub>4</sub> sec. 11, T. 1 N., R. 13 E., Hamilton County, Hydrologic Unit 03110201, at bridge on State Highway 259, 1.5 mi south of U. S. Highway 41, and 2.0 mi southwest of Jasper, Fl.	37A	1995	06-05-96	No Flow
023156482	Alapaha Rise near Fort Union, Fl.	Lat 30°26'14", long 83°05'13", in SE <sup>1</sup> / <sub>4</sub> sec. 35, T. 1 N., R. 12 E., Hamilton County, Hydrologic Unit 03110202, 300 ft below main pool, 10 mi southwest of Jasper, and 11.3 mi south of Jennings, Fl.	I	1977-83 1985 1995	11-28-95	325
02317615	Apalahoochee River near Jennings, Fl.	Lat 30°36'58", long 83°04'48", in NE <sup>1</sup> / <sub>4</sub> sec. 224, T. 2 N., R. 12 E., Hamilton County, Hydrologic Unit 03110202, at bridge on county road, 0.3 mi south of Florida-Georgia State Line, and 1.4 mi northeast of Jennings, Fl.	240A	1995	11-21-95	33.3
02317620	Alapaha River near Jennings, Fl.	Lat 30°35'53", long 83°04'24", in SW <sup>1</sup> / <sub>4</sub> sec. 1, T. 2 N., R. 12 E., Hamilton County, Hydrologic Unit 03110202, at bridge on State Highway 150, 150 ft upstream from Southern Railroad bridge, 1400 ft downstream from Apalahoochee River, 1.5 mi south of the Florida-Georgia State Line, and 1.6 mi southeast of Jennings, Fl.	1680	1923 1928 1976-87 1990-91 1995	11-21-95 06-05-96	74.0 128
02317625	Alligator Creek near Jennings, Fl	Lat 30°35'47", long 83°01'07", in NE <sup>1</sup> / <sub>4</sub> sec. 9, T. 2 N., R. 13 E., Hamilton County, Hydrologic Unit 03110202, at bridge on County Road 150, 0.4 mi west of State Road 100, 1.4 mi south of Florida-Georgia State Line, and 4.7 mi east of Jennings, Fl.	30A	1995	11-21-95 06-05-96	0.10 No Flow
02317630	Alapaha River near Jasper, Fl.	Lat 30°31'42", long 83°02'17", in SE <sup>1</sup> / <sub>4</sub> sec. 32, T. 2 N., R. 13 E., Hamilton County, Hydrologic Unit 03110202, at bridge on U. S. Highway 41, 5.4 mi west of Jasper, 6.3 mi southeast of Jennings, and 11 mi upstream from mouth	1720	1948 1966-77 1979-82 1985-89 1991 1994-95	11-21-95	Dry
02317635	Little Alapaha River near Bakers Mill, Fl.	Lat 30°35'07", long 82°56'40", in SW <sup>1</sup> / <sub>4</sub> sec. 8, T. 2 N., R. 14 E., Hamilton County, Hydrologic Unit 03110202, at bridge on County Road 51, 0.6 mi northwest of Bakers Mill, and 1.9 mi south of Florida-Georgia State Line.	30A	1995	11-21-95 06-05-96	0.50 No Flow
02317637	Little Alapaha River near Avoca, Fl.	Lat 30°33'55", long 82°59'14", in NE <sup>1</sup> / <sub>4</sub> sec. 23, T. 2 N., R. 13 E., Hamilton County, Hydrologic Unit 03110202, at bridge on U. S. Highway 129, and 2.1 mi southeast of Avoca, Fl.	21.6	1965 1967 1995	11-21-95 06-05-96	0.50 0.08
302227082 514800	Jerry Branch near Genoa, Fl.	Lat 30°22'27", long 82°59'14", in NE <sup>1</sup> / <sub>4</sub> sec. 25, T. 1 S., R. 14 E., Hamilton County, Hydrologic Unit 03110201, at culvert on Interstate Highway I-75, and 2.5 mi southwest of Genoa, Fl.	I	1977 1989	06-05-96	No Flow

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
LAFAYETTE COUNTY						
02319794	Mill Creek near Dowling Park, Fl.	Lat 30°15'18", long 83°17'00", in NW <sup>1</sup> / <sub>4</sub> sec. 1, T. 3 S., R. 10 E., Lafayette County, Hydrologic Unit 03110205, at bridge on State Highway 53, 550 ft south of church and cemetery, 0.4 mi south of Madison-Lafayette County Line, 0.6 mi south of fire tower, and 2.7 mi west of Dowling Park, Fl.	26A		11-07-95 06-06-96	2.01 3.36
02319795	Mill Creek Tributary near Dowling Park, Fl.	Lat 30°15'15", long 83°17'00", in NW <sup>1</sup> / <sub>4</sub> sec. 1, T. 3 S., R. 10 E., Lafayette County, Hydrologic Unit 03110205, at bridge on State Highway 53, 900 ft south of church and cemetery, 0.5 mi south of Madison-Lafayette County Line, 0.7 mi south of fire tower, and 2.7 mi west of Dowling Park, Fl.	5A		11-07-95 06-06-96	2.18 5.00
02319915	Allen Mill Pond Spring near Dell, Fl.	Lat 30°09'45", long 83°14'33", in SW <sup>1</sup> / <sub>4</sub> sec. 5, T. 4 S., R. 11 E., Lafayette County, Hydrologic Unit 03110205, on right bank of the Suwannee River, 0.6 mi upstream from mouth, 2.0 mi north of Dell, 5.7 mi south of Dowling Park, 8.0 mi northwest of Mayo, and 105 mi upstream from the mouth of the Suwannee River.	I	1974 1977 1995	11-29-95	8.87
02319950	Blue Spring near Dell, Fl.	Lat 30°07'33", long 83°13'34", in NW <sup>1</sup> / <sub>4</sub> sec. 21, T. 4 S., R. 11 E., Lafayette County, Hydrologic Unit 03110205, on west bank of the Suwannee River, 1.1 mi southeast of Dell, 5.3 mi northwest of Mayo, and 102 mi upstream from the mouth of the Suwannee River.	I	1974 1977 1992-93 1995	11-29-95	44.8
02320050	Troy Spring near Branford, Fl.	Lat 30°00'21", long 82°59'51", in SE <sup>1</sup> / <sub>4</sub> sec. 34, T. 5 S., R. 13 E., Lafayette County, Hydrologic Unit 03110205, on right bank of Suwannee River, and 5.3 mi northwest of Branford, Fl.	I	1942 1961 1963 1974 1977 1985 1990 1993 1995	11-30-95	97.8
02320100	Convict Spring near Mayo, Fl.	Lat 30°05'18", long 83°05'46", in SE <sup>1</sup> / <sub>4</sub> sec. 35, T. 4 S., R. 12 E., Lafayette County, Hydrologic Unit 03110205, on right bank of the Suwannee River, 4.7 mi northeast of Mayo, and 91 mi upstream from the mouth of the Suwannee River.	I	1974 1992 1995	11-29-95	0.17
02320240	Mearson Spring near Mayo, Fl.	Lat 30°02'28", long 83°01'32", in NE <sup>1</sup> / <sub>4</sub> sec. 21, T. 5 S., R. 13 E., Lafayette County, Hydrologic Unit 03110205, on right bank of the Suwannee River, 5.1 mi west of O'Brien, 9.1 mi east of Mayo, and 84 mi upstream from the mouth of the Suwannee River.	I	1976 1977 1993 1995	11-30-95	58.6
02320260	Ruth Spring near Branford, Fl.	Lat 29°59'44", long 82°58'38", in NE <sup>1</sup> / <sub>4</sub> sec. 1, T. 6 S., R. 13 E., Lafayette County, Hydrologic Unit 03110205, on right bank of Suwannee River, 3.6 mi southwest of O'Brien, 4.1 mi northwest of Branford, and 80 mi upstream from the mouth of the Suwannee River.	I	1974 1995	11-30-95	3.14

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
LAFAYETTE COUNTY--Continued						
02320550	North Mallory Swamp Drain near Branford, Fl.	Lat 29°54'18", long 82°57'11", in NW <sup>1</sup> / <sub>4</sub> sec. 6, T. 7 S., R. 14 E., Lafayette County, Hydrologic Unit 03110205, at culvert on State Highway 349, 3.1 mi south of U. S. Highway 27, and 3.7 mi southwest of Branford, Fl.	8.5A	1995	11-07-95 06-04-96	0.33 0.33
02322880	Turtle Spring near Hatchbend, Fl.	Lat 29°50'55", long 82°53'24", in NW <sup>1</sup> / <sub>4</sub> sec. 26, T. 7 S., R. 14 E., Lafayette County, Hydrologic Unit 03110205, on right bank of the Suwannee River, 0.2 mi northeast of Fletcher Spring, 1.4 mi east of Hatchbend, and 61.5 mi upstream from the mouth of the Suwannee River.	I	1973 1977 1995	11-30-95	20.8
02322990	Hatchbend Drain near Branford, Fl.	Lat 29°50'28", long 82°58'03", in SE <sup>1</sup> / <sub>4</sub> sec. 25, T. 7 S., R. 13 E., Lafayette County, Hydrologic Unit 03110205, at culvert on State Highway 349, 1.1 mi north of Lafayette-Dixie county line, 3.0 mi west of Hatchbend, and 9.4 mi south of Branford, Fl.	12A	1995	11-07-95 06-04-96	Dry Dry
02323840	Steinhatchee River near Cooks Hammock, Fl.	Lat 29°53'27", long 83°15'00", in NW <sup>1</sup> / <sub>4</sub> sec. 8, T. 7 S., R. 10 E., Lafayette County, Hydrologic Unit 03110202, at culverts on County Road 357, 3.1 mi south of Cooks Hammock, and 16.4 mi north of Steinhatchee Fl.	56A	1995	11-07-95 06-04-96	2.46 4.35
02323870	Steinhatchee River near Mayo, Fl.	Lat 29°50'32", long 83°18'30", in SE <sup>1</sup> / <sub>4</sub> sec. 27, T. 7 S., R. 10 E., Lafayette County, Hydrologic Unit 03110102, at bridge on graded road, and 16.6 mi southwest of Mayo, Fl.	85.5	1956 1965-67 1989-91 1995	11-07-95 06-04-96	1.88 3.54
02323883	Kettle Creek Overflow near Mayo, Fl.	Lat 29°51'04", long 83°18'37", in NE <sup>1</sup> / <sub>4</sub> sec. 27, T. 7 S., R. 10 E. Lafayette County, Hydrologic Unit 03110102, at culvert on State Highway 51, and 16.5 mi southwest of Mayo, Fl.	B	1995	11-07-95 06-04-96	Dry No Flow
02323884	Kettle Creek at North Bridge near Mayo, Fl.	Lat 29°50'38", long 83°18'41", in SE <sup>1</sup> / <sub>4</sub> sec. 27, T. 7 S., R. 10 E., Lafayette County, Hydrologic Unit 03110102, at bridge on State Highway 51, and 17 mi southwest of Mayo, Fl.	B	1956 1965-67 1995	11-07-95 06-04-96	0.93 0.48
02323940	Kettle Creek at South Bridge near Mayo, Fl.	Lat 29°50'20", long 83°18'54", in SE <sup>1</sup> / <sub>4</sub> sec. 27, T. 7 S., R. 10 E., Lafayette County, Hydrologic Unit 03110102, at bridge on State Highway 51, and 17.3 mi southwest of Mayo, Fl.	B	1956 1966-67 1995	11-07-95 06-04-96	0.38 0.28
LEVY COUNTY						
02313400	Waccasassa River near Bronson, Fl.	Lat 29°28'32", long 82°42'58", in NE <sup>1</sup> / <sub>4</sub> sec. 4, T. 12 S., R. 16 E., Levy County, Hydrologic Unit 03110101, at bridge on U. S. Highway Alternate 27, 2.5 mi upstream from Little Waccasassa River, 5 mi northwest of Bronson, and 28 mi upstream from mouth.	220A	1961-78 1980-86 1995	06-04-96	<5.00
02313448	Little Waccasassa River near Bronson, Fl.	Lat 29°28'34", long 82°41'13", in NW <sup>1</sup> / <sub>4</sub> sec. 2, T. 12 S., R. 16 E., Levy County, Hydrologic Unit 03110101, at bridge on U. S. Highway Alternate 27, 0.3 mi west of junction of State Highway 339, 2.8 mi upstream from mouth, and 3.7 mi northwest of Bronson, Fl.	18.0	1964-82 1989 1995	06-04-96	No Flow

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
LEVY COUNTY--Continued						
02313500	Waccasassa River near Otter Creek, Fl.	Lat 29°21'25", long 82°44'06", in NW <sup>1</sup> / <sub>4</sub> sec. 17, T. 13 S., R. 16 E., Levy County, Hydrologic Unit 03110101, at bridge on State Highway 24, and 2.8 mi northeast of Otter Creek, Fl.	300A	1945-54 1956 1967 1995	11-07-95 06-04-96	27.3 17.9
02313522	Magee Branch near Bronson, Fl.	Lat 29°21'04", long 82°38'17", in SW <sup>1</sup> / <sub>4</sub> sec. 17, T. 17 S., R. 13 E., Levy County, Hydrologic Unit 03110101, at culvert on State Highway 343, 6.6 mi south of Bronson, and 7.4 mi upstream from mouth.	43.3	1981-82 1989 1995	06-04-96	No Flow
02313614	Wekiva River near Gulf Hammock, Fl.	Lat 29°16'41", long 82°41'15", in SW <sup>1</sup> / <sub>4</sub> sec. 11, T. 14 S., R. 16 E., Levy County, Hydrologic Unit 03110101, at culvert on State Highway 343, and 2.8 mi northeast of Gulf Hammock, Fl.	30.1	1932 1981-82 1989-90 1995	06-04-96	67.8
02314000	Otter Creek at Otter Creek, Fl.	Lat 29°19'08", long 82°47'03", in SW <sup>1</sup> / <sub>4</sub> sec. 26, T. 13 S., R. 15 E., Levy County, Hydrologic Unit 03110101, at bridge on State Highway 24, and 1.1 mi southwest of Otter Creek, Fl.	300A	1945-54 1956 1964 1995	06-04-96	<0.01
02314098	Cow Creek near Gulf Hammock, Fl.	Lat 29°12'37", long 82°41'50", in NW <sup>1</sup> / <sub>4</sub> sec. 4, T. 15 S., R. 16 E., Levy County, Hydrologic Unit 03110101, at bridge on U. S. Highway 19, and 3.3 mi southeast of Gulf Hammock, Fl.	19.5	1964-65 1967 1981-82 1989 1995	06-04-96	1.04
02314134	Sand Slough near Lebanon Station, Fl.	Lat 29°11'17", long 82°41'01", in SW <sup>1</sup> / <sub>4</sub> sec. 10, T. 15 S., R. 16 E., Levy County, Hydrologic Unit 03110101, at culvert on U. S. Highway 19, and 3.3 mi northwest of Lebanon Station, Fl.	32.3	1964 1981-82 1989 1995	06-04-96	0.01
02314170	Tenmile Creek near Dunnellon, Fl.	Lat 29°06'27", long 82°33'27", in NE <sup>1</sup> / <sub>4</sub> sec. 11, T. 16 S., R. 17 E., Levy County, Hydrologic Unit 03110101, at culvert on State Highway 336, 1.7 mi southeast of Tidewater, 7.4 mi northwest of Dunnellon, and 7.7 mi upstream from mouth.	3.7A	1981-82 1995	06-04-96	<0.01
02314200	Tenmile Creek at Lebanon Station, Fl.	Lat 29°09'39", long 82°38'21", in SE <sup>1</sup> / <sub>4</sub> sec. 24, T. 15 S., R. 16 E., Levy County, Hydrologic Unit 03110101, at bridge on U. S. Highways 19 and 98, 0.2 mi south of Lebanon Station, 9.4 mi upstream from mouth, and 13 mi northwest of Dunnellon, Fl.	26.0A	1963-93 1995	06-04-96	2.60
02314205	Horse Hole Creek near Lebanon Station, Fl.	Lat 29°08'01", long 82°38'14", in SE <sup>1</sup> / <sub>4</sub> sec. 24, T. 15 S., R. 16 E., Levy County, Hydrologic Unit 03110101, at culvert on U. S. Highways 19 and 98, 2.7 mi south of Lebanon Station, 9.4 mi upstream from mouth, and 10.5 mi northwest of Dunnellon, Fl.	8.1	1963-93 1995	06-04-96	0.13
02323502	Fannin Spring near Wilcox, Fl.	Lat 29°35'20", long 82°56'00", in NW <sup>1</sup> / <sub>4</sub> sec. 29, T. 10 S., R. 14 E., Levy County, Hydrologic Unit 03110205, on left bank of the Suwannee River, and 1.8 mi southwest of Wilcox, Fl.	I	1931-32 1943 1956 1961 1963 1972-73 1977 1985 1990 1995	12-05-95	108

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
LEVY COUNTY--Continued						
02323566	Manatee Springs near Chiefland, Fl.	Lat 29°29'22", long 82°58'37", in SE <sup>1</sup> / <sub>4</sub> sec. 26, T. 11 S., R. 13 E., Levy County, Hydrologic Unit 03110205, on left bank of the Suwannee River, and 7.2 mi west of Chiefland, Fl.	I	1932 1943 1946 1956 1961 1963 1972 1977 1985 1990 1995	12-05-95	194
MADISON COUNTY						
02319302	Blue Springs near Madison, Fl.	Lat 30°28'49", long 83°14'40", in SW <sup>1</sup> / <sub>4</sub> sec. 17, T. 1 N., R. 11 E., Madison County, Hydrologic Unit 03110203, on right bank of the Withlacoochee River, and 10.2 mi east of Madison, Fl.	I	1932 1946 1956 1961 1963 1974 1977 1985 1990-91 1993 1995	11-28-95	86.5
02319387	Norton Creek at Lee, Fl.	Lat 30°24'52", long 83°18'02", in NW <sup>1</sup> / <sub>4</sub> sec. 11, T. 1 S., R. 10 E., Madison County, Hydrologic Unit 03110203, at culverts on State Highway 255, and 0.3 mi south of Lee, Fl.	I	1964	11-07-95 06-04-96	Dry Dry
02319390	Norton Creek near Lee, Fl.	Lat 30°24'51", long 83°16'50", in NW <sup>1</sup> / <sub>4</sub> sec. 12, T. 1 S., R. 10 E., Madison County, Hydrologic Unit 03110203, at culvert on U. S. Highway 90, and 1.2 mi east of Lee, Fl.	I	1964	11-07-95 06-04-96	Dry Dry
02326245	Gum Creek near Greenville, Fl.	Lat 30°33'16", long 83°38'12", in SW <sup>1</sup> / <sub>4</sub> sec. 21, T. 2 N., R. 7 E., Madison County, Hydrologic Unit 03110103, at bridge on U. S. Highway 221, and 5.7 mi north of Greenville, Fl.	I	1956	11-07-95 06-04-96	No Flow No Flow
02326261	Little Aucilla River near Cherry Lake, Fl.	Lat 30°37'36", long 83°29'44", in SW <sup>1</sup> / <sub>4</sub> sec. 26, T. 3 N., R. 8 E., Madison County, Hydrologic Unit 03110103, at culvert on State Highway 253, 5.1 mi northwest of Cherry Lake, and 11.9 mi northwest of Madison, Fl.	13.9	1969-74 1984 1986 1991	11-07-95 06-04-96	No Flow No Flow
02326300	Little Aucilla River near Greenville, Fl.	Lat 30°31'10", long 83°35'14", in NE <sup>1</sup> / <sub>4</sub> sec. 2, T. 1 N., R. 7 E., Madison County, Hydrologic Unit 03110103, at bridge on State Highway 150, 4.5 mi northeast of Greenville, and 10 mi upstream from mouth.	90.7	1963-70 1972-74 1990-91	11-07-95 06-04-96	Dry No Flow
SUWANNEE COUNTY						
02315509	Tiger Branch near White Springs, Fl.	Lat 30°17'27", long 82°48'15", in NW <sup>1</sup> / <sub>4</sub> sec. 27, T. 2 S., R. 15 E., Suwannee County, Hydrologic Unit 03110201, at culvert on Adams Road, and 3.8 mi southwest of White Springs, Fl.	5.62	1995	11-08-95 06-05-96	Dry No Flow



DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
SUWANNEE COUNTY--Continued						
02315527	Caney Hammock Creek near Wellborn, Fl.	Lat 30°15'45", long 82°50'28", in NW <sup>1</sup> / <sub>4</sub> sec. 5, T. 3 S., R. 15 E., Suwannee County, Hydrologic Unit 03110201, at culvert on Hogan Road, 2.5 mi northwest of Wellborn, and 6.8 mi west of White Spring, Fl.	2.37	1995	11-07-95 06-05-96	0.25 0.08
02315528	Rocky Creek at 98th Terrace near Wellborn, Fl.	Lat 30°16'38", long 82°51'56", in SE <sup>1</sup> / <sub>4</sub> sec. 36, T. 2 S., R. 15 E., Suwannee County, Hydrologic Unit 03110201, at culvert on 98th Terrace, 1.0 mi west of Hogan Road, 4.0 mi northwest of Wellborn, and 7.2 mi southwest of White Springs, Fl.	12.5	1995	11-08-95 06-05-96	No Flow Dry
02315529	Rocky Creek near Live Oak, Fl.	Lat 30°17'58", long 82°51'47", in SE <sup>1</sup> / <sub>4</sub> sec. 24, T. 2 S., R. 14 E., Suwannee County, Hydrologic Unit 03110201, at culvert on Hogan Road, 0.1 mi west of junction of Hogan and Miller Roads, 6.6 mi west of White Springs, and 7.7 mi east of Live Oak, Fl.	19.0	1995	11-07-95 06-05-96	Dry No Flow
02315532	Rocky Creek near Houston, Fl.	Lat 30°18'56", long 82°50'42", in NW <sup>1</sup> / <sub>4</sub> sec. 17, T. 2 S., R. 15 E., Suwannee County, Hydrologic Unit 03110201, at bridge on State Highway 136, 2.5 mi upstream from mouth, and 5.3 mi northeast of Houston, Fl.	25.3	1965 1967 1979-83 1989-90 1995	11-08-95 06-05-96	Dry Dry
02315534	Rocky Creek tributary near Wellborn, Fl.	Lat 30°19'00", long 82°49'49", in SW <sup>1</sup> / <sub>4</sub> sec. 16, T. 2 S., R. 15 E., Suwannee County, Hydrologic Unit 03110201, at culvert on State Highway 136, 0.5 mi west of State Highway 137, 1.4 mi west of I-75, and 4.2 mi west of White Springs, Fl.	1.15	1995	11-08-95 06-05-96	Dry Dry
02319900	Charles Spring near Dell, Fl.	Lat 30°10'02", long 83°13'50", in NW <sup>1</sup> / <sub>4</sub> sec. 4, T. 4 S., R. 11 E., Suwannee County, Hydrologic Unit 03110205, on left bank of the Suwannee River, and 2.2 mi north of Dell, Fl.	I	1942 1956 1961 1974 1977 1995	11-29-95	0.82
02320003	Telford Springs at Luraville, Fl.	Lat 30°06'24", long 83°09'57", in SE <sup>1</sup> / <sub>4</sub> sec. 25, T. 4 S., R. 11 E., Suwannee County, Hydrologic Unit 03110205, on left bank of the Suwannee River, 1.0 mi south of Luraville, and 10.4 mi southeast of Dowling Park, Fl.	I	1942 1961 1985 1990-91 1995	11-29-95	28.8
02320060	Running Springs (West) near Luraville, Fl.	Lat 30°06'15", long 83°06'59", in SE <sup>1</sup> / <sub>4</sub> sec. 28, T. 4 S., R. 12 E., Suwannee County, Hydrologic Unit 03110205, on left bank of the Suwannee River, 2.8 mi southeast of Luraville, 4.5 mi northwest of Mayo, and 93 mi upstream from the mouth of the Suwannee River.	I	1974 1977 1995	11-29-95	14.4
02320290	Little River near Wellborn, Fl.	Lat 30°10'00", long 82°52'15", in SW <sup>1</sup> / <sub>4</sub> sec. 1, T. 4 S., R. 14 E., Suwannee County, Hydrologic Unit 03110205, at bridge on State Highway 252, 2.6 mi west of County Road 137, and 5.1 mi southwest of Wellborn, Fl.	20	1995	11-08-95 06-05-96	Dry Dry

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
SUWANNEE COUNTY--Continued						
02320292	Little River near McAlpin, Fl.	Lat 30°08'47", long 82°53'14", in NW <sup>1</sup> / <sub>4</sub> sec. 14, T. 4 S., R. 14 E., Suwannee County, Hydrologic Unit 03110205, at bridge on County Road 49, 1.4 mi south of State Highway 252, and 3.9 mi east of McAlpin, Fl.	29	1995	11-08-95 06-05-96	No Flow No Flow
02320295	Little River at 180th Street near McAlpin, Fl.	Lat 30°07'22", long 82°53'05", in SE <sup>1</sup> / <sub>4</sub> sec. 22, T. 4 S., R. 14 E., Suwannee County, Hydrologic Unit 03110205, at culvert on 180th Street, 1.3 mi west of County Road 49, 2.9 mi east of U. S. Highway 129, and 3.3 mi southeast of McAlpin, Fl.	36	1995	11-08-95 06-05-96	Dry Dry
02320299	Little River at 192nd Street near McAlpin, Fl.	Lat 30°06'06", long 82°54'22", in SW <sup>1</sup> / <sub>4</sub> sec. 27, T. 4 S., R. 14 E., Suwannee County, Hydrologic Unit 03110201, at culvert on 192nd Street, 1.6 mi west of County Road 49, 2.5 mi east of U. S. Highway 129, and 3.6 mi southeast of McAlpin, Fl.	45	1995	11-08-95 06-05-96	No Flow Dry
02320400	Little River Spring near Branford, Fl.	Lat 29°59'47", long 82°57'59", in NE <sup>1</sup> / <sub>4</sub> sec. 1, T. 6 S., R. 13 E., Suwannee County, Hydrologic Unit 03110205, on left bank of the Suwannee River, 3.2 southwest of O'Brien, 3.4 mi northwest of Branford, and 79 mi upstream from the mouth of the Suwannee River.	I	1974 1977 1993 1995	11-30-95	49.2
02322700	Ichetucknee Springs near Hildreth, Fl.	Lat 29°57'09", long 82°47'10", in NW <sup>1</sup> / <sub>4</sub> sec. 23, T. 6 S., R. 15 E., Suwannee County, Hydrologic Unit 03110206, at bridge on U. S. Highway 27, 1.0 mi east of Hildreth, 1.5 mi upstream from mouth, and 3.0 mi downstream from head of springs.	I	1917 1929-83 1989 1991 1995	11-30-95	276
TAYLOR COUNTY						
02324032	Steinhatchee River near Steinhatchee, Fl.	Lat 29°44'46", long 83°20'24", in NE <sup>1</sup> / <sub>4</sub> sec. 32, T. 8 S., R. 10 E., Taylor County, Hydrologic Unit 03110102, at falls, 0.7 mi east of State Highway 51, 6.2 mi north of Steinhatchee, and 9.8 mi upstream from mouth.	373A	1988-89 1995	11-07-95 06-03-96	42.4 57.8
02324130	Rocky Creek near Steinhatchee, Fl.	Lat 29°44'44", long 83°21'19", in NE <sup>1</sup> / <sub>4</sub> sec. 31, T. 8 S., R. 10 E., Taylor County, Hydrologic Unit 03110202, at bridge on State Highway 51, 0.6 mi upstream from mouth, and 6.0 mi north of Steinhatchee, Fl.	65A	1988-89 1995	06-03-96	<0.01
02324155	Boggy Creek near Steinhatchee, Fl.	Lat 29°43'59", long 83°21'33", in NE <sup>1</sup> / <sub>4</sub> sec. 6, T. 9 S., R. 10 E., Taylor County, Hydrologic Unit 03110202, at bridge on State Highway 51, 0.7 mi upstream from mouth, and 5.1 mi north of Steinhatchee, Fl.	34A	1988-89 1995	06-03-96	No Flow
02324474	Fenholloway River at County Road at Fenholloway, Fl.	Lat 29°04'35", long 83°29'47", in SE <sup>1</sup> / <sub>4</sub> sec. 2, T. 5 S., R. 8 E., Taylor County, Hydrologic Unit 03110102, at bridge on county road, and 0.1 mi southeast of Fenholloway, Fl.	I	1955-56 1966-67 1989	11-07-95 06-05-96	Dry Dry

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
TAYLOR COUNTY--Continued						
02325495	Spring Creek at Hampton Springs, Fl.	Lat 30°05'02", long 83°39'51", in SW <sup>1</sup> / <sub>4</sub> sec. 31, T. 4 S., R. 7 E., Taylor County, Hydrologic Unit 03110102, at bridge on U. S. Highway 98, 0.5 mi west of Hampton Springs, 0.9 mi from mouth, and 4.9 mi southwest of Perry, Fl. Previous station located 0.3 mi downstream, Spring Creek near Perry, Fl (02325500)	85A	1964-67 1980 1992-93	11-07-95 06-05-96	36.0 53.2
02325950	Econfina River near Eridu, Fl.	Lat 30°15'03", long 83°42'04", in SW <sup>1</sup> / <sub>4</sub> sec. 2, T. 3 S., R. 6 E., Taylor County, Hydrologic Unit 03110103, at bridge on U. S. Highway 27, and 4.4 mi southeast of Eridu, Fl.	I	1965-67 1989-91	11-07-95 06-05-96	2.99 11.6
300631083 374500	Woods Creek at Mouth near Perry, Fl.	Lat 30°06'31", long 83°37'45", in NE <sup>1</sup> / <sub>4</sub> sec. 28, T. 4 S., R. 7 E., Taylor County, Hydrologic Unit 03110102, 20 ft above mouth, 50 ft west of bridge over Spring Creek on County Road 359-B, 0.8 mi north of U. S. Highway 98, and 3.9 mi west of Perry, Fl.	I	1980	11-07-95 06-05-96	1.83 2.02
UNION COUNTY						
02320920	Turkey Creek at Raiford, Fl.	Lat 30°04'03", long 82°13'44", in NW <sup>1</sup> / <sub>4</sub> sec. 14, T. 2 S., R. 30 E., Union County, Hydrologic Unit 03110206, at bridge on State Highway 121, 0.5 mi east of Raiford, and 2.0 mi west of Raiford State Prison.	23.8	1995	11-21-95 06-04-96	5.57 0.29
02321195	Richard Creek at State Highway 121 near Lake Butler, Fl.	Lat 30°02'48", long 82°17'52", in NW <sup>1</sup> / <sub>4</sub> sec. 22, T. 5 S., R. 20 E., Union County, Hydrologic Unit 03110201, at bridge on State Highway 121, 2.1 mi northeast of State Highway 100, and 2.7 mi northeast of Lake Butler, Fl.	9.70	1995	11-21-95 06-04-96	1.69 No Flow
02321200	Richard Creek near Lake Butler, Fl.	Lat 30°01'10", long 82°18'59", in NE <sup>1</sup> / <sub>4</sub> sec. 32, T. 5 S., R. 20 E., Union County, Hydrologic Unit 03110206, at culvert on State Highway 100, 1.7 mi east of Lake Butler, and 4.9 mi upstream from mouth.	13.9	1957-60 1965 1967 1976 1989-90 1992 1995	11-21-95 06-04-96	2.32 No Flow
02321446	Fivemile Creek near Dukes, Fl.	Lat 29°58'05", long 82°22'49", in NE <sup>1</sup> / <sub>4</sub> sec. 14, T. 6 S., R. 19 E., Union County, Hydrologic Unit 03110206, at culvert on State Highway 239A, and 1.6 mi east of Dukes, Fl.	11.8	1967 1995	11-07-95 06-03-96	No Flow No Flow
02321450	Fivemile Creek near Worthington Springs, Fl.	Lat 29°57'23", long 82°22'34", in NE <sup>1</sup> / <sub>4</sub> sec. 23, T. 6 S., R. 19 E., Union County, Hydrologic Unit 03110206, at culvert on Dana Dixie Road, 0.6 mi east of State Highway 18A, 2.0 mi southeast of Dukes, and 3.2 mi northeast of Worthington Springs, Fl.	13.8	1976-77 1995	11-07-95 06-03-96	0.05 No Flow
02321520	Fern Creek tributary near Worthington Springs, Fl.	Lat 29°58'05", long 82°27'15", in NW <sup>1</sup> / <sub>4</sub> sec. 18, T. 6 S., R. 19 E., Union County, Hydrologic Unit 03110206, at culvert on County Road 239, 0.8 mi east of County Road 239A, 0.9 mi upstream from mouth, and 3.2 mi northwest of Worthington Springs, Fl.	5.67	1995	11-07-95 06-03-96	0.38 0.12

DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES

Station No.	Station Name	Location	Drainage area (mi)	Measured previously (water years)	Measurements	
					Date	Discharge (ft/s)
UNION COUNTY--Continued						
02321525	Fern Creek near Worthington Springs, Fl.	Lat 29°56'45", long 82°27'19", in NW <sup>1</sup> / <sub>4</sub> sec. 30, T. 6 S., R. 19 E., Union County, Hydrologic Unit 03110206, at culvert on County Road 18, 2.2 mi northwest of Worthington Springs, 3.0 mi downstream of Fern Pond, and 4.2 mi upstream from mouth.	13.6	1976 1995	11-06-95 06-03-96	0.30 0.04
02321542	Unnamed Tributary to Santa Fe River near Providence, Fl.	Lat 29°56'59", long 82°30'12", in SW <sup>1</sup> / <sub>4</sub> sec. 22, T. 6 S., R. 18 E., Union County, Hydrologic Unit 03110206, at culvert on County Road 18, 0.5 mi upstream from mouth, 4.3 mi southeast of Providence, and 4.8 mi northwest of Worthington Springs, Fl.	4.44	1995	11-06-95 06-03-96	Dry Dry
02321692	Swift Creek at County Road 231 near Lake Butler, Fl.	Lat 30°04'56", long 82°21'39", in SE <sup>1</sup> / <sub>4</sub> sec. 1, T. 5 S., R. 19 E., Union County, Hydrologic Unit 03110206, at bridge on County Road 231, 3.0 mi southeast of Palestine Lake, and 4.2 mi north of Lake Butler, Fl.	26.0	1976-77 1995	05-31-95 11-21-95 06-04-96	No Flow 5.36 No Flow
02321692	Swift Creek at County Road 231 near Lake Butler, Fl.	Lat 30°04'56", long 82°21'39", in SE <sup>1</sup> / <sub>4</sub> sec. 1, T. 5 S., R. 19 E., Union County, Hydrologic Unit 03110206, at bridge on County Road 231, 3.0 mi southeast of Palestine Lake, and 4.2 mi north of Lake Butler, Fl.	26.0	1976-77 1995	11-21-95 06-04-96	5.36 No Flow
02321700	Swift Creek near Lake Butler, Fl.	Lat 30°03'28", long 82°25'10", in NW <sup>1</sup> / <sub>4</sub> sec. 16, T. 5 S., R. 19 E., Union County, Hydrologic Unit 03110206, at bridge on State Highway 100, 5.0 mi northwest of Lake Butler, and 8.1 mi upstream from mouth.	46.0	1956-78 1989 1992 1995	11-21-95 06-04-96	10.3 Dry
02321730	Swift Creek near Lulu, Fl.	Lat 30°02'20", long 82°28'03", in NE <sup>1</sup> / <sub>4</sub> sec. 24, T. 5 S., R. 18 E., Union County, Hydrologic Unit 03110206, at culvert on State Highway 239, 2.1 mi north of State Highway 238, 4.6 mi upstream from mouth, and 5.0 mi south of State Highway 100 at Lulu, Fl.	63.3	1995	11-06-95 06-03-96	1.74 Dry
02321768	Swift Creek near Providence, Fl.	Lat 30°02'04", long 82°31'31", in SW <sup>1</sup> / <sub>4</sub> sec. 21, T. 5 S., R. 18 E., Union County, Hydrologic Unit 03110206, at bridge on County Road 241, 0.6 mi upstream from mouth, 2.3 mi north of State Highway 238, and 2.5 mi northeast of Providence, Fl.	78.7	1976 1992 1995	11-06-95 06-03-96	1.90 No Flow
02321800	Olustee Creek near Providence, Fl.	Lat 30°00'14", long 82°34'20", in NW <sup>1</sup> / <sub>4</sub> sec. 1, T. 6 S., R. 17 E., Union County, Hydrologic Unit 03110206, at bridge on State Highway 238, 1.5 mi west of Providence, 3.6 mi downstream from Swift Creek, and 6.8 mi upstream from mouth.	163	1956-61 1964-77 1989-90 1992 1995	11-07-95 06-04-96	3.63 0.87
02321896	Olustee Creek near Mikesville, Fl.	Lat 29°57'01", long 82°31'50", in SE <sup>1</sup> / <sub>4</sub> sec. 20, T. 6 S., R. 18 E., Union County, Hydrologic Unit 03110206, at bridge on County Road 18, 0.7 mi upstream from mouth, 3.3 mi south of Providence, and 4.3 mi east of Mikesville, Fl.	186	1976-77 1991 1995	11-06-95 06-03-96	No Flow No Flow

A-approximately

B-total combined flow of 3 Kettle Creek sites 100 sq mi approximately

I- indeterminate

## ELEVATION OF LAKES





OCHLOCKONEE RIVER BASIN  
02329900 LAKE TALQUIN NEAR BLOXHAM, FL

LOCATION.--Lat 30°23'15", long 84°38'45", in SW<sup>1</sup>/<sub>4</sub> 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 middownstream from Oklawaha Creek.

SURFACE AREA.--6,850 acres (10.7 mi<sup>2</sup>), at elevation 60.0 ft NGVD, from data provided by Florida Power Corporation.

DRAINAGE AREA.--1,700 mi<sup>2</sup>.

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, 72,100 acre-ft, Jan. 24-25, elevation, 68.73 ft; minimum daily contents, 63,700 acre-ft, Oct. 5, elevation, 67.87 ft.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.46	68.57	68.47	68.64	68.56	68.54	68.41	68.45	68.45	68.49	68.63	68.48
2	68.51	68.55	68.51	68.57	68.54	68.52	68.38	68.49	68.47	68.48	68.47	68.42
3	68.53	68.47	68.58	68.53	68.49	68.50	68.40	68.53	68.49	68.48	68.50	68.50
4	67.98	68.51	68.64	68.50	68.41	68.48	68.40	68.54	68.49	68.49	68.61	68.48
5	67.87	68.54	68.61	68.48	68.49	68.50	68.39	68.52	68.48	68.52	68.66	68.47
6	68.22	68.49	68.43	68.64	68.54	68.64	68.39	68.48	68.47	68.59	68.53	68.51
7	68.46	68.49	68.53	68.64	68.55	68.59	68.34	68.46	68.48	68.58	68.50	68.51
8	68.59	68.55	68.61	68.55	68.55	68.41	68.37	68.42	68.49	68.46	68.59	68.50
9	68.61	68.48	68.49	68.47	68.54	68.45	68.40	68.46	68.49	68.53	68.69	68.50
10	68.60	68.58	68.49	68.56	68.56	68.53	68.39	68.44	68.51	68.59	68.66	68.51
11	68.57	68.52	68.62	68.63	68.56	68.53	68.48	68.52	68.52	68.60	68.61	68.52
12	68.53	68.45	68.55	68.52	68.59	68.50	68.46	68.56	68.51	68.58	68.50	68.50
13	68.51	68.55	68.45	68.46	68.56	68.56	68.46	68.49	68.51	68.59	68.47	68.49
14	68.56	68.49	68.57	68.58	68.51	68.59	68.44	68.49	68.52	68.62	68.65	68.47
15	68.53	68.48	68.61	68.66	68.50	68.56	68.46	68.46	68.55	68.65	68.66	68.47
16	68.51	68.59	68.45	68.53	68.46	68.56	68.40	68.47	68.61	68.68	68.62	68.53
17	68.51	68.61	68.54	68.46	68.47	68.46	68.43	68.50	68.58	68.63	68.64	68.55
18	68.56	68.47	68.65	68.56	68.53	68.49	68.44	68.54	68.50	68.47	68.62	68.54
19	68.45	68.50	68.60	68.67	68.59	68.51	68.43	68.60	68.46	68.45	68.54	68.54
20	68.49	68.58	68.53	68.60	68.54	68.48	68.42	68.64	68.47	68.44	68.51	68.48
21	68.53	68.63	68.45	68.48	68.48	68.53	68.50	68.69	68.49	68.44	68.50	68.50
22	68.59	68.48	68.49	68.56	68.58	68.45	68.51	68.59	68.49	68.43	68.46	68.50
23	68.51	68.49	68.59	68.64	68.59	68.40	68.49	68.54	68.54	68.44	68.46	68.49
24	68.45	68.56	68.68	68.73	68.65	68.51	68.51	68.49	68.57	68.47	68.46	68.46
25	68.49	68.64	68.57	68.73	68.58	68.50	68.48	68.46	68.58	68.49	68.52	68.48
26	68.53	68.61	68.44	68.64	68.57	68.39	68.48	68.42	68.59	68.54	68.60	68.51
27	68.53	68.44	68.45	68.59	68.57	68.38	68.54	68.40	68.66	68.57	68.64	68.50
28	68.54	68.51	68.51	68.62	68.57	68.38	68.54	68.46	68.62	68.61	68.67	68.47
29	68.51	68.63	68.57	68.60	68.47	68.40	68.52	68.49	68.56	68.63	68.57	68.57
30	68.52	68.62	68.61	68.58	---	68.43	68.48	68.53	68.50	68.64	68.51	68.57
31	68.52	---	68.67	68.56	---	68.41	---	68.53	---	68.66	68.53	---
MEAN	68.48	68.54	68.55	68.58	68.54	68.49	68.44	68.51	68.52	68.54	68.57	68.50
MAX	68.61	68.64	68.68	68.73	68.65	68.64	68.54	68.69	68.66	68.68	68.69	68.57
MIN	67.87	68.44	68.43	68.46	68.41	68.38	68.34	68.40	68.45	68.43	68.46	68.42
CAL YR 1995	MEAN 68.47	MAX 68.68	MIN 67.40									
WTR YR 1996	MEAN 68.52	MAX 68.73	MIN 67.87									



## WELL DESCRIPTIONS AND GROUND-WATER DATA

WATER RESOURCES DATA FOR FLORIDA, 1994  
Volume 4: Northwest Florida

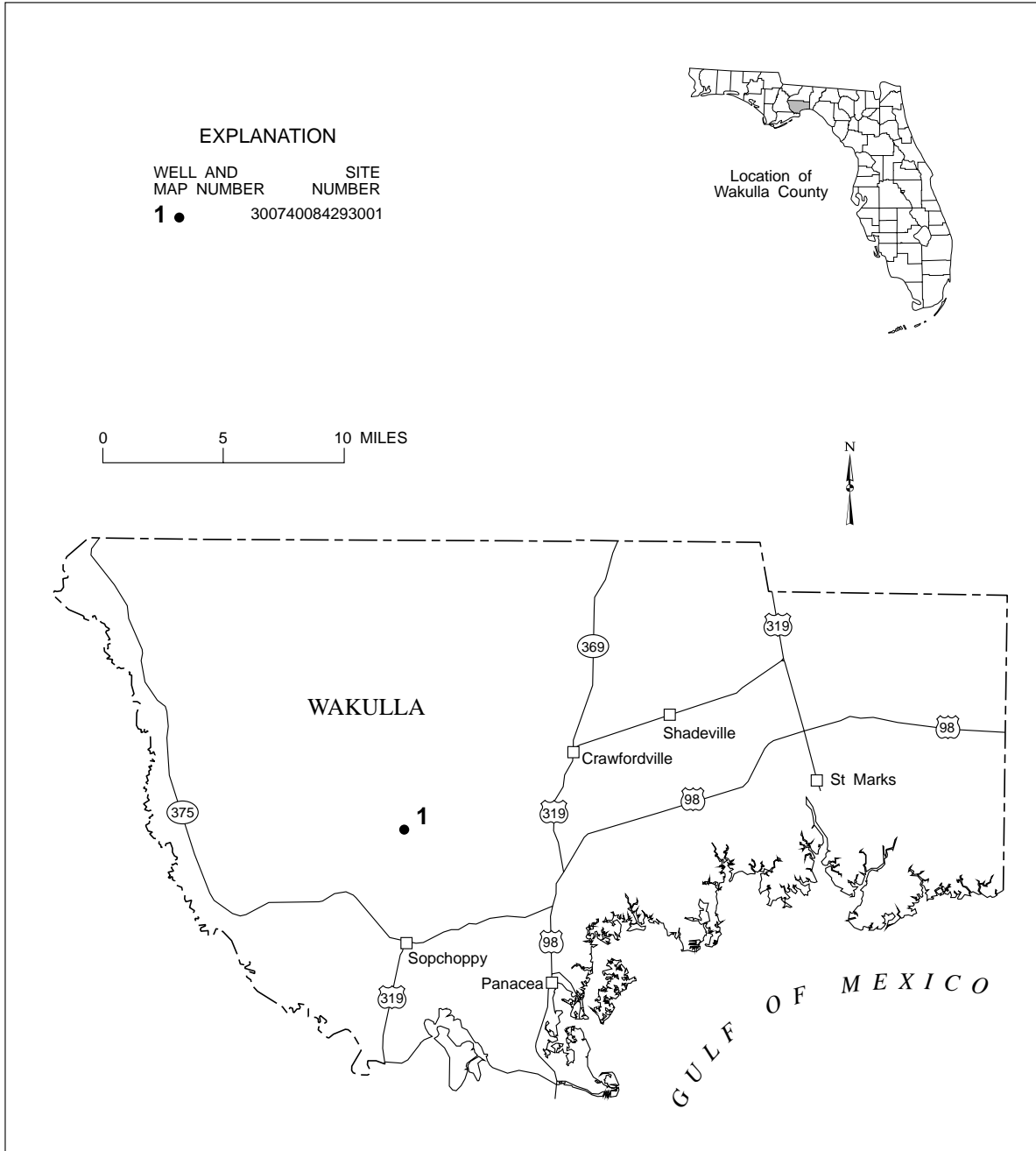


Figure 16. Location of wells in Wakulla County.

WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS  
WAKULLA COUNTY

WELL NUMBER.--300740084293001. USGS Observation Well near Crawfordville, FL.

LOCATION.--Lat 30°07'40", long 84°29'30", in NW 1/4 NE 1/4 NW 1/4 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.--Hawthorn 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. Measuring point: Top of recorder shelf, 2.90 ft above land-surface datum.

DATUM.--Land-surface datum is 46.91 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--January 1967 to current year. 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 1995 TO SEPTEMBER 1996  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.79	31.42	31.59	31.97	32.07	32.60	33.86	32.87	31.11	31.09	30.62	31.59
2	31.75	31.40	31.60	32.20	32.18	32.69	33.87	32.93	31.07	31.04	30.63	31.81
3	31.77	31.42	31.60	32.27	32.21	32.70	33.82	32.90	31.05	30.99	30.63	31.92
4	32.06	31.38	31.60	32.31	32.22	32.72	33.75	32.88	31.03	30.95	30.62	32.03
5	32.23	31.39	31.57	32.36	32.28	32.75	33.64	32.81	31.04	30.91	30.61	32.16
6	32.46	31.41	31.63	32.45	32.33	32.78	33.53	32.76	31.04	31.02	30.61	32.22
7	32.55	31.45	31.74	32.52	32.37	32.77	33.49	32.66	31.03	31.13	30.62	32.28
8	32.56	31.42	31.84	32.44	32.38	32.78	33.39	32.55	31.00	31.19	30.84	32.30
9	32.54	31.34	31.93	32.49	32.37	32.81	33.31	32.45	31.01	31.23	31.18	32.30
10	32.50	31.34	31.96	32.49	32.34	32.85	33.18	32.36	30.97	31.23	31.38	32.33
11	32.46	31.45	32.05	32.50	32.30	32.92	33.07	32.29	30.95	31.20	31.58	32.34
12	32.41	31.53	32.10	32.50	32.25	32.92	32.98	32.22	30.90	31.15	31.70	32.32
13	32.37	31.64	32.11	32.42	32.17	32.91	32.94	32.13	30.86	31.12	31.78	32.26
14	32.34	31.66	32.10	32.37	32.21	32.86	32.85	32.03	30.84	31.18	31.80	32.18
15	32.31	31.63	32.08	32.32	32.19	32.81	32.99	31.94	30.83	31.19	31.78	32.08
16	32.24	31.60	32.07	32.29	32.13	32.79	33.09	31.89	30.90	31.18	31.75	32.02
17	32.21	31.60	32.03	32.28	32.05	32.75	33.14	31.84	31.00	31.16	31.70	31.99
18	32.18	31.58	32.01	32.28	32.03	32.94	33.15	31.78	31.05	31.14	31.64	31.96
19	32.12	31.55	32.13	32.25	32.02	32.97	33.13	31.72	31.08	31.11	31.55	31.94
20	32.08	31.52	32.12	32.17	32.25	33.02	33.10	31.69	31.09	31.08	31.49	31.92
21	32.00	31.52	32.18	32.14	32.44	33.03	33.02	31.64	31.09	31.01	31.43	31.90
22	31.91	31.44	32.19	32.08	32.57	33.00	32.94	31.60	31.19	30.92	31.36	31.88
23	31.84	31.40	32.16	32.09	32.60	32.94	32.87	31.52	31.30	30.86	31.32	31.77
24	31.78	31.40	32.13	32.10	32.60	32.87	32.78	31.42	31.35	30.81	31.28	31.72
25	31.72	31.36	32.10	32.05	32.58	32.91	32.68	31.35	31.34	30.78	31.25	31.67
26	31.68	31.36	32.09	32.10	32.57	33.06	32.63	31.31	31.32	30.77	31.23	31.60
27	31.64	31.38	32.06	32.11	32.54	33.21	32.53	31.27	31.29	30.75	31.21	31.53
28	31.61	31.38	32.01	32.08	32.52	33.30	32.41	31.23	31.25	30.69	31.21	31.54
29	31.48	31.46	31.93	32.11	32.44	33.33	32.45	31.26	31.20	30.63	31.25	31.59
30	31.45	31.51	31.91	32.13	---	33.53	32.73	31.25	31.14	30.60	31.35	31.64
31	31.44	---	31.97	32.13	---	33.76	---	31.19	---	30.59	31.48	---
MAX	32.56	31.66	32.19	32.52	32.60	33.76	33.87	32.93	31.35	31.23	31.80	32.34



	Page		Page
<b>A</b>			
ACCESS TO WATSTORE DATA .....	22	Cubic feet per second per square mile, definition of ....	24
Accuracy of the Records .....	18	Cubic feet per second, definition of .....	23
Acre-foot, definition of .....	23	Cubic-feet-per-second day, definition of .....	23
ALAPHA RIVER NEAR JASPER, FL .....	128	<b>D</b>	
Algae, definition of .....	23	Data Collection and Computation .....	15
Annual 7-day minimum, definition of .....	24	Data Presentation .....	15
APALACHICOLA RIVER AT		Data table of daily mean values .....	16
CHATTAHOOCHEE, FL .....	91	DEEP CREEK NEAR SUWANNEE VALLEY, FL ...	35
APALACHICOLA RIVER AT MILE 36		DEFINITION OF TERMS .....	22
NEAR WEWAHITCHKA, FL .....	101	Discharge, definition of .....	24
APALACHICOLA RIVER NEAR		Dissolved, definition of.....	24
BLOUNTSTOWN, FL .....	97	Dissolved-solids concentration, definition of .....	24
APALACHICOLA RIVER NEAR		Downstream Order System .....	14
SUMATRA, FL .....	107	Drainage area, definition of .....	24
APALACHICOLA RIVER NEAR		Drainage basin, definition of .....	24
WEWAHITCHKA, FL .....	99	Dry mass, definition of .....	23
Aquifer, definition of .....	23	<b>E</b>	
Arrangement of Records .....	19	ECONFINA RIVER NEAR PERRY, FL. ....	73
Artesian, definition of .....	23	Elevation, definition .....	24
Artificial substrate, definition of .....	26	ELEVENMILE CREEK NEAR	
Ash mass, definition of .....	23	PENSACOLA, FL .....	123
AUCILLA RIVER NEAR SCANLON, FL .....	75	ESCAMBIA RIVER NEAR CENTURY, FL .....	121
<b>B</b>			
Bacteria, definition of .....	23	EXPLANATION OF THE RECORDS .....	12
Bed load discharge, definition of .....	25	<b>F</b>	
Bed load, definition of .....	25	Fecal coliform bacteria, definition of .....	23
Bed material, definition of .....	23	Fecal streptococcal, definition of .....	23
Biochemical oxygen demand, definition of .....	23	FENHOLLOWAY RIVER NEAR FOLEY, FL .....	69
Biomass, definition of .....	23	FENHOLLOWAY RIVER NEAR PERRY, FL .....	71
Bottom material, definition of .....	23	<b>G</b>	
<b>C</b>			
Cannon Creek near Lake City, FL .....	63	Gage height, definition of .....	24
Cells/volume, definition of .....	23	Gaging station, definition of .....	24
Chemical oxygen demand, definition of .....	23	<b>H</b>	
CHIPOLA RIVER AT COCKRAN LANDING		Hardness, definition of .....	24
NEAR WEWAHITCHKA, FL .....	105	HYDROLOGIC BENCH-MARK NETWORK .....	12
CHIPOLA RIVER NEAR ALTHA, FL .....	103	Hydrologic unit, definition of .....	24
Chlorophyll, definition of .....	23	<b>I</b>	
CHOCTAWHATCHEE RIVER AT		Instantaneous discharge, definition of .....	24
CARYVILLE, FL .....	116	Introduction .....	1
CHOCTAWHATCHEE RIVER NEAR			
BRUCE, FL .....	117		
Classification of records .....	18		
Color unit, definition of .....	23		
Contents, definition of .....	23		
Control structure, definition of .....	23		
Control, definition of .....	23		
Cooperation .....	1		

	Page		Page
L		R	
Laboratory Measurements .....	19	Records of Ground-Water Levels .....	20
Lafayette Creek at Tallahassee, FL .....	77	Records of Ground-Water Quality .....	21
LAKE JACKSON NEAR TALLAHASSEE, FL .....	147	Records of Stage and Water Discharge .....	14
LAKE TALQUIN NEAR BLOXHAM, FL .....	148	Records of Surface-Water Quality .....	18
Land-surface datum, definition of .....	24	Recoverable from bottom material, definition of .....	25
Latitude-Longitude System .....	14	Recurrence interval, definition of .....	25
LITTLE RIVER NEAR MIDWAY, FL .....	85	REMARK CODES .....	20
		Runoff in inches, definition of .....	25
M		S	
Manuscript .....	20	SANTA FE RIVER AT US HWY 441	
Mean concentration, definition of .....	25	NEAR HIGH SPRINGS, FL .....	59
Mean discharge, definition of .....	24	SANTA FE RIVER AT WORTHINGTON	
Measuring point, definition of .....	24	SPRINGS, FL .....	55
Micrograms per gram, definition of .....	24	SANTA FE RIVER NEAR FORT WHITE, FL .....	61
Micrograms per liter, definition of .....	24	SANTA FE RIVER NEAR GRAHAM, FL .....	51
Milligrams per liter, definition of .....	24	Sediment .....	19
		Sediment, definition of .....	25
		Seven-day 10-year low flow, definition of .....	25
		SHOAL RIVER NEAR CRESTVIEW, FL .....	119
		Solute, definition of .....	26
		SOPCHOPPY RIVER NEAR SOPCHOPPY, FL .....	79
		SPECIAL NETWORKS AND PROGRAMS .....	12
		Specific conductance, definition of .....	26
		Stage-discharge relation, definition of .....	26
		Station Identification Numbers .....	13
		Station manuscript .....	16
		Statistics of monthly mean data .....	17
		STEINHATCHEE RIVER NEAR	
		CROSS CITY, FL .....	67
		Streamflow, definition of .....	26
		Substrate, definition of .....	26
		Summary of Hydrologic Conditions .....	2
		Summary statistics .....	17
		Surface area, definition of .....	26
		Surficial bed material, definition of .....	26
		Suspended sediment, definition of .....	25
		Suspended, definition of .....	26
		Suspended, recoverable, definition of .....	26
		Suspended, total, definition of .....	26
		Suspended-sediment concentration, definition of .....	25
		Suspended-sediment discharge, definition of .....	25
		Suspended-sediment load, definition of .....	25
		SUWANNEE RIVER AT BRANFORD, FL .....	45
		SUWANNEE RIVER AT ELLAVILLE, FL .....	43
		SUWANNEE RIVER AT SUWANNEE	
		SPRINGS, FL .....	39
		SUWANNEE RIVER AT WHITE SPRINGS, FL .....	37
		SUWANNEE RIVER NEAR BENTON, FL .....	33
		SUWANNEE RIVER NEAR WILCOX, FL .....	65
N			
National Geodetic Vertical Datum of 1929,			
definition of .....	24		
NATIONAL STREAM-QUALITY ACCOUNTING			
NETWORK .....	12		
NATIONAL WATER-QUALITY ASSESSMENT			
PROGRAM .....	12		
Natural substrate, definition of .....	26		
NEW RIVER NEAR LAKE BUTLER, FL .....	53		
O			
OCHLOCKONEE RIVER NEAR BLOXHAM, FL ...	87		
OCHLOCKONEE RIVER NEAR HAVANA, FL .....	82		
odium-adsorption-ratio, definition of .....	26		
On-site Measurements and Sample Collection .....	19		
Organic mass, definition of .....	23		
Organism count/area, definition of .....	24		
Organism count/volume, definition of .....	24		
Organism, definition of .....	24		
P			
Parameter Code, definition of .....	25		
PARENERS BRANCH NEAR BLAND, FL .....	57		
Partial-record station, definition of .....	25		
Particle size, definition of .....	25		
Particle-size classification, definition of .....	25		
Percent composition, definition of .....	25		
PERDIDO RIVER AT BARRINEAU PARK, FL .....	125		
Pesticides, definition of .....	25		
PUBLICATIONS OF TECHNIQUES OF			
WATER-RESOURCES INVESTIGATIONS .....	28		

INDEX

	Page		Page
<b>T</b>			
Taxonomy, definition of .....	26	Total, definition .....	27
TELOGIA CREEK NEAR BRISTOL, FL .....	89	Total, recoverable, definition of .....	27
THE NATIONAL ATMOSPHERIC DEPOSITION PROGRAM/NATIONAL TRENDS NETWORK .	12	Total-sediment load, definition of .....	25
Thermograph, definition of .....	26	<b>W</b>	
Time-weighted, definition of .....	27	WAKULLA COUNTY .....	153
Tons per acre-foot, definition of .....	27	Water year, definition of .....	27
Tons per day, definition of .....	27	WDR, definition of .....	27
Total coliform bacteria, definition of .....	23	Weighted average, definition of .....	27
Total discharge, definition of .....	27	Wet mass, definition of .....	23
Total organism, definition of .....	25	WITHLACOCHEE RIVER NEAR PINETTA, FL .....	41
Total sediment discharge, definition of .....	25	WSP, definition of .....	27