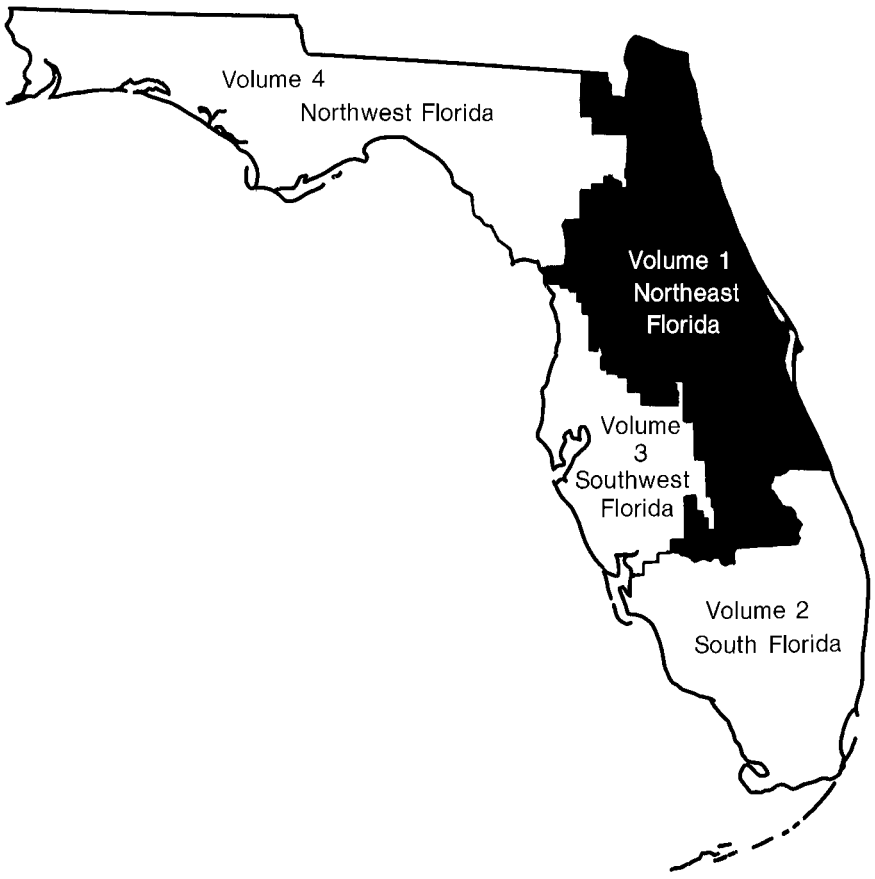
U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Florida Water Year 2002

Volume 1A. Northeast Florida Surface Water

Water-Data Report FL-02-1A



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

UNITED STATES DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U.S. GEOLOGICAL SURVEY

Charles G. Groat, Director

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

For additional information write to
Chief, Hydrologic Records Section
U.S. Geological Survey
224 West Central Parkway, Suite 1006
Altamonte Springs, Florida 32714

2003

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 S.M. Dickerson under the supervision of Donna M. Schiffer and Howard G. George. The following individuals contributed significantly to the collection, processing and tabulation of the data:

Altamonte Springs Subdistrict Office

S. Anderson	E.J. Duffy	S. Kinnaman	J. Pollender
L.L. Braley	C. Engstrom	W.J. McDevitt	J. Shelton
T.C. Coates	R.S. Greenwood	R. Medina	E.P. Simonds
Jose Cruz	W.D. Hyde	A.P. Nazarian	G.F. Taylor
T.P. Curran	R.E. Jones	J.A. O'Brien	D.J. Walsh
D.B. Dale	J.L. Kelly	M. J. Orr	S.M. Wicklein

Jacksonville Field Headquarters

R.A. Broxton	D. Huntt	C.V. Phillips, Jr.	M.J. Savarino
Larry B. Thomas	J.A. Willard	D.K. Williams	

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13. ABSTRACT *(Maximum 200 words)*

Water resources data for the 2002 water year in Florida consist of continuous or daily discharge for 392 streams, periodic discharge for 15 streams, continuous or daily stage for 191 streams, periodic stage for 13 streams, peak stage and discharge for 33 streams; continuous or daily elevations for 14 lakes, periodic elevations for 49 lakes; continuous ground-water levels for 418 wells, periodic ground-water levels for 1,287 wells; quality-of-water data for 116 surface-water sites and 291 wells.

The data for northeast Florida include continuous or daily discharge for 155 streams, periodic discharge for 7 streams, continuous or daily stage for 61 streams, periodic stage for 0 streams; peak stage and discharge for 0 streams; continuous or daily elevations for 10 lakes, periodic elevations for 20 lakes; continuous ground water levels for 53 wells, periodic ground-water levels for 589 wells; quality-of-water data for 44 surface-water sites and 86 wells.

These data represent the National Water Data System records collected by the U.S. Geological Survey and cooperating local, State and Federal agencies in Florida.

14. SUBJECT TERMS

*Florida, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Elevations, Water wells.

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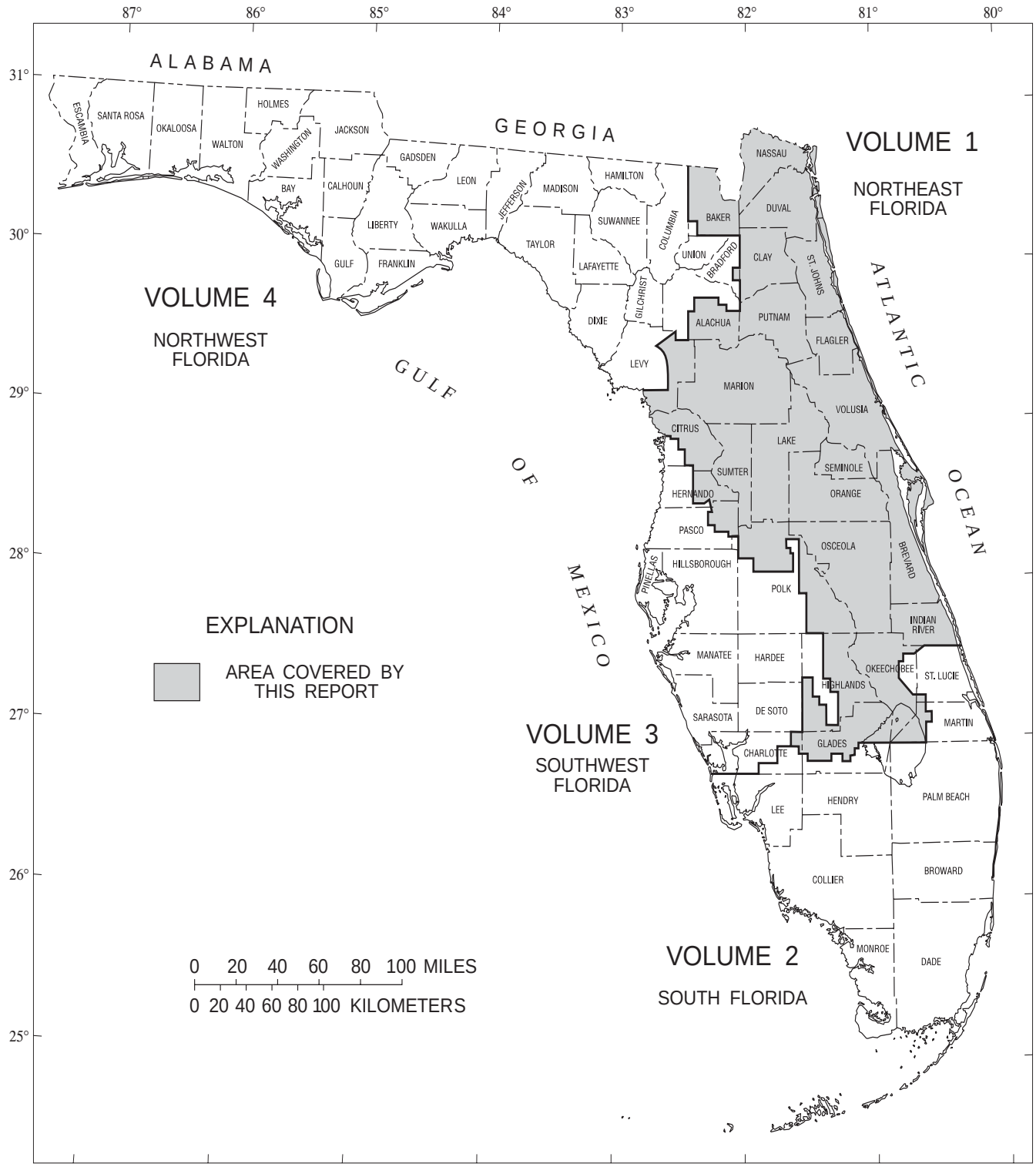

Figure 1.--Geographic area covered by this report.

CONTENTS

ILLUSTRATIONS

TABLES

STREAM AND LAKE GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

The following list shows the surface water sites where streamflow, stage, lake elevation, or water quality data are collected.

[Letters after station name designate type of data published: (d) discharge, (c) chemical, (t) water temperature, (e) elevation, gage heights, or contents.]

STREAM AND LAKE GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

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DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water discharge or stage-only 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 stations with periodic observations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the subdistrict office at the address given on the back side of the title page of this report.

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only)]

Station name	Station number	Drainage area (mi^2)	Period of record
ST. MARYS RIVER BASIN			
Ocean Pond at Olustee (e)	02228700	13.1	1975-78
Middle Prong St. Marys River at Taylor (d)	02229000	125	1955-01
South Prong St. Marys River near Sanderson (d)	02229500	57.8	1955-60
Turkey Creek at Macclenny (d)	02230000	19.9	1955-77
South Prong St. Marys River at Glen St. Mary (d)	02230500	156	1950-71
Little St. Marys River near Hilliard (d)	02231250	19.8	1965-67
St. Marys River near Gross (d)	02231253	1,360	1966-75, 1980-90
COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS			
Nassau Sound near Amelia City (e)	02231299	400	1983-85
ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER			
St. Johns Marsh near Fort Pierce (e)	02231300	--	1957-71
St. Johns Headwaters near Vero Beach (e)	02231350	297	1942-93
Cow Log Branch at Yeehaw Junction (d)	02231390	20.5	1956-95
Blue Cypress Lake near Fellsmere (e)	02231400	489	1956-68
Crabgrass Creek near Holopaw (d)	02231565	30.2	1997-98
Lake Washington near Eau Gallie (e)	02232100	1,025	1942-92
Lake Poinsett near Cocoa (e)	02232300	1,272	1942-98
Taylor Creek above S-164, near Cocoa (e)	02232413	52.0	1969-75
Clear Lake near Cocoa (e)	02232420	0.26	1952-58
Jim Creek at Fish Hole Road near Christmas (d)	02232460	47.0	1997-98
Econlockhatchee River at Magnolia Ranch near Bithlo (d)	02233001	32.9	1960-01
Econlockhatchee Tributary near Bithlo (d)	02233102	1.83	1976-89
Lake Susannah near Orlando (e)	02233445	0.60	1943-49
Lake Spier near Orlando (e)	02233448	0.34	1943-49
Lake Corrine near Orlando (e)	02233450	2.09	1943-64
Lake Catherine at Chuluota (e)	02233755	0.15	1975-79
Lake Geneva at Geneva (e)	02233900	0.46	1975-79
Deep Creek near Osteen (d)	02234100	140	1965-66, 1981-92 1997-98
Lake Winnemissett near Deland (e)	02234160	1.10	1965-98
Deep Creek Diversion Canal near Osteen (d)	02234180	70	1935, 1956, 1964-66, 1981-92
Spring Lake at Orlando (e)	02234200	0.52	1943-56
Lake Adair at Orlando (e)	02234205	1.27	1942-56
Park Lake at Orlando (e)	02234210	0.12	1942-56
Lake Concord at Orlando (e)	02234215	2.10	1942-52
Lake Highland at Orlando (e)	02234220	0.22	1942-56
Lake Ivanhoe at Orlando (e)	02234225	3.27	1942-56
Lake Rowena at Orlando (e)	02234240	5.13	1942-45
Lake Sue at Orlando (e)	02234261	6.34	1948-56
Lake Charity near Maitland (e)	02234294	0.66	1971-79
Lake Faith at Maitland (e)	02234296	0.71	1971-79
Lake Hope at Maitland (e)	02234297	1.67	1971-79
Lake Maitland at Winter Park (e)	02234300	20.6	1945-64
Lake Howell near Casselberry (e)	02234318	27.8	1975-79
Soldier Creek Headwaters at Lake Mary (d)	02234365	7.86	1987-93
Soldier Creek at Lake Mary (d)	02234367	9.16	1987-93
County Home Run near Lake Mary (e)	02234386	0.45	1983-86
Island Lake at Longwood (e)	02234394	1.29	1970-79
Lake Mary at Lake Mary (e)	02234414	0.88	1975-79
Lake Charm at Oviedo (e)	02234428	0.11	1975-98
Lake Jesup near Sanford (e)	02234434	156	1941-48, 1977-97
Lake Monroe near Sanford (e)	02234499	2,582	1920-95

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS --Continued

Station name	Station number	Drainage area (mi^2)	Period of record
ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER--Continued			
St. Johns River near DeBary (e)	02234519	2,600	1987-89
Lake Brantley near Forest City (e)	02234638	1.56	1975-79
Lake Silver at Orlando (e)	02234800	0.51	1959-64
Lake Fairview at Orlando (e)	02234810	3.73	1948-55
Lake Wekiva near Maitland (e)	02234814	13.4	1969-95
Lake Wekiva Outlet near Maitland (d)	02234815	13.4	1969-74
Lake Herrick near Orlando (e)	02234900	1.94	1966-68
Lake Sherwood near Orlando (e)	02234930	17.1	1966-68
Bear Lake near Forest City (e)	02234942	1.59	1975-79
Lake Orienta at Altamonte Springs (e)	02234943	1.61	1970-79
Cranes Roost at Altamonte Springs (e)	02234988	2.89	1978-79
Eleventh Hole Pond at Altamonte Springs (e)	02234995	1.25	1971-79
Linden Lake at Lake Mary (e)	02234999	0.62	1973-79
Lake Dorr near Altoona (headwaters of Black Water Creek) (e)	02235150	26.5	1965-98
Mount Plymouth Lake at Mount Plymouth (e)	02235260	1.30	1983-98
Pine Lake near Cassia (e)	02235900	1.79	1967-69
Alexander Springs Creek near Paisley (e)	02236100	--	1959-65
Lake Odom near DeLeon Springs	02236119	1.33	1981-90
Deep Creek near Barberville (d)	02236120	35.4	1964-95
Price Creek near Pierson (d)	02236157	6.21	1979-82
Lake Delancy near Eureka (e)	02236190	30.0	1953-60
OCKLAWAHA RIVER BASIN			
Lake Kerr near Eureka (e)	02236200	102	1936-98
Lake George near Salt Springs (e)	02236210	3,721	1936-98
Lake Lowery (head of Ocklawaha River) near Haines City (e)	02236250	5.4	1960-95
Little Creek at Cooper's Ranch near Clermont (d)	02236600	9.90	1960-62
Lake Nellie near Clermont (e)	02236808	13.3	1979-89
Lake Louisa (continuation of Big Creek) near Clermont (e)	02236820	121	1957-95
Lake Apshawa near Minneola (e)	02236860	1.48	1953-98
Cherry Lake near Groveland (e)	02236880	165	1956-95
Palatlakaha River near Mascotte (e)	02237000	182	1945-95
Palatlakaha River below spillway, near Mascotte (e)	02237001	182	1964-95
Pitts Pond near Okahumpka (e)	02237176	0.07	1967-69
Lake Harris at Leesburg (e)	02237520	357	1936-50, 1956-93
Dead River near Tavares (d)	02237522	420	1942-56, 1993-96
Johns Lake at Oakland (e)	02237540	40.1	1959-98
Lake Florence at Montverde (e)	02237561	0.63	1967-69
Lake Apopka at Winter Garden (e)	02237600	128	1935-93
Lake Francis near Plymouth (e)	02237660*	0.67	1959-67
Wolf Branch above State Road 46 near Mount (d)	02237733	2.80	1991-94
Lake Dicie at Eustis (e)	02237752	0.11	1971-73
Lake Dora at Mount Dora (e)	02237800	236	1935-93
Lake Eustis at Eustis (e)	02237900	646	1935-93
Silver Lake near Leesburg (e)	02238020	1.50	1983-95
Nicotoon Lake near Altoona (e)	02238170	19.2	1967-69
Lake Yale at Grand Island (e)	02238200	67.6	1959-98
Lake Griffin at Leesburg (e)	02238300	775	1936-93
Ocklawaha River near Ocala (d)	02239000	1,018	1930-68
Silver River near Ocala (e)	02239501	--	1969-72
Lake Bryant near Silver Springs (e)	02240200	9.86	1936-95
Hatchet Creek near Fairbanks (d)	02240783	34.7	1995-98
Little Hatchet Creek at Gainesville (d)	02240806	3.24	1995-98

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS --Continued

Station name	Station number	Drainage area (mi^2)	Period of record
OCKLAWAHA RIVER BASIN--Continued			
Newnans Lake (head of Prairie Creek) near Gainesville (e)	02240900	114	1936-95
Paynes Prairie Inflow near Rochelle (e)	02240930	--	1978-81
Lake Kanapaha at Arredondo (e)	02240958	8.65	1971-95
Tumblin Creek at Gainesville (d)	02240976	1.00	1997-98
Bivens Arm near Gainesville (e)	02240980	3.00	1965-67
Bivens Arm at Gainesville (d)	02240982	5.67	1997-98
Sweetwater Branch at Gainesville (e)	02240988	2.64	1997-98
Lochloosa Creek at Grove Park (d)	02241900	37.4	1995-98
ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER			
Lochloosa Lake at Lochloosa (e)	02242400	88.0	1936-95
Orange Lake at Orange Lake (e)	02242450	1,012	1933-95
Orange Lake Outlet near Citra (d)	02242451	1,012	1941-95
Orange Creek near Island Grove (d)	02242460	1,010	1997-98
Lochloosa Slough near Lochloosa (d)	02242500	Indeterminate	1947-55, 1982-92
Little Orange Creek near Johnson (d)	02243300	42.6	1995-98
Ocklawaha River near Orange Springs (d)	02243500	2,657	1930-52
Deep Creek near Kenwood (d)	02243609	6.34	1995-98
Lake Ocklawaha near Orange Springs (e)	02243958	2.747	1969-95
Ocklawaha River at Riverside Landing near Orange Springs (d)	02244000	2,840	1943-68
Middle Haw Creek at Relay Station, near Bunnell (d)	02244300	54.6	1964-66
Lake Winona near Deland (e)	02244350	1.35	1965-98
Blue Pond Outlet near Keystone Heights (d)	02244551	2.32	1958-97
Sand Hill Lake near Keystone Heights (e)	02244600	11.0	1957-65, 1976-96
Sand Hill Lake Outlet near Keystone Heights (d)	02244601	11.5	1959-97
Magnolia Lake near Keystone Heights (e)	02244650	14.4	1958-98
Magnolia Lake Outlet near Keystone Heights (d)	02244651	14.4	1956-97
Alligator Creek near Keystone Heights (d)	02244690	15.0	1994-97
Loch Lommond near Keystone Heights (e)	02244700	0.90	1959-98
Brooklyn Lake at Keystone Heights(e)	02244750	17.4	1957-61, 1965-96
Crystal Lake near Keystone Heights (e)	02244760	3.42	1994-98
Lake Bedford near Keystone Heights (e)	02244766	5.0	1994-98
LakeGeneva at Keystone Heights (e)	02244800	35.5	1957-61, 1965-96
Pebble Lake near Keystone Heights (e)	02244850	0.19	1945-98
Lake Johnson (Little Lake) near Keystone Heights (e)	02244900	6.37	1945-98
Lake Johnson (Big Lake) near Keystone Heights (e)	02244905	6.37	1959-98
Spring Lake near Keystone Heights (e)	02244908	1.62	1994-98
Lake Grandin near Interlachen (e)	02244950	3.71	1957-95
St. Johns River at Palatka (e)	02244450	7,094	1970-82
Georges Lake near Florahome (e)	02245010	5.33	1982-95
Rice Creek near Palatka (e)	02245200	349	1970-73, 1994-97
Sixmile Creek near Picolata (d)	02245328	Indeterminate	1990-01
St. Johns River at Shands Bridge near Green Cove Springs (c,t)	295856081372301	Indeterminate	1995-01
South Fork Black Creek near Camp Blanding (d)	02245400	34.8	1957-60
Kingsley Lake (head of North Fork Black Creek) at Camp Blanding (e)	02245700	6.84	1945-95
Rowell Creek near Fiftone (d)	02245918	6.1	1992-95
Rowell Creek at Lake Fretwell Dam near Maxville (d)	02245922	8.1	1992-95
Site 2 Outflow Ditch near Maxville (d)	02245924	Indeterminate	1992-95
North Fork Black Creek near Highland (d)	02245800	50.5	1957-60
Yellow Water Creek near Maxville (e)	02245900	21.9	1975-77
Sal Taylor Creek near Maxville (d)	02245913	15.7	1992-95
Site 1 Outflow Ditch near Maxville (d)	02245925	Indeterminate	1992-95
Rowell Creek above Perimeter Road Bridge near Maxville (d)	02245926	Indeterminate	1992-95
Rowell Creek near Maxville (d)	02245927	8.7	1992-95
Cormorant Branch near Mandarin (e)	02246202	1.62	1976-81
Williamson Creek at Cedar Hills (d)	02246460	0.92	1971-86

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS --Continued

Station name	Station number	Drainage area (mi^2)	Period of record
ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER--Continued			
McCoy Creek at Jacksonville (e)	02246497	3.51	1975-77, 1978-83
St. Johns River at Dames Point Bridge at Jacksonville (c,t)	302309081333001	Indeterminate	1996-01
Strawberry Creek near Arlington (d,e)	02246520	2.86	1989-95
Red Bay Branch Tributary at Jacksonville (d)	02246522	0.57	1975-86
Trout River at Dinsmore (e)	02246660	20.9	1975-77
Sixmile Creek at Pickettville (e)	02246645	12.1	1975-78
Cedar Swamp Creek at Jacksonville (d)	02246832	3.40	1974-92
COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET			
Moultrie Creek at State Highway 207, near St. Augustine (d)	02246900	19.8	1961-92
Moultrie Creek at St. Augustine (d)	02247000	11.2	1939-64
Bellevue Canal at Daytona Beach (d)	02247465	--	1982-85
Bayless Blvd. Canal at Daytona Beach (d)	02247493	--	1982-85
Wally Hoffmeyer Canal at Daytona Beach (d)	02247498	--	1982-85
Williamson Blvd. Ditch at Daytona Beach (d)	02247499	--	1983-85
Tomoka River near Daytona Beach (d)	02247500	76.2	1942-46, 1983-84
Eleventh Street Canal near Holly Hill(d)	02247508		1982-92
B-19 Canal at Willow Run Boulevard near Port Orange(d)	02248037		1988-92
B-19 Canal at Port Orange(d)	02248040		1982-92
COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET			
County Line Road Ditch near Scottsmoor (d)	02248357	Indeterminate	1994-96
Addison Creek near Titusville (d)	02248510	4.1	1989-96
Horse Creek near Melbourne (d)	02248900	1.2	1989-92
Eau Gallie River near Eau Gallie (d)	02249000	2.69	1955-57
Crane Creek at Melbourne (d)	02249500	12.6	1951-68
C-1 Canal at Red Bug Circle near Palm Bay (d)	02249950	Indeterminate	1988-92
C-10 Canal at Malabar Road at Palm Bay (d)	02249970	Indeterminate	1988-92
C-69 Canal at Palm Bay Road at Palm Bay (d)	02249990	Indeterminate	1988-92
Turkey Creek near Palm Bay (d)	02250000	95.5	1956-68
Melbourne-Tillman Canal at Palm Bay (d)	02250005	100	1992-01
Goat Creek near Valkaria (d)	02250500	11.9	1989-96
Kid Creek at Valkaria (d)	02250600	0.70	1989-92
Trout Creek at Grant (d)	02250700	15.0	1989-96
COASTAL AREA BETWEEN SEBASTIAN INLET AND ST. LUCIE RIVER			
Fellsmere Canal near Fellsmere (d)	02251765	78.4	1955-68
FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST			
Fisheating Creek near Venus (d)	02256000	311	1955-66
Harney Pond Canal at S-71 near Lakeport (d)	02257800	--	1962-89
Indian Prairie Canal near Lakeport (d)	02259000	--	1931-33
Indian Prairie Canal at S-72, near Okeechobee (d)	02259200	--	1962-89
Indian Prairie Canal near Okeechobee (d)	02259500	--	1939-50
Lake Mary Jane near Narcoossee (e)	02261900	1,161	1949-01
East Lake Tohopekaliga at St. Cloud (e)	02263400	308	1941-68
St. Cloud Canal at S-59, near St. Cloud (d)	02263500	308	1942-68
Bay Lake Outlet at S-105A, near Vineland (d)	02263851	14.8	1968-71
Lake Tohopekaliga at Kissimmee (e)	02264900	620	1942-89
KISSIMMEE RIVER BASIN			
Myrtle-Mary Jane Canal near Narcoossee (d)	02261500	111	1949-68
Lake Hart near Narcoossee (e)	02262200	166	1941-69
Lake Conway at Pinecastle (e)	02262800	12.7	1952-98
South Port Canal at S-61 near St. Cloud (d)	02265000	620	1942-68
Lake Gentry near St. Cloud (e)	02265400	44.6	1949-68

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS --Continued

Station name	Station number	Drainage area (mi^2)	Period of record
KISSIMMEE RIVER BASIN--Continued			
Canoe Creek near St. Cloud (d)	02266000	86.5	1949-59
Horse Creek at Davenport (d)	02266700	22.8	1960-62
Lake Pierce near Waverly (e)	02266900*	8.9	1947-71
Lake Hatchineha near Lake Wales (e)	02267400	1,162	1942-76
Kissimmee River near Lake Wales (d)	02267500	--	1942-68
Lake Kissimmee near Lake Wales (e)	02268900	49.6	1929-89
Kissimmee River Below Lake Kissimmee, near Lake Wales (d)	02269000	1,607	1933-69
Kissimmee River at C-38 near Lorida (e)	02269149	Indeterminate	1994-01
Kissimmee River at Fort Kissimmee (e)	02269100	1,911	1941-67
Reedy Creek near Frostproof (d)	02269500	60.9	1946-71
Carter Creek near Sebring (d)	02270000	38.6	1954-66
Stearns Creek near Lake Placid (d)	02271000	44.0	1955-67
Lake Huntley near Lake Placid (e)	02271580	9.54	1951-63
Lake Clay near Lake Placid (e)	02271600	11.7	1951-63
Lake Apthorpe near Lake Placid (e)	02271620	15.3	1955-60
Istokpoga Canal near Cornwell (d)	02272000	--	1933-68
Kissimmee River near Basinger (e)	02272500	2,709	1931-59, 1963-64
Canal 41A at S-68, near Lake Placid (d)	02273200	--	1964-89
Canal 41A at S-84, near Okeechobee (d)	02273300	--	1963-89
Taylor Creek near Basinger (d)	02274000	15.7	1955-89
Taylor Creek above S-1, near Okeechobee (e)	02274330	62.2	1969-89
Williamson Ditch at S-7, near Okeechobee (d)	02274495	35.4	1964-89
Taylor Creek above Okeechobee (d)	02274500	98.7	1955-82
Taylor Creek at Okeechobee (d)	02275000	115	1932-33
PEACE RIVER BASIN			
Lake Alfred at Lake Alfred (e)	02293461	2.93	1985-94
Lake Gibson near Lakeland (e)	02294224	4.31	1969-94
WITHLACOOCHEE RIVER BASIN			
Lake Mattie near Polk City (e)	02310780	14.7	1960-62
Withlacoochee River near Eva (d)	02310800	130	1958-93
Pony Creek near Polk City (d)	02310900	9.50	1960-62
Big Gant Canal at Structure S-11, near Webster (e)	02312194	18	1970-92
Big Gant Canal at Structure WC-2, at Rerdell (e)	02312197	30	1970-92
Big Gant Canal below Structure at Rerdell (e)	02312198	30	1970-92
Lake Lindsey near Brooksville (e)	02312520	3.07	1965-68
Withlacoochee River near Istachatta (e)	02312560	--	1983-87
Jumper Creek near Bevilles Corner (d)	02312632	15.4	1979-81
Jumper Creek Canal near Sumterville (d)	02312635	28.6	1976-91
Jumper Creek Canal near Wahoo (d)	02312645	50.6	1979-91
Lake Deaton near Wildwood (d)	02312688	12.4	1978-94
Chitty Chatty Creek near Wildwood (d)	02312690	38	1959-60, 1963-66, 1978-92
Lake Okahumpka near Wildwood (e)	02312691	49	1978-94
Lady Lake near Lady Lake (e)	02312694*	4.67	1970-73
Lake Miona near Oxford (e)	02312696	38	1978-94
Withlacoochee River above Wysong Dam at Carlson (e)	02312719	1,520	1962-88
Leslie Heifner Canal near Floral City (e)	02312772*	--	1983, 1984-87
Leslie Heifner Canal below Control near Floral City (e)	02312773	--	1984-86
The Orange State Canal near Floral City (e)	02312786*	--	1983-86
Tsala Apopka Lake at Floral City (e)	02312800	Indeterminate	1957-92
Tsala Apopka Lake at Inverness (e)	02312900	Indeterminate	1957-92
Tsala Apopka Lake at Hernando (e)	02312950	Indeterminate	1936-50, 1957-92
Tsala Apopka Lake at Spivey Lake near Inverness (e)	02312877	--	1984-87
Lake Rousseau near Dunnellon (e)	02313229	2,020	1964-91
Withlacoochee River Bypass Channel below Structure, near Inglis (e)	02313251	--	1969-82
Withlocoochee River at Crackertown	02313265	--	1967-91

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State 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 includes records of stage, discharge, and water quality of streams, stage, contents, water quality of lakes and reservoirs, and water levels and water quality of ground-water wells. Volume 1A contains records for continuous or daily discharge for 150 streams, periodic discharge for 3 streams, continuous or daily stage for 22 streams, periodic stage for 0 streams, peak stage and discharge for 0 stream, continuous or daily elevations for 10 lakes, and periodic elevations for 20 lakes. The area encompassed in this report is shown in figure 1. The data presented here represent part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Florida.

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

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Florida were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report FL-02-1A." For archiving and general distribution, the reports for l971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Office at the address given on the back of the title page or by telephone (407) 865-7575.

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:

U.S. Army Corps of Engineers, Jacksonville District
Florida Department of Environmental Protection
St. Johns River Water Management District
South Florida Water Management District
Southwest Florida Water Management District
City of Cocoa
City of Jacksonville
JEA
Lake County Water Authority
Nassau County
Reedy Creek Improvement District
Seminole County

Organizations that provided data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

RAINFALL: Rainfall during the 2002 water year was above normal. Based on rainfall data at six National Oceanic and Atmospheric Administration stations, the rainfall for the 12-month period, from October 2001 through September 2002, ranged from 11.30 in. above normal at Winter Haven to 2.91 in. below normal at Jacksonville. The departure from the 30-year average rainfall in 2002 for the six rainfall stations presented in the table below averaged 4.3 inches above normal. The change in average departure for these six rainfall stations from 2001 to 2002 was 3.3 inches (from an average surplus of 1.0 inch in 2001 to an average surplus of 4.3 inches in 2002 from the 30-year average). The following summary lists departure from the 30-year (1971-2000) normal for each of the stations.

Departure from the 30-year normal rainfall (1971-2000)

	October-December		January-March		April-June		July-September		Water Year	
	Total		Total		Total		Total		Total	
Station	Rainfall	Departure	Rainfall	Departure	Rainfall	Departure	Rainfall	Departure	Rainfall	Departure
Jacksonville AP	5.38	-3.46	9.68	-1.09	9.12	-2.87	25.25	4.51	49.43	-2.91
Ocala	3.88	-3.95	8.25	-2.43	16.46	2.93	21.38	3.74	49.97	.29
Daytona Beach	10.49	.27	6.28	-3.43	16.49	5.00	22.77	4.90	56.03	6.74
Orlando	3.17	-4.19	5.10	-3.22	16.68	3.17	25.92	6.76	50.87	2.52
Winter Haven	4.48	-2.82	7.70	-.62	22.81	10.01	26.53	4.73	61.52	11.30
Vero Beach	10.54	-1.17	8.70	-.78	23.75	9.85	20.24	-.25	63.23	7.65

SURFACE-WATER DISCHARGE: Data for the current year and period of record for 10 selected stream gaging sites are summarized in table 1.

Annual Means: After a year of above normal rainfall, discharges throughout the report area ranged from 80 percent below to 75 percent above the period-of-record mean at sites shown. Discharge at five sites was above the period-of-record mean: St. Johns River near Cocoa, St. Johns River near DeLand, Fisheating Creek at Palmdale, Reedy Creek near Vineland, and Kissimmee at S-65 near Lake Wales. Overall, flow at the ten selected sites averaged 0.1 percent above the means for the period of record, and 192 percent above the means for the previous water year (2001).

Seasonal Patterns: Generally, mean monthly discharges rise and fall in two cycles each year. An annual high in September or October is followed by a low in November or December which is followed by another high in March or April and an annual low in May or June. This semi-annual pattern is the result of convective and tropical storms in late summer and early fall, and continental frontal storms in late winter and early spring.

Extremes: New extremes were observed for the current year at two of the ten representative sites. A new minimum daily mean was observed at St. Marys River near Macclenny (02231000) and St. Johns River near Deland (02236000).

Generally, discharges of the 10 selected surface-water sites indicated an increase from 2001 levels. Of the 10 selected surface-water sites presented, discharges at 9 were above the previous water-year mean.

Table 1.--Mean discharge for the 2002 water year and mean annual discharges computed from base period discharges

Station number	Station name	Long-term mean annual discharge		Mean discharge 2002 water year (ft^3/s)	Departure from long-term mean annual discharge (percent)	Change from previous year (percent)
		Base period	Discharge (ft^3/s)			
	St. Marys River basin					
02231000	St. Marys River near Macclenny	1927-02	640	132	-80	17
	St. Johns River basin					
02232400	St. Johns River near Cocoa	1954-02	1,013	1,746	75	132
02236000	St. Johns River near De Land	1934-02	3,048	4,137	36	500
02240000	Ocklawaha River near Conner	1931-46, 1978-02	1,062	561	-48	14
	Fisheating Creek basin					
02256500	Fisheating Creek at Palmdale	1931-02	252	264	4.3	-18
	Kissimmee River basin					
02266300	Reedy Creek near Vineland	1966-02	40.5	54.6	36	127
02268903	Kissimmee River at S-65, near Lake Wales	1970-02	916	1,355	50	332
	Withlacoochee River basin					
02312000	Withlacoochee River at Trilby	1928-02	324	293	-9.6	155
02312200	Little Withlacoochee River at Rerdell	1958-02	73.4	62.5	-15	346
02313000	Withlacoochee River near Holder	1928-02	985	518	-48	308

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

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

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

Figure 2. NAWQA stations in the State of Florida.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 2002 water year that began October 1, 2001, and ended September 30, 2002. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and for surface-water stations where only miscellaneous observations are made.

Downstream Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 02228500, which appears just to the left of the station name, includes the 2-digit part number "02" plus the 6- to 12-digit downstream-order number "228500." The part number designates the major river basin; for example, part "02" is the South Atlantic Slope and eastern Gulf of Mexico basins.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)

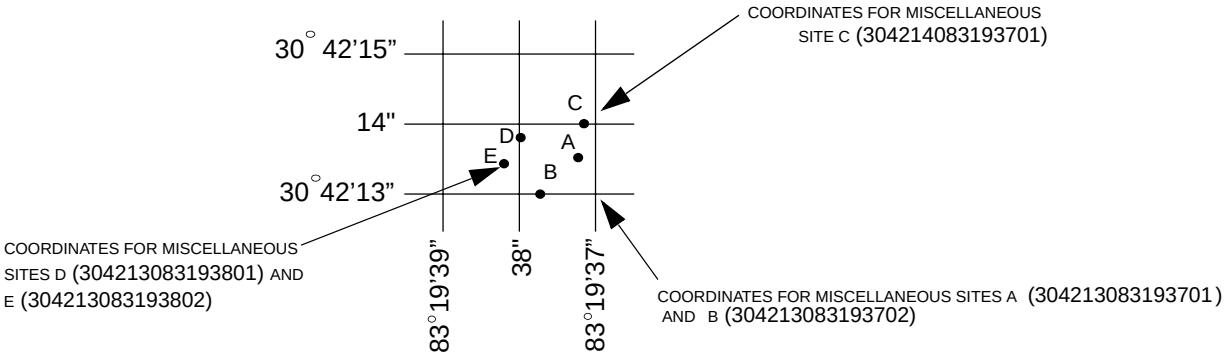

Figure 3.--System for numbering miscellaneous sites (latitude and longitude)

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 continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake elevation, similarly, are those for which stage may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a stage-recording device or daily or weekly observations, but need not be. Because daily mean discharges and lake elevations commonly are published for such stations, they are referred to as "daily stations."By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low- flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record and partial-record stations for which data are given in this report are shown in figures preceding each sub-basin.

Data Collection and Computation

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

Continuous records of stage are obtained with electronic water-stage recorders at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, Water-Supply Paper 2175, and the U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI's), Book 3, Chapter A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for standards (ISO).

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

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

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

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

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

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. The following comments 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 gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. 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 there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

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

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

REMARKS.--All periods of estimated daily-discharge record will be flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") The remarks paragraph is used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

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 errors in published water-quality records are discovered after publication, appropriate updates are made in the U.S. Geological Survey’s distribution data system, NWIS, and subsequently to its web-based National data system, NWISWeb [http://water.usgs.gov/nwis/nwis]. Because of the unusual voluem of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

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

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

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 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 the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC- FT"). Figures for cubic feet per second per square mile and runoff in inches 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 year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS _-_ ,"will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

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

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

MAXIMUM PEAK FLOW.--The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.--The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the mauscript or a footnote may be used to provide further information.

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

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

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal 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 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 of the runoff for a given time period were uniformly distributed on it.

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

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

90 PERCENT EXCEEDS.--The discharge that has been 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.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

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

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

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Altamonte Springs Subdistrict office of the Florida District. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the offices whose addresses are given on the back of the title page of this report.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuous-record station is a site where data are collected on a regularly scheduled basis. Frequency may be one 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.

A careful distinction needs to be made between "continuous records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape or obtained via data collection platform. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made, as described by Wagner and others (2000). Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating continuous water-quality records [≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Ratings			
	Excellent	Good	Fair	Poor
Water temperature	≤ ± 0.2°C	> ± 0.2 to 0.5°C	> ± 0.5 to 0.8°C	> ± 0.8°C
Specific conductance	≤ ± 3%	> ± 3 to 10%	> ± 10 to 15%	> ± 15%
Dissolved oxygen	≤ ± 0.3 mg/L	> ± 0.3 to 0.5 mg/L	> ± 0.5 to 0.8 mg/L	> ± 0.8 mg/L
pH	≤ ± 0.2 unit	> ± 0.2 to 0.5 unit	> ± 0.5 to 0.8 unit	> ± 0.8 unit
Turbidity	≤ ± 5%	> ± 5 to 10%	> ± 10 to 15%	> ± 15%

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 needs to be assuring that the data obtained represent the in situ quality of the water. 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 in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in the PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the Geological Survey Florida office whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Florida Office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Dissolved Trace Element Concentrations

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols will take place during the 1995 water year.

Laboratory Measurements

Samples for indicator bacteria and daily samples for specific conductance are analyzed in Tampa office. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado and Ocala, Florida. Methods used to analyze sediment samples and to compute sediment records are described in the TWRI Book 5, Chapter C1. Methods used by the U.S. Geological Survey laboratories are given in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapter A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

In March 1989 the National Water-Quality Laboratory in Arvada, Colorado discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between October 1982 and July 1989. Sulfate values for NASQAN stations (02301500) Alafia River at Lithia, FL and (02296750) Peace River at Arcadia, FL have not been corrected for this bias. Sulfate values for other stations in this report were determined in Ocala, Florida, and the turbidimetric method was not used.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

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

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

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

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

INSTRUMENTATION.--Information on instrumentation is given only if a water- quality monitor temperature record, 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 in the U.S. Geological Survey’s distribution data system, NWIS, and subsequently to its web-based National data system, NWISWeb [http://water.usgs.gov/nwis/nwis]. Because of the unusual voluem of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

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

PRINT OUTPUT	REMARK
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.
cl	Value qualifier code for holding time exceeded by the laboratory.

Rounding Clarification

Values for some constituents analyzed by routine methods are tabulated with extraneous trailing zeros that are not significant digits. Extraneous zeros result because data obtained from low-level methods that have better (lower) detection limits are stored under the same parameter code as data obtained by routine analytical methods. Precision varies for different analytical methods used to determine the same constituent. The presence of trailing zeroes after the decimal in values printed in this report does not necessarily indicate that the method used for the determination is as precise as the level implied by the rightmost zero.

ACCESS TO USGS WATER DATA

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

http://water.usgs.gov

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine readable formats on magnetic tape or 3-1/2 inch floppy disk. 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 Offices (See address on the back of the title page).

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

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

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

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas 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.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

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

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

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

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

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

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

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

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

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

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

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved solids content of the pore water and lithology and porosity of the rock.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

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

$$\text{sphere } 4/3\ \pi r^3 \quad \text{cone } 1/3\ \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

From cell volume, total algal biomass expressed as biovolume ($\mu m^3/mL$) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

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

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

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

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

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

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

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

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

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

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

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

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

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

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

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

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

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

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

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

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

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

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

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

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

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

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

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

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

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

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

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

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

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

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

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

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

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

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

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

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

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

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

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

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

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

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

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

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

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

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

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat are typically made over a wider geographic scale than are measurements of species distribution.

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

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

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

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

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

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

Horizontal datum (See "Datum")

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

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

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

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

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year on average, and remains stable except during large flood events.

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

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

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Micrograms per gram (UG/G, µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

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

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

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

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

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

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

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

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

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

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

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

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

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

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

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

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

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also “Ash mass,” “Biomass,” and “Dry mass”)

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

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

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

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

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

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

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

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

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

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

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

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

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

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

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

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

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

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

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

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

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

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

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

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

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

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

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

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

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

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

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

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

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

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

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

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of pre-cipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also "Annual 7-day minimum" and "Recurrence interval")

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

Stage (See "Gage height")

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

Surficial bed material is the upper surface (0.1 to 0.2 foot) 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 defined operationally as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended mate-rial collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

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

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

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

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

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

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

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

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

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

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

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

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

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

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

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

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

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

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

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

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

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Vertical datum (See "Datum")

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

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

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

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the "2002 water year."

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

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

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

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

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

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

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The USGS publishes a series of manuals titled the "Techniques of Water-Resources Investigations" that describe procedures for planning and conducting specialized work in water-resources investigations. The material in these manuals 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. Each chapter then is limited to a narrow field of the section subject matter. This publication format permits flexibility when revision or printing is required.

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1–D1. *Water temperature—Influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.

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

Book 2. Collection of Environmental Data

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2–D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.

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Section F. Drilling and Sampling Methods

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

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

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

Section C. Sedimentation and Erosion Techniques

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

Book 4. Hydrologic Analysis and Interpretation

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

Book 5. Laboratory Analysis

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

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

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

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

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

Section C. Sediment Analysis

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

Book 6. Modeling Techniques

Section A. Ground Water

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

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

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

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

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

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

6–A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

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

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

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

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

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

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

Section B. Instruments for Measurement of Discharge

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

Book 9. Handbooks for Water-Resources Investigations

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

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

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

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

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

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

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

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

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

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

STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

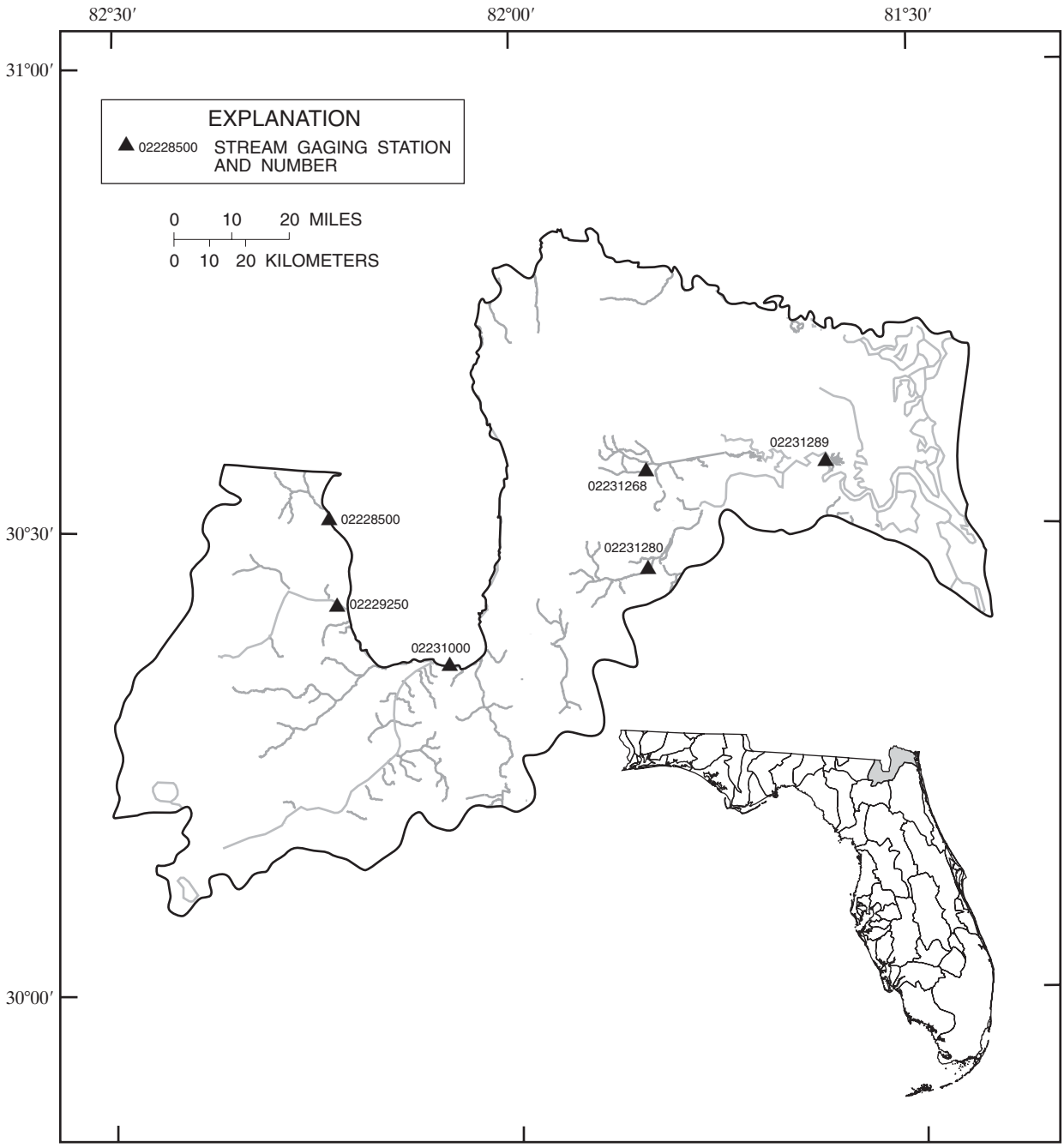

Figure 4.--Location of stream gaging stations in the St. Marys River basin and the coastal area between the St. Marys and St. Johns Rivers.

02228500 NORTH PRONG ST. MARYS RIVER AT MONIAC, GA

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

DRAINAGE AREA.--160 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--January 1921 to December 1923 (published as St. Marys River at Moniac), January 1927 to June 1930, July 1932 to June 1934, October 1950 to September 1989. October 1989 to July 1990 (discharge measurements only), August 1990 to current year.

REVISED RECORDS.--WSP 1234; Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 89.40 ft above NGVD of 1929. Prior to June 30, 1934, nonrecording gage at site 800 ft downstream at datum 3.22 ft higher. Oct. 3, 1950 to Oct. 17, 1988, water-stage recorder, Oct. 17, 1988 to Aug. 10, 1990, non-recording gage, at present site and datum.

REMARKS.--Records fair except for period of estimated daily discharge, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	1.4	0.02	4.1	15	5.7	23	1.2	0.00	0.68	1.1	14
2	12	1.2	0.02	5.1	14	10	21	1.0	0.00	0.51	0.98	17
3	10	1.2	0.01	7.2	13	137	20	0.79	0.00	0.27	1.4	18
4	8.7	1.1	0.01	7.1	12	503	19	0.61	0.00	0.16	3.4	17
5	7.8	0.91	0.01	6.7	11	463	18	0.49	0.00	0.14	7.6	16
6	7.1	0.70	0.01	6.7	9.9	366	16	0.43	0.00	0.10	5.1	14
7	6.7	0.67	0.01	7.7	10	308	14	0.37	0.00	0.05	3.6	11
8	6.1	0.61	0.01	7.5	11	276	13	0.29	0.00	0.00	2.6	8.7
9	5.6	0.52	0.02	7.1	11	252	12	0.21	0.00	0.00	1.8	7.0
10	5.4	0.34	0.18	6.7	10	222	11	0.17	0.00	0.00	1.4	5.7
11	5.7	0.23	3.6	6.6	9.7	185	10	0.14	0.00	0.00	1.2	4.6
12	5.2	0.17	3.9	6.5	8.9	153	10	0.12	0.00	0.00	1.1	3.8
13	4.8	0.13	e3.4	7.8	8.2	130	15	0.10	0.00	0.00	1.0	4.3
14	4.6	0.13	e4.2	10	7.9	113	20	0.08	0.00	0.00	2.0	4.6
15	4.3	0.13	e4.9	21	7.8	97	21	0.07	0.00	0.00	3.7	10
16	3.9	0.11	e6.1	18	7.4	85	19	0.05	0.00	0.00	4.7	20
17	3.5	0.10	e6.9	15	6.9	75	16	0.05	0.00	0.00	4.3	22
18	3.1	0.09	e7.5	13	6.2	66	14	0.05	0.00	0.00	3.9	18
19	2.9	0.07	e9.1	12	5.9	58	12	0.04	0.00	0.00	3.6	15
20	2.6	0.06	e10	11	5.6	52	11	0.02	0.00	0.00	3.5	12
21	2.4	0.05	e10	17	5.5	47	9.0	0.00	0.00	0.00	7.4	10
22	2.2	0.05	e9.6	29	5.5	45	6.9	0.00	0.00	0.00	13	8.7
23	2.0	0.04	e9.4	24	6.3	41	5.2	0.00	0.00	0.00	12	7.2
24	1.9	0.04	e9.1	22	9.2	38	4.3	0.00	0.00	0.02	9.2	6.5
25	2.2	0.04	7.9	20	8.2	35	3.5	0.00	0.00	0.53	6.9	11
26	2.8	0.04	6.6	20	7.7	33	2.8	0.00	0.00	0.62	5.4	13
27	2.3	0.03	6.1	20	7.0	31	2.3	0.00	0.09	1.5	6.7	16
28	1.8	0.02	5.5	19	6.2	29	1.9	0.00	0.34	1.6	6.4	16
29	1.6	0.02	5.3	18	---	27	1.6	0.00	0.48	3.3	5.7	14
30	1.5	0.02	5.0	17	---	25	1.4	0.00	0.58	2.5	6.1	12
31	1.5	---	4.5	16	---	24	---	0.00	---	1.6	14	---
TOTAL	146.2	10.22	138.90	408.8	247.0	3931.7	353.9	6.28	1.49	13.58	150.78	357.1
MEAN	4.716	0.341	4.481	13.19	8.821	126.8	11.80	0.203	0.050	0.438	4.864	11.90
MAX	14	1.4	10	29	15	503	23	1.2	0.58	3.3	14	22
MIN	1.5	0.02	0.01	4.1	5.5	5.7	1.4	0.00	0.00	0.00	0.98	3.8
CFSM	0.03	0.00	0.03	0.08	0.06	0.79	0.07	0.00	0.00	0.00	0.03	0.07
IN.	0.03	0.00	0.03	0.10	0.06	0.91	0.08	0.00	0.00	0.00	0.04	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2002, BY WATER YEAR (WY)

MEAN	143.9	53.50	90.22	167.6	230.6	236.2	188.1	66.90	82.65	111.9	172.7	192.2
MAX	914	520	498	583	1427	1203	2238	540	775	802	726	1592
(WY)	1951	1970	1977	1986	1998	1959	1973	1964	1957	1928	1971	1928
MIN	0.003	0.000	0.13	0.19	0.21	0.40	0.20	0.20	0.040	0.000	0.006	0.023
(WY)	1955	1955	1955	1934	1934	1955	1934	2002	1954	1954	1954	1954

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1921 - 2002	
ANNUAL TOTAL	5284.22		5765.95			
ANNUAL MEAN	14.48		15.80		144.4	
HIGHEST ANNUAL MEAN					377	1973
LOWEST ANNUAL MEAN					15.8	2002
HIGHEST DAILY MEAN	248	Mar 21	503	Mar 4	11400	Apr 5 1973
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Most years
ANNUAL SEVEN-DAY MINIMUM	0.00	May 27	0.00	May 21	0.00	Many days
MAXIMUM PEAK FLOW			540	Mar 4	11600	Apr 5 1973
MAXIMUM PEAK STAGE			10.44	Mar 4	22.98	Apr 5 1973
ANNUAL RUNOFF (CFSM)	0.090		0.099		0.90	
ANNUAL RUNOFF (INCHES)	1.23		1.34		12.26	
10 PERCENT EXCEEDS	29		21		390	
50 PERCENT EXCEEDS	7.6		4.6		44	
90 PERCENT EXCEEDS	0.04		0.00		1.3	

e Estimated

02229250 MIDDLE PRONG ST. MARYS RIVER NEAR TAYLOR, FL

LOCATION.--Lat 30°25'57", long 82°13'52", in SW¼ sec.5, T.1 S., R.21 E., Baker County, Hydrologic Unit 03070204, near left bank on downstream side of bridge on State Highway 127, 2.0 mi upstream from mouth, and 3.6 mi east of Taylor.

DRAINAGE AREA.--186 mi^2.

PERIOD OF RECORD.--April 1997 to March 2002 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 68.80 ft above NGVD of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OCTOBER 2001 TO MARCH 2002.--Maximum discharge, 431 ft^3/s, Mar. 4, gage height, 7.34 ft; minimum discharge, 0.45 ft^3/s, Dec. 6,7,8; minimum gage height, 1.53 ft, Oct. 26,28,30,31, Nov. 1,2,5-7,9.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD OCTOBER 2001 TO MARCH 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	0.55	0.61	0.72	9.4	6.5	---	---	---	---	---	---
2	1.8	0.58	0.57	0.96	9.4	8.4	---	---	---	---	---	---
3	1.7	0.62	0.57	1.0	9.3	119	---	---	---	---	---	---
4	1.5	0.64	0.57	1.2	8.9	387	---	---	---	---	---	---
5	1.3	0.63	0.52	1.1	7.6	387	---	---	---	---	---	---
6	1.3	0.61	0.49	1.1	7.2	348	---	---	---	---	---	---
7	1.1	0.64	0.49	1.1	7.3	330	---	---	---	---	---	---
8	1.1	0.66	0.59	0.98	8.0	309	---	---	---	---	---	---
9	0.95	0.64	0.59	0.90	8.2	296	---	---	---	---	---	---
10	0.89	0.62	1.4	0.81	8.1	302	---	---	---	---	---	---
11	0.86	0.63	2.5	0.76	7.6	308	---	---	---	---	---	---
12	0.81	0.62	2.9	0.72	7.0	---	---	---	---	---	---	---
13	0.78	0.64	2.2	1.00	6.7	---	---	---	---	---	---	---
14	0.82	0.90	1.7	2.0	6.1	---	---	---	---	---	---	---
15	0.80	0.90	1.3	6.6	5.6	---	---	---	---	---	---	---
16	0.77	0.84	1.1	7.5	5.3	---	---	---	---	---	---	---
17	0.71	0.91	1.1	5.5	5.2	---	---	---	---	---	---	---
18	0.69	0.89	0.98	4.3	4.8	---	---	---	---	---	---	---
19	0.69	0.82	0.82	3.5	4.5	---	---	---	---	---	---	---
20	0.66	0.83	0.71	3.2	4.3	---	---	---	---	---	---	---
21	0.65	0.77	0.64	4.9	4.1	---	---	---	---	---	---	---
22	0.66	0.70	0.58	13	3.9	---	---	---	---	---	---	---
23	0.66	0.70	0.58	12	4.4	---	---	---	---	---	---	---
24	0.67	0.72	1.1	11	5.9	---	---	---	---	---	---	---
25	0.64	0.68	1.6	11	7.7	---	---	---	---	---	---	---
26	0.60	0.68	1.7	12	7.5	---	---	---	---	---	---	---
27	0.59	0.68	1.2	12	7.2	---	---	---	---	---	---	---
28	0.60	0.70	1.1	11	6.9	---	---	---	---	---	---	---
29	0.61	0.64	0.99	11	---	---	---	---	---	---	---	---
30	0.58	0.62	0.90	10	---	---	---	---	---	---	---	---
31	0.56	---	0.81	9.8	---	---	---	---	---	---	---	---
TOTAL	27.95	21.06	32.91	162.65	188.1	---	---	---	---	---	---	---
MEAN	0.90	0.70	1.06	5.25	6.72	---	---	---	---	---	---	---
MAX	1.9	0.91	2.9	13	9.4	---	---	---	---	---	---	---
MIN	0.56	0.55	0.49	0.72	3.9	---	---	---	---	---	---	---

02231000 ST. MARYS RIVER NEAR MACCLENNY, FL

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

DRAINAGE AREA.--700 mi^2, approximately, includes part of watershed in Okefenokee Swamp, which is indeterminate.

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

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

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

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	28	26	31	149	66	148	35	15	80	124	316
2	142	27	26	33	135	69	144	33	15	92	148	343
3	121	28	25	36	123	305	139	31	15	101	257	326
4	105	31	25	40	112	1900	143	29	14	104	214	287
5	93	30	26	40	103	2440	143	28	13	91	183	250
6	84	28	26	40	97	2170	133	27	14	70	184	218
7	76	27	25	39	95	1820	123	26	20	54	162	186
8	70	26	25	38	97	1540	112	25	17	46	126	158
9	66	26	25	36	99	1310	101	24	18	55	101	133
10	61	26	29	35	97	1100	92	24	17	86	86	112
11	57	25	32	35	92	937	87	23	16	76	77	95
12	54	25	38	34	88	822	84	22	15	67	70	82
13	51	25	38	35	83	744	102	20	14	78	64	72
14	48	29	36	43	80	692	142	19	13	129	68	74
15	46	34	36	101	77	640	174	18	12	112	142	123
16	43	44	35	202	73	584	164	18	10	87	180	237
17	41	43	34	171	70	529	144	19	9.6	67	128	308
18	38	38	32	128	67	479	122	22	9.7	52	111	290
19	37	35	30	108	65	432	104	22	11	42	106	244
20	36	33	29	97	62	389	91	21	18	39	102	206
21	35	31	28	117	60	353	81	19	24	52	92	179
22	35	30	28	250	59	333	71	19	29	60	92	157
23	33	30	27	312	61	315	65	18	30	64	104	138
24	33	30	31	253	69	287	58	18	30	75	114	128
25	32	30	33	208	81	260	53	18	32	70	109	136
26	31	29	36	197	84	236	49	17	40	68	94	138
27	29	28	38	205	77	216	46	16	42	225	88	137
28	28	28	36	195	70	198	42	16	38	257	117	139
29	27	27	35	180	---	183	39	15	61	276	184	130
30	28	26	33	176	---	168	38	15	110	240	198	117
31	28	---	32	164	---	155	---	15	---	166	271	---
TOTAL	1779	897	955	3579	2425	21672	3034	672	722.3	3081	4096	5459
MEAN	57.39	29.90	30.81	115.5	86.61	699.1	101.1	21.68	24.08	99.39	132.1	182.0
MAX	171	44	38	312	149	2440	174	35	110	276	271	343
MIN	27	25	25	31	59	66	38	15	9.6	39	64	72
MED	43	29	31	101	82	432	102	20	17	76	114	148
CFSM	0.08	0.04	0.04	0.16	0.12	1.00	0.14	0.03	0.03	0.14	0.19	0.26
IN.	0.09	0.05	0.05	0.19	0.13	1.15	0.16	0.04	0.04	0.16	0.22	0.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2002, BY WATER YEAR (WY)

MEAN	801.7	267.7	366.3	604.0	852.1	941.8	738.9	307.2	344.4	573.6	898.3	995.6
MAX	6240	4155	2470	2404	5940	4928	6564	3303	2642	2183	3296	6340
(WY)	1948	1948	1948	1942	1998	1959	1973	1964	1957	1928	1945	1964
MIN	22.7	15.9	18.0	21.7	20.2	44.7	25.7	20.4	18.8	31.3	24.9	21.4
(WY)	1932	1932	1932	1932	1934	1932	1935	1932	1935	1954	1954	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1927 - 2002	
ANNUAL TOTAL	38821		48371.3			
ANNUAL MEAN	106.4		132.5		640.0	
HIGHEST ANNUAL MEAN					2285	1948
LOWEST ANNUAL MEAN					90.1	1955
HIGHEST DAILY MEAN	1680	Sep 16	2440	Mar 5	27600	Sep 25 1947
LOWEST DAILY MEAN	13	May 28,29	9.6	Jun 17	9.6	Jun 17 2002
ANNUAL SEVEN-DAY MINIMUM	14	May 23	11	Jun 13	11	Jun 13 2002
MAXIMUM PEAK FLOW			2490	Mar 5	28100	Sep 25 1947
MAXIMUM PEAK STAGE			11.77	Mar 5	23.25	Sep 13 1964
INSTANTANEOUS LOW FLOW			9.5	Jun 17,18	9.5	Jun 17,18 2002
ANNUAL RUNOFF (CFSM)	0.15		0.19		0.91	
ANNUAL RUNOFF (INCHES)	2.06		2.57		12.42	
10 PERCENT EXCEEDS	257		250		1600	
50 PERCENT EXCEEDS	44		67		215	
90 PERCENT EXCEEDS	24		21		37	

02231000 ST. MARYS RIVER NEAR MACCLENNY, FL--Continued

GAGE HEIGHT, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.06	1.27	1.20	1.28	2.75	1.80	2.82	1.43	1.08	2.06	2.58	4.28
2	2.78	1.26	1.20	1.32	2.61	1.84	2.78	1.39	1.09	2.21	2.81	4.47
3	2.56	1.27	1.19	1.37	2.49	3.72	2.73	1.36	1.07	2.32	3.82	4.35
4	2.39	1.30	1.19	1.43	2.37	10.29	2.77	1.33	1.06	2.35	3.45	4.06
5	2.25	1.30	1.20	1.43	2.27	11.70	2.77	1.31	1.05	2.20	3.16	3.76
6	2.13	1.27	1.20	1.42	2.19	11.09	2.67	1.30	1.07	1.93	3.17	3.48
7	2.03	1.25	1.19	1.41	2.17	10.16	2.56	1.29	1.19	1.72	2.96	3.19
8	1.95	1.23	1.19	1.39	2.19	9.41	2.44	1.27	1.13	1.60	2.59	2.92
9	1.89	1.23	1.19	1.37	2.22	8.71	2.32	1.25	1.14	1.73	2.32	2.67
10	1.82	1.22	1.25	1.35	2.19	8.04	2.22	1.25	1.12	2.14	2.14	2.44
11	1.76	1.21	1.29	1.34	2.14	7.48	2.15	1.23	1.11	2.01	2.02	2.25
12	1.71	1.21	1.40	1.33	2.08	7.04	2.12	1.21	1.09	1.89	1.93	2.08
13	1.68	1.20	1.40	1.35	2.03	6.73	2.33	1.18	1.07	2.03	1.85	1.97
14	1.63	1.27	1.37	1.47	1.98	6.48	2.76	1.16	1.03	2.63	1.91	1.99
15	1.59	1.34	1.37	2.21	1.94	6.22	3.07	1.15	1.00	2.44	2.75	2.55
16	1.55	1.49	1.35	3.26	1.90	5.93	2.97	1.15	0.98	2.15	3.13	3.64
17	1.50	1.47	1.33	2.96	1.86	5.63	2.78	1.16	0.96	1.89	2.62	4.22
18	1.47	1.39	1.31	2.54	1.81	5.34	2.56	1.21	0.97	1.68	2.43	4.08
19	1.45	1.34	1.28	2.32	1.78	5.06	2.36	1.21	1.01	1.53	2.37	3.71
20	1.43	1.31	1.25	2.19	1.75	4.78	2.20	1.19	1.13	1.49	2.33	3.37
21	1.41	1.29	1.23	2.41	1.72	4.54	2.07	1.17	1.25	1.68	2.21	3.12
22	1.40	1.27	1.23	3.66	1.70	4.40	1.95	1.16	1.34	1.80	2.21	2.91
23	1.38	1.27	1.22	4.18	1.73	4.27	1.86	1.15	1.35	1.85	2.35	2.72
24	1.37	1.26	1.28	3.70	1.84	4.06	1.78	1.15	1.35	2.00	2.47	2.62
25	1.36	1.26	1.31	3.31	1.99	3.84	1.70	1.14	1.37	1.94	2.41	2.70
26	1.33	1.25	1.37	3.20	2.02	3.64	1.64	1.12	1.51	1.90	2.23	2.72
27	1.31	1.24	1.39	3.28	1.94	3.47	1.59	1.11	1.54	3.52	2.16	2.71
28	1.28	1.23	1.37	3.19	1.86	3.31	1.54	1.10	1.47	3.82	2.49	2.73
29	1.27	1.22	1.34	3.04	---	3.16	1.49	1.09	1.80	3.97	3.17	2.64
30	1.27	1.21	1.32	3.00	---	3.01	1.47	1.09	2.42	3.67	3.31	2.50
31	1.27	---	1.30	2.89	---	2.89	---	1.08	---	2.99	3.93	---
MEAN	1.72	1.28	1.28	2.28	2.05	5.74	2.28	1.21	1.23	2.23	2.62	3.10
MAX	3.06	1.49	1.40	4.18	2.75	11.70	3.07	1.43	2.42	3.97	3.93	4.47
MIN	1.27	1.20	1.19	1.28	1.70	1.80	1.47	1.08	0.96	1.49	1.85	1.97

CAL YR 2001 MEAN 2.08 MAX 9.71 MIN 0.95
WTR YR 2002 MEAN 2.26 MAX 11.70 MIN 0.96

02231268 ALLIGATOR CREEK AT CALLAHAN, FL

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

DRAINAGE AREA.--14.0 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	e0.39	0.71	1.3	2.6	2.0	1.3	e0.00	e2.0	0.00	1.7	54
2	1.6	e0.43	0.78	1.8	2.3	4.0	1.3	e0.00	e0.98	0.16	3.9	30
3	1.3	e0.52	0.78	2.3	2.3	139	3.9	e0.00	e0.60	0.63	15	20
4	1.2	e0.73	0.78	2.7	2.1	329	6.3	e0.00	e0.31	0.57	18	14
5	1.0	e0.64	0.78	2.4	1.8	e208	6.7	e0.10	e0.23	0.20	35	12
6	0.94	e0.56	0.78	2.1	1.7	e142	3.9	e0.20	e0.17	0.05	25	9.9
7	0.87	e0.56	0.80	2.1	2.4	e71	2.6	e0.15	e0.12	0.00	9.9	7.7
8	0.83	0.56	0.88	2.1	2.9	e30	1.9	e0.04	e0.11	1.4	5.3	5.7
9	0.64	0.52	0.93	2.0	3.0	e18	1.5	e0.02	e0.10	1.4	3.9	4.5
10	0.66	0.45	1.7	1.9	2.8	e11	1.4	e0.00	e0.20	0.98	3.5	3.4
11	e0.72	0.42	1.7	1.8	2.7	e7.0	1.4	e0.00	e0.16	1.4	3.1	2.9
12	e0.76	0.42	1.6	1.7	2.4	6.5	1.9	e0.00	e0.13	2.4	2.4	2.4
13	e0.69	0.42	1.5	2.5	2.2	6.2	2.6	e0.00	e0.09	1.3	7.6	2.2
14	e0.66	0.76	1.4	7.0	2.1	5.8	3.4	e0.00	e0.05	0.90	54	4.3
15	e0.66	1.1	1.4	16	2.0	5.5	3.8	e0.00	e0.03	0.47	112	e20
16	e0.59	1.0	1.3	22	2.0	4.8	2.7	e0.00	e0.01	0.21	41	32
17	e0.56	1.0	1.3	9.9	2.0	4.3	1.8	e0.10	e0.00	0.03	25	36
18	e0.54	0.99	1.2	5.6	1.9	3.4	1.4	e1.0	0.00	0.00	14	19
19	e0.54	0.89	1.2	3.9	1.8	3.0	1.1	e0.85	0.24	0.00	9.6	13
20	e0.56	0.84	1.2	3.0	1.7	2.7	0.74	e0.53	0.09	0.31	7.3	9.8
21	e0.53	0.78	1.1	5.9	1.7	2.9	0.46	e0.42	1.6	0.24	6.0	7.5
22	e0.57	0.78	1.0	9.7	1.7	3.2	0.24	e0.30	1.1	0.23	4.8	5.8
23	e0.59	0.78	1.0	12	3.7	3.2	0.12	e0.22	0.18	0.59	4.1	4.2
24	e0.63	0.78	2.0	7.2	5.9	3.0	0.07	e0.19	0.00	0.71	3.4	52
25	e0.73	0.80	2.5	4.9	6.8	2.5	0.05	e0.16	0.60	0.48	2.7	204
26	e0.58	0.78	2.7	4.4	4.7	2.2	0.05	e0.11	0.58	2.3	2.2	e226
27	e0.47	0.78	2.1	4.0	3.4	1.9	0.02	e0.05	0.18	10	4.0	e84
28	e0.42	0.78	1.8	3.8	2.4	1.6	0.00	e0.02	0.26	15	19	68
29	e0.41	0.72	1.6	3.4	---	1.5	0.00	e0.01	0.23	8.5	45	52
30	e0.43	0.71	1.5	3.0	---	1.4	0.00	e0.00	0.14	3.7	195	45
31	e0.40	---	1.4	2.8	---	1.4	---	e0.20	---	2.2	155	---
TOTAL	23.08	20.89	41.42	155.2	75.0	1028.0	52.65	4.67	10.49	56.36	838.4	1051.3
MEAN	0.74	0.70	1.34	5.01	2.68	33.2	1.75	0.15	0.35	1.82	27.0	35.0
MAX	2.0	1.1	2.7	22	6.8	329	6.7	1.0	2.0	15	195	226
MIN	0.40	0.39	0.71	1.3	1.7	1.4	0.00	0.00	0.00	0.00	1.7	2.2
CFSM	0.05	0.05	0.10	0.36	0.19	2.37	0.13	0.01	0.02	0.13	1.93	2.50
IN.	0.06	0.06	0.11	0.41	0.20	2.73	0.14	0.01	0.03	0.15	2.23	2.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)

MEAN	16.6	4.58	9.82	18.8	21.6	18.4	9.35	2.66	5.41	6.92	17.5	18.2
MAX	89.9	22.5	73.3	50.6	126	41.7	26.4	13.1	47.4	54.1	99.1	69.1
(WY)	1997	1994	1998	1998	1998	1986	1983	1984	1991	1991	1998	1985
MIN	0.028	0.60	0.98	2.40	2.35	2.10	1.20	0.037	0.023	0.083	0.11	0.086
(WY)	1982	1991	1991	2001	2001	2000	2001	1995	1993	1993	1990	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1982 - 2002	
ANNUAL TOTAL	1872.90		3357.46			
ANNUAL MEAN	5.13		9.20		12.5	
HIGHEST ANNUAL MEAN					36.9	1998
LOWEST ANNUAL MEAN					3.34	2000
HIGHEST DAILY MEAN	158	Sep 14	329	Mar 4	878	Oct 8 1996
LOWEST DAILY MEAN	0.02	Jul 12	0.00	Many days	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	0.03	May 30	0.00	Apr 28	0.00	Some years
MAXIMUM PEAK FLOW			386	Mar 4	931	Oct 8 1996
MAXIMUM PEAK STAGE			11.47	Mar 4	14.35	Oct 8 1996
ANNUAL RUNOFF (CFSM)	0.37		0.66		0.89	
ANNUAL RUNOFF (INCHES)	4.98		8.92		12.09	
10 PERCENT EXCEEDS	10		14		25	
50 PERCENT EXCEEDS	1.5		1.5		3.0	
90 PERCENT EXCEEDS	0.06		0.08		0.17	

e Estimated

02231280 THOMAS CREEK NEAR CRAWFORD, FL

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

DRAINAGE AREA.--29.9 mi^2.

PERIOD OF RECORD.--January 1965 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	6.6	7.1	8.6	18	6.5	4.9	1.8	4.6	28	17	278
2	13	6.8	7.2	12	16	9.5	4.8	1.7	2.8	10	89	210
3	12	7.7	7.2	18	14	151	8.6	1.6	1.7	6.2	41	144
4	11	8.1	7.3	15	12	447	11	1.5	1.4	5.1	25	94
5	10	7.7	7.3	12	11	275	8.6	1.5	1.3	7.3	30	71
6	9.9	7.2	7.3	12	9.8	161	6.6	1.7	1.3	8.5	24	55
7	10	6.9	7.3	12	11	108	5.6	1.6	1.6	5.3	12	36
8	10	6.6	7.3	11	13	77	4.8	1.5	1.8	5.8	7.1	23
9	9.8	6.5	9.8	10	12	57	4.3	1.4	1.8	24	5.2	17
10	9.3	6.3	21	9.9	11	43	4.0	1.3	2.2	64	4.6	13
11	9.5	6.2	52	9.8	10	33	4.2	1.3	1.7	44	4.6	11
12	9.2	6.3	26	9.6	9.3	24	6.1	1.2	1.4	13	3.9	9.7
13	8.7	6.3	17	12	8.5	23	6.4	1.2	1.2	11	5.7	35
14	8.8	8.4	15	21	8.1	22	5.7	1.1	1.1	11	104	86
15	8.6	17	13	115	7.7	18	4.9	1.1	0.98	7.2	153	153
16	8.0	15	12	100	7.6	16	4.3	1.1	0.89	4.8	99	365
17	7.4	11	11	43	7.2	14	3.8	1.1	0.86	3.6	68	266
18	7.0	9.5	11	28	6.5	12	3.4	1.9	0.94	2.9	39	154
19	7.2	8.7	11	22	6.1	10	3.1	2.4	1.1	2.5	22	97
20	7.3	8.6	9.7	20	6.0	9.0	2.9	2.1	1.6	3.7	30	65
21	7.2	8.4	9.0	52	6.0	12	2.6	1.7	4.6	6.2	46	43
22	7.4	8.2	8.5	131	5.9	20	2.5	1.5	16	6.0	27	29
23	7.6	8.2	8.4	100	8.4	15	2.3	1.5	16	9.9	16	20
24	7.6	8.1	13	61	17	11	2.2	1.4	7.1	6.7	11	22
25	8.5	7.9	16	44	14	9.2	2.1	1.3	4.7	5.7	8.3	85
26	7.8	7.7	13	45	10	7.9	2.1	1.2	4.6	6.5	7.9	118
27	6.7	7.4	11	44	8.4	7.0	2.0	1.1	11	26	26	131
28	6.3	7.4	10	35	7.1	6.2	2.1	1.1	9.0	30	66	100
29	6.4	7.2	9.9	28	---	5.7	2.0	1.1	30	21	87	71
30	6.5	7.2	9.5	23	---	5.3	1.9	1.1	49	7.5	144	60
31	6.4	---	8.9	20	---	4.9	---	1.2	---	4.4	324	---
TOTAL	270.1	245.1	383.7	1083.9	281.6	1620.2	129.8	44.3	184.27	397.8	1547.3	2861.7
MEAN	8.71	8.17	12.4	35.0	10.1	52.3	4.33	1.43	6.14	12.8	49.9	95.4
MAX	15	17	52	131	18	447	11	2.4	49	64	324	365
MIN	6.3	6.2	7.1	8.6	5.9	4.9	1.9	1.1	0.86	2.5	3.9	9.7
CFSM	0.29	0.27	0.41	1.17	0.34	1.75	0.14	0.05	0.21	0.43	1.67	3.19
IN.	0.34	0.30	0.48	1.35	0.35	2.02	0.16	0.06	0.23	0.49	1.93	3.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

MEAN	39.8	17.5	24.7	38.3	52.0	47.3	29.6	14.5	22.6	29.2	47.1	52.8
MAX	294	182	171	104	280	170	254	92.6	109	169	185	238
(WY)	1993	1970	1998	1986	1998	1970	1973	1966	1973	1991	1968	1979
MIN	1.54	2.62	3.46	6.58	6.98	5.43	2.45	1.26	0.65	2.04	1.05	1.16
(WY)	1982	1991	1991	1985	2001	2000	1968	2000	2000	1977	1999	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002	
ANNUAL TOTAL	7847.94		9049.77			
ANNUAL MEAN	21.5		24.8		34.2	
HIGHEST ANNUAL MEAN					90.8	1970
LOWEST ANNUAL MEAN					9.85	2000
HIGHEST DAILY MEAN	1070	Sep 15	447	Mar 4	4000	Oct 4 1992
LOWEST DAILY MEAN	0.63	Jun 7	0.86	Jun 17	0.00	Sep 26-28 1990
ANNUAL SEVEN-DAY MINIMUM	0.83	Jun 2	1.0	Jun 13	0.21	May 31 2000
MAXIMUM PEAK FLOW			533	Mar 4	5350	Oct 4 1992
MAXIMUM PEAK STAGE			17.96	Mar 4	a21.30	Oct 4 1992
INSTANTANEOUS LOW FLOW			0.83	Jun 17	.00	Some years
ANNUAL RUNOFF (CFSM)	0.72		0.83		1.14	
ANNUAL RUNOFF (INCHES)	9.76		11.26		15.53	
10 PERCENT EXCEEDS	30		64		76	
50 PERCENT EXCEEDS	7.2		8.6		9.7	
90 PERCENT EXCEEDS	2.4		1.6		2.6	

a From floodmark

02231289 NASSAU RIVER NEAR HEDGES, FL

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

DRAINAGE AREA.--274 mi^2, approximately, does not include Inconstantion Creek.

PERIOD OF RECORD.--April 1983 to September 1985 and October 1986 to September 1988, October 1988 to September 1992 (gage heights only), October 1992 to September 1994 (gage heights and discharge measurements only), October 1994 to September 1996 (gage heights only), October 1996 to December 2000, July to September 2002.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 10.00 ft below NGVD of 1929. Prior to June 22, 1991 gage was at present site and datum. June 22, 1991 to August 22, 1996 at site 200 ft upstream at present datum. August 1985 to April 1998 auxiliary water-stage recorder about 5.0 mi downstream.

REMARKS.--Records poor. There is no record, Oct. 1, 2001 to July 19, 2002, due to bridge construction. Discharge represents net of much larger upstream and downstream discharge. The gage height record published is the high and low tide event for each day. Maximum daily discharge, maximum daily reverse flow, and maximum peak stage may have been exceeded during periods of no record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR PERIOD JULY 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	-91	92
2	---	---	---	---	---	---	---	---	---	---	-550	-251
3	---	---	---	---	---	---	---	---	---	---	-240	-1010
4	---	---	---	---	---	---	---	---	---	---	341	-50
5	---	---	---	---	---	---	---	---	---	---	-159	990
6	---	---	---	---	---	---	---	---	---	---	-672	-283
7	---	---	---	---	---	---	---	---	---	---	-1520	-498
8	---	---	---	---	---	---	---	---	---	---	188	241
9	---	---	---	---	---	---	---	---	---	---	751	756
10	---	---	---	---	---	---	---	---	---	---	962	952
11	---	---	---	---	---	---	---	---	---	---	1230	920
12	---	---	---	---	---	---	---	---	---	---	1150	199
13	---	---	---	---	---	---	---	---	---	---	1270	130
14	---	---	---	---	---	---	---	---	---	---	1010	99
15	---	---	---	---	---	---	---	---	---	---	652	119
16	---	---	---	---	---	---	---	---	---	---	258	-326
17	---	---	---	---	---	---	---	---	---	---	94	-841
18	---	---	---	---	---	---	---	---	---	---	69	-1110
19	---	---	---	---	---	---	---	---	---	---	-214	-624
20	---	---	---	---	---	---	---	---	---	15	-219	-105
21	---	---	---	---	---	---	---	---	---	-530	-61	45
22	---	---	---	---	---	---	---	---	---	-286	38	113
23	---	---	---	---	---	---	---	---	---	207	487	567
24	---	---	---	---	---	---	---	---	---	694	617	1110
25	---	---	---	---	---	---	---	---	---	713	450	2690
26	---	---	---	---	---	---	---	---	---	1250	1060	2450
27	---	---	---	---	---	---	---	---	---	1030	882	2830
28	---	---	---	---	---	---	---	---	---	1120	1230	1320
29	---	---	---	---	---	---	---	---	---	795	836	481
30	---	---	---	---	---	---	---	---	---	584	660	-911
31	---	---	---	---	---	---	---	---	---	326	402	---
TOTAL	---	---	---	---	---	---	---	---	---	5918	10911	10095
MEAN	---	---	---	---	---	---	---	---	---	493	352	336
MAX	---	---	---	---	---	---	---	---	---	1250	1270	2830
MIN	---	---	---	---	---	---	---	---	---	-530	-1520	-1110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002, BY WATER YEAR (WY)

MEAN	986	1398	1375	1679	1508	1629	1274	823	1386	1196	1393	1168
MAX	2465	4111	3587	3566	3104	3908	4040	3191	4465	5826	7110	6780
(WY)	1998	1985	1997	1984	1984	1984	1984	1985	1997	1997	1997	1997
MIN	416	340	432	484	412	398	191	116	191	-28.5	57.7	140
(WY)	2001	1987	2001	1987	1989	1989	1989	1988	1986	1986	2000	1998

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR		#WATER YEARS 1983 - 2002	
ANNUAL TOTAL		26924			
ANNUAL MEAN		369		1312	
HIGHEST ANNUAL MEAN				3966	1997
LOWEST ANNUAL MEAN				266	2000
HIGHEST DAILY MEAN		2830	Sep 27	11300	Sep 2 1985
LOWEST DAILY MEAN		-1520	Aug 7	-3370	May 26 1988
ANNUAL SEVEN-DAY MINIMUM		-413	Aug 1	-692	Sep 21 2000
MAXIMUM PEAK STAGE		13.27	Aug 7	14.88	Oct 7 1996
10 PERCENT EXCEEDS		1230		3560	
50 PERCENT EXCEEDS		258		876	
90 PERCENT EXCEEDS		-594		-306	

Note.--Negative figures indicate reverse flow.
Includes partial year(s) of record

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

GAGE HEIGHT, FEET, PERIOD JULY TO SEPTEMBER 2002

DAY	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	---	---	12.14	8.11	12.59	9.12
2	---	---	---	---	---	---	---	---	12.39	8.56	12.70	9.12
3	---	---	---	---	---	---	---	---	12.43	8.83	12.94	9.59
4	---	---	---	---	---	---	---	---	12.47	8.60	12.95	9.65
5	---	---	---	---	---	---	---	---	12.59	8.53	12.67	8.55
6	---	---	---	---	---	---	---	---	12.80	8.85	12.78	8.32
7	---	---	---	---	---	---	---	---	13.27	9.93	12.94	9.26
8	---	---	---	---	---	---	---	---	13.17	10.09	12.92	9.77
9	---	---	---	---	---	---	---	---	12.77	9.76	12.90	9.69
10	---	---	---	---	---	---	---	---	13.04	9.54	12.73	9.28
11	---	---	---	---	---	---	---	---	12.85	9.14	12.56	8.65
12	---	---	---	---	---	---	---	---	12.67	8.91	12.54	8.17
13	---	---	---	---	---	---	---	---	12.48	8.65	12.61	8.62
14	---	---	---	---	---	---	---	---	12.40	8.23	12.35	8.33
15	---	---	---	---	---	---	---	---	12.37	8.04	12.20	7.88
16	---	---	---	---	---	---	---	---	12.26	7.87	12.16	7.60
17	---	---	---	---	---	---	---	---	12.24	7.59	12.27	7.71
18	---	---	---	---	---	---	---	---	12.22	7.32	12.45	8.25
19	---	---	---	---	---	---	---	---	12.26	7.27	12.55	8.63
20	---	---	---	---	---	---	12.19	7.18	12.26	7.55	12.58	9.03
21	---	---	---	---	---	---	12.25	7.34	12.24	7.60	12.61	9.19
22	---	---	---	---	---	---	12.28	7.60	12.27	7.79	12.61	9.47
23	---	---	---	---	---	---	12.24	7.34	12.21	7.98	12.63	9.44
24	---	---	---	---	---	---	12.20	7.63	11.93	7.77	12.64	9.30
25	---	---	---	---	---	---	12.08	7.33	12.10	7.91	12.84	10.22
26	---	---	---	---	---	---	11.63	7.72	12.15	8.23	12.74	9.83
27	---	---	---	---	---	---	12.03	7.70	12.16	8.40	12.25	8.83
28	---	---	---	---	---	---	11.96	7.43	12.13	8.24	12.40	8.55
29	---	---	---	---	---	---	11.86	7.59	12.13	8.34	12.46	8.75
30	---	---	---	---	---	---	11.68	7.34	12.27	8.23	12.89	10.11
31	---	---	---	---	---	---	11.78	7.36	12.42	8.79	---	---
MAX	---	---	---	---	---	---	---	---	13.27	10.09	12.95	10.22
MIN	---	---	---	---	---	---	---	---	11.93	7.27	12.16	7.60

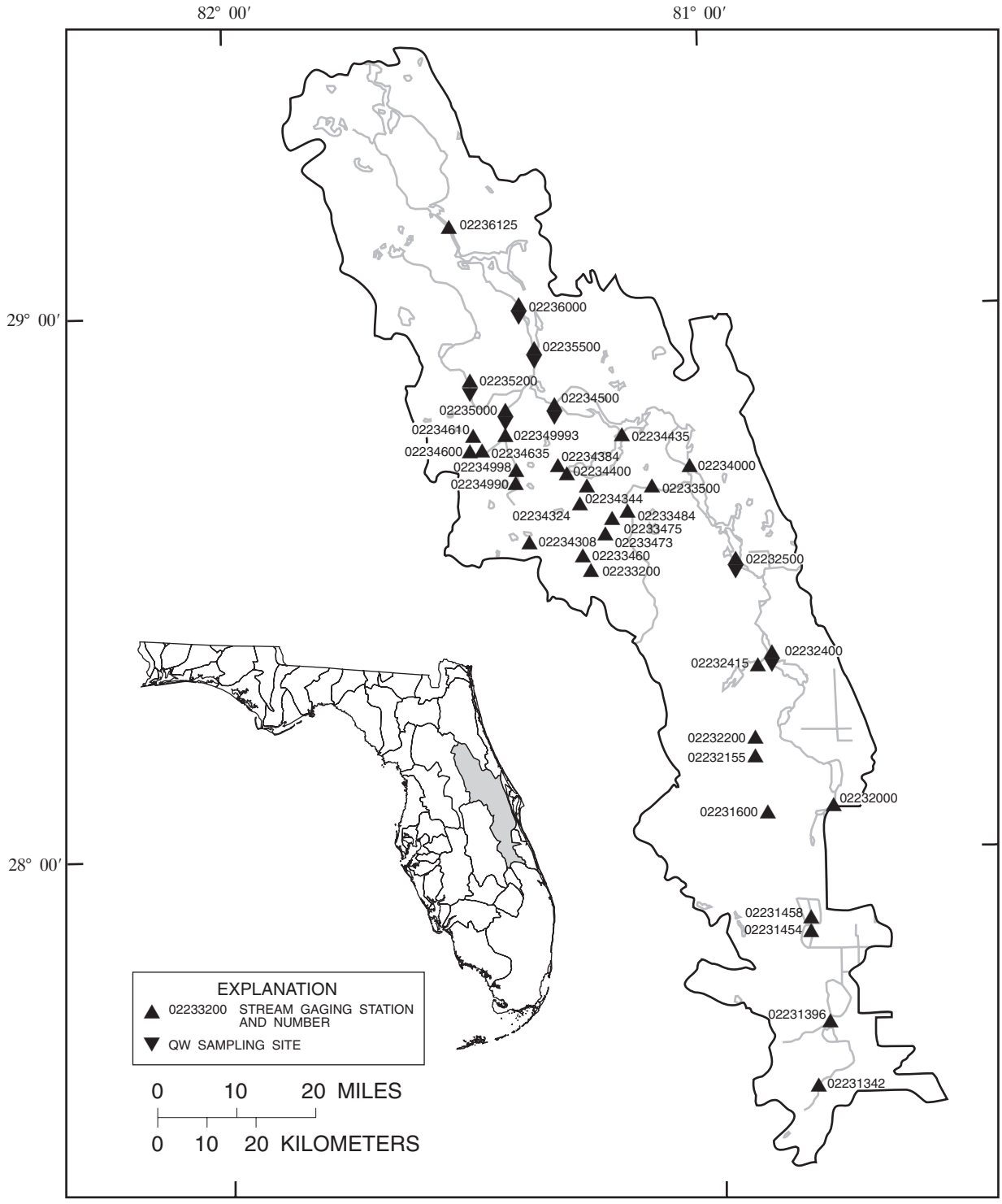

Figure 5.--Location of stream gaging stations in the St. Johns River basin above the Ocklawaha River.

02231342 FORT DRUM CREEK AT SUNSHINE STATE PARKWAY, NEAR FORT DRUM, FL

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

DRAINAGE AREA.--52.6 mi^2.

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

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (levels by Brevard Engineering Co.).

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	95	17	9.3	16	13	1.5	0.00	0.00	137	44	244
2	67	88	17	11	17	12	1.2	0.00	0.00	119	80	191
3	57	82	15	15	13	11	1.2	0.00	0.00	144	85	165
4	47	71	15	17	12	9.6	2.3	0.00	0.00	131	67	382
5	40	76	13	15	14	8.7	3.2	0.00	0.00	140	49	383
6	34	87	14	15	13	7.8	2.9	0.00	0.00	171	40	287
7	30	89	15	15	12	8.6	2.0	0.00	0.00	391	33	210
8	28	74	14	13	12	8.2	1.6	0.00	0.02	530	29	145
9	30	57	13	13	11	7.0	1.2	0.00	0.38	405	27	98
10	35	47	13	12	20	6.3	0.87	0.00	0.20	485	21	69
11	38	39	13	11	37	5.7	0.63	0.00	0.06	738	26	53
12	35	34	12	11	25	5.5	1.7	0.00	0.00	761	29	46
13	31	34	12	10	20	5.3	3.4	0.00	0.35	629	25	40
14	28	40	12	10	20	4.4	4.1	0.00	6.3	490	23	34
15	25	41	12	30	20	4.1	12	0.00	13	338	20	30
16	22	38	12	36	18	3.9	11	0.00	67	248	17	26
17	19	35	12	34	16	3.4	7.4	0.00	64	198	14	21
18	17	32	11	31	15	2.9	5.2	0.00	44	169	13	23
19	18	29	11	29	13	2.5	3.8	0.00	34	136	14	64
20	18	28	9.9	27	13	2.2	2.9	0.00	37	106	20	189
21	19	26	9.3	25	12	2.9	2.1	0.00	78	132	43	150
22	29	24	8.9	23	13	3.4	1.7	0.00	134	180	93	131
23	37	24	8.7	22	24	2.8	1.3	0.00	148	150	168	128
24	53	24	8.7	20	34	2.2	0.90	0.00	136	121	198	165
25	391	22	8.5	20	30	1.9	0.63	0.00	243	90	149	325
26	889	21	9.9	19	23	2.0	0.37	0.00	432	79	95	386
27	628	20	9.4	17	19	4.4	0.16	0.00	390	81	79	294
28	379	19	9.1	17	16	3.9	0.03	0.00	297	64	72	220
29	248	18	8.9	16	---	2.9	0.00	0.00	195	53	59	164
30	174	17	8.3	15	---	2.3	0.00	0.00	177	44	145	117
31	120	---	8.5	15	---	2.0	---	0.00	---	39	262	---
TOTAL	3668	1331	361.1	573.3	508	162.8	77.29	0.00	2496.31	7499	2039	4780
MEAN	118	44.4	11.6	18.5	18.1	5.25	2.58	0.000	83.2	242	65.8	159
MAX	889	95	17	36	37	13	12	0.00	432	761	262	386
MIN	17	17	8.3	9.3	11	1.9	0.00	0.00	0.00	39	13	21
CFSM	2.25	0.84	0.22	0.35	0.34	0.10	0.05	0.00	1.58	4.60	1.25	3.03
IN.	2.59	0.94	0.26	0.41	0.36	0.12	0.05	0.00	1.77	5.30	1.44	3.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2002, BY WATER YEAR (WY)

MEAN	80.7	35.0	20.4	27.5	30.8	41.8	16.0	11.6	39.6	74.0	80.9	109
MAX	384	276	79.0	125	166	229	80.3	134	193	242	222	467
(WY)	2000	1988	1998	1979	1983	1998	1993	1979	1982	2002	1995	1979
MIN	0.017	0.42	0.027	0.72	0.18	0.26	0.009	0.000	0.000	0.096	2.69	1.83
(WY)	1989	1981	1982	2001	2001	1999	1999	1981	1981	1981	1980	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1977 - 2002	
ANNUAL TOTAL	19849.50		23495.80			
ANNUAL MEAN	54.4		64.4		47.9	
HIGHEST ANNUAL MEAN					95.3	1995
LOWEST ANNUAL MEAN					6.14	1981
HIGHEST DAILY MEAN	889	Oct 26	889	Oct 26	1330	Mar 21 1998
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Most years
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 14	0.00	Apr 29	0.00	Most years
MAXIMUM PEAK FLOW			942	Oct 26	1410	Sep 4 1979
MAXIMUM PEAK STAGE			37.88	Oct 26	38.50	Mar 21 1998
ANNUAL RUNOFF (CFSM)	1.03		1.22		0.91	
ANNUAL RUNOFF (INCHES)	14.04		16.62		12.38	
10 PERCENT EXCEEDS	167		175		126	
50 PERCENT EXCEEDS	14		18		15	
90 PERCENT EXCEEDS	0.00		0.00		0.07	

02231396 BLUE CYPRESS CREEK NEAR FELLSMERE, FL

LOCATION.--Lat 27°43'40", long 80°48'19", in NW¼ sec.2, T. 32 S., R.35 E., Indian River County, Hydrologic Unit 03080101, on private road 2 mi upstream from Blue Cypress Lake and 12.8 mi west of Fellsmere.

DRAINAGE AREA.--105 mi^2.

PERIOD OF RECORD.--Water years 1969-70, 1985-90 (low flow measurements only), December 1995 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (St. Johns River Water Management District bench mark). Prior to Oct. 1, 1999, at present site at datum 6.47 ft lower.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	359	26	8.0	11	38	1.6	0.00	0.00	1960	131	88
2	349	323	24	9.0	10	35	1.5	0.00	0.00	1880	102	88
3	287	298	21	11	9.9	30	1.5	0.00	0.00	1680	79	178
4	246	268	19	12	9.0	26	1.4	0.00	0.00	1480	69	204
5	201	254	18	11	8.5	21	1.3	0.00	0.00	1180	56	255
6	179	238	17	10	7.6	17	1.2	0.00	0.00	1030	41	319
7	157	219	18	9.9	7.4	15	0.98	0.00	0.00	867	40	319
8	137	201	20	9.7	8.7	13	0.72	0.00	0.00	795	41	271
9	120	176	18	9.3	9.7	11	0.52	0.00	1.2	651	42	217
10	103	155	17	8.7	10	9.6	0.38	0.00	1.7	612	37	171
11	86	137	16	8.2	24	8.5	0.25	0.00	1.4	600	34	147
12	71	121	15	8.0	29	7.8	0.34	0.00	1.2	602	34	124
13	62	111	14	7.8	21	6.8	0.55	0.00	2.6	674	46	111
14	55	110	13	8.5	17	6.3	0.89	0.00	8.0	671	138	107
15	48	110	12	41	15	24	5.4	0.00	10	572	274	108
16	43	102	11	61	13	67	12	0.00	16	483	264	99
17	40	93	11	64	11	55	7.9	0.00	48	619	245	80
18	37	79	11	53	9.3	24	5.0	0.00	73	697	208	65
19	35	71	11	42	8.4	11	3.8	0.00	100	643	163	71
20	34	66	10	37	7.8	7.3	3.1	0.00	178	502	135	86
21	36	60	9.6	32	7.1	5.2	2.4	0.00	291	477	122	89
22	50	52	8.9	30	7.6	4.1	1.9	0.00	472	386	93	76
23	91	47	8.6	27	27	3.6	1.6	0.00	500	308	74	58
24	150	45	8.4	25	57	3.1	1.3	0.00	431	253	88	68
25	262	42	8.3	21	71	2.7	1.0	0.00	714	215	79	207
26	398	40	8.4	19	69	2.6	0.72	0.00	1140	192	58	429
27	554	36	8.3	17	55	2.5	0.48	0.00	1250	155	45	344
28	554	34	8.0	16	44	2.4	0.30	0.00	1060	163	45	268
29	512	32	7.7	14	---	2.2	0.14	0.00	893	160	46	218
30	463	29	7.4	13	---	1.9	0.00	0.00	959	128	72	171
31	404	---	7.5	12	---	1.7	---	0.00	---	111	85	---
TOTAL	6194	3908	413.1	655.1	585.0	465.3	60.17	0.00	8151.10	20746	2986	5036
MEAN	200	130	13.3	21.1	20.9	15.0	2.01	0.000	272	669	96.3	168
MAX	554	359	26	64	71	67	12	0.00	1250	1960	274	429
MIN	34	29	7.4	7.8	7.1	1.7	0.00	0.00	0.00	111	34	58
CFSM	1.90	1.24	0.13	0.20	0.20	0.14	0.02	0.00	2.59	6.37	0.92	1.60
IN.	2.19	1.38	0.15	0.23	0.21	0.16	0.02	0.00	2.89	7.35	1.06	1.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

MEAN	220	178	87.2	90.4	110	92.1	23.3	4.28	77.5	154	200	199
MAX	821	760	435	519	711	553	91.5	14.6	272	669	440	514
(WY)	2000	1998	1998	1998	1998	1998	1996	1997	2002	2002	1997	2001
MIN	10.9	0.36	0.24	1.02	0.55	0.016	0.13	0.000	0.000	3.23	19.6	38.2
(WY)	2001	2001	2001	2001	2001	2001	1999	2002	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	42483.22		49199.77			
ANNUAL MEAN	116		135		123	
HIGHEST ANNUAL MEAN					282	1998
LOWEST ANNUAL MEAN					64.8	1999
HIGHEST DAILY MEAN	1460	Sep 10	1960	Jul 1	3260	Oct 17 1999
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 22	0.00	Apr 30	0.00	Many days
MAXIMUM PEAK FLOW			2150	Jul 1	3430	Oct 17 1999
MAXIMUM PEAK STAGE			28.57	Jul 1	a29.01	Nov 14 1997
ANNUAL RUNOFF (CFSM)	1.11		1.28		1.17	
ANNUAL RUNOFF (INCHES)	15.05		17.43		15.96	
10 PERCENT EXCEEDS	356		414		352	
50 PERCENT EXCEEDS	17		30		18	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a At present datum

02231454 SIXMILE CREEK NEAR KENANSVILLE, FL

LOCATION.--Lat 27°52'00", long 80°48'18", in SE¼ sec.15, T. 30 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on left bank of levee at west edge of St. Johns Marsh, 11.6 mi east of Kenansville, 15 mi south of U.S. Highway 192, 19 mi west of Sebastian.

DRAINAGE AREA.--11.6 mi^2.

PERIOD OF RECORD.--February 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	32	2.3	0.80	2.2	6.0	0.29	0.00	0.00	64	2.3	11
2	72	30	2.2	0.85	2.3	5.7	0.28	0.00	0.00	56	2.7	7.6
3	70	31	2.0	0.94	2.3	5.3	0.26	0.00	0.00	41	3.1	12
4	68	29	2.0	0.93	2.3	4.7	0.26	0.00	0.00	30	3.6	6.8
5	63	25	1.9	0.92	2.3	4.2	0.25	0.00	0.00	24	4.3	4.3
6	58	22	1.9	0.95	2.4	4.1	0.23	0.00	0.00	18	5.0	3.9
7	52	18	1.9	0.95	2.6	4.1	0.19	0.00	0.00	15	5.7	3.4
8	45	16	1.9	0.92	2.9	4.1	0.18	0.00	0.00	15	6.8	2.8
9	37	13	1.7	0.92	2.9	3.9	0.16	0.00	0.00	17	8.2	2.5
10	30	11	1.6	0.93	3.5	3.8	0.15	0.00	0.00	18	8.9	2.3
11	23	9.9	1.6	0.95	6.4	3.6	0.14	0.00	0.00	18	9.7	2.2
12	18	8.8	1.5	0.97	6.5	3.4	0.17	0.00	0.00	18	12	2.3
13	15	8.2	1.4	0.97	5.4	3.2	0.23	0.00	0.00	19	23	2.4
14	12	8.9	1.4	1.1	4.8	3.0	0.20	0.00	0.00	17	21	2.5
15	10	8.7	1.3	2.4	4.5	3.0	0.29	0.00	0.00	15	15	2.5
16	9.3	7.7	1.4	2.8	4.2	2.9	0.28	0.00	0.02	13	11	2.5
17	8.4	7.1	1.2	2.3	3.8	2.7	0.28	0.00	0.16	12	8.8	2.5
18	7.5	6.4	1.2	2.2	3.5	2.7	0.24	0.00	0.09	10	6.5	2.6
19	7.1	5.7	1.1	2.1	3.4	2.5	0.20	0.00	0.15	8.7	5.2	2.6
20	7.2	5.3	1.0	2.1	3.3	2.4	0.18	0.00	2.7	7.1	3.7	2.7
21	9.2	4.9	0.95	2.0	3.2	2.3	0.16	0.00	28	6.5	2.8	2.8
22	17	4.4	0.91	2.0	3.5	1.8	0.13	0.00	172	6.4	2.2	2.8
23	21	4.0	0.85	2.0	9.8	0.39	0.11	0.00	184	5.5	2.3	2.9
24	20	3.8	0.78	2.1	22	0.30	0.09	0.00	282	4.8	2.1	3.7
25	41	3.6	0.73	2.1	20	0.26	0.07	0.00	271	4.2	1.8	6.5
26	100	3.4	0.70	2.1	13	0.25	0.06	0.00	184	3.6	1.5	27
27	132	3.1	0.71	2.1	9.5	0.35	0.05	0.00	135	3.1	1.4	25
28	88	2.8	0.73	2.2	7.2	0.35	0.04	0.00	70	2.6	1.9	12
29	67	2.6	0.73	2.3	---	0.30	0.03	0.00	43	2.1	18	7.0
30	51	2.5	0.73	2.2	---	0.28	0.02	0.00	39	1.7	24	5.5
31	39	---	0.74	2.2	---	0.27	---	0.00	---	2.0	18	---
TOTAL	1271.7	338.8	41.06	50.30	159.7	82.15	5.22	0.00	1411.12	478.3	242.5	176.6
MEAN	41.0	11.3	1.32	1.62	5.70	2.65	0.17	0.000	47.0	15.4	7.82	5.89
MAX	132	32	2.3	2.8	22	6.0	0.29	0.00	282	64	24	27
MIN	7.1	2.5	0.70	0.80	2.2	0.25	0.02	0.00	0.00	1.7	1.4	2.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

MEAN	21.6	12.3	5.12	5.41	4.44	3.37	2.69	0.23	7.42	6.53	11.0	20.1
MAX	68.3	70.1	31.4	30.4	22.5	16.7	8.87	0.80	47.0	24.0	42.4	81.1
(WY)	1996	1998	1998	1998	1998	1998	1995	1995	2002	2001	2001	1995
MIN	0.77	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.26	0.000
(WY)	1998	1997	1997	1997	1997	1997	1997	1999	2000	1997	1997	1996

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1995 - 2002	
ANNUAL TOTAL	5492.17		4257.55			
ANNUAL MEAN	15.0		11.7		7.58	
HIGHEST ANNUAL MEAN					14.9	1998
LOWEST ANNUAL MEAN					0.18	1997
HIGHEST DAILY MEAN	132	Oct 27	282	Jun 24	596	Nov 15 1997
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	May 1	0.00	Many days
MAXIMUM PEAK FLOW			355	Jun 24	844	Nov 14 1997
MAXIMUM PEAK STAGE			23.21	Jun 24	25.07	Nov 14 1997
10 PERCENT EXCEEDS	53		26		19	
50 PERCENT EXCEEDS	2.5		2.6		0.50	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

02231458 WOLF CREEK NEAR KENANSVILLE, FL

LOCATION.--Lat 27°53'39", long 80°49'17", in NE¼ sec.9, T. 30 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on right bank at west edge of St. Johns Marsh, 10.7 mi east of Kenansville, 13 mi south of U.S. Highway 192, and 21 mi west of Sebastian.

DRAINAGE AREA.-- 8.6 mi^2.

PERIOD OF RECORD.--February 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e7.0	38	4.5	1.5	2.2	3.1	0.63	0.38	0.96	49	1.2	9.9
2	e7.1	39	3.6	1.9	2.3	2.7	0.60	0.37	0.79	45	1.8	12
3	e7.4	43	3.0	3.2	2.3	2.4	0.56	0.36	0.69	41	2.5	13
4	e7.4	45	2.6	2.8	2.3	2.1	0.52	0.36	0.64	36	3.5	13
5	e7.0	44	2.2	2.6	2.3	1.9	0.49	0.37	0.59	32	4.9	13
6	e6.8	41	2.0	2.3	2.3	1.8	0.45	0.61	0.57	29	6.2	13
7	e6.2	37	2.1	2.2	2.4	1.7	0.42	0.75	0.70	26	7.8	13
8	e5.9	34	2.1	2.1	2.7	1.7	0.39	0.73	1.4	25	10	12
9	e5.5	30	2.1	2.0	2.6	1.6	0.36	0.71	1.5	24	12	12
10	e4.9	28	1.9	1.9	3.2	1.5	0.36	0.70	1.1	24	14	12
11	e4.2	25	1.7	1.9	5.9	1.5	0.36	0.68	0.97	22	17	12
12	e3.9	22	1.6	1.9	5.0	1.4	0.37	0.68	0.92	21	20	12
13	e3.9	20	1.5	1.9	4.2	1.4	0.39	0.64	1.1	20	23	13
14	e4.0	20	1.4	3.4	3.6	1.3	0.40	0.67	1.2	18	22	13
15	e4.2	18	1.3	8.9	3.2	1.3	0.42	0.76	1.1	16	19	12
16	e4.5	17	1.5	7.0	2.8	1.3	0.41	0.60	1.9	14	17	11
17	e5.3	14	1.7	5.7	2.6	1.2	0.42	0.58	3.1	12	14	10
18	e6.2	13	1.6	4.6	2.4	1.1	0.40	0.54	2.1	11	12	9.4
19	e7.9	11	1.5	3.7	2.3	1.1	0.39	0.83	10	9.0	9.4	8.7
20	e10	9.7	1.4	3.5	2.2	1.0	0.39	1.0	50	7.4	7.4	8.2
21	e16	9.5	1.6	3.2	2.2	0.99	0.39	0.84	53	6.1	5.8	7.7
22	e23	9.2	1.4	3.0	2.4	0.96	0.39	0.76	75	5.3	4.8	6.0
23	e25	8.6	1.3	2.8	8.6	0.93	0.39	0.75	76	4.3	5.4	5.0
24	e30	8.2	1.3	2.6	14	0.90	0.39	0.72	84	3.4	5.5	11
25	72	7.7	1.3	2.5	10	0.86	0.39	0.69	90	2.7	5.5	23
26	87	7.3	1.3	2.3	7.3	0.82	0.39	0.69	83	2.1	5.4	32
27	86	6.9	1.2	2.2	5.4	0.79	0.39	0.68	74	1.5	5.5	26
28	70	6.2	1.1	2.2	3.8	0.76	0.39	0.62	62	0.97	6.0	22
29	53	5.6	1.2	2.2	---	0.73	0.39	0.62	53	0.45	7.3	20
30	46	5.1	1.2	2.2	---	0.70	0.39	0.62	48	0.15	7.9	18
31	42	---	1.2	2.2	---	0.66	---	0.77	---	0.60	8.9	---
TOTAL	669.3	623.0	55.4	92.4	112.5	42.20	12.63	20.08	779.33	508.97	292.7	402.9
MEAN	21.6	20.8	1.79	2.98	4.02	1.36	0.42	0.65	26.0	16.4	9.44	13.4
MAX	87	45	4.5	8.9	14	3.1	0.63	1.0	90	49	23	32
MIN	3.9	5.1	1.1	1.5	2.2	0.66	0.36	0.36	0.57	0.15	1.2	5.0
CFSM	2.51	2.41	0.21	0.35	0.47	0.16	0.05	0.08	3.02	1.91	1.10	1.56
IN.	2.90	2.69	0.24	0.40	0.49	0.18	0.05	0.09	3.37	2.20	1.27	1.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

MEAN	30.4	15.9	17.1	9.20	5.87	6.33	7.81	1.56	13.7	13.4	16.0	18.0
MAX	112	56.9	106	48.1	26.3	21.4	30.9	4.95	70.5	24.7	33.1	80.7
(WY)	1996	1998	1998	1998	1998	1998	1995	1995	1999	1995	1995	1995
MIN	2.67	0.59	0.66	0.87	0.71	0.36	0.42	0.65	0.23	0.42	5.74	3.82
(WY)	1997	2001	2001	2001	2001	1997	2002	2002	1998	1998	1998	1996

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1995 - 2002	
ANNUAL TOTAL	3344.33		3611.41			
ANNUAL MEAN	9.16		9.89		12.8	
HIGHEST ANNUAL MEAN					26.8	1995
LOWEST ANNUAL MEAN					2.40	1997
HIGHEST DAILY MEAN	87	Oct 26	90	Jun 25	220	Jun 18 1999
LOWEST DAILY MEAN	0.42	Apr 28	0.15	Jul 30	*0.00	
ANNUAL SEVEN-DAY MINIMUM	0.49	Apr 23	0.37	Apr 29	0.00	May 30 1995
MAXIMUM PEAK FLOW			91	Jun 24,25	250	Nov 14 1997
MAXIMUM PEAK STAGE			21.15	Jun 25	21.59	Oct 19 1995
ANNUAL RUNOFF (CFSM)	1.07		1.15		1.49	
ANNUAL RUNOFF (INCHES)	14.47		15.62		20.21	
10 PERCENT EXCEEDS	33		27		36	
50 PERCENT EXCEEDS	2.0		2.8		2.4	
90 PERCENT EXCEEDS	0.68		0.57		0.47	

e Estimated
* Many days in 1995, 1998 water years.

02231600 JANE GREEN CREEK NEAR DEER PARK, FL

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

DRAINAGE AREA.--248 mi^2

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

GAGE.--Water-stage recorder. Datum of gage is 18.55 ft above NGVD of 1929.

REMARKS.--Records fair. Since April 1990, flow regulated to some extent by flood control lift gates (S161A), approximately 1.5 mi upstream from the gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	426	150	47	13	29	63	9.8	0.77	0.00	925	691	307
2	383	153	46	13	28	73	9.2	0.64	0.00	959	644	286
3	347	157	44	13	26	79	8.9	0.51	0.00	991	604	279
4	314	163	43	13	24	81	8.4	0.36	0.00	978	556	301
5	280	157	41	12	22	79	7.8	0.24	0.00	952	562	465
6	247	153	40	12	20	74	7.0	0.16	0.00	963	561	395
7	224	150	41	12	21	69	6.5	0.11	0.00	943	586	392
8	204	147	42	12	23	64	6.0	0.05	0.00	900	604	509
9	177	144	41	11	21	60	5.7	0.01	0.00	824	596	596
10	158	138	39	11	21	56	5.4	0.00	0.00	758	582	619
11	142	132	37	11	24	53	5.2	0.00	0.00	680	562	600
12	128	126	35	11	23	49	5.7	0.00	0.00	679	526	561
13	116	119	33	11	21	46	5.8	0.00	0.00	747	501	528
14	106	119	30	12	20	42	5.6	0.00	0.00	779	503	483
15	96	114	29	19	19	40	5.6	0.00	0.00	779	583	415
16	87	106	28	20	19	38	5.4	0.00	0.00	764	723	358
17	79	98	27	19	18	35	5.4	0.00	0.00	707	807	315
18	72	95	25	19	17	32	5.0	0.00	0.00	635	831	273
19	66	90	24	20	17	30	4.5	0.00	0.00	574	815	234
20	62	85	22	22	16	27	4.1	0.00	0.00	664	783	204
21	62	81	20	24	16	25	3.6	0.00	0.90	816	743	175
22	65	77	19	25	17	22	3.2	0.00	9.1	1030	736	149
23	61	72	18	27	23	20	2.7	0.00	22	1300	716	124
24	60	68	18	28	34	18	2.3	0.00	43	1400	681	110
25	86	64	17	29	38	16	2.0	0.00	96	1400	635	104
26	89	61	16	28	39	15	1.7	0.00	323	1300	571	102
27	86	58	15	28	43	18	1.5	0.00	624	1180	512	100
28	99	54	15	28	50	15	1.3	0.00	787	1050	449	113
29	118	51	14	30	---	13	1.1	0.00	861	937	401	114
30	135	49	14	32	---	12	0.90	0.00	885	846	359	115
31	146	---	13	32	---	11	---	0.00	---	773	343	---
TOTAL	4721	3231	893	597	689	1275	147.30	2.85	3651.00	28233	18766	9326
MEAN	152	108	28.8	19.3	24.6	41.1	4.91	0.092	122	911	605	311
MAX	426	163	47	32	50	81	9.8	0.77	885	1400	831	619
MIN	60	49	13	11	16	11	0.90	0.00	0.00	574	343	100
CFSM	0.61	0.43	0.12	0.08	0.10	0.17	0.02	0.00	0.49	3.67	2.44	1.25
IN.	0.71	0.48	0.13	0.09	0.10	0.19	0.02	0.00	0.55	4.23	2.81	1.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2002, BY WATER YEAR (WY)

MEAN	447	167	91.5	113	147	202	81.8	25.8	182	268	330	476
MAX	2930	1353	820	970	1148	1729	536	268	1857	1483	1432	2324
(WY)	1957	1995	1998	1958	1966	1960	1973	1957	1968	1974	1964	1979
MIN	0.79	0.000	1.03	0.45	0.68	0.049	0.000	0.000	0.000	0.000	0.16	17.7
(WY)	1981	1981	1994	2001	2001	2001	1956	1956	1956	1977	2000	1996

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1954 - 2002	
ANNUAL TOTAL	56874.97		71532.15			
ANNUAL MEAN	156		196		211	
HIGHEST ANNUAL MEAN					726	1960
LOWEST ANNUAL MEAN					39.0	1981
HIGHEST DAILY MEAN	1710	Sep 17	1400	Jul 24,25	17000	Oct 17 1956
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Mar 10	0.00	May 10	0.00	Many days
MAXIMUM PEAK FLOW			1420	Jul 24,25	18400	Oct 17 1956
MAXIMUM PEAK STAGE			6.30	Jul 24,25	10.95	Oct 17 1956
ANNUAL RUNOFF (CFSM)	0.63		0.79		0.85	
ANNUAL RUNOFF (INCHES)	8.53		10.73		11.56	
10 PERCENT EXCEEDS	609		711		584	
50 PERCENT EXCEEDS	10		41		39	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

02232000 ST. JOHNS RIVER NEAR MELBOURNE, FL

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

DRAINAGE AREA.--968 mi^2.

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

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

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3120	1030	e580	e30	139	58	68	93	20	e3350	3450	1840
2	3150	1020	e540	e120	112	73	70	48	36	e3420	3270	1790
3	3100	1040	e490	168	125	74	50	40	31	e3460	3180	1770
4	3090	e1090	e480	180	104	89	48	45	31	e3430	3180	1730
5	3060	e1110	e440	169	106	103	6.2	22	34	e3410	3130	1670
6	2990	e1120	e380	131	143	149	47	64	46	e3380	3070	1560
7	2950	e1130	e350	129	113	62	58	78	16	e3310	3070	1510
8	2820	e1100	337	153	114	121	66	54	31	e3270	3050	1480
9	2740	e1060	326	149	152	100	52	47	6.0	3240	3050	1460
10	2770	e1020	301	140	158	69	52	41	35	3240	2970	1400
11	2680	e980	274	147	181	110	44	42	36	3210	2950	1500
12	2650	e940	265	152	185	153	30	56	51	3130	2850	1520
13	2580	e970	250	124	142	141	49	54	35	3200	2780	1590
14	2440	e1070	238	166	155	79	74	8.3	55	3270	2760	1590
15	2200	e1150	190	120	184	44	55	56	30	3330	2730	1470
16	2080	e1050	170	163	138	64	68	61	38	3410	2620	1390
17	1840	e970	235	137	134	78	58	71	37	3470	2580	1330
18	1810	e890	166	181	103	110	59	47	82	3500	2490	1220
19	1710	e820	158	188	145	97	59	24	137	3460	2480	1110
20	1580	e780	65	132	144	92	41	-21	143	3380	2460	1050
21	1390	e760	52	85	115	86	40	27	143	3480	2660	963
22	1450	e750	23	69	110	2.4	43	9.6	292	3520	2720	893
23	1490	e760	e15	30	113	70	-2.4	42	465	3590	2580	834
24	1500	e730	e10	-34	233	88	46	20	761	3760	2490	789
25	1540	e700	e20	-31	259	76	40	23	1160	3800	2440	824
26	1590	e710	e22	61	-14	75	40	-5.1	1480	3830	2340	836
27	1580	e680	e17	187	-17	80	45	30	1930	3820	2230	789
28	1490	e680	e17	175	57	63	35	-13	2470	3730	2130	780
29	1560	e670	e20	162	---	81	50	9.1	2830	3700	2070	757
30	1500	e630	e25	166	---	65	57	28	3190	3610	1920	734
31	1260	---	e30	151	---	77	---	-4.1	---	3520	1900	---
TOTAL	67710	27410	6486	3900	3633	2629.4	1447.8	1096.8	15651.0	107230	83600	38179
MEAN	2184	914	209	126	130	84.8	48.3	35.4	522	3459	2697	1273
MAX	3150	1150	580	188	259	153	74	93	3190	3830	3450	1840
MIN	1260	630	10	-34	-17	2.4	-2.4	-21	6.0	3130	1900	734

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	1655	978	550	412	416	465	353	162	323	661	893	1285
MAX	6377	3062	2753	2338	2782	2608	2161	852	3073	3459	2697	5424
(WY)	1954	1995	1988	1998	1998	1960	1998	1993	1968	2002	2002	1953
MIN	87.7	31.7	21.9	9.44	4.68	1.03	0.000	-23.5	-32.7	10.9	15.8	75.0
(WY)	1962	1962	1962	1962	1962	1962	1956	2000	1984	1981	1981	1950

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	271742.66		358973.0			
ANNUAL MEAN	745		983		681	
HIGHEST ANNUAL MEAN					1756	1960
LOWEST ANNUAL MEAN					93.9	1981
HIGHEST DAILY MEAN	3440	Sep 22	3830	Jul 26	18000	Oct 18 1956
LOWEST DAILY MEAN	-41	Apr 26	-34	Jan 24	-118	May 23 1984
ANNUAL SEVEN-DAY MINIMUM	-18	Apr 25	9.3	May 26	-78	Jun 18 1984
MAXIMUM PEAK STAGE			6.66	Aug 3	9.66	Sep 30 1960
10 PERCENT EXCEEDS	2790		3140		1770	
50 PERCENT EXCEEDS	45		185		304	
90 PERCENT EXCEEDS	-5.6		30		50	

e Estimated
Note.--Negative figures indicate reverse flow

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

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.44	4.84	3.61	3.03	2.94	3.15	2.62	2.42	2.36	5.32	6.48	5.31
2	6.38	4.81	3.58	3.02	2.94	3.08	2.61	2.44	2.35	5.48	6.50	5.25
3	6.34	4.78	3.55	3.04	2.92	3.07	2.59	2.45	2.34	5.59	6.54	5.19
4	6.30	4.75	3.53	3.03	2.91	3.09	2.60	2.45	2.33	5.70	6.53	5.16
5	6.25	4.73	3.50	3.00	2.89	3.08	2.61	2.47	2.31	5.77	6.51	5.16
6	6.21	4.70	3.47	2.98	2.84	3.02	2.58	2.47	2.30	5.85	6.46	5.13
7	6.18	4.65	3.50	2.99	2.84	3.02	2.54	2.46	2.30	5.89	6.41	5.09
8	6.14	4.59	3.53	2.97	2.91	3.01	2.50	2.45	2.35	6.00	6.37	5.05
9	6.07	4.54	3.51	2.95	2.90	3.00	2.48	2.44	2.36	6.09	6.31	5.02
10	5.98	4.49	3.48	2.93	2.90	3.00	2.48	2.44	2.35	6.15	6.24	4.97
11	5.90	4.43	3.46	2.92	2.98	2.98	2.48	2.43	2.35	6.19	6.19	4.92
12	5.84	4.38	3.43	2.90	2.99	2.96	2.53	2.41	2.35	6.24	6.17	4.87
13	5.77	4.35	3.40	2.90	3.01	2.93	2.56	2.41	2.38	6.33	6.13	4.83
14	5.68	4.36	3.36	2.91	3.01	2.92	2.57	2.42	2.42	6.39	6.09	4.81
15	5.59	4.37	3.34	3.09	2.99	2.90	2.58	2.40	2.42	6.42	6.05	4.77
16	5.51	4.33	3.32	3.12	2.99	2.87	2.59	2.37	2.44	6.44	5.99	4.71
17	5.43	4.27	3.29	3.14	2.97	2.85	2.59	2.38	2.52	6.48	5.94	4.66
18	5.31	4.21	3.28	3.16	2.96	2.82	2.58	2.40	2.58	6.49	5.89	4.58
19	5.21	4.15	3.25	3.14	2.91	2.79	2.56	2.46	2.71	6.48	5.85	4.50
20	5.14	4.09	3.23	3.13	2.88	2.75	2.54	2.54	2.95	6.47	5.82	4.42
21	5.08	4.03	3.21	3.11	2.87	2.73	2.52	2.51	3.09	6.49	5.81	4.35
22	5.07	3.97	3.18	3.11	2.89	2.75	2.50	2.47	3.23	6.50	5.82	4.27
23	5.02	3.91	3.16	3.09	3.01	2.71	2.50	2.43	3.39	6.52	5.79	4.18
24	4.98	3.85	3.15	3.06	3.12	2.68	2.47	2.39	3.62	6.56	5.76	4.14
25	5.06	3.81	3.14	3.05	3.15	2.67	2.44	2.38	3.83	6.59	5.71	4.13
26	5.16	3.78	3.14	3.04	3.17	2.66	2.43	2.37	4.07	6.60	5.64	4.08
27	5.14	3.75	3.10	3.02	3.19	2.71	2.42	2.35	4.32	6.61	5.59	4.06
28	5.08	3.70	3.08	3.01	3.18	2.70	2.41	2.35	4.54	6.60	5.54	4.03
29	5.02	3.67	3.06	2.99	---	2.68	2.41	2.31	4.76	6.58	5.47	3.99
30	4.97	3.63	3.05	2.97	---	2.65	2.41	2.30	5.04	6.55	5.42	3.95
31	4.91	---	3.04	2.95	---	2.63	---	2.33	---	6.52	5.38	---
MEAN	5.59	4.26	3.32	3.02	2.97	2.87	2.52	2.42	2.95	6.25	6.01	4.65
MAX	6.44	4.84	3.61	3.16	3.19	3.15	2.62	2.54	5.04	6.61	6.54	5.31
MIN	4.91	3.63	3.04	2.90	2.84	2.63	2.41	2.30	2.30	5.32	5.38	3.95

CAL YR 2001 MEAN 3.06 MAX 6.50 MIN 0.81
WTR YR 2002 MEAN 3.91 MAX 6.61 MIN 2.30

02232155 PENNYWASH CREEK NEAR DEER PARK, FL

LOCATION.--Lat 28°10'54", long 80°53'44", in NW¼ sec.35, T.26 S., R.34 E., Osceola County, Hydrologic Unit 03080101, near center of span on downstream side of bridge on State Highway 419, 0.6 mi upstream from mouth, and 6.2 mi north of Deer Park.

DRAINAGE AREA.--17.2 mi^2.

PERIOD OF RECORD.--1956, 1965, 1976 (miscellaneous discharge measurements only), August 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records good. Levees were constructed as part of the Jane Green Creek Reservoir and an interconnecting canal was dug joining the watershed areas of Taylor, Pennywash, Cox, and Wolf Creeks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	7.9	3.5	2.1	2.2	6.1	0.69	0.15	0.29	113	22	46
2	10	7.6	3.4	2.2	2.1	5.3	0.67	0.12	0.18	105	27	46
3	8.2	7.8	3.3	3.2	2.2	4.4	0.61	0.10	0.08	89	38	34
4	6.9	7.3	3.2	2.9	2.5	3.6	0.60	0.08	0.03	81	37	91
5	5.9	9.9	3.1	2.5	2.4	3.1	0.50	0.06	0.00	72	31	387
6	5.2	17	2.9	2.4	2.3	2.7	0.44	0.06	0.00	81	21	172
7	4.8	14	3.5	2.4	2.5	2.5	0.37	0.06	0.05	68	20	84
8	5.1	9.8	5.3	2.3	3.9	2.4	0.34	0.04	0.12	64	46	50
9	5.5	7.7	5.1	2.0	3.3	2.3	0.31	0.03	0.10	84	45	36
10	5.2	6.5	5.0	1.9	3.0	2.1	0.29	0.02	0.04	116	29	29
11	4.8	5.7	4.5	1.7	3.2	1.9	0.27	0.02	0.01	197	21	23
12	4.3	5.1	3.9	1.7	3.0	1.8	0.43	0.01	0.00	417	19	19
13	3.8	6.4	3.6	1.7	2.7	1.7	0.49	0.01	0.04	367	36	17
14	3.4	20	3.3	2.2	2.6	1.4	0.58	0.02	0.12	217	119	15
15	3.2	24	3.0	13	2.5	1.2	0.82	0.03	0.12	113	164	13
16	3.1	19	2.9	12	2.3	1.2	2.5	0.01	0.50	70	102	12
17	2.8	14	2.7	7.8	2.0	1.1	2.0	0.02	1.4	48	63	9.9
18	2.5	12	2.7	6.2	1.8	0.97	1.1	0.05	1.5	38	46	8.6
19	2.1	11	2.5	5.2	1.7	0.90	0.71	0.50	7.2	172	39	7.6
20	2.3	9.7	2.3	4.6	1.6	0.81	0.43	0.54	46	107	33	6.9
21	3.0	8.4	2.0	4.3	1.5	0.74	0.33	0.29	43	74	107	6.2
22	5.6	7.3	1.9	4.1	2.5	0.74	0.33	0.20	108	73	175	5.6
23	5.6	6.3	1.9	3.8	15	0.58	0.31	0.16	130	71	213	5.4
24	7.4	5.8	2.2	3.5	41	0.55	0.27	0.10	238	58	105	11
25	60	5.4	2.3	3.1	29	0.49	0.25	0.06	213	43	62	32
26	74	5.2	2.8	2.9	16	0.59	0.23	0.04	118	33	40	35
27	37	5.0	2.5	2.8	11	1.7	0.21	0.01	113	25	32	23
28	22	4.6	2.4	2.8	7.8	1.5	0.18	0.01	85	20	26	15
29	15	4.2	2.3	2.8	---	0.99	0.16	0.00	54	16	23	11
30	11	3.9	2.1	2.6	---	0.80	0.16	0.02	44	14	24	8.4
31	9.2	---	2.1	2.4	---	0.71	---	0.19	---	12	32	---
TOTAL	351.9	278.5	94.2	115.1	173.6	56.87	16.58	3.01	1203.78	3058	1797	1259.6
MEAN	11.4	9.28	3.04	3.71	6.20	1.83	0.55	0.097	40.1	98.6	58.0	42.0
MAX	74	24	5.3	13	41	6.1	2.5	0.54	238	417	213	387
MIN	2.1	3.9	1.9	1.7	1.5	0.49	0.16	0.00	0.00	12	19	5.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

MEAN	41.9	15.7	18.4	11.1	16.4	17.5	5.73	1.05	10.0	17.4	26.0	30.1
MAX	126	65.4	82.6	45.1	87.8	64.8	30.8	3.72	40.1	98.6	58.0	93.9
(WY)	2000	1995	1998	1998	1998	1996	1996	1996	2002	2002	2002	1994
MIN	2.63	0.92	0.66	0.94	0.64	0.76	0.36	0.097	0.051	0.73	0.61	3.73
(WY)	1999	2001	2001	2001	2001	2000	2000	2002	2000	1998	2000	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	3273.16		8408.44			
ANNUAL MEAN	8.97		23.0		17.0	
HIGHEST ANNUAL MEAN					28.2	1995
LOWEST ANNUAL MEAN					6.18	1999
HIGHEST DAILY MEAN	209	Sep 15	417	Jul 12	501	Oct 17 1999
LOWEST DAILY MEAN	0.18	Apr 25,29	0.00	Some days	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	0.20	Apr 24	0.02	May 10	0.00	May 26 2000
MAXIMUM PEAK FLOW			494	Sep 5	613	Feb 20 1998
MAXIMUM PEAK STAGE			25.85	Sep 5	27.17	Nov 16 1994
10 PERCENT EXCEEDS	19		71		38	
50 PERCENT EXCEEDS	2.4		3.6		3.2	
90 PERCENT EXCEEDS	0.41		0.12		0.35	

02232200 WOLF CREEK NEAR DEER PARK, FL

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

DRAINAGE AREA.--25.7 mi^2.

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

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

REMARKS.--Records good. Since October 1970 flow regulated to some extent following the construction of Jane Green Reservoir; levees were constructed and an interconnecting canal was dug joining the watershed areas of Taylor, Pennywash, Cox, and Wolf Creeks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	9.6	5.1	2.4	3.7	22	0.44	0.00	0.00	132	109	30
2	18	8.9	4.8	2.6	3.3	19	0.34	0.00	0.00	144	90	30
3	14	11	4.6	4.2	3.0	16	0.26	0.00	0.00	123	176	22
4	11	11	4.6	5.1	2.7	14	0.21	0.00	0.00	83	241	134
5	9.0	13	4.8	4.6	2.3	13	0.16	0.00	0.00	76	183	387
6	7.8	20	4.8	4.4	2.1	12	0.11	0.00	0.00	167	99	160
7	7.1	16	5.1	4.2	2.2	10	0.08	0.00	0.00	96	71	108
8	7.2	12	6.7	4.0	4.1	9.3	0.06	0.00	0.00	71	172	76
9	8.7	8.9	8.5	3.6	5.0	8.3	0.06	0.00	0.00	60	94	58
10	9.3	7.4	8.0	3.2	4.9	7.4	0.06	0.00	0.00	96	54	44
11	7.6	6.3	7.4	2.8	7.7	6.6	0.06	0.00	0.00	204	36	33
12	6.3	6.1	6.5	2.6	8.8	5.9	0.09	0.00	0.00	256	30	27
13	5.3	7.5	5.8	2.5	7.3	5.4	0.11	0.00	0.00	247	114	25
14	4.7	33	5.3	3.2	6.2	4.6	0.14	0.00	0.00	175	449	22
15	6.4	38	4.8	12	5.7	4.0	4.5	0.00	0.00	132	359	19
16	7.5	29	4.4	17	5.3	3.6	14	0.00	0.06	87	197	16
17	6.6	22	4.1	13	4.9	3.2	9.1	0.00	0.36	59	126	13
18	5.5	19	4.1	11	4.3	2.6	5.5	0.00	0.66	255	90	10
19	4.7	17	3.7	9.0	3.5	2.2	3.7	0.00	9.1	861	66	8.2
20	4.3	15	3.2	8.0	3.0	2.0	2.5	0.00	62	293	50	6.8
21	4.8	13	2.7	7.5	2.8	1.7	1.7	0.00	152	186	59	5.9
22	9.0	11	2.4	7.1	4.6	1.5	1.1	0.00	191	159	56	5.0
23	12	9.6	2.1	6.7	37	1.2	0.68	0.00	259	203	43	5.2
24	12	8.7	2.2	6.1	113	1.0	0.41	0.00	304	156	33	21
25	31	8.1	2.4	5.6	95	0.87	0.25	0.00	189	109	25	102
26	55	7.6	2.9	5.1	63	0.76	0.14	0.00	131	80	20	100
27	44	7.2	3.1	4.7	42	1.1	0.08	0.00	119	59	18	64
28	29	6.4	2.9	4.6	30	1.3	0.04	0.00	92	45	16	37
29	20	5.8	2.6	4.6	---	1.2	0.01	0.00	63	36	17	23
30	16	5.4	2.4	4.5	---	0.79	0.00	0.00	66	26	20	17
31	12	---	2.2	4.1	---	0.57	---	0.00	---	25	27	---
TOTAL	417.8	393.5	134.2	180.0	477.4	183.09	45.89	0.00	1638.18	4701	3140	1609.1
MEAN	13.5	13.1	4.33	5.81	17.1	5.91	1.53	0.000	54.6	152	101	53.6
MAX	55	38	8.5	17	113	22	14	0.00	304	861	449	387
MIN	4.3	5.4	2.1	2.4	2.1	0.57	0.00	0.00	0.00	25	16	5.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2002, BY WATER YEAR (WY)

MEAN	48.4	20.2	15.8	19.7	25.0	30.3	10.9	7.09	31.6	38.2	46.7	64.4
MAX	396	252	156	76.5	152	231	77.7	77.9	303	218	276	376
(WY)	1957	1988	1998	1964	1966	1959	1984	1966	1968	1974	1964	1960
MIN	0.29	0.47	0.71	1.39	0.76	0.15	0.011	0.000	0.000	0.020	0.23	1.40
(WY)	1981	1997	1962	1985	1974	1974	1974	1967	2000	1981	1998	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1956 - 2002	
ANNUAL TOTAL	5071.42		12920.16			
ANNUAL MEAN	13.9		35.4		30.2	
HIGHEST ANNUAL MEAN					77.7	1960
LOWEST ANNUAL MEAN					7.97	1977
HIGHEST DAILY MEAN	381	Sep 15	861	Jul 19	5850	Oct 16 1956
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 19	0.00	Apr 30	0.00	Many days
MAXIMUM PEAK FLOW			1320	Jul 19	7700	Oct 16 1956
MAXIMUM PEAK STAGE			8.49	Jul 19	e10.20	Aug 28 1964
10 PERCENT EXCEEDS	33		111		68	
50 PERCENT EXCEEDS	4.6		6.6		5.2	
90 PERCENT EXCEEDS	0.11		0.00		0.17	

e Estimated

02232400 ST. JOHNS RIVER NEAR COCOA, FL

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

DRAINAGE AREA.--1,331 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929. Prior to Oct. 1, 1959, nonrecording gage at site 3.7 mi east on north shore of Lake Poinsett at datum 5.06 ft higher.

REMARKS.--Records fair. Records include inflow from Taylor Creek.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4750	3340	1650	592	290	605	105	96	50	1230	4520	3610
2	4650	3230	1570	590	314	463	94	60	38	1910	4670	3830
3	4450	3160	1470	507	298	321	127	63	31	2150	4660	3360
4	4320	3070	1410	551	341	428	89	91	12	2520	5220	3660
5	4410	2930	1350	497	230	321	33	107	4.3	2960	5430	4150
6	4560	3140	1380	469	254	383	121	170	13	2800	5590	4300
7	4630	3020	1300	448	186	402	129	79	20	3010	5350	4040
8	4080	2760	1240	523	294	342	71	47	2.4	3160	5250	4040
9	4350	2590	1250	469	194	365	20	49	-50	3380	5270	3640
10	4320	2620	1170	401	218	395	73	47	-9.8	3700	5180	3730
11	4230	2630	1190	480	295	370	67	58	-13	4100	5020	3950
12	4050	2340	1070	400	314	302	111	83	-12	4810	4880	3570
13	4440	2320	1070	416	292	386	102	29	-49	5190	4910	3710
14	4060	2150	1080	386	261	305	152	-0.22	-26	5270	4830	3410
15	3910	2400	1030	423	210	298	26	4.2	39	4860	4810	3210
16	3860	2540	994	395	309	184	86	46	53	4960	4790	3040
17	3540	2670	990	443	260	203	138	-11	-28	4830	4670	2790
18	3720	2710	970	426	241	250	121	21	-50	4530	4620	2730
19	3820	2460	894	430	255	216	69	37	-95	4560	4520	2640
20	3530	2460	860	399	224	204	66	-16	-123	5220	4590	2710
21	3640	2290	838	426	191	231	81	-36	-56	5450	4540	2620
22	3250	2340	763	381	235	212	49	-55	17	5080	4690	2600
23	3640	2150	750	396	188	238	119	35	78	5180	4400	2570
24	3490	2110	799	348	179	215	164	27	143	5030	4060	2490
25	3550	1960	759	327	233	140	37	33	354	5240	4040	2600
26	3320	1910	637	369	360	121	76	-27	754	5110	4270	2530
27	3530	1920	654	396	325	223	128	33	865	4860	4700	2290
28	3530	1790	677	398	443	203	90	-49	1050	4760	4410	2090
29	3700	1750	715	351	---	142	104	2.6	1260	4940	3980	1900
30	3530	1750	666	305	---	181	74	29	1170	4570	4020	1950
31	3640	---	602	290	---	151	---	38	---	4640	3960	---
TOTAL	122500	74510	31798	13232	7434	8800	2722	1090.58	5441.9	130010	145850	93760
MEAN	3952	2484	1026	427	266	284	90.7	35.2	181	4194	4705	3125
MAX	4750	3340	1650	592	443	605	164	170	1260	5450	5590	4300
MIN	3250	1750	602	290	179	121	20	-55	-123	1230	3960	1900
CFSM	2.97	1.87	0.77	0.32	0.20	0.21	0.07	0.03	0.14	3.15	3.53	2.35
IN.	3.42	2.08	0.89	0.37	0.21	0.25	0.08	0.03	0.15	3.63	4.08	2.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2002, BY WATER YEAR (WY)

MEAN	2157	1536	1025	733	691	789	634	369	485	943	1196	1577
MAX	8873	4571	4364	3240	4000	4473	3100	1494	3710	4859	4705	5046
(WY)	1954	2000	1988	1998	1998	1998	1998	1998	1968	1968	2002	1960
MIN	41.0	21.2	42.3	45.0	11.2	-27.4	24.9	15.9	4.41	7.47	10.9	65.7
(WY)	1981	1981	1981	2001	2001	2001	1999	1999	2000	1981	1981	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1954 - 2002	
ANNUAL TOTAL	435347.2		637116.71			
ANNUAL MEAN	1193		1746		1013	
HIGHEST ANNUAL MEAN					2462	1960
LOWEST ANNUAL MEAN					44.5	1981
HIGHEST DAILY MEAN	4760	Sep 26	5590	Aug 6	10700	Oct 11 1953
LOWEST DAILY MEAN	-125	Mar 18	-123	Jun 20	-125	Mar 18 2001
ANNUAL SEVEN-DAY MINIMUM	-61	Mar 15	-40	Jun 16	-61	Mar 15 2001
MAXIMUM PEAK STAGE			15.74	Jul 22	16.96	Oct 11 1953
ANNUAL RUNOFF (CFSM)	0.90		1.31		0.76	
ANNUAL RUNOFF (INCHES)	12.17		17.81		10.34	
10 PERCENT EXCEEDS	3660		4640		2470	
50 PERCENT EXCEEDS	75		750		588	
90 PERCENT EXCEEDS	-8.7		34		86	

Note.--Negative figures indicate reverse flow

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

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.52	14.47	13.13	11.37	10.74	11.24	10.03	9.28	8.64	13.72	15.47	14.89
2	15.51	14.44	13.06	11.37	10.68	11.31	10.01	9.26	8.63	13.98	15.49	14.88
3	15.50	14.39	12.98	11.31	10.64	11.22	9.96	9.28	8.62	14.17	15.55	14.85
4	15.47	14.34	12.93	11.26	10.56	11.10	9.91	9.25	8.65	14.31	15.58	14.82
5	15.44	14.29	12.89	11.27	10.55	11.02	9.81	9.16	8.65	14.54	15.62	14.96
6	15.40	14.26	12.82	11.25	10.60	11.07	9.78	9.16	8.61	14.72	15.60	15.01
7	15.35	14.23	12.76	11.14	10.52	11.03	9.87	9.14	8.54	14.83	15.60	14.98
8	15.33	14.18	12.73	11.11	10.47	11.02	9.92	9.13	8.59	14.90	15.60	14.96
9	15.30	14.12	12.67	11.09	10.49	10.99	9.84	9.09	8.61	14.97	15.58	14.88
10	15.25	14.05	12.63	11.06	10.51	10.92	9.72	9.05	8.64	15.06	15.54	14.80
11	15.21	13.99	12.57	11.01	10.52	10.90	9.68	9.06	8.61	15.15	15.47	14.71
12	15.15	13.92	12.52	10.97	10.55	10.88	9.74	9.03	8.62	15.26	15.47	14.63
13	15.12	13.89	12.47	10.91	10.52	10.77	9.81	8.92	8.71	15.39	15.48	14.56
14	15.07	13.88	12.42	10.90	10.52	10.78	9.79	8.80	8.80	15.48	15.51	14.47
15	15.02	13.87	12.35	10.96	10.55	10.75	9.83	8.86	9.14	15.53	15.52	14.37
16	14.96	13.91	12.32	10.99	10.51	10.72	9.83	8.91	9.21	15.53	15.50	14.29
17	14.87	13.94	12.25	11.02	10.47	10.66	9.83	8.84	9.33	15.53	15.44	14.21
18	14.82	13.92	12.16	11.00	10.47	10.63	9.80	8.74	9.57	15.52	15.38	14.13
19	14.78	13.88	12.11	11.02	10.52	10.58	9.77	8.70	10.00	15.53	15.31	14.07
20	14.71	13.83	12.03	11.01	10.50	10.53	9.72	8.61	10.53	15.55	15.28	14.00
21	14.69	13.77	11.96	11.00	10.45	10.42	9.70	8.56	11.02	15.63	15.29	13.95
22	14.71	13.73	11.93	10.99	10.44	10.32	9.64	8.52	11.57	15.69	15.26	13.88
23	14.67	13.68	11.90	11.00	10.50	10.30	9.58	8.72	11.99	15.70	15.25	13.81
24	14.66	13.62	11.83	10.98	10.79	10.30	9.62	8.74	12.35	15.69	15.21	13.79
25	14.79	13.54	11.75	10.93	11.02	10.27	9.58	8.70	12.64	15.66	15.16	13.82
26	14.75	13.47	11.66	10.88	11.13	10.24	9.51	8.67	12.85	15.63	15.10	13.83
27	14.68	13.41	11.66	10.86	11.09	10.20	9.52	8.71	13.04	15.60	15.06	13.77
28	14.64	13.34	11.63	10.84	11.14	10.18	9.45	8.55	13.18	15.56	15.04	13.73
29	14.62	13.28	11.57	10.82	---	10.19	9.34	8.53	13.27	15.52	15.04	13.68
30	14.57	13.21	11.52	10.82	---	10.19	9.37	8.59	13.42	15.48	14.97	13.63
31	14.52	---	11.44	10.81	---	10.11	---	8.63	---	15.46	14.92	---
MEAN	15.00	13.89	12.28	11.03	10.62	10.67	9.73	8.88	10.13	15.20	15.36	14.35
MAX	15.52	14.47	13.13	11.37	11.14	11.31	10.03	9.28	13.42	15.70	15.62	15.01
MIN	14.52	13.21	11.44	10.81	10.44	10.11	9.34	8.52	8.54	13.72	14.92	13.63

CAL YR 2001 MEAN 11.23 MAX 15.54 MIN 8.34
WTR YR 2002 MEAN 12.28 MAX 15.70 MIN 8.52

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-60, 1962-78, 1980-88, 2000 to 2002.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 2000 to September 2002 (discontinued).
WATER TEMPERATURE: August 2000 to September 2002 (discontinued).

INSTRUMENTATION.--Water-quality monitor and data-collection platform.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 2,640 µS/cm @ 25 °C, June 9, 2001; minimum daily mean, 317 µS/cm @ 25 °C, Sept. 21, 2002.
WATER TEMPERATURE: Maximum daily mean, 31.7 °C, July 30, 2001; minimum daily mean, 8.8 °C, Jan. 1, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 1,620 µS/cm @ 25 °C, May 30; minimum daily mean, 317 µS/cm @ 25 °C, Sept. 21.
WATER TEMPERATURE: Maximum daily mean, 31.1 °C, July 27,28; minimum daily mean, 11.3 °C, Jan. 9.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	393	377	438	551	834	924	1020	1200	1560	992	348	332
2	391	382	476	550	833	948	1020	1210	1530	937	352	338
3	378	375	483	566	852	955	1030	1220	---	934	---	336
4	374	367	486	573	907	957	1040	1230	---	854	---	345
5	367	383	484	577	937	978	1040	1250	---	772	---	344
6	370	416	447	571	939	1010	1050	1260	---	713	---	344
7	372	434	464	571	943	996	1060	1270	1590	655	---	352
8	378	400	491	597	910	994	1070	1300	1560	610	---	319
9	350	402	460	589	910	996	1060	1310	1540	561	---	322
10	347	398	461	594	909	993	1060	1330	1540	546	---	347
11	366	405	478	602	904	991	1070	1350	1570	516	---	354
12	366	412	464	629	908	1000	1050	1370	1580	477	---	375
13	362	435	467	625	911	1010	1010	1380	873	452	342	354
14	381	424	485	621	910	1010	1000	1390	367	439	336	349
15	379	447	510	617	899	1010	1010	1390	1010	409	352	322
16	379	450	480	623	920	1010	1020	1410	568	400	326	337
17	378	400	482	638	929	985	1030	1430	322	395	332	342
18	361	409	506	652	925	993	1040	1440	820	390	351	348
19	350	407	508	658	925	982	1050	1430	1420	384	358	330
20	348	404	527	675	926	982	1070	1420	1160	378	350	326
21	350	433	572	678	927	980	1080	1420	873	363	346	317
22	347	434	604	690	923	984	1090	1450	708	357	326	331
23	355	434	575	695	916	986	1100	1470	627	355	325	357
24	360	428	548	722	959	988	1110	1500	393	347	320	358
25	360	452	564	728	952	998	1120	1520	708	346	325	354
26	366	455	576	751	966	1000	1130	1540	890	342	336	395
27	391	461	584	766	953	996	1150	1550	949	347	344	430
28	384	450	561	768	942	999	1160	1580	1000	349	349	369
29	369	445	552	791	---	1020	1170	1600	1030	345	341	368
30	373	459	550	829	---	1020	1180	1620	1040	347	339	376
31	363	---	542	833	---	1030	---	1600	---	341	333	---
MEAN	368	419	510	656	917	991	1070	1400	---	505	---	349
MAX	393	461	604	833	966	1030	1180	1620	---	992	---	430
MIN	347	367	438	550	833	924	1000	1200	---	341	---	317

CAL YR 2001 MEAN 1290 MAX 2640 MIN 347

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.9	21.3	22.9	15.7	24.1	15.4	25.8	28.6	27.7	27.6	30.3	29.3
2	24.3	22.3	22.9	15.3	23.9	17.3	26.3	28.8	29.1	27.4	30.0	29.3
3	24.6	23.1	22.8	14.8	22.9	20.0	26.2	29.1	30.6	28.0	29.7	29.3
4	25.1	23.3	22.9	11.8	21.5	19.1	25.3	29.5	31.0	28.4	29.9	29.1
5	25.8	22.7	22.8	11.4	18.5	15.7	25.4	29.4	30.3	27.9	29.9	28.7
6	26.4	21.7	23.0	13.0	18.3	16.4	23.3	28.9	30.1	28.4	30.1	28.9
7	26.5	21.3	23.2	13.1	19.1	17.5	22.4	27.9	29.3	29.2	29.7	29.3
8	26.1	21.5	23.4	11.7	17.9	18.8	21.9	28.5	27.7	29.2	29.2	29.3
9	24.8	21.2	23.7	11.3	18.0	21.3	22.9	28.1	27.8	28.6	28.9	29.5
10	24.1	21.1	23.9	12.2	19.8	22.8	23.7	28.2	27.9	28.4	28.5	29.7
11	24.1	20.9	24.0	13.5	20.1	22.4	23.9	28.4	28.6	28.3	28.3	29.0
12	24.7	20.8	24.3	14.4	19.8	22.9	23.2	27.9	29.1	28.1	28.4	28.4
13	25.1	20.5	24.3	15.5	19.2	23.0	23.3	28.2	28.3	27.9	28.1	28.3
14	25.6	20.8	24.6	15.6	17.9	22.6	24.3	28.1	27.2	28.6	28.2	28.6
15	26.0	20.6	24.9	16.5	18.0	23.7	24.4	25.6	26.9	29.1	28.6	29.1
16	25.9	20.3	24.7	16.2	19.6	25.4	26.4	25.2	26.8	29.6	29.1	29.9
17	24.8	20.6	23.7	17.3	18.7	26.1	26.7	26.5	26.4	30.1	29.7	30.1
18	23.7	21.2	23.2	18.7	17.4	26.3	27.4	27.9	25.4	30.4	30.3	29.9
19	24.0	21.2	22.0	18.8	17.4	26.1	27.4	27.4	24.8	30.2	30.2	30.1
20	24.7	21.3	20.7	19.9	18.5	25.7	27.4	25.2	24.8	30.1	29.8	29.9
21	25.0	21.3	18.9	20.6	20.2	25.3	28.2	24.1	24.8	29.2	29.5	29.7
22	25.0	21.5	18.1	21.4	20.9	24.4	28.6	23.6	24.9	29.1	29.3	29.4
23	25.3	21.8	18.5	22.4	19.6	22.1	28.8	24.2	24.9	29.7	29.5	29.2
24	25.7	22.3	19.2	22.8	17.4	22.4	27.6	25.1	25.0	30.1	29.7	29.1
25	25.6	22.9	18.2	23.1	17.8	24.1	26.8	25.4	26.3	30.4	30.1	28.9
26	24.9	23.3	16.4	23.4	19.5	25.4	27.0	26.0	26.4	30.8	29.7	28.6
27	22.4	23.4	14.4	22.9	18.9	25.3	27.9	27.0	26.9	31.1	29.2	28.8
28	20.4	23.3	14.7	23.1	15.8	25.5	27.6	27.9	28.3	31.1	29.0	29.4
29	19.8	23.3	16.1	23.6	---	25.9	27.8	27.5	28.8	30.9	28.9	29.3
30	20.3	23.1	16.7	24.1	---	25.8	27.8	28.2	28.5	30.8	29.2	29.1
31	20.7	---	16.5	24.2	---	25.9	---	28.3	---	30.6	29.2	---
MEAN	24.4	21.8	21.1	17.7	19.3	22.6	25.9	27.2	27.5	29.3	29.4	29.2
MAX	26.5	23.4	24.9	24.2	24.1	26.3	28.8	29.5	31.0	31.1	30.3	30.1
MIN	19.8	20.3	14.4	11.3	15.8	15.4	21.9	23.6	24.8	27.4	28.1	28.3

CAL YR 2001 MEAN 24.1 MAX 31.7 MIN 8.8
WTR YR 2002 MEAN 24.6 MAX 31.1 MIN 11.3

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT													
10...	1130	4710	15.26	351	356	7.2	7.1	24.0	1.7	320	6.7	6	.10
24...	0950	4100	14.63	364	361	6.9	7.3	25.4	.27	240	4.5	3	.16
NOV													
05...	1335	2780	14.27	403	387	7.4	7.8	22.7	.28	200	6.9	<1	.11
20...	1400	2000	13.82	394	402	7.6	7.3	21.5	1.6	240	7.7	<1	.05
DEC													
05...	0949	1870	12.88	459	464	7.3	7.7	22.4	.93	200	6.9	<1	.10
18...	1255	1080	12.15	512	507	7.8	7.7	23.2	.95	200	7.5	<1	.11
JAN													
03...	1015	431	11.24	558	552	7.3	7.9	14.9	2.6	240	8.7	1	.08
15...	1035	374	10.94	620	626	7.7	7.6	16.5	2.2	140	9.3	4	.03
29...	1215	-11	10.80	791	779	7.6	7.7	23.6	5.5	160	7.4	8	<.01
FEB													
12...	1029	389	10.55	920	904	7.5	7.7	19.3	5.0	120	8.8	12	.04
27...	1050	410	11.01	948	947	7.8	7.7	18.8	4.5	120	9.0	7	.05
MAR													
13...	1420	359	10.67	1020	1010	7.7	7.5	23.5	9.8	100	7.7	26	.05
27...	1058	244	10.21	1000	978	7.5	7.6	24.6	6.1	100	6.5	13	.01
APR													
10...	1325	290	9.81	1050	1040	7.5	7.7	24.2	6.6	100	7.7	10	.03
24...	0858	-9.3	9.57	1090	1080	7.4	7.7	26.4	5.7	100	5.8	13	.07
MAY													
07...	1128	100	9.16	1250	1250	7.9	7.8	29.0	5.2	100	6.3	10	.02
22...	0916	-346	8.54	1450	1440	7.3	7.5	22.7	11	80	7.5	28	.15
JUN													
05...	1325	92	8.72	1550	1530	8.4	7.8	30.6	13	100	6.6	19	.02
18...	0950	-183	9.52	313	343	6.6	6.8	25.8	8.6	160	9.1	20	.19
JUL													
01...	1032	1070	13.68	1020	976	7.8	7.5	27.7	5.0	100	6.0	10	.02
16...	0925	5970	15.52	396	392	6.1	7.1	29.3	1.1	320	1.1	4	.31
30...	0955	3800	15.48	349	354	6.8	7.3	30.4	2.7	240	.9	7	.16
AUG													
13...	0918	4670	15.45	352	345	7.2	7.5	28.0	4.1	280	4.4	3	.23
28...	1245	3540	15.01	361	350	7.0	7.5	29.4	2.5	280	3.6	4	.18
SEP													
10...	0955	4270	14.81	347	336	7.2	7.8	29.4	1.4	240	4.0	2	.19
25...	1155	2140	13.81	363	347	6.6	7.4	29.1	1.9	240	6.0	1	.19

< -- Less than
Negative figures indicate reverse flow

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SULFIDE TOTAL (MG/L AS S) (00745)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)
OCT													
10...	.11	<.010	E1.9	<.02	.06	.05	42.0	3.0	.050	99	29.0	6.20	30.0
24...	.16	<.010	E1.3	.03	E.06	.05	30.0	2.0	.050	100	29.0	6.40	30.0
NOV													
05...	.11	<.010	E1.7	.06	E.05	.04	33.0	1.0	.040	100	30.0	7.00	34.0
20...	.06	<.010	E1.4	.08	E.04	.03	29.0	2.0	.030	110	31.0	7.20	34.0
DEC													
05...	.10	<.010	E1.5	.06	E.06	.04	28.0	2.0	.040	120	34.0	8.00	42.0
18...	.11	<.010	1.9	.15	.06	.04	29.0	2.0	.040	130	38.0	8.80	46.0
JAN													
03...	.09	<.010	1.7	.24	.04	.02	30.0	2.0	.020	140	41.0	9.70	52.0
15...	.05	<.010	1.8	.20	.05	.01	31.0	1.0	.010	160	44.0	11.0	58.0
29...	.03	<.010	2.1	<.02	.03	<.01	28.0	1.0	.010	200	53.0	15.0	71.0
FEB													
12...	.06	<.010	1.9	<.02	.04	<.01	2.2	2.0	<.010	220	60.0	17.0	91.0
27...	.12	<.010	1.6	.03	.06	.02	25.0	1.0	.020	230	64.0	17.0	92.0
MAR													
13...	.06	<.010	2.1	<.02	.06	<.01	24.0	<1.0	<.010	250	70.0	18.0	98.0
27...	.04	<.010	1.7	<.02	.03	<.01	24.0	1.0	<.010	240	68.0	17.0	93.0
APR													
10...	.03	<.010	1.7	<.02	.05	<.01	25.0	2.0	.010	260	73.0	19.0	100
24...	.09	<.010	1.8	<.02	.04	.01	24.0	1.0	.010	260	73.0	19.0	110
MAY													
07...	.04	<.010	2.1	<.02	.05	<.01	29.0	3.0	<.010	300	83.0	22.0	130
22...	.18	<.010	3.0	.03	.08	<.01	29.0	1.0	.020	330	93.0	24.0	150
JUN													
05...	.02	<.010	2.0	<.02	.07	<.01	30.0	1.0	.010	370	100	27.0	160
18...	.20	.010	1.7	.02	.09	.02	24.0	2.0	.030	82	23.0	5.80	33.0
JUL													
01...	.04	<.010	1.8	<.02	.05	<.01	19.0	<1.0	<.010	230	63.0	17.0	98.0
16...	.31	.010	2.2	<.02	.42	.37	30.0	3.0	.390	110	31.0	6.80	33.0
30...	E.20	.010	3.9	<.02	.24	.22	29.0	2.0	E.250	100	30.0	6.20	29.0
AUG													
13...	.22	.020	2.1	.03	.14	.11	28.0	2.0	.120	99	29.0	6.30	28.0
28...	.19	.010	1.9	<.02	.12	.09	27.0	2.0	.100	100	30.0	6.50	29.0
SEP													
10...	.20	.010	1.7	.04	.12	.06	24.0	3.0	.060	95	28.0	5.90	28.0
25...	.20	.020	1.7	.08	.06	.05	24.0	2.0	.060	98	29.0	6.10	29.0

< -- Less than
E -- Estimated value

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT												
10...	3.70	E56	15.0	61.0	8.20	267	7.2	.3	20.0	750	496	335
24...	3.70	E54	16.0	63.0	7.60	267	<.1	.3	20.0	760	441	358
NOV												
05...	3.80	E56	19.0	70.0	7.60	286	<.1	.4	20.0	830	399	332
20...	3.60	E56	19.0	73.0	7.00	287	<.1	.4	20.0	840	367	280
DEC												
05...	3.60	E60	21.0	88.0	6.20	315	4.3	.4	21.0	940	360	296
18...	3.70	63	24.0	97.0	6.60	E344	5.2	.4	25.0	1050	374	273
JAN												
03...	3.80	65	30.0	109	6.90	382	3.1	.4	27.0	1150	341	260
15...	3.70	64	44.0	124	6.30	421	<.1	.6	27.0	1330	330	249
29...	3.70	70	64.0	156	2.00	494	16.0	.8	35.0	1700	360	223
FEB												
12...	4.30	71	85.0	183	.08	605	<.1	.7	40.0	2070	390	163
27...	4.00	66	103	187	1.10	649	13.0	.7	43.0	2100	318	131
MAR												
13...	4.40	64	117	199	.50	676	19.0	.8	45.0	2370	540	106
27...	4.40	66	111	193	.27	610	15.0	.8	45.0	2310	280	95
APR												
10...	4.70	72	111	212	.36	705	7.7	.8	47.0	2470	287	63
24...	4.70	71	118	220	.45	721	12.0	.9	51.0	2570	252	65
MAY												
07...	5.30	81	128	258	.39	815	13.0	1.1	58.0	2930	183	42
22...	6.20	90	135	315	.86	918	38.0	1.2	64.0	3280	347	37
JUN												
05...	6.40	90	142	340	1.10	1060	52.0	1.2	72.0	3670	333	20
18...	2.30	28	31.0	62.0	3.50	244	7.7	.2	18.0	510	573	295
JUL												
01...	4.10	50	120	192	2.90	611	18.0	.6	46.0	2450	368	121
16...	5.00	57	23.0	67.0	8.10	285	8.7	.3	24.0	900	992	635
30...	5.10	66	12.0	58.0	10.0	277	26.0	.3	24.0	790	772	541
AUG												
13...	4.60	68	11.0	54.0	11.0	260	13.0	.3	23.0	770	567	465
28...	4.10	68	11.0	57.0	11.0	254	12.0	.3	24.0	800	536	428
SEP												
10...	3.60	61	12.0	54.0	9.70	238	<.1	.4	22.0	750	443	348
25...	3.30	60	13.0	57.0	9.20	244	<.1	.3	22.0	760	455	371

< -- Less than
E -- Estimated value

02232415 TAYLOR CREEK NEAR COCOA, FL

LOCATION.--Lat 28°21'08", long 80°55'43", in SW¼ sec.33, T.24 S., R.34 E., Orange County, Hydrologic Unit 03080101, near right bank on downstream side of bridge on State Highway 532, 1.0 mi downstream from structure 164, 3.5 mi upstream from mouth, and 10.8 mi west of Cocoa.

DRAINAGE AREA.--55.1 mi^2.

PERIOD OF RECORD.--1960, 1967, 1972, 1982, 1984, 1985, 1994 (one to five discharge measurements each year), January 1997 to September 2002 (discontinued).

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (Florida Department of Natural Resources bench mark).

REMARKS.--Records fair. Flow regulated by structure 164.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199	232	1.3	1.6	1.4	1.2	0.78	0.74	0.72	469	244	216
2	196	228	1.3	1.8	1.4	1.3	0.75	0.68	0.61	459	234	211
3	194	226	1.2	2.6	1.4	1.2	0.75	0.64	0.55	453	239	203
4	161	221	1.4	2.1	1.3	1.2	0.77	0.64	0.51	434	241	200
5	102	221	2.1	2.0	1.1	1.2	0.75	0.65	0.54	407	235	217
6	100	215	2.3	1.9	1.1	1.2	0.70	0.69	0.56	418	221	220
7	98	162	2.3	1.8	1.1	1.2	0.66	0.69	0.61	404	225	210
8	104	5.8	2.3	1.7	1.1	1.2	0.65	0.66	0.67	383	217	212
9	103	2.2	2.5	1.6	1.1	1.1	11	0.65	0.58	370	204	203
10	100	1.8	2.4	1.6	1.2	1.1	1.9	0.65	11	347	189	164
11	98	1.6	2.3	1.6	1.4	1.1	1.1	0.65	85	333	178	76
12	73	1.6	2.2	1.6	1.2	1.1	1.2	0.63	89	328	174	14
13	5.3	1.6	2.2	1.6	1.2	1.1	1.2	0.62	87	322	216	16
14	2.6	2.8	2.1	1.7	1.1	7.3	1.1	0.65	95	311	284	17
15	3.4	3.4	2.1	4.0	1.0	2.5	1.1	0.61	96	294	318	13
16	2.6	2.5	2.0	3.1	1.1	1.3	0.95	0.59	90	273	323	12
17	2.0	2.0	2.0	2.4	1.1	1.1	0.87	0.67	90	253	310	11
18	1.8	1.8	1.9	2.2	1.0	1.1	0.84	0.68	124	235	292	17
19	1.7	1.7	1.8	2.0	1.0	1.1	0.80	0.79	193	243	291	6.9
20	1.8	1.7	1.7	1.9	1.1	1.0	0.77	0.73	223	294	367	5.7
21	2.3	1.6	1.6	1.8	0.96	0.98	0.78	0.65	276	360	507	5.6
22	7.8	1.5	1.6	1.8	1.5	0.86	0.77	0.65	340	414	611	5.3
23	6.2	1.4	1.6	1.7	12	0.80	0.75	0.69	461	493	562	5.5
24	53	1.6	1.6	1.7	21	0.79	0.72	0.71	573	513	512	10
25	162	1.6	1.6	1.6	4.4	0.72	0.67	0.65	566	482	469	79
26	149	1.5	1.7	1.5	1.3	0.73	0.73	0.61	556	441	426	184
27	139	1.5	1.7	1.5	1.3	0.80	0.75	0.58	559	400	385	234
28	135	1.4	1.6	1.5	1.2	0.78	0.74	0.55	522	360	358	282
29	133	1.4	1.6	1.5	---	0.75	0.73	0.57	476	320	341	230
30	165	1.3	1.6	1.5	---	0.76	0.75	0.57	459	287	286	105
31	239	---	1.6	1.4	---	0.77	---	0.71	---	262	223	---
TOTAL	2740.5	1550.3	57.2	58.3	67.06	39.34	36.03	20.25	5976.35	11362	9682	3385.0
MEAN	88.4	51.7	1.85	1.88	2.40	1.27	1.20	0.65	199	367	312	113
MAX	239	232	2.5	4.0	21	7.3	11	0.79	573	513	611	282
MIN	1.7	1.3	1.2	1.4	0.96	0.72	0.65	0.55	0.51	235	174	5.3
CFSM	1.63	0.95	0.03	0.03	0.04	0.02	0.02	0.01	3.67	6.75	5.75	2.08
IN.	1.88	1.06	0.04	0.04	0.05	0.03	0.02	0.01	4.09	7.78	6.63	2.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

MEAN	183	15.9	60.6	37.4	59.1	37.3	3.58	9.34	47.3	91.9	86.5	52.4
MAX	734	51.7	298	183	353	222	19.3	54.5	199	367	312	113
(WY)	2000	2002	1998	1998	1998	1998	1998	1998	2002	2002	2002	2002
MIN	0.053	0.28	0.28	0.11	0.000	0.000	0.000	0.000	0.000	0.18	0.18	0.002
(WY)	1998	2001	2001	2001	1997	1997	1997	1997	2000	1997	1997	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	16750.25		34974.33			
ANNUAL MEAN	45.9		95.8		63.7	
HIGHEST ANNUAL MEAN					95.8	2002
LOWEST ANNUAL MEAN					18.8	1999
HIGHEST DAILY MEAN	288	Jul 15	611	Aug 22	1110	Dec 16 1997
LOWEST DAILY MEAN	0.00	Many days	0.51	Jun 4	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Mar 9	0.57	Jun 3	0.00	Many days
MAXIMUM PEAK FLOW			638	Aug 21,22	1170	Dec 15 1997
MAXIMUM PEAK STAGE			21.95	Aug 21,22	22.44	Dec 15 1997
ANNUAL RUNOFF (CFSM)	0.85		1.76		1.17	
ANNUAL RUNOFF (INCHES)	11.48		23.96		15.95	
10 PERCENT EXCEEDS	216		340		230	
50 PERCENT EXCEEDS	0.28		1.9		1.0	
90 PERCENT EXCEEDS	0.00		0.69		0.07	

02232500 ST. JOHNS RIVER NEAR CHRISTMAS, FL

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

DRAINAGE AREA.--1,539 mi^2, includes that of Tootoosahatchee Creek.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 1.62 ft above NGVD of 1929. Prior to July 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4740	3720	2000	696	441	965	257	145	45	2010	4820	4430
2	4750	3720	1910	683	421	867	235	146	65	2400	5140	4430
3	4660	3660	1860	709	422	767	224	120	67	2930	5070	4360
4	4380	3570	1860	713	419	777	221	113	59	3130	5190	4550
5	4390	3470	1830	649	394	717	205	112	65	3170	5350	4550
6	4370	3430	1760	618	374	656	199	104	56	3240	5260	4620
7	4360	3280	1650	605	373	592	188	114	57	3350	5230	4610
8	4570	3120	1590	589	379	544	184	103	103	3380	5090	4690
9	4650	3080	1530	572	361	530	180	98	82	3430	5130	4620
10	4530	3050	1490	560	362	537	182	105	81	3610	5040	4560
11	4220	2940	1390	525	396	489	174	89	73	3610	5020	4430
12	4200	2890	1370	493	409	461	183	86	90	3730	5130	4230
13	4170	2820	1330	481	395	464	187	88	66	3940	5310	4230
14	3990	2850	1300	496	395	446	200	88	82	4130	5820	4110
15	3980	2860	1280	585	360	404	196	70	91	4300	6030	3950
16	3900	2870	1270	620	382	396	199	66	109	4370	6120	3770
17	3880	2890	1210	587	382	376	179	75	145	4530	5960	3650
18	3800	2900	1120	562	364	361	189	101	213	4540	5670	3570
19	3770	2780	1110	548	341	363	168	101	428	4460	5440	3450
20	3730	2720	1070	565	350	348	180	93	639	4530	5450	3270
21	3760	2750	1040	539	350	354	179	83	745	4680	5520	3240
22	3930	2650	1010	523	369	343	195	71	933	4670	5630	3180
23	3750	2630	954	529	509	315	162	43	1200	4890	5580	3070
24	3870	2630	914	501	841	261	156	62	1500	5330	5390	3010
25	4140	2480	911	512	954	251	162	61	1630	5440	5120	3040
26	4350	2360	875	513	1060	262	161	65	1760	5360	4980	3160
27	4470	2290	845	488	1070	307	161	57	1910	5280	4870	3080
28	4450	2220	804	463	1040	273	149	51	1950	5210	4800	3180
29	4210	2110	763	440	---	261	152	53	1850	5010	4750	3100
30	3970	2050	755	454	---	247	138	44	1860	4890	4650	3000
31	3920	---	725	439	---	235	---	47	---	4850	4520	---
TOTAL	129860	86790	39526	17257	13913	14169	5545	2654	17954	128400	163080	115140
MEAN	4189	2893	1275	557	497	457	185	85.6	598	4142	5261	3838
MAX	4750	3720	2000	713	1070	965	257	146	1950	5440	6120	4690
MIN	3730	2050	725	439	341	235	138	43	45	2010	4520	3000
MED	4200	2870	1270	548	394	396	183	88	106	4370	5190	3860
CFSM	2.72	1.88	0.83	0.36	0.32	0.30	0.12	0.06	0.39	2.69	3.42	2.49
IN.	3.14	2.10	0.96	0.42	0.34	0.34	0.13	0.06	0.43	3.10	3.94	2.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2002, BY WATER YEAR (WY)

MEAN	2725	1965	1304	989	889	953	777	421	639	1210	1546	2113
MAX	10130	4928	4174	3949	4230	4739	4072	1715	5461	6809	5261	8062
(WY)	1954	1957	1988	1998	1998	1960	1960	1998	1968	1968	2002	1953
MIN	67.5	38.7	81.8	70.0	66.4	16.4	-30.3	15.3	8.45	8.34	32.3	171
(WY)	1981	1981	1962	1962	2001	1939	1999	1981	2000	1981	1981	1950

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1934 - 2002	
ANNUAL TOTAL	467940.24		734288			
ANNUAL MEAN	1282		2012		1296	
HIGHEST ANNUAL MEAN					2978	1960
LOWEST ANNUAL MEAN					84.4	1981
HIGHEST DAILY MEAN	5790	Sep 16	6120	Aug 16	11600	Oct 11 1953
LOWEST DAILY MEAN	-2.7	Jun 4	43	May 23	-137	Apr 24 1999
ANNUAL SEVEN-DAY MINIMUM	8.7	Jun 4	52	May 26	-82	Apr 24 1999
MAXIMUM PEAK FLOW					11700	Oct 12 1953
MAXIMUM PEAK STAGE			8.94	Aug 15	10.81	Sep 28 1960
ANNUAL RUNOFF (CFSM)	0.83		1.31		0.84	
ANNUAL RUNOFF (INCHES)	11.31		17.75		11.44	
10 PERCENT EXCEEDS	3970		4810		3110	
50 PERCENT EXCEEDS	151		1060		808	
90 PERCENT EXCEEDS	36		102		108	

Note.--Negative figures indicate reverse flow

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

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.59	7.74	6.55	4.47	3.47	5.05	2.55	1.63	0.98	6.63	8.24	8.37
2	8.59	7.69	6.49	4.46	3.43	4.91	2.49	1.58	0.95	6.77	8.30	8.37
3	8.56	7.65	6.42	4.54	3.37	4.74	2.42	1.53	0.92	6.96	8.37	8.33
4	8.52	7.59	6.39	4.50	3.30	4.59	2.37	1.50	0.89	7.06	8.41	8.36
5	8.46	7.54	6.34	4.43	3.23	4.45	2.32	1.47	0.88	7.13	8.50	8.43
6	8.41	7.51	6.28	4.34	3.17	4.32	2.24	1.44	0.87	7.17	8.49	8.42
7	8.35	7.46	6.21	4.27	3.13	4.17	2.17	1.39	0.93	7.21	8.47	8.42
8	8.36	7.39	6.16	4.21	3.17	4.08	2.13	1.36	1.27	7.27	8.47	8.42
9	8.34	7.33	6.10	4.12	3.14	3.99	2.13	1.33	1.28	7.35	8.46	8.40
10	8.27	7.27	6.05	4.05	3.12	3.90	2.12	1.30	1.19	7.45	8.43	8.36
11	8.21	7.22	5.99	3.98	3.18	3.82	2.08	1.27	1.14	7.51	8.42	8.31
12	8.15	7.16	5.93	3.92	3.18	3.73	2.07	1.25	1.12	7.59	8.49	8.24
13	8.12	7.13	5.87	3.85	3.16	3.67	2.13	1.22	1.06	7.69	8.60	8.17
14	8.07	7.16	5.81	3.82	3.14	3.62	2.14	1.21	1.03	7.79	8.79	8.09
15	8.03	7.14	5.75	4.01	3.12	3.53	2.17	1.19	1.13	7.85	8.91	7.99
16	7.98	7.16	5.71	4.13	3.10	3.45	2.17	1.11	1.33	7.89	8.91	7.90
17	7.93	7.18	5.64	4.12	3.09	3.39	2.20	1.16	1.53	7.92	8.87	7.80
18	7.89	7.16	5.57	4.07	3.06	3.32	2.19	1.28	1.99	7.94	8.81	7.70
19	7.85	7.14	5.51	4.04	3.02	3.24	2.15	1.34	2.96	7.95	8.76	7.61
20	7.81	7.11	5.42	4.01	2.99	3.17	2.11	1.36	3.85	7.98	8.75	7.53
21	7.83	7.08	5.34	3.98	2.98	3.09	2.06	1.20	4.39	8.04	8.79	7.48
22	7.89	7.05	5.26	3.95	3.11	3.02	2.01	1.05	4.85	8.13	8.83	7.40
23	7.88	7.00	5.18	3.91	3.68	2.90	1.96	0.95	5.39	8.26	8.83	7.32
24	7.88	6.96	5.09	3.86	4.67	2.80	1.90	0.91	5.86	8.35	8.79	7.31
25	7.97	6.90	5.02	3.82	5.01	2.74	1.85	0.94	6.11	8.38	8.72	7.32
26	8.01	6.85	4.95	3.77	5.21	2.70	1.84	0.94	6.26	8.38	8.64	7.34
27	8.03	6.80	4.89	3.71	5.22	2.76	1.83	0.92	6.35	8.35	8.56	7.32
28	8.02	6.74	4.79	3.66	5.17	2.77	1.78	0.90	6.38	8.31	8.49	7.32
29	7.97	6.68	4.70	3.61	---	2.71	1.73	0.88	6.40	8.27	8.43	7.26
30	7.89	6.62	4.63	3.57	---	2.65	1.68	0.83	6.45	8.22	8.37	7.20
31	7.82	---	4.55	3.52	---	2.60	---	0.90	---	8.21	8.36	---
MEAN	8.12	7.18	5.63	4.02	3.52	3.54	2.10	1.20	2.86	7.74	8.59	7.88
MAX	8.59	7.74	6.55	4.54	5.22	5.05	2.55	1.63	6.45	8.38	8.91	8.43
MIN	7.81	6.62	4.55	3.52	2.98	2.60	1.68	0.83	0.87	6.63	8.24	7.20

CAL YR 2001 MEAN 4.07 MAX 8.72 MIN 0.86
WTR YR 2002 MEAN 5.22 MAX 8.91 MIN 0.83

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952-58, 1960-62, 1965-76, 1979-84, 2000 to 2002.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 2000 to September 2002 (discontinued).
WATER TEMPERATURE: August 2000 to September 2002 (discontinued).

INSTRUMENTATION.--Water-quality monitor and data-collection platform.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 5,310 µS/cm @ 25 °C, June 18, 2001; minimum daily mean, 315 µS/cm @ 25 °C, Aug. 23, 2002.
WATER TEMPERATURE: Maximum daily mean, 31.8 °C, July 28,29, 2002; minimum daily mean, 9.7 °C, Jan. 3, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 3,270 µS/cm @ 25 °C, June 12; minimum daily mean, 315 µS/cm @ 25 °C, Aug. 23.
WATER TEMPERATURE: Maximum daily mean, 31.8 °C, July 28,29; minimum daily mean, 10.5 °C, Jan. 5.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	430	576	818	1170	1220	1410	1510	2100	776	377	359
2	413	425	579	815	1170	1270	1410	1560	2130	768	371	360
3	396	423	584	829	1180	1270	1420	1590	2160	736	362	357
4	392	430	583	897	1190	1280	1420	1570	2180	714	365	359
5	---	442	596	940	1190	1310	1410	1580	2150	738	363	352
6	---	454	620	953	1220	1340	1440	1590	2130	768	370	341
7	---	455	636	943	1240	1350	1480	1590	2170	775	376	332
8	---	462	642	954	1250	1340	1510	1590	2290	755	378	330
9	---	476	640	958	1300	1340	1470	1600	2580	722	371	334
10	---	492	640	960	1300	1340	1400	1630	3070	679	367	339
11	---	491	650	957	1310	1340	1390	1640	3070	639	368	338
12	---	486	657	953	1370	1350	1410	1650	3270	615	364	348
13	---	482	658	953	1380	1330	1420	1660	3210	586	352	355
14	---	476	666	969	1360	1340	1460	1670	3100	550	345	362
15	---	483	667	1010	1340	1360	1480	1660	3050	536	340	372
16	---	511	665	1210	1320	1360	1500	1680	2850	507	347	380
17	---	520	676	1270	1280	1350	1520	1760	2380	478	342	385
18	---	535	689	1230	1270	1340	1550	1840	1870	461	335	382
19	---	558	690	1190	1270	1330	1540	1800	2080	449	336	385
20	---	553	695	1150	1260	1320	1510	1780	1800	438	334	389
21	---	543	706	1130	1240	1310	1500	1890	1660	427	340	394
22	---	546	716	1120	1230	1300	1480	2020	1630	409	320	384
23	---	545	731	1110	1450	1310	1490	2100	1470	397	315	382
24	---	544	756	1110	1770	1320	1500	2200	1190	385	321	379
25	---	549	776	1100	1610	1310	1510	2220	1050	357	334	390
26	---	553	779	1100	1290	1300	1510	2240	970	344	342	404
27	---	553	786	1120	1150	1300	1480	2240	862	346	348	400
28	---	564	805	1130	1160	1390	1450	2210	793	349	351	404
29	---	569	815	1150	---	1450	1490	2180	777	359	357	411
30	421	576	819	1160	---	1450	1500	2140	788	366	356	428
31	427	---	815	1170	---	1430	---	2110	---	374	356	---
MEAN	---	504	688	1040	1300	1330	1470	1820	2030	542	352	371
MAX	---	576	819	1270	1770	1450	1550	2240	3270	776	378	428
MIN	---	423	576	815	1150	1220	1390	1510	777	344	315	330

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.2	21.7	22.5	15.5	24.0	14.4	26.1	28.7	27.4	26.7	30.4	29.3
2	23.8	22.5	22.7	15.2	23.8	17.0	26.1	28.8	28.2	26.7	29.6	29.7
3	24.4	23.1	22.5	14.4	22.7	20.5	26.4	29.2	29.2	27.5	29.0	30.2
4	25.1	23.3	22.5	10.7	21.3	19.6	25.6	29.8	30.4	28.1	29.3	29.2
5	25.6	22.4	22.3	10.5	18.1	14.8	25.4	30.0	30.3	27.7	29.9	28.4
6	26.5	21.1	22.4	12.8	17.6	15.3	23.5	29.4	30.2	28.5	30.4	28.5
7	26.8	20.7	22.9	13.8	18.7	17.3	22.9	28.4	29.6	29.4	30.0	28.8
8	26.1	21.1	23.3	11.6	17.7	19.0	22.5	28.3	28.7	28.9	28.8	29.1
9	24.5	21.3	23.8	11.2	17.5	21.5	23.0	28.3	28.2	28.1	28.4	29.4
10	24.0	21.3	24.0	12.0	19.3	22.8	23.6	28.5	28.4	28.0	28.4	29.7
11	24.4	21.3	24.0	13.4	20.3	22.5	24.3	28.6	28.0	28.6	27.9	29.1
12	25.1	21.0	24.2	14.8	20.1	22.9	23.9	28.5	28.4	28.3	27.9	28.0
13	25.5	20.4	24.1	16.0	19.1	23.3	23.6	28.1	28.6	28.0	28.0	28.1
14	25.7	20.4	24.3	16.2	17.7	22.8	24.1	28.1	29.2	28.8	28.0	28.5
15	26.1	20.1	24.6	17.0	17.6	23.6	24.2	26.6	28.9	30.1	28.4	29.1
16	26.0	19.9	24.4	16.4	19.1	24.9	25.0	25.9	28.9	31.0	29.0	29.9
17	24.4	20.4	23.3	17.5	18.5	25.9	25.8	26.1	28.2	31.5	29.8	30.2
18	22.8	21.3	22.8	18.9	17.5	26.4	26.9	26.7	27.1	31.5	30.4	30.2
19	23.4	21.3	21.3	19.0	17.3	26.4	27.1	27.2	26.1	31.6	30.2	30.0
20	24.3	21.7	19.7	20.1	18.5	25.9	27.2	25.8	25.8	30.9	29.5	29.5
21	24.6	21.7	17.6	20.9	20.0	25.5	27.9	24.4	25.7	29.0	29.3	29.2
22	24.8	21.5	17.2	22.1	21.4	24.7	28.8	23.6	25.3	28.6	29.0	28.8
23	25.2	21.8	17.8	22.6	19.7	22.4	29.0	23.9	25.4	29.5	29.0	28.5
24	25.7	22.2	18.9	22.9	16.4	22.0	28.1	24.6	26.1	30.0	29.6	28.6
25	26.0	22.8	18.0	23.0	17.2	23.4	27.2	25.5	26.5	30.4	29.9	28.7
26	25.1	23.1	15.5	23.6	18.9	25.0	27.7	26.0	26.8	31.0	30.0	28.4
27	21.7	23.1	13.3	22.8	18.6	25.4	28.3	26.7	27.3	31.5	29.8	28.6
28	19.4	22.8	13.5	22.5	14.5	25.3	28.0	27.4	27.9	31.8	29.5	29.3
29	19.4	22.9	15.8	23.1	---	25.8	28.1	27.8	28.1	31.8	29.2	29.3
30	20.3	22.7	17.2	23.7	---	26.1	28.3	28.0	27.6	31.7	29.3	29.3
31	21.0	---	17.0	24.1	---	26.2	---	27.7	---	31.5	29.2	---
MEAN	24.3	21.7	20.8	17.7	19.0	22.5	26.0	27.3	27.9	29.6	29.3	29.1
MAX	26.8	23.3	24.6	24.1	24.0	26.4	29.0	30.0	30.4	31.8	30.4	30.2
MIN	19.4	19.9	13.3	10.5	14.5	14.4	22.5	23.6	25.3	26.7	27.9	28.0

CAL YR 2001 MEAN 24.0 MAX 31.4 MIN 9.7
WTR YR 2002 MEAN 24.6 MAX 31.8 MIN 10.5

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT													
10...	0845	4390	8.27	402	406	6.7	7.1	23.4	1.2	240	3.4	3	.09
24...	1305	3750	7.85	442	432	6.7	7.0	25.9	.23	200	1.0	5	.09
NOV													
05...	1040	3370	7.53	430	426	6.7	7.6	22.5	.78	200	2.8	2	.08
20...	1020	2730	7.12	547	541	6.9	7.2	21.2	1.1	200	2.2	6	.04
DEC													
05...	1235	1890	6.35	574	578	7.0	7.8	22.1	1.5	200	3.7	<1	.09
18...	1010	1050	5.55	677	650	7.2	7.9	22.3	4.0	200	4.6	E4	.10
JAN													
03...	1245	784	4.53	822	805	7.2	7.8	14.6	6.8	200	8.1	8	.14
15...	1340	662	4.02	962	962	7.5	7.6	17.1	7.7	140	8.8	12	.11
29...	0945	408	3.61	1130	1100	7.4	7.5	22.4	13	160	6.6	17	.06
FEB													
12...	1320	384	3.17	1340	1310	7.4	7.6	19.8	12	140	8.4	19	.08
27...	1430	1110	5.16	1120	1070	7.0	7.0	18.2	5.5	160	8.2	15	.06
MAR													
13...	1043	455	3.69	1300	1280	7.5	7.5	22.7	6.0	100	7.5	13	.03
29...	1025	244	2.72	1420	1400	7.4	7.5	25.7	9.5	100	6.8	16	.02
APR													
10...	1015	212	2.12	1360	1360	7.5	7.7	23.8	9.2	100	7.5	16	.06
24...	1127	115	1.91	1450	1450	7.4	7.8	28.3	9.1	100	7.0	18	<.01
MAY													
10...	0948	54	1.30	1600	1560	7.6	7.9	27.9	9.4	100	6.0	20	.27
22...	1218	82	1.05	1950	1920	7.7	7.6	23.7	15	80	8.0	30	.05
JUN													
05...	0935	100	.89	2100	2060	7.4	7.6	29.8	17	100	3.1	24	.02
18...	1520	140	1.97	1840	1790	7.2	7.3	27.3	12	120	--	30	.25
JUL													
03...	1022	3300	6.94	722	708	6.1	6.6	26.6	6.1	240	.2	9	.03
16...	1300	4460	7.90	490	488	6.4	7.0	31.0	6.7	280	.1	13	.11
30...	1450	4950	8.22	355	360	6.9	7.0	31.9	2.8	240	.5	11	<.01
AUG													
13...	1140	5180	8.54	353	348	6.9	7.7	28.1	2.2	280	1.0	2	.18
28...	0915	4700	8.48	364	346	6.7	7.2	29.1	1.2	240	1.3	4	.10
SEP													
10...	1225	4630	8.36	340	336	7.0	7.3	29.6	2.0	240	1.4	7	.09
25...	0925	3000	7.32	395	383	6.3	7.2	28.3	3.5	240	2.7	4	.07

< -- Less than
E -- Estimated value

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SULFIDE TOTAL (MG/L AS S) (00745)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)
OCT													
10...	.09	<.010	<.20	<.02	.06	.05	28.0	2.0	.050	100	29.0	7.00	37.0
24...	E.13	.010	E1.3	<.02	E.08	.05	31.0	2.0	E.060	100	29.0	7.40	41.0
NOV													
05...	.08	<.010	E1.7	.04	E.07	.04	34.0	1.0	.040	100	29.0	7.50	42.0
20...	.06	.010	E1.6	.08	E.05	.04	29.0	2.0	.050	120	34.0	9.40	53.0
DEC													
05...	.09	<.010	E1.5	.11	E.07	.05	28.0	2.0	.060	130	36.0	9.90	57.0
18...	.13	<.010	2.0	.16	.08	.04	29.0	2.0	.060	160	42.0	12.0	67.0
JAN													
03...	.16	.010	1.8	.26	.05	.02	30.0	2.0	.010	180	47.0	14.0	84.0
15...	.12	<.010	1.8	.25	.05	.02	28.0	1.0	.030	200	52.0	17.0	110
29...	.09	.010	2.1	.09	.04	.01	27.0	2.0	.020	240	60.0	21.0	120
FEB													
12...	.13	.010	1.9	.07	.05	<.01	2.1	3.0	.010	280	68.0	25.0	150
27...	.08	<.010	1.4	.07	.07	.02	26.0	1.0	.020	210	53.0	19.0	130
MAR													
13...	.09	<.010	1.7	.03	.05	<.01	24.0	<1.0	<.010	280	73.0	23.0	140
29...	.04	<.010	1.9	.06	.06	<.01	24.0	<1.0	.020	290	76.0	24.0	150
APR													
10...	.07	.010	1.7	.07	.05	<.01	25.0	<1.0	.010	280	73.0	22.0	150
24...	.02	<.010	1.3	<.02	.04	.01	23.0	2.0	.020	300	80.0	24.0	160
MAY													
10...	.25	<.010	1.7	.03	.05	<.01	28.0	1.0	.010	330	86.0	28.0	180
22...	.07	<.010	2.3	.05	.07	<.01	27.0	1.0	.020	420	109	35.0	220
JUN													
05...	.05	<.010	2.2	<.02	.07	<.01	27.0	<1.0	.030	430	111	36.0	240
18...	.26	.020	1.7	.10	.06	<.01	17.0	<1.0	<.010	340	83.0	32.0	220
JUL													
03...	.07	<.010	2.1	<.02	.13	.04	30.0	3.0	.060	150	39.0	12.0	73.0
16...	.11	.010	2.1	<.02	.34	.19	32.0	3.0	.240	120	34.0	8.50	46.0
30...	.02	.010	2.3	<.02	.26	.18	29.0	3.0	.130	94	27.0	6.20	33.0
AUG													
13...	.18	.020	2.0	<.02	.08	.08	28.0	2.0	.090	97	28.0	6.30	30.0
28...	.11	.010	1.5	<.02	.09	.07	27.0	2.0	.070	89	25.0	6.20	33.0
SEP													
10...	.08	<.010	1.4	.03	.08	E.06	25.0	6.0	.060	90	26.0	5.90	30.0
25...	.07	.010	1.5	.06	.06	.05	23.0	2.0	.060	98	28.0	6.60	35.0

< -- Less than
E -- Estimated value

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT												
10...	3.70	E54	17.0	75.0	8.40	E282	<.1	.5	20.0	790	397	303
24...	3.90	53	19.0	82.0	7.70	309	<.1	.4	21.0	790	572	384
NOV												
05...	3.90	E52	21.0	83.0	6.70	299	<.1	.5	20.0	800	563	400
20...	4.10	E58	28.0	109	6.50	373	<.1	.6	22.0	940	563	372
DEC												
05...	4.50	E60	30.0	118	6.00	386	<.1	.5	23.0	990	578	345
18...	4.50	67	34.0	140	6.60	E427	<.1	.6	27.0	1130	613	382
JAN												
03...	4.70	137	52.0	172	6.30	520	<.1	1.0	28.0	1360	618	308
15...	5.00	66	73.0	210	5.60	613	18.0	1.4	32.0	1580	662	316
29...	5.10	72	90.0	245	2.80	717	20.0	1.3	39.0	1890	861	283
FEB												
12...	6.00	73	121	294	.72	824	14.0	1.1	45.0	2360	890	239
27...	5.10	30	121	247	3.10	740	11.0	.9	34.0	1570	739	310
MAR												
13...	5.60	68	134	276	.60	820	23.0	1.0	45.0	2450	609	187
29...	6.00	70	141	296	1.00	862	24.0	1.2	49.0	2620	590	160
APR												
10...	5.50	76	135	297	.89	869	17.0	1.2	46.0	2520	509	96
24...	6.30	76	132	321	1.00	934	28.0	1.3	53.0	2760	438	84
MAY												
10...	6.70	84	150	351	.93	1000	19.0	1.4	59.0	3140	439	67
22...	8.30	85	196	443	.94	1220	53.0	1.5	66.0	3620	478	34
JUN												
05...	8.90	97	182	487	1.50	1400	40.0	1.7	72.0	3880	635	21
18...	7.40	49	197	408	3.00	1060	35.0	1.4	53.0	2720	679	136
JUL												
03...	4.40	37	76.0	140	5.80	458	<.1	.6	31.0	1290	1860	992
16...	4.90	52	35.0	92.0	7.90	345	16.0	.4	23.0	1010	1620	437
30...	4.60	59	12.0	63.0	10.0	284	32.0	.3	22.0	750	890	390
AUG												
13...	4.50	60	11.0	58.0	11.0	250	11.0	.3	21.0	730	497	354
28...	3.50	57	11.0	61.0	9.50	244	<.1	.3	20.0	680	537	412
SEP												
10...	3.30	57	11.0	57.0	9.60	246	<.1	.4	20.0	690	511	354
25...	3.30	58	15.0	67.0	9.30	263	<.1	.4	21.0	730	511	319

< -- Less than
E -- Estimated value

02233200 LITTLE ECONLOCKHATCHEE RIVER NEAR UNION PARK, FL

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

DRAINAGE AREA.--27.1 mi^2.

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

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

REMARKS.--Records good except for periods of estimated daily discharge, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	20	16	9.2	12	24	e9.2	11	7.3	88	69	290
2	42	20	15	14	12	23	e9.8	9.0	e6.3	100	58	282
3	39	22	14	28	11	22	e10	7.8	e5.4	128	58	183
4	37	22	14	17	11	23	e9.5	7.1	e5.4	104	110	164
5	35	23	14	15	9.7	21	e8.8	6.7	e5.8	101	95	318
6	33	21	13	15	9.0	19	e8.4	6.5	e7.0	86	72	193
7	34	19	13	14	9.7	18	e8.0	6.2	e8.4	75	73	143
8	40	19	12	13	14	18	e7.7	6.0	e10	69	71	117
9	34	23	12	13	e11	17	e7.3	5.8	e9.2	60	59	101
10	31	25	12	12	e10	17	e7.0	5.7	e8.6	61	49	90
11	29	26	12	12	e11	16	e9.6	5.5	e9.4	68	43	82
12	28	23	12	12	e11	15	12	5.4	e10	74	41	77
13	27	24	12	12	e10	15	14	5.4	e11	105	56	77
14	26	41	12	12	e9.7	15	14	5.6	e12	110	95	75
15	31	37	11	18	e9.2	14	32	5.9	e11	90	119	69
16	27	32	11	15	e8.8	13	29	5.4	e12	74	128	64
17	25	26	11	15	e8.8	13	32	5.3	e17	67	119	99
18	24	23	12	15	e8.5	12	19	5.3	22	77	111	85
19	24	21	11	17	e8.6	11	16	8.4	23	71	99	71
20	29	20	11	18	8.7	11	13	9.0	60	100	115	67
21	31	19	9.9	16	8.7	e10	11	7.0	51	165	93	70
22	51	18	9.3	15	20	e10	10	6.1	80	274	75	64
23	40	17	9.4	14	62	e10	9.2	5.7	101	136	64	66
24	34	21	9.7	13	91	e9.6	8.9	5.4	84	100	57	72
25	32	19	9.6	13	65	e9.8	8.9	5.4	84	79	49	74
26	29	19	10	13	44	e12	8.1	5.1	73	64	50	72
27	26	18	9.8	13	33	e13	11	5.0	72	71	62	64
28	23	18	9.4	13	27	e12	9.0	5.0	87	59	73	57
29	22	17	9.6	12	---	e11	8.5	5.0	80	53	266	51
30	21	17	9.6	12	---	e9.7	8.1	4.9	79	66	569	47
31	21	---	9.4	11	---	e8.8	---	7.5	---	79	394	---
TOTAL	971	670	355.7	441.2	554.4	452.9	369.0	195.1	1051.8	2854	3392	3284
MEAN	31.3	22.3	11.5	14.2	19.8	14.6	12.3	6.29	35.1	92.1	109	109
MAX	51	41	16	28	91	24	32	11	101	274	569	318
MIN	21	17	9.3	9.2	8.5	8.8	7.0	4.9	5.4	53	41	47
CFSM	1.16	0.82	0.42	0.53	0.73	0.54	0.45	0.23	1.29	3.40	4.04	4.04
IN.	1.33	0.92	0.49	0.61	0.76	0.62	0.51	0.27	1.44	3.92	4.66	4.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2002, BY WATER YEAR (WY)

MEAN	34.1	23.1	19.3	22.1	25.0	28.9	18.0	10.5	27.5	41.3	53.4	62.5
MAX	114	151	155	82.2	128	193	86.5	71.5	137	174	169	171
(WY)	1970	1995	1998	1986	1998	1960	1991	1991	1968	1991	1995	1960
MIN	3.16	2.67	2.22	2.73	3.58	3.61	1.64	0.69	1.14	5.29	5.94	4.12
(WY)	1971	1971	1961	1968	1968	1961	1961	1961	1962	1980	1980	1970

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1960 - 2002	
ANNUAL TOTAL	11088.9		14591.1			
ANNUAL MEAN	30.4		40.0		30.5	
HIGHEST ANNUAL MEAN					64.3	1995
LOWEST ANNUAL MEAN					7.41	1971
HIGHEST DAILY MEAN	433	Jul 19	569	Aug 30	1570	Mar 17 1960
LOWEST DAILY MEAN	4.0	May 21	4.9	May 30	0.10	Jun 7 1961
ANNUAL SEVEN-DAY MINIMUM	4.5	May 15	5.1	May 24	0.20	Jun 3 1961
MAXIMUM PEAK FLOW			695	Aug 30	1640	Mar 17 1960
MAXIMUM PEAK STAGE			9.55	Aug 30	11.64	Mar 17 1960
INSTANTANEOUS LOW FLOW			4.7	May 29,30	0.10	Jun 6 1961
ANNUAL RUNOFF (CFSM)	1.12		1.48		1.12	
ANNUAL RUNOFF (INCHES)	15.22		20.03		15.28	
10 PERCENT EXCEEDS	66		90		69	
50 PERCENT EXCEEDS	18		18		15	
90 PERCENT EXCEEDS	5.9		7.9		3.7	

e Estimated

02233460 LITTLE ECONLOCKHATCHEE RIVER TRIBUTARY AT BANNER DAM AT UNION PARK, FL

LOCATION.--Lat 28°34'27", long 81°16'12", in SE¼ sec.13, T.22 S., R.30 E., Orange County, Hydrologic Unit 03080101, on left upstream wingwall of Banner Dam, 29 ft upstream from Harrell Road, 1.2 mi upstream from Little Econlockhatchee River, and 1.1 mi northeast of Union Park.

DRAINAGE AREA.--18 mi^2.

PERIOD OF RECORD.--November 2001 to September 2002.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD NOVEMBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	23	14	9.5	19	12	17	34	99	46	108
2	---	---	23	52	11	17	15	18	41	84	50	96
3	---	---	22	36	11	16	23	17	18	64	127	74
4	---	---	23	16	11	23	17	17	4.3	68	135	95
5	---	---	25	13	11	16	14	17	2.5	67	106	239
6	---	---	25	13	11	14	14	16	1.8	55	70	128
7	---	---	25	13	17	13	15	18	13	54	71	94
8	---	---	26	13	14	12	14	16	19	64	59	76
9	---	---	24	13	11	11	14	15	8.1	54	50	66
10	---	---	27	13	13	11	10	15	4.3	54	44	58
11	---	---	26	13	15	11	7.4	15	17	49	41	55
12	---	---	22	12	13	10	17	15	19	80	55	51
13	---	---	21	12	15	27	13	14	29	119	79	51
14	---	---	22	18	15	14	15	15	20	95	81	49
15	---	31	21	29	14	12	27	15	34	64	139	46
16	---	26	19	14	13	11	32	15	18	54	95	91
17	---	23	19	13	13	10	25	15	30	51	75	146
18	---	24	21	12	13	9.7	17	19	36	47	65	75
19	---	24	18	11	13	9.2	12	33	25	44	79	57
20	---	24	13	9.9	7.6	8.2	10	26	26	43	113	79
21	---	23	14	11	4.4	10	9.9	21	28	75	87	82
22	---	23	15	11	42	12	10	17	77	76	64	79
23	---	24	15	11	79	11	11	16	99	57	55	90
24	---	21	14	10	78	11	11	16	99	50	50	104
25	---	20	15	10	48	11	11	15	82	46	45	73
26	---	20	15	11	37	15	19	14	54	53	42	61
27	---	21	13	11	27	16	34	13	53	90	42	54
28	---	20	14	11	22	13	14	12	45	99	88	50
29	---	20	13	11	---	12	14	12	70	72	173	46
30	---	20	13	11	---	12	15	13	77	67	165	43
31	---	---	13	11	---	12	---	34	---	52	122	---
TOTAL	---	364	599	458.9	588.5	409.1	472.3	531	1084.0	2046	2513	2416
MEAN	---	22.8	19.3	14.8	21.0	13.2	15.7	17.1	36.1	66.0	81.1	80.5
MAX	---	31	27	52	79	27	34	34	99	119	173	239
MIN	---	20	13	9.9	4.4	8.2	7.4	12	1.8	43	41	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

MEAN	---	22.8	19.3	14.8	21.0	13.2	15.7	17.1	36.1	66.0	81.1	80.5
MAX	---	22.8	19.3	14.8	21.0	13.2	15.7	17.1	36.1	66.0	81.1	80.5
(WY)	---	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	---	22.8	19.3	14.8	21.0	13.2	15.7	17.1	36.1	66.0	81.1	80.5
(WY)	---	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS	#FOR 2002 WATER YEAR		
ANNUAL TOTAL	11481.8		
ANNUAL MEAN	35.9		
HIGHEST DAILY MEAN	239	Sep	5
LOWEST DAILY MEAN	1.8	Jun	6
ANNUAL SEVEN-DAY MINIMUM	7.6	Jun	4
MAXIMUM PEAK FLOW	397	Sep	4
MAXIMUM PEAK STAGE	50.87	Sep	4
INSTANTANEOUS LOW FLOW	1.0	Jun	5-7
10 PERCENT EXCEEDS	81		
50 PERCENT EXCEEDS	20		
90 PERCENT EXCEEDS	11		

Includes partial year of record

02233473 LITTLE ECONLOCKHATCHEE RIVER AT UNIVERSITY BOULEVARD NEAR UNION PARK, FL

LOCATION.--Lat 28°35'49", long 81°13'30", in NW¼ sec.9, T.22 S., R.31 E., Orange County, Hydrologic Unit 03080101, near center span on upstream side of bridge on University Boulevard (SR436A), 1.6 mi east of State Highway 417, 2.0 mi north of Union Park, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--71 mi^2.

PERIOD OF RECORD.--September 2001 to February 2002 (discharge measurements only), March to September 2002.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records good.

DISCHARGE MEASUREMENTS, PERIOD SEPTEMBER 2001 TO FEBRUARY 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND
SEP			DEC			FEB		
17...	1020	572	19...	1015	37	14...	1100	38

DISCHARGE, CUBIC FEET PER SECOND, PERIOD MARCH TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	e92	32	27	35	299	201	769
2	---	---	---	---	---	87	32	27	41	298	180	724
3	---	---	---	---	---	81	34	24	26	334	260	584
4	---	---	---	---	---	85	34	22	21	326	396	537
5	---	---	---	---	---	78	31	20	18	324	378	1080
6	---	---	---	---	---	70	28	20	17	295	305	787
7	---	---	---	---	---	66	27	19	22	241	302	609
8	---	---	---	---	---	63	27	19	58	249	304	486
9	---	---	---	---	---	60	26	18	47	229	256	397
10	---	---	---	---	---	57	26	17	32	200	212	330
11	---	---	---	---	---	54	28	17	35	198	182	282
12	---	---	---	---	---	52	34	17	43	206	183	256
13	---	---	---	---	---	73	49	17	56	335	233	288
14	---	---	---	---	---	63	40	16	36	350	303	256
15	---	---	---	---	---	51	55	16	58	301	399	226
16	---	---	---	---	---	49	82	16	44	239	429	207
17	---	---	---	---	---	45	97	16	44	201	378	348
18	---	---	---	---	---	43	71	17	76	224	403	288
19	---	---	---	---	---	41	50	23	70	191	429	225
20	---	---	---	---	---	39	42	28	71	193	482	212
21	---	---	---	---	---	38	36	22	103	262	456	260
22	---	---	---	---	---	38	33	19	181	540	367	226
23	---	---	---	---	---	37	30	18	300	475	302	239
24	---	---	---	---	---	35	28	17	326	363	252	285
25	---	---	---	---	---	33	26	16	330	284	214	259
26	---	---	---	---	---	36	27	16	260	228	188	229
27	---	---	---	---	---	57	57	15	233	228	191	208
28	---	---	---	---	---	47	35	15	228	310	255	186
29	---	---	---	---	---	39	28	14	232	265	561	165
30	---	---	---	---	---	35	27	15	263	230	1000	151
31	---	---	---	---	---	34	---	26	---	213	887	---
TOTAL	---	---	---	---	---	1678	1172	589	3306	8631	10888	11099
MEAN	---	---	---	---	---	54.1	39.1	19.0	110	278	351	370
MAX	---	---	---	---	---	92	97	28	330	540	1000	1080
MIN	---	---	---	---	---	33	26	14	17	191	180	151

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	54.1	39.1	19.0	110	278	351	370
MAX	---	---	---	---	---	54.1	39.1	19.0	110	278	351	370
(WY)	---	---	---	---	---	2002	2002	2002	2002	2002	2002	2002
MIN	---	---	---	---	---	54.1	39.1	19.0	110	278	351	370
(WY)	---	---	---	---	---	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS	#FOR 2002 WATER YEAR	
ANNUAL TOTAL	37363	
ANNUAL MEAN	175	
HIGHEST DAILY MEAN	1080	Sep 5
LOWEST DAILY MEAN	14	May 29
ANNUAL SEVEN-DAY MINIMUM	15	May 24
MAXIMUM PEAK FLOW	1210	Sep 5
MAXIMUM PEAK STAGE	43.59	Sep 5
INSTANTANEOUS LOW FLOW	14	May 26-30
10 PERCENT EXCEEDS	387	
50 PERCENT EXCEEDS	82	
90 PERCENT EXCEEDS	19	

e Estimated
Includes partial year of record

02233475 LITTLE ECONLOCKHATCHEE RIVER AT STATE HIGHWAY 434 NEAR OVIEDO, FL

LOCATION.--Lat 28°37'11", long 81°12'29", in NW¼ sec.34, T.21 S., R.31 E., Seminole County, Hydrologic Unit 03080101, on upstream side of bridge on State Highway 434, 3.5 mi south of Oviedo, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--72.7 mi^2.

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929. (Levels by Seminole County).

REMARKS.--Records good except for period of estimated daily discharge, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	69	52	37	40	124	47	43	45	321	188	879
2	150	69	52	47	40	110	46	41	48	336	168	828
3	137	87	50	139	37	103	48	39	39	364	223	668
4	124	78	50	91	40	103	49	36	33	380	437	577
5	114	69	50	64	38	101	47	35	27	376	416	1200
6	107	65	48	60	32	95	44	33	27	342	339	930
7	106	63	49	53	37	89	42	32	28	260	326	715
8	105	56	52	49	47	85	42	35	62	e265	336	537
9	106	55	46	46	42	80	41	29	65	e245	270	438
10	100	59	46	45	42	76	37	28	49	e225	213	360
11	90	58	47	44	50	73	37	27	43	e210	176	296
12	83	59	47	43	47	70	44	26	57	e290	177	252
13	78	58	45	43	42	84	59	25	68	e350	228	297
14	75	132	44	45	38	90	58	26	49	e365	317	262
15	106	133	43	68	37	72	67	25	64	e300	405	220
16	96	106	43	68	36	67	94	26	58	e250	461	194
17	83	89	41	57	37	63	120	25	51	202	413	332
18	72	77	42	53	34	60	102	24	86	216	430	307
19	68	71	41	49	35	56	73	29	80	188	457	225
20	72	70	40	51	35	55	62	37	72	173	537	190
21	82	67	39	52	37	58	54	32	96	230	532	243
22	132	58	38	54	69	54	49	28	148	547	417	215
23	134	57	36	48	236	52	46	25	310	538	335	235
24	118	59	36	43	385	50	41	25	374	407	263	306
25	188	60	36	44	334	48	41	24	391	309	212	280
26	142	57	40	41	250	49	40	24	284	224	181	230
27	103	57	43	43	189	65	65	25	246	207	173	206
28	89	58	39	46	147	66	56	24	226	325	233	183
29	75	55	38	46	---	56	44	20	214	284	536	158
30	70	56	38	47	---	51	42	22	277	225	1070	138
31	64	---	38	46	---	49	---	33	---	203	1000	---
TOTAL	3243	2107	1349	1662	2433	2254	1637	903	3617	9157	11469	11901
MEAN	105	70.2	43.5	53.6	86.9	72.7	54.6	29.1	121	295	370	397
MAX	188	133	52	139	385	124	120	43	391	547	1070	1200
MIN	64	55	36	37	32	48	37	20	27	173	168	138
CFSM	1.45	0.97	0.60	0.74	1.20	1.01	0.76	0.40	1.67	4.09	5.12	5.49
IN.	1.67	1.09	0.70	0.86	1.25	1.16	0.84	0.47	1.86	4.72	5.91	6.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

MEAN	158	91.7	119	91.2	111	99.6	50.0	38.9	123	226	218	256
MAX	415	170	438	282	390	346	85.7	49.7	263	355	370	397
(WY)	2000	2000	1998	1998	1998	1998	1998	1999	1999	1997	2002	2002
MIN	64.5	45.2	37.3	37.2	38.9	28.7	29.7	21.3	33.5	80.0	76.6	98.1
(WY)	1998	2001	2001	2001	2001	1999	1999	2000	1998	2000	2000	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	43855		51732			
ANNUAL MEAN	120		142		132	
HIGHEST ANNUAL MEAN					201	1998
LOWEST ANNUAL MEAN					101	2000
HIGHEST DAILY MEAN	1310	Jul 22	1200	Sep 5	1310	Jul 22 2001
LOWEST DAILY MEAN	17	May 20	20	May 29	11	Apr 16 1999
ANNUAL SEVEN-DAY MINIMUM	21	May 16	23	May 24	16	Apr 11 1999
MAXIMUM PEAK FLOW			1340	Sep 5	1480	Jul 22 2001
MAXIMUM PEAK STAGE			36.27	Sep 5	a36.49	
INSTANTANEOUS LOW FLOW			15	May 30	10	Apr 16 1999
ANNUAL RUNOFF (CFSM)	1.66		1.96		1.83	
ANNUAL RUNOFF (INCHES)	22.60		26.65		24.86	
10 PERCENT EXCEEDS	267		337		341	
50 PERCENT EXCEEDS	62		65		64	
90 PERCENT EXCEEDS	29		36		30	

e Estimated
a Dec 27, 1997, Jul 22, 2001

02233484 ECONLOCKHATCHEE RIVER NEAR OVIEDO, FL

LOCATION.--Lat 28°39'19", long 81°10'12", in NE¼ sec.24, T.21 S., R.31 E., Seminole County, Hydrologic Unit 03080101, on downstream side of bridge on State Highway 419, 0.1 mi downstream from Little Econlockhatchee River, 2.5 mi east of Oviedo, and 16.3 mi upstream from mouth.

DRAINAGE AREA.--228 mi^2.

PERIOD OF RECORD.--December 2001 to September 2002.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (Seminole County bench mark).

REMARKS.--Records fair except for period of estimated daily discharge, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD DECEMBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	69	81	320	78	70	48	788	479	2020
2	---	---	---	79	79	269	75	63	51	962	508	1740
3	---	---	---	178	76	236	76	58	50	1190	655	1520
4	---	---	111	205	74	222	78	51	42	1310	830	1380
5	---	---	109	177	67	213	82	47	36	1400	832	2580
6	---	---	106	154	63	197	73	45	34	1570	772	2690
7	---	---	105	137	61	186	67	42	35	1450	827	1980
8	---	---	106	123	72	176	65	43	52	1250	876	1580
9	---	---	104	112	80	165	62	e44	72	1090	692	1310
10	---	---	105	106	80	156	58	e35	64	965	568	1060
11	---	---	108	100	94	149	55	e33	54	817	491	825
12	---	---	108	94	93	141	61	e31	60	730	499	674
13	---	---	106	91	87	144	75	e29	70	820	619	643
14	---	---	102	92	82	159	86	e28	66	1160	774	643
15	---	---	98	117	76	140	93	e26	68	1080	1420	578
16	---	---	96	137	72	130	111	e25	77	945	1830	514
17	---	---	92	128	72	123	137	e26	72	756	1690	500
18	---	---	91	128	68	116	143	e30	99	617	1500	568
19	---	---	89	118	64	108	115	e40	127	535	1460	502
20	---	---	87	111	62	100	95	44	125	456	1630	455
21	---	---	82	110	64	96	82	42	153	459	1720	484
22	---	---	78	106	93	94	74	e36	222	807	1530	470
23	---	---	74	101	270	87	66	e32	403	1340	1320	473
24	---	---	72	93	466	82	61	e27	633	1410	1110	620
25	---	---	72	92	537	84	57	e24	725	1340	900	653
26	---	---	74	86	554	84	54	e23	735	1040	728	585
27	---	---	78	82	501	101	71	e22	764	802	623	514
28	---	---	75	82	394	107	77	e22	739	794	619	477
29	---	---	73	81	---	98	60	e26	626	736	1110	452
30	---	---	71	81	---	91	59	e32	652	613	2350	418
31	---	---	70	81	---	85	---	e40	---	537	2420	---
TOTAL	---	---	2542	3451	4382	4459	2346	1136	6954	29769	33382	28908
MEAN	---	---	90.8	111	156	144	78.2	36.6	232	960	1077	964
MAX	---	---	111	205	554	320	143	70	764	1570	2420	2690
MIN	---	---	70	69	61	82	54	22	34	456	479	418
CFSM	---	---	0.40	0.49	0.70	0.64	0.35	0.16	1.03	4.27	4.79	4.28
IN.	---	---	0.42	0.57	0.72	0.74	0.39	0.19	1.15	4.92	5.52	4.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

MEAN	---	---	90.8	111	156	144	78.2	36.6	232	960	1077	964
MAX	---	---	90.8	111	156	144	78.2	36.6	232	960	1077	964
(WY)	---	---	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	---	---	90.8	111	156	144	78.2	36.6	232	960	1077	964
(WY)	---	---	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS	#FOR 2002 WATER YEAR	
ANNUAL TOTAL	117330	
ANNUAL MEAN	390	
HIGHEST DAILY MEAN	2690	Sep 6
LOWEST DAILY MEAN	e22	May 27,28
ANNUAL SEVEN-DAY MINIMUM	25	May 23
MAXIMUM PEAK FLOW	3050	Sep 5
MAXIMUM PEAK STAGE	22.99	Sep 5
ANNUAL RUNOFF (CFSM)	1.73	
ANNUAL RUNOFF (INCHES)	19.40	
10 PERCENT EXCEEDS	1150	
50 PERCENT EXCEEDS	108	
90 PERCENT EXCEEDS	45	

e Estimated
Includes partial year of record

02233500 ECONLOCKHATCHEE RIVER NEAR CHULUOTA, FL

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

DRAINAGE AREA.--241 mi^2.

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

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

REMARKS.--Records fair except for period of estimated daily discharge, which is poor. Records include some flow diverted from Lake Mary Jane in the Kissimmee River Basin through Disston Canal.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	587	250	136	85	96	414	e79	e72	e53	842	553	2390
2	539	237	130	89	94	340	e77	e67	e56	930	605	2000
3	486	241	125	141	91	289	e77	e62	e55	1050	909	1670
4	440	253	122	230	88	259	e79	e56	e47	1140	970	1470
5	400	243	122	214	85	242	e83	e53	e42	1270	943	2300
6	367	235	117	185	82	224	e74	e50	e40	1350	889	3000
7	344	221	112	163	79	205	e70	e48	e41	1400	890	2480
8	332	214	112	144	82	192	e68	e49	e56	1310	952	1880
9	324	205	110	133	91	180	e65	e51	e73	1180	856	1430
10	304	196	107	125	91	167	e62	e53	e66	1110	703	1160
11	288	187	109	121	98	155	e60	e44	e57	1020	581	952
12	277	181	108	115	103	146	e65	e42	e62	932	549	789
13	273	177	107	109	98	143	e77	e40	e70	924	684	701
14	257	210	102	108	91	154	e86	e38	e67	1140	805	690
15	254	281	99	120	86	147	e92	e36	e68	1160	1010	644
16	274	295	98	144	82	132	e110	e35	e75	1100	1520	562
17	265	282	94	143	81	124	e140	e35	e70	984	1730	502
18	254	265	91	139	79	e115	e148	e35	e94	825	1550	552
19	235	242	90	135	76	e107	e114	e40	e122	681	1410	543
20	218	222	89	125	74	e98	e94	e49	e116	570	1410	520
21	231	209	86	122	73	e95	e83	e48	e134	524	1670	580
22	299	202	85	119	82	e93	e75	e46	e203	719	1590	530
23	383	190	83	115	207	e87	e69	e44	e432	1100	1380	488
24	396	177	80	109	466	e83	e64	e40	e674	1280	1160	643
25	440	174	79	106	587	e85	e61	e38	e702	1340	980	812
26	489	170	80	104	624	e84	e59	e36	725	1220	837	738
27	458	162	84	98	618	e100	e73	e35	752	1000	715	624
28	399	158	87	96	522	e105	e78	e35	821	908	698	544
29	348	151	85	97	---	e96	e64	e35	749	856	956	496
30	302	143	85	96	---	e90	e63	e37	725	747	1840	451
31	271	---	84	96	---	e85	---	e42	---	636	2640	---
TOTAL	10734	6373	3098	3926	4926	4836	2409	1391	7247	31248	33985	32141
MEAN	346	212	99.9	127	176	156	80.3	44.9	242	1008	1096	1071
MAX	587	295	136	230	624	414	148	72	821	1400	2640	3000
MIN	218	143	79	85	73	83	59	35	40	524	549	451
CFSM	1.44	0.88	0.41	0.53	0.73	0.65	0.33	0.19	1.00	4.18	4.55	4.45
IN.	1.66	0.98	0.48	0.61	0.76	0.75	0.37	0.21	1.12	4.82	5.25	4.96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2002, BY WATER YEAR (WY)

MEAN	433	186	146	181	192	238	159	69.8	210	391	487	622
MAX	1668	1189	1324	948	1018	1901	962	379	1510	2082	1253	2182
(WY)	1957	1995	1998	1986	1998	1960	1987	1991	1968	1960	1992	1960
MIN	46.5	12.5	20.4	18.6	18.9	12.6	12.4	9.18	14.1	20.7	31.9	51.6
(WY)	1943	1943	1943	1939	1939	1939	1945	1945	1948	1937	1950	1938

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1936 - 2002	
ANNUAL TOTAL	108632		142314			
ANNUAL MEAN	298		390		277	
HIGHEST ANNUAL MEAN					742	1960
LOWEST ANNUAL MEAN					78.6	1971
HIGHEST DAILY MEAN	3910	Sep 16	3000	Sep 6	10100	Mar 18 1960
LOWEST DAILY MEAN	30	May 21	e35	May 16-18,27-29	*6.7	
ANNUAL SEVEN-DAY MINIMUM	32	May 16	37	May 24	6.7	Jun 10 1945
MAXIMUM PEAK FLOW			3100	Sep 6	11000	Mar 18 1960
MAXIMUM PEAK STAGE			12.81	Sep 6	18.69	Mar 18 1960
ANNUAL RUNOFF (CFSM)	1.23		1.62		1.15	
ANNUAL RUNOFF (INCHES)	16.77		21.97		15.60	
10 PERCENT EXCEEDS	876		1030		691	
50 PERCENT EXCEEDS	125		151		112	
90 PERCENT EXCEEDS	44		57		33	

e Estimated
* June 11-13,15, 1945

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

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

DRAINAGE AREA.--2,043 mi^2.

PERIOD OF RECORD.--July 1941 to September 1981 (gage heights and miscellaneous discharge measurements only). October 1981 to current year.

REVISED RECORDS.--WRD FL 66-1: Drainage area.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Sept. 3, 1943, nonrecording gage, and Sept.3, 1943 to Oct. 8, 1959, water-stage recorder at site 50 ft downstream at same datum.

REMARKS.--Records fair except those below 200 ft^3/s, which are poor.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6860	5570	3020	1090	718	1810	379	132	201	2760	4890	7100
2	6760	5230	3010	1090	722	1870	410	126	124	3030	5370	6670
3	6350	4950	2790	1040	645	1610	375	152	143	3620	5620	6320
4	6070	4910	3010	1080	532	1460	340	124	88	3650	5830	6760
5	6090	4390	3130	1030	622	1390	366	161	99	3650	5880	7030
6	5870	5440	2950	941	675	1330	383	166	62	3950	5850	6770
7	5730	5180	2890	902	456	1180	310	98	19	4100	5740	6660
8	5840	4780	2800	922	564	1180	252	78	91	4210	6120	6390
9	6530	4500	2510	892	611	1120	209	85	184	4280	6260	6020
10	6130	4280	2530	871	562	1100	195	85	174	4500	6090	5860
11	5800	4220	2340	875	564	1010	227	81	105	4510	6050	5770
12	5400	3940	2330	877	635	924	204	93	78	4580	6190	5590
13	5600	4250	2240	881	616	830	246	58	0.36	4510	6200	5690
14	5310	3210	2130	848	715	860	299	77	31	4270	6620	5380
15	5140	3500	1930	889	665	821	315	106	106	4510	6860	4870
16	5270	4600	2030	943	521	815	318	91	186	4750	6980	4670
17	4860	4560	1940	895	527	783	407	50	200	4630	7280	4540
18	5440	4260	1760	893	557	718	440	36	283	4800	7480	4440
19	5220	4020	1710	850	595	662	461	92	434	4600	7130	4420
20	5020	3800	1610	928	466	605	398	162	604	4910	6690	4510
21	5320	3640	1600	880	427	548	353	185	818	5150	6940	4480
22	5360	3840	1630	985	558	562	335	107	1000	5150	7380	4300
23	5430	4020	1520	921	731	709	327	154	1420	4930	6830	4290
24	5580	3910	1440	857	1500	579	266	7.7	1670	5210	7070	4030
25	5490	3540	1320	793	1710	496	162	-25	1950	5890	6960	4250
26	5190	3410	1310	866	1750	421	169	14	2100	5560	6960	4500
27	5310	3540	1340	871	1760	421	138	26	2330	5460	6610	4170
28	6050	3490	1250	804	1830	409	114	35	2540	5460	6160	3960
29	5720	3450	1180	758	---	408	117	78	2700	5280	6090	4050
30	5620	3290	1120	748	---	406	186	47	2690	5150	6180	3770
31	5390	---	1100	737	---	388	---	191	---	5150	7130	---
TOTAL	175750	125720	63470	27957	22234	27425	8701	2872.7	22430.36	142210	199440	157260
MEAN	5669	4191	2047	902	794	885	290	92.7	748	4587	6434	5242
MAX	6860	5570	3130	1090	1830	1870	461	191	2700	5890	7480	7100
MIN	4860	3210	1100	737	427	388	114	-25	0.36	2760	4890	3770
CFSM	2.78	2.05	1.00	0.44	0.39	0.43	0.14	0.05	0.37	2.25	3.15	2.57
IN.	3.20	2.29	1.16	0.51	0.40	0.50	0.16	0.05	0.41	2.59	3.63	2.86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)

MEAN	3304	2718	2161	1761	1452	1352	1403	738	994	1653	2310	2918
MAX	7088	7703	7738	5642	5371	5868	4332	2306	3738	6207	6815	5918
(WY)	1995	1995	1995	1995	1998	1998	1983	1998	1982	1982	1982	1995
MIN	315	531	260	302	168	135	87.6	24.5	1.06	117	212	439
(WY)	1982	1982	1982	1982	1982	2001	2000	2000	2000	2000	2000	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1982 - 2002	
ANNUAL TOTAL	695940.0		975470.06			
ANNUAL MEAN	1907		2673		1899	
HIGHEST ANNUAL MEAN					3784	1995
LOWEST ANNUAL MEAN					858	1999
HIGHEST DAILY MEAN	8280	Sep 17	7480	Aug 18	9880	Nov 22 1994
LOWEST DAILY MEAN	-25	Mar 13	-25	May 25	-77	Apr 25 2000
ANNUAL SEVEN-DAY MINIMUM	26	Mar 10	26	May 24	-43	May 31 2000
MAXIMUM PEAK FLOW					*13800	Oct 7 1953
MAXIMUM PEAK STAGE			8.49	Sep 6,7	10.62	Oct 13 1953
ANNUAL RUNOFF (CFSM)	0.93		1.31		0.93	
ANNUAL RUNOFF (INCHES)	12.67		17.76		12.63	
10 PERCENT EXCEEDS	5430		6090		4960	
50 PERCENT EXCEEDS	504		1710		1230	
90 PERCENT EXCEEDS	143		130		259	

* Measured
Note.--Negative figures indicate reverse flow

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

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.24	6.81	5.73	2.66	1.20	2.49	0.89	0.70	1.22	3.97	7.11	8.38
2	8.20	6.78	5.63	2.66	1.18	2.51	0.89	0.68	1.21	4.24	7.15	8.38
3	8.15	6.78	5.52	2.76	1.14	2.49	0.92	0.62	1.16	4.47	7.28	8.34
4	8.11	6.73	5.41	2.75	1.15	2.48	0.94	0.52	1.06	4.63	7.40	8.32
5	8.05	6.66	5.31	2.72	1.14	2.44	0.97	0.44	0.98	4.88	7.49	8.43
6	7.98	6.60	5.21	2.68	1.10	2.42	0.98	0.36	0.92	5.12	7.51	8.47
7	7.91	6.55	5.12	2.65	1.11	2.37	0.99	0.35	0.92	5.30	7.60	8.49
8	7.83	6.49	5.02	2.59	1.17	2.32	0.96	0.37	0.97	5.48	7.65	8.47
9	7.76	6.42	4.92	2.49	1.15	2.25	0.93	0.35	0.96	5.64	7.66	8.41
10	7.70	6.35	4.82	2.42	1.14	2.18	0.90	0.32	0.98	5.79	7.65	8.32
11	7.63	6.28	4.70	2.34	1.15	2.09	0.85	0.24	1.04	5.91	7.63	8.22
12	7.56	6.19	4.60	2.22	1.13	2.00	0.83	0.16	1.15	5.98	7.64	8.13
13	7.50	6.14	4.50	2.12	1.13	1.93	0.83	0.11	1.21	6.08	7.72	8.05
14	7.43	6.22	4.41	2.04	1.11	1.86	0.82	0.13	1.27	6.23	7.91	7.97
15	7.42	6.34	4.32	2.02	1.08	1.78	0.84	0.09	1.31	6.34	8.03	7.86
16	7.35	6.39	4.20	1.96	1.07	1.70	0.84	0.03	1.28	6.44	8.12	7.77
17	7.25	6.42	4.11	1.91	1.09	1.61	0.84	0.03	1.26	6.49	8.19	7.66
18	7.17	6.44	4.01	1.86	1.12	1.51	0.82	0.06	1.28	6.54	8.23	7.55
19	7.11	6.45	3.91	1.82	1.08	1.41	0.79	0.17	1.30	6.57	8.25	7.44
20	7.06	6.45	3.80	1.78	1.06	1.31	0.74	0.24	1.41	6.57	8.31	7.39
21	7.03	6.42	3.71	1.73	1.04	1.24	0.68	0.34	1.56	6.60	8.39	7.36
22	7.04	6.39	3.60	1.67	1.10	1.19	0.64	0.48	1.74	6.70	8.43	7.26
23	7.01	6.34	3.50	1.61	1.34	1.10	0.61	0.54	2.10	6.81	8.45	7.16
24	7.00	6.31	3.40	1.55	1.76	1.03	0.54	0.67	2.44	6.89	8.43	7.16
25	7.04	6.24	3.30	1.49	2.02	1.00	0.50	0.82	2.73	6.97	8.39	7.25
26	7.03	6.17	3.22	1.45	2.22	0.99	0.53	0.93	2.96	7.04	8.32	7.24
27	6.97	6.11	3.12	1.39	2.36	1.02	0.60	0.96	3.15	7.09	8.26	7.16
28	6.94	6.01	3.03	1.35	2.44	1.01	0.62	0.99	3.36	7.11	8.22	7.07
29	6.92	5.92	2.96	1.32	---	0.97	0.67	1.04	3.52	7.12	8.21	6.97
30	6.90	5.83	2.86	1.28	---	0.93	0.71	1.10	3.71	7.12	8.17	6.88
31	6.87	---	2.75	1.23	---	0.88	---	1.18	---	7.12	8.25	---
MEAN	7.42	6.37	4.22	2.02	1.31	1.69	0.79	0.48	1.67	6.10	7.94	7.79
MAX	8.24	6.81	5.73	2.76	2.44	2.51	0.99	1.18	3.71	7.12	8.45	8.49
MIN	6.87	5.83	2.75	1.23	1.04	0.88	0.50	0.03	0.92	3.97	7.11	6.88

CAL YR 2001 MEAN 2.90 MAX 8.61 MIN 0.21
WTR YR 2002 MEAN 4.00 MAX 8.49 MIN 0.03

02234308 HOWELL CREEK NEAR ALTAMONTE SPRINGS, FL

LOCATION.--Lat 28°37'56", long 81°19'24", in NW¼ sec.28, T.21 S., R.30 E., Orange County, Hydrologic Unit 03080101, on downstream side of bridge on Lake Howell Lane approximately 0.5 mi upstream from Lake Howell and 3.1 mi southeast of Altamonte Springs.

DRAINAGE AREA.--20.6 mi^2.

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. (Elevation furnished by Seminole County).

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	1.9	0.39	0.50	0.56	2.0	0.18	0.24	1.8	5.5	13	73
2	26	2.6	0.35	3.1	0.52	6.8	0.12	0.09	1.4	24	11	64
3	23	4.6	0.40	1.9	0.50	0.34	0.36	0.05	0.62	43	23	56
4	20	4.3	0.40	0.95	0.52	0.70	0.50	0.04	0.37	47	41	63
5	18	4.0	0.40	0.80	0.50	2.8	0.36	0.12	0.27	44	44	111
6	16	3.4	0.40	0.78	0.44	1.1	0.30	0.10	0.22	41	39	96
7	14	2.6	0.41	0.67	0.50	0.30	0.21	0.07	1.3	38	39	78
8	12	1.9	0.58	0.63	0.48	0.28	0.24	0.06	1.1	39	42	66
9	10	1.6	0.67	0.60	0.74	0.28	0.23	0.03	0.50	40	39	58
10	8.3	1.3	0.51	0.56	0.69	0.28	0.20	0.03	0.38	38	37	52
11	7.0	1.1	0.42	0.58	0.74	0.26	0.20	0.03	0.37	39	33	51
12	5.9	0.94	0.34	0.60	0.67	0.24	0.33	0.08	1.1	39	36	49
13	4.5	0.94	0.34	0.56	0.61	0.24	0.34	0.07	2.3	45	52	47
14	5.7	1.3	0.34	0.74	0.62	0.23	0.37	0.07	1.4	56	69	49
15	11	1.8	0.34	1.2	0.52	0.35	0.33	0.06	1.4	47	102	44
16	12	1.9	0.34	0.86	0.44	0.35	1.2	0.05	0.77	40	95	44
17	12	1.7	0.35	0.74	0.40	0.41	0.67	0.05	3.5	34	73	78
18	9.4	1.6	0.46	0.68	0.40	0.77	0.35	0.06	4.6	29	61	78
19	7.3	1.4	0.45	0.63	0.37	0.54	0.27	0.12	2.4	23	63	67
20	6.1	1.4	0.47	0.61	0.35	0.34	0.22	0.08	2.2	19	88	61
21	5.8	1.4	0.45	0.60	0.46	0.16	0.18	0.06	3.9	23	73	56
22	8.3	1.2	0.45	0.52	2.1	0.20	0.14	0.04	8.1	27	58	55
23	9.3	1.1	0.43	0.69	4.3	0.35	0.11	0.04	18	27	47	53
24	9.2	0.92	0.40	0.69	5.1	0.51	0.07	0.04	16	22	40	50
25	12	0.83	0.40	0.60	2.2	0.34	0.08	0.04	15	18	35	47
26	13	0.74	0.40	0.56	1.8	0.21	0.35	0.04	8.4	17	31	44
27	10	0.62	0.36	0.56	1.5	0.24	0.57	0.04	5.5	25	28	40
28	6.8	0.53	0.31	0.56	1.2	0.28	0.45	0.02	3.2	24	30	36
29	4.5	0.50	0.31	0.57	---	0.21	0.41	0.06	2.4	25	56	34
30	3.7	0.45	0.34	0.57	---	0.06	0.35	0.12	2.7	23	83	31
31	2.7	---	0.38	0.56	---	0.07	---	0.14	---	18	84	---
TOTAL	343.5	50.57	12.59	24.17	29.23	21.24	9.69	2.14	111.20	979.5	1565	1731
MEAN	11.1	1.69	0.41	0.78	1.04	0.69	0.32	0.069	3.71	31.6	50.5	57.7
MAX	30	4.6	0.67	3.1	5.1	6.8	1.2	0.24	18	56	102	111
MIN	2.7	0.45	0.31	0.50	0.35	0.06	0.07	0.02	0.22	5.5	11	31
CFSM	0.50	0.08	0.02	0.04	0.05	0.03	0.01	0.00	0.17	1.44	2.29	2.62
IN.	0.58	0.09	0.02	0.04	0.05	0.04	0.02	0.00	0.19	1.66	2.65	2.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

MEAN	19.6	7.36	9.89	6.64	7.65	8.19	1.92	0.40	1.51	12.9	14.7	35.4
MAX	54.1	23.5	44.8	34.1	41.2	42.7	8.27	1.04	3.71	31.6	50.5	64.6
(WY)	2000	2000	1998	1998	1998	1998	1998	1997	2002	2002	2002	2001
MIN	0.17	0.11	0.099	0.11	0.13	0.19	0.14	0.069	0.066	0.63	0.22	1.09
(WY)	2001	2001	2001	2001	2001	1999	1999	2002	2000	2000	1999	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	2743.00		4879.83			
ANNUAL MEAN	7.52		13.4		10.5	
HIGHEST ANNUAL MEAN					18.8	1998
LOWEST ANNUAL MEAN					6.43	2001
HIGHEST DAILY MEAN	158	Sep 15	111	Sep 5	159	Sep 20 1999
LOWEST DAILY MEAN	0.06	May 15-18	0.02	May 28	0.02	Jun 7,8 1999
ANNUAL SEVEN-DAY MINIMUM	0.06	May 12	0.04	May 22	0.03	Jun 2 1999
MAXIMUM PEAK FLOW			121	Aug 15	204	Jul 21 2001
MAXIMUM PEAK STAGE			57.75	Aug 15	58.92	Jul 21 2001
INSTANTANEOUS LOW FLOW			b0.00		b0.00	
ANNUAL RUNOFF (CFSM)	0.34		0.61		0.48	
ANNUAL RUNOFF (INCHES)	4.64		8.25		6.50	
10 PERCENT EXCEEDS	15		47		37	
50 PERCENT EXCEEDS	0.33		0.94		0.97	
90 PERCENT EXCEEDS	0.08		0.14		0.10	

b May 4,9-11,28,2002

02234324 HOWELL CREEK NEAR SLAVIA, FL

LOCATION.--Lat 28°38'51", long 81°15'53", in SE¼ sec.24, T.21 S., R.30 E., Seminole County, Hydrologic Unit 03080101, on right bank 75 ft upstream from box culvert on Red Bug Road, 0.2 mi east of Tuskawilla Road, 2.1 mi west of Slavia, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--29.2 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark). Prior to Oct. 1, 1980, at site 170 ft downstream at same datum. Oct. 1, 1980 to Mar. 20, 1992, at site 150 ft downstream at same datum.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Some regulation by retention ponds in urban areas upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	4.5	11	2.8	e5.1	19	1.5	2.2	1.6	28	33	125
2	22	7.5	12	8.6	e6.5	17	1.9	1.5	1.6	30	42	116
3	34	15	12	14	e5.7	13	1.9	4.2	1.2	23	87	98
4	51	13	10	12	e5.3	3.9	1.7	1.8	1.1	21	71	123
5	33	17	8.9	11	e5.0	3.2	1.7	1.3	1.1	25	69	141
6	27	11	8.0	11	e4.8	3.0	1.5	1.3	1.1	21	56	132
7	19	15	7.4	10	e16	3.0	1.4	1.3	1.8	33	56	117
8	24	19	7.2	9.0	e17	2.8	1.4	2.9	2.0	53	70	101
9	24	14	6.9	8.2	e16	2.6	1.3	1.8	1.5	39	49	90
10	17	18	6.6	7.9	e15	2.5	2.2	1.3	1.4	27	53	80
11	20	18	6.3	7.3	e14	2.5	1.6	1.2	1.5	27	38	73
12	17	13	5.8	7.0	12	2.4	1.7	1.2	1.4	41	64	68
13	17	11	5.3	7.0	10	2.4	1.6	2.5	2.1	64	64	63
14	27	11	5.1	7.6	8.8	2.4	1.6	2.1	1.6	85	73	63
15	39	11	4.8	11	7.2	2.3	1.7	1.4	2.0	75	127	64
16	41	10	4.5	11	3.0	2.2	1.8	1.4	1.8	64	118	80
17	29	11	4.3	9.9	2.7	2.1	1.6	1.4	2.4	54	102	86
18	38	10	4.7	9.4	2.6	2.0	1.5	1.2	4.2	e46	86	77
19	30	12	4.4	8.4	2.6	2.0	1.6	1.6	4.5	e38	98	80
20	25	14	4.1	6.6	2.8	2.0	1.5	1.6	4.3	e45	160	94
21	17	16	3.8	6.5	2.8	1.9	1.4	1.7	4.8	e49	135	87
22	20	9.0	3.5	6.3	7.4	1.9	1.5	2.1	16	e73	112	83
23	25	10	3.3	5.9	28	1.8	1.7	1.3	14	e68	99	122
24	20	12	3.2	5.9	38	1.7	1.4	1.6	16	e56	81	101
25	25	12	3.2	7.3	28	1.7	1.5	1.3	26	e43	68	80
26	23	14	3.2	7.2	30	1.9	4.1	1.1	29	e55	50	67
27	15	12	3.1	6.7	25	1.9	2.2	1.0	36	e94	25	64
28	12	11	2.9	6.3	21	1.8	1.5	1.0	38	e110	68	55
29	9.6	10	2.8	5.9	---	2.7	1.3	1.0	23	e80	99	45
30	6.1	12	2.8	5.5	---	2.1	1.5	1.0	19	e52	114	42
31	4.8	---	2.8	e5.3	---	1.6	---	1.4	---	36	127	---
TOTAL	736.5	373.0	173.9	248.5	342.3	113.3	50.8	49.7	262.0	1555	2494	2617
MEAN	23.8	12.4	5.61	8.02	12.2	3.65	1.69	1.60	8.73	50.2	80.5	87.2
MAX	51	19	12	14	38	19	4.1	4.2	38	110	160	141
MIN	4.8	4.5	2.8	2.8	2.6	1.6	1.3	1.0	1.1	21	25	42
CFSM	0.81	0.43	0.19	0.27	0.42	0.13	0.06	0.05	0.30	1.72	2.76	2.99
IN.	0.94	0.48	0.22	0.32	0.44	0.14	0.06	0.06	0.33	1.98	3.18	3.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

MEAN	33.6	21.9	19.7	21.3	20.6	19.9	18.6	11.5	21.5	45.3	47.9	52.5
MAX	86.2	91.5	71.0	62.2	61.9	78.8	74.9	49.5	83.1	156	144	113
(WY)	2000	1995	1998	1986	1998	1998	1987	1976	1996	1974	1995	1995
MIN	3.35	1.45	1.38	1.25	1.14	1.87	1.57	1.09	1.31	3.01	5.79	4.88
(WY)	2001	2001	2001	2001	2001	2001	1999	2000	2000	1998	1999	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL	5944.89		9016.0			
ANNUAL MEAN	16.3		24.7		28.4	
HIGHEST ANNUAL MEAN					54.1	1995
LOWEST ANNUAL MEAN					9.55	1990
HIGHEST DAILY MEAN	218	Sep 16	160	Aug 20	417	Jul 26 1995
LOWEST DAILY MEAN	0.83	May 19,20	1.0	May 27-30	0.66	Jun 3 2000
ANNUAL SEVEN-DAY MINIMUM	0.88	May 16	1.1	May 25	0.69	May 28 2000
MAXIMUM PEAK FLOW			353	Aug 20	679	Jul 21 2001
MAXIMUM PEAK STAGE			34.22	Aug 20	37.98	Nov 25 1992
INSTANTANEOUS LOW FLOW			0.95	May 29,30	*0.64	
ANNUAL RUNOFF (CFSM)	0.56		0.85		0.97	
ANNUAL RUNOFF (INCHES)	7.57		11.49		13.20	
10 PERCENT EXCEEDS	34		80		66	
50 PERCENT EXCEEDS	4.9		10		18	
90 PERCENT EXCEEDS	1.1		1.5		2.9	

e Estimated
* May 29, June 2-4, 2000

02234344 HOWELL CREEK AT STATE HIGHWAY 434 NEAR OVIEDO, FL

(Formerly published as Howell Creek at State Highway 419 near Oviedo, FL)

LOCATION.--Lat 28°41'23", long 81°14'52", in SE¼ sec.6, T.21 S., R.30 E., Seminole County, Hydrologic Unit 03080101, on headwall upstream side of culverts on State Highway 434, 1.0 mi upstream from mouth and 2.8 mi northwest of Oviedo.

DRAINAGE AREA.--52.0 mi^2.

PERIOD OF RECORD.--May 1973 to August 1979 (discharge measurements only), June 1999 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records good. Some regulation from retention ponds upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	37	33	17	19	45	13	18	12	112	116	342
2	75	37	33	38	24	42	12	14	11	138	151	354
3	74	55	33	70	21	40	13	12	9.0	126	309	266
4	95	48	31	45	17	37	15	13	8.0	97	356	254
5	79	49	29	36	16	31	21	9.5	7.5	156	239	594
6	68	46	28	34	16	27	16	9.0	7.2	156	167	541
7	63	41	27	33	32	26	14	8.9	11	101	177	373
8	61	47	27	30	34	25	13	8.7	13	110	223	269
9	62	42	26	28	30	23	12	10	11	96	155	224
10	57	41	26	27	27	22	11	8.2	9.4	83	136	203
11	54	44	25	26	27	21	12	7.8	12	75	107	183
12	54	38	24	26	25	20	14	7.5	18	74	181	173
13	49	37	23	26	23	21	16	8.4	28	135	413	190
14	64	62	23	29	22	21	14	7.8	17	329	431	199
15	94	60	22	46	20	20	14	7.7	20	214	444	173
16	85	50	22	39	17	18	17	7.0	14	141	360	190
17	64	43	21	34	16	17	15	7.2	18	113	258	335
18	70	42	22	31	15	16	13	7.3	31	93	237	242
19	61	41	21	29	14	16	12	9.5	33	74	266	197
20	58	44	20	26	14	15	11	9.0	28	86	494	229
21	73	43	19	25	15	15	11	8.4	29	93	629	250
22	87	36	19	24	33	15	9.9	8.0	111	161	461	199
23	74	40	18	24	89	14	9.8	8.0	120	159	296	324
24	65	54	19	23	154	14	9.6	7.2	98	123	221	561
25	83	43	18	23	92	13	9.0	7.5	93	93	189	435
26	79	42	19	23	71	14	11	6.7	94	123	158	272
27	59	39	18	23	59	21	19	6.6	103	251	124	208
28	49	36	17	22	50	17	13	6.5	103	336	201	174
29	46	34	17	22	---	15	11	6.4	72	377	442	149
30	41	35	17	21	---	16	14	6.5	80	216	435	132
31	39	---	17	20	---	14	---	11	---	143	413	---
TOTAL	2065	1306	714	920	992	671	395.3	273.3	1221.1	4584	8789	8235
MEAN	66.6	43.5	23.0	29.7	35.4	21.6	13.2	8.82	40.7	148	284	274
MAX	95	62	33	70	154	45	21	18	120	377	629	594
MIN	39	34	17	17	14	13	9.0	6.4	7.2	74	107	132
CFSM	1.28	0.84	0.44	0.57	0.68	0.42	0.25	0.17	0.78	2.84	5.45	5.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	87.2	52.4	28.3	21.3	20.9	16.5	13.0	8.95	33.5	82.5	99.2	141
MAX	182	105	52.1	29.7	35.4	21.6	15.6	11.2	70.4	148	284	274
(WY)	2000	2000	2000	2002	2002	2002	2001	2001	1999	2002	2002	2002
MIN	12.9	8.59	9.88	8.85	8.54	12.3	10.3	6.84	10.4	23.3	21.2	16.9
(WY)	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000	1999	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	16679.1		30165.7			
ANNUAL MEAN	45.7		82.6		54.8	
HIGHEST ANNUAL MEAN					82.6	2002
LOWEST ANNUAL MEAN					37.1	2001
HIGHEST DAILY MEAN	560	Jul 23	629	Aug 21	629	Aug 21 2002
LOWEST DAILY MEAN	5.9	May 21	6.4	May 29	3.1	May 4 2000
ANNUAL SEVEN-DAY MINIMUM	6.1	May 16	6.8	May 24	5.0	May 28 2000
MAXIMUM PEAK FLOW			770	Aug 20	*800	Jun 28 1974
MAXIMUM PEAK STAGE			10.57	Aug 20	10.57	Aug 20 2002
INSTANTANEOUS LOW FLOW			6.3	May 28-30	2.6	May 4 2000
ANNUAL RUNOFF (CFSM)	0.88		1.59		1.05	
10 PERCENT EXCEEDS	91		232		151	
50 PERCENT EXCEEDS	25		33		21	
90 PERCENT EXCEEDS	7.5		11		7.9	

* Measured.

02234384 SOLDIER CREEK NEAR LONGWOOD, FL

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

DRAINAGE AREA.--21.2 mi^2.

PERIOD OF RECORD.--February 1972 to September 1975, October 1975 to September 1977 (discharge measurements only), October 1977 to September 1979, October 1980 to September 1986 (discharge measurements only), October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by Seminole County Engineer). Nov. 5, 1975 to July 26, 1977 and Oct. 1, 1980 to Sept. 30, 1986, nonrecording gage at same site and datum.

REMARKS.--Records fair. Since about 1980, some regulation by retention ponds in headwaters.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	8.1	3.7	2.6	2.9	9.5	0.50	2.2	1.9	36	27	26
2	25	8.8	3.6	23	2.7	9.0	0.47	1.2	1.7	26	61	36
3	22	9.9	3.5	23	2.5	8.9	0.42	0.96	1.6	23	77	29
4	20	8.2	3.3	15	2.0	16	5.1	0.72	1.5	20	52	34
5	18	9.6	3.1	13	1.9	8.5	5.9	0.59	1.5	30	36	48
6	16	8.5	3.1	14	1.9	6.0	1.9	0.57	1.7	25	29	37
7	16	6.9	3.2	12	2.6	5.6	1.1	0.55	5.0	19	39	29
8	17	6.5	3.2	9.2	2.8	5.3	0.92	0.51	3.6	28	28	25
9	16	5.1	3.2	7.8	1.8	5.1	0.63	0.45	2.5	34	25	22
10	15	5.3	3.2	6.7	1.8	4.8	0.57	0.41	2.2	29	23	19
11	14	4.5	3.1	5.6	2.4	4.6	0.52	0.40	3.4	23	21	17
12	13	4.7	3.0	5.0	2.1	4.1	1.5	0.40	2.6	31	30	16
13	12	5.2	3.0	4.2	1.5	4.2	1.0	0.40	12	58	66	27
14	15	17	2.9	9.2	1.5	3.6	2.3	0.40	12	63	71	29
15	19	14	2.9	13	1.5	3.5	2.3	0.40	11	39	107	22
16	16	10	2.8	8.4	1.8	3.1	4.8	0.43	7.2	33	58	22
17	14	9.5	2.9	7.1	1.7	2.7	4.2	0.48	16	29	44	23
18	13	9.4	3.3	6.4	1.3	2.1	2.3	0.55	13	25	36	18
19	13	7.4	2.9	5.9	1.5	1.9	1.4	1.3	11	22	31	15
20	14	7.0	3.0	5.7	1.3	1.9	1.1	1.1	9.7	27	30	16
21	18	6.9	2.9	5.6	1.1	1.5	0.71	1.0	12	38	28	15
22	18	6.8	2.7	5.4	4.3	1.4	0.52	0.93	25	32	23	14
23	15	6.4	2.6	5.1	21	1.1	0.48	1.0	18	27	21	27
24	14	6.2	2.8	4.4	25	1.1	0.48	0.87	19	25	18	43
25	14	6.7	2.8	4.1	16	0.97	0.50	0.91	17	22	15	32
26	13	6.6	2.9	4.6	14	0.89	3.3	0.91	14	20	15	23
27	12	5.0	2.7	4.3	12	0.80	5.4	0.91	21	20	14	19
28	10	4.4	2.6	3.8	10	0.71	2.4	0.95	17	42	21	15
29	9.6	4.2	2.6	3.6	---	0.75	1.4	0.96	41	39	24	13
30	9.2	3.9	2.6	3.3	---	0.57	2.6	1.2	52	32	23	12
31	9.4	---	2.6	3.2	---	0.50	---	2.2	---	30	22	---
TOTAL	479.2	222.7	92.7	244.2	142.9	120.69	56.72	25.86	357.1	947	1115	723
MEAN	15.5	7.42	2.99	7.88	5.10	3.89	1.89	0.83	11.9	30.5	36.0	24.1
MAX	29	17	3.7	23	25	16	5.9	2.2	52	63	107	48
MIN	9.2	3.9	2.6	2.6	1.1	0.50	0.42	0.40	1.5	19	14	12
CFSM	0.73	0.35	0.14	0.37	0.24	0.18	0.09	0.04	0.56	1.44	1.70	1.14
IN.	0.84	0.39	0.16	0.43	0.25	0.21	0.10	0.05	0.63	1.66	1.96	1.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

MEAN	12.6	10.2	8.88	10.7	9.94	11.5	6.03	3.77	8.20	17.7	17.6	22.7
MAX	46.3	51.0	35.2	31.5	41.8	48.0	25.1	28.5	35.3	56.7	43.8	71.9
(WY)	1996	1995	1998	1996	1998	1998	1996	1991	1974	1978	1995	2001
MIN	1.73	1.25	0.63	0.83	1.13	1.50	1.30	0.60	0.51	1.94	1.20	1.32
(WY)	1973	2001	2001	2001	1991	2000	2000	1990	1998	1972	1999	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL	4101.65		4527.07			
ANNUAL MEAN	11.2		12.4		11.9	
HIGHEST ANNUAL MEAN					21.7	1995
LOWEST ANNUAL MEAN					3.23	1990
HIGHEST DAILY MEAN	246	Sep 14	107	Aug 15	411	Nov 16 1994
LOWEST DAILY MEAN	0.11	May 31	0.40	May 11-15	0.11	May 31 2001
ANNUAL SEVEN-DAY MINIMUM	0.49	May 30	0.41	May 10	0.23	May 29 1990
MAXIMUM PEAK FLOW			191	Aug 15	605	Nov 25 1992
MAXIMUM PEAK STAGE			10.47	Aug 15	14.41	Sep 13 1973
INSTANTANEOUS LOW FLOW			0.15	Apr 4	0.05	Jun 1 2001
ANNUAL RUNOFF (CFSM)	0.53		0.59		0.56	
ANNUAL RUNOFF (INCHES)	7.20		7.94		7.61	
10 PERCENT EXCEEDS	28		29		28	
50 PERCENT EXCEEDS	3.1		6.6		5.2	
90 PERCENT EXCEEDS	0.94		0.92		1.1	

02234400 GEE CREEK NEAR LONGWOOD, FL

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

DRAINAGE AREA.--12.8 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by Seminole County Engineer). Apr. 11, 1978 to Sept. 30, 1979 at site 400 ft upstream at same datum, Oct. 1, 1980 to Aug.11, 1985, nonrecording gage at present site and datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	5.1	5.3	6.0	3.8	7.6	1.8	3.1	1.8	21	21	85
2	19	6.0	5.1	31	3.5	7.5	1.9	2.3	1.4	23	105	88
3	9.9	8.2	4.8	18	3.2	8.0	2.6	1.9	1.3	18	152	65
4	9.7	7.9	4.5	11	3.0	13	5.5	1.7	1.2	13	129	60
5	9.9	15	4.4	9.1	2.9	9.9	5.0	1.6	1.2	17	95	96
6	9.7	19	4.6	8.8	3.4	8.7	2.9	1.6	1.2	23	64	82
7	9.1	5.9	4.5	7.7	4.1	7.5	2.4	1.5	7.9	20	58	60
8	12	5.6	4.4	6.7	3.5	7.0	2.2	1.5	3.0	20	46	45
9	21	5.6	4.4	6.3	4.1	6.7	2.0	1.4	1.9	23	36	35
10	17	5.5	4.9	5.8	5.6	6.3	1.9	1.4	1.6	21	29	29
11	13	5.5	4.4	5.5	4.1	5.7	1.9	1.3	4.6	17	24	26
12	4.7	5.4	4.3	6.0	3.5	5.2	3.0	1.3	2.6	14	37	24
13	4.1	5.6	4.2	e9.0	3.2	5.0	2.7	1.3	4.3	31	73	26
14	14	16	4.3	e11	2.9	4.4	4.7	1.3	7.7	73	79	28
15	24	25	4.2	14	3.0	4.0	3.2	1.2	6.1	48	87	24
16	24	8.0	4.1	11	3.0	3.7	2.6	1.2	3.2	33	72	29
17	10	6.6	4.2	8.9	2.8	3.4	2.5	1.2	13	23	62	38
18	10	6.6	4.1	7.8	2.6	3.1	2.2	1.3	7.4	17	55	28
19	14	6.5	3.9	7.2	2.6	3.1	2.0	2.0	9.3	14	73	23
20	16	6.9	3.6	6.7	2.5	2.9	1.9	1.5	11	17	142	24
21	25	6.7	3.5	6.4	7.9	6.5	1.8	1.3	14	50	134	30
22	27	6.6	3.3	6.1	e13	3.0	1.8	1.3	37	49	95	27
23	23	6.7	3.4	5.8	e19	2.5	1.9	1.3	46	38	69	49
24	20	7.2	3.5	5.5	e25	2.4	1.8	1.2	45	29	45	95
25	19	6.9	3.8	5.3	20	2.3	1.8	1.3	31	21	33	74
26	28	6.9	3.6	5.5	16	2.3	6.2	1.2	18	19	26	53
27	22	6.5	3.6	5.1	11	2.2	5.4	1.2	32	29	21	38
28	16	6.3	3.5	4.8	8.9	2.1	2.7	1.2	25	52	34	29
29	6.8	6.0	3.5	4.6	---	2.0	2.3	1.2	18	53	67	23
30	6.0	5.6	3.5	4.3	---	1.9	3.6	1.3	16	37	66	19
31	5.4	---	3.5	4.0	---	1.8	---	3.4	---	28	62	---
TOTAL	474.3	241.3	126.9	254.9	188.1	151.7	84.2	47.5	373.7	891	2091	1352
MEAN	15.3	8.04	4.09	8.22	6.72	4.89	2.81	1.53	12.5	28.7	67.5	45.1
MAX	28	25	5.3	31	25	13	6.2	3.4	46	73	152	96
MIN	4.1	5.1	3.3	4.0	2.5	1.8	1.8	1.2	1.2	13	21	19
CFSM	1.20	0.63	0.32	0.64	0.52	0.38	0.22	0.12	0.97	2.25	5.27	3.52
IN.	1.38	0.70	0.37	0.74	0.55	0.44	0.24	0.14	1.09	2.59	6.08	3.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

MEAN	17.5	13.8	11.1	13.3	11.8	13.3	8.73	5.47	13.2	23.7	25.1	30.3
MAX	47.4	67.1	43.3	34.8	62.2	57.1	41.3	35.6	47.9	103	72.6	64.4
(WY)	1976	1995	1995	1986	1998	1998	1991	1991	1996	1978	1995	1979
MIN	2.05	1.64	1.83	1.85	1.82	1.42	1.43	0.85	1.09	1.88	2.01	1.58
(WY)	1991	2001	1991	1991	1991	2000	1990	2000	1998	1998	1999	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL	4021.35		6276.6			
ANNUAL MEAN	11.0		17.2		15.7	
HIGHEST ANNUAL MEAN					40.7	1985
LOWEST ANNUAL MEAN					4.63	1990
HIGHEST DAILY MEAN	e162	Sep 14	152	Aug 3	377	Nov 16 1994
LOWEST DAILY MEAN	e0.40	May 22	1.2	Many days	e0.35	Jun 6-8 2000
ANNUAL SEVEN-DAY MINIMUM	0.51	May 20	1.2	May 23	0.37	Jun 3 2000
MAXIMUM PEAK FLOW			316	Aug 2	459	Jul 25 1995
MAXIMUM PEAK STAGE			14.45	Aug 2	16.16	Jul 25 1995
INSTANTANEOUS LOW FLOW			1.1	Many days		
ANNUAL RUNOFF (CFSM)	0.86		1.34		1.23	
ANNUAL RUNOFF (INCHES)	11.69		18.24		16.68	
10 PERCENT EXCEEDS	25		48		37	
50 PERCENT EXCEEDS	4.2		6.6		8.0	
90 PERCENT EXCEEDS	1.4		1.8		2.0	

e Estimated

02234435 LAKE JESUP OUTLET NEAR SANFORD, FL

LOCATION (Revised).--Lat 28°47'02", long 81°10'53", in NW¼ sec.1, T.20 S., R.31 E., Seminole County, Hydrologic Unit 03080101, on left bank of outlet, 1,300 ft upstream from bridge on State Highway 46, and 5.4 mi east of Sanford.

DRAINAGE AREA.--156 mi^2.

PERIOD OF RECORD.--August 1941 to July 1948 (gage heights and discharge measurements only), January 1993 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929 August 1941 to April 1943, nonrecording gage and September 1943 to July 1948, water-stage recorder at same site and datum, operated as daily stage for station 02234434, Lake Jesup near Sanford, January 1993 to June 2002, at site 1500 ft downstream at same datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	396	120	388	372	114	-39	-230	333	-10	145	108	521
2	389	-79	437	281	-150	479	-50	188	229	429	359	468
3	352	-3.4	423	189	70	-121	-89	189	254	274	950	480
4	398	-43	508	353	-378	-746	-44	318	195	362	724	511
5	384	-339	480	418	-342	-315	-219	-74	70	333	389	772
6	210	423	462	464	436	190	-258	-89	111	237	250	764
7	201	289	443	122	111	137	-103	-105	-23	93	181	571
8	128	241	401	520	-335	273	215	-29	-40	6.8	310	486
9	272	195	369	563	277	248	217	148	-165	22	273	518
10	285	191	470	587	285	85	235	143	-270	40	237	400
11	306	215	410	562	-81	310	120	153	-117	-48	240	393
12	179	274	426	630	190	410	124	296	e-80	-286	328	293
13	219	191	400	512	-60	185	69	266	e-30	93	281	387
14	244	-935	410	599	13	90	55	-342	e80	126	276	495
15	190	-320	273	439	134	215	30	-36	137	152	231	477
16	383	-37	380	426	-165	330	177	116	380	149	306	532
17	245	-224	536	400	-237	289	183	125	337	53	149	731
18	457	-203	345	295	-145	310	185	91	146	31	135	698
19	395	-277	433	414	246	346	190	-427	152	99	24	644
20	370	-37	326	116	344	366	226	-520	-2.2	105	563	654
21	437	-96	457	329	45	147	199	-433	23	e140	826	616
22	418	43	506	202	159	-323	32	-545	369	e130	628	656
23	240	178	546	377	-321	-154	-227	-244	565	121	511	753
24	180	213	325	309	131	-129	1.2	-130	420	-37	423	830
25	-34	169	395	26	66	37	40	-138	345	-111	353	740
26	-144	276	377	4.6	-131	140	-158	-175	322	-48	305	628
27	7.6	297	500	88	-721	-126	185	65	68	73	270	481
28	105	293	463	32	-308	-25	-130	-251	224	49	320	602
29	193	322	461	33	---	154	-132	-124	186	250	379	643
30	181	311	427	131	---	77	96	-56	33	187	604	581
31	148	---	436	140	---	40	---	-13	---	135	603	---
TOTAL	7734.6	1647.6	13213	9933.6	-753	2880	939.2	-1300	3908.8	3304.8	11536	17325
MEAN	250	54.9	426	320	-26.9	92.9	31.3	-41.9	130	107	372	578
MAX	457	423	546	630	436	479	235	333	565	429	950	830
MIN	-144	-935	273	4.6	-721	-746	-258	-545	-270	-286	24	293

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2002, BY WATER YEAR (WY)

MEAN	78.1	216	248	250	167	154	141	79.3	176	225	69.6	112
MAX	316	434	589	525	395	579	514	356	667	779	519	578
(WY)	1995	1996	1995	1995	1996	1998	1998	1993	1993	1993	1994	2002
MIN	-442	54.9	-131	-59.4	-62.0	5.29	-89.6	-41.9	-24.5	-24.0	-264	-580
(WY)	2000	2002	1998	1993	1999	2001	1999	2002	1999	1997	2001	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1993 - 2002	
ANNUAL TOTAL	3755.74		70369.6			
ANNUAL MEAN	10.3		193		159	
HIGHEST ANNUAL MEAN					*398	1994
LOWEST ANNUAL MEAN					-49.9	2001
HIGHEST DAILY MEAN	1060	Jul 23	950	Aug 3	1890	Jul 26 1995
LOWEST DAILY MEAN	e-2940	Sep 18	-935	Nov 14	e-2940	Sep 18 2001
ANNUAL SEVEN-DAY MINIMUM	e-2340	Sep 15	-348	May 19	e-2340	Sep 15 2001
MAXIMUM PEAK STAGE			6.72	Sep 5	7.30	Nov 24 1994
10 PERCENT EXCEEDS	407		511		502	
50 PERCENT EXCEEDS	81		193		183	
90 PERCENT EXCEEDS	-345		-144		-214	

e Estimated
* Highest annual mean based on partial water year record
Note.--Negative figures indicate reverse flow.

02234500 ST. JOHNS RIVER NEAR SANFORD, FL

LOCATION.--Lat 28°50'16", long 81°19'28", in SW¼ sec.16, T.19 S., R.30 E., Seminole County, Hydrologic Unit 03080101, near center of channel on bridge pile under U.S. Highways 17 and 92, at outlet of Lake Monroe, 4 mi northwest of Sanford, and 161 mi upstream from mouth.

DRAINAGE AREA.--2,582 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1941 to June 1956 (discharge measurement only), October 1964 to September 1968 (gage heights and miscellaneous discharge measurements only), May 1987 to September 1989, March 1995 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is .09 ft below NGVD of 1929.

REMARKS.--Records fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height since at least 1871, 13.37 ft in the fall of 1880, from information by Fred T. Williams, former city engineer for Sanford. Since July 1941: Maximum daily gage height, 8.59 ft, Oct. 5-17, 1953; minimum daily, -0.43 ft, Apr. 5, 1945 (published as elevations for Lake Monroe near Sanford).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8280	6360	5330	2330	1080	1690	-50	-36	12	2920	6380	9290
2	8450	6440	5230	2300	878	2390	-105	202	244	3030	6200	9280
3	8660	6290	5110	1770	451	1980	-238	662	576	3150	6640	8870
4	8350	6150	4960	1820	-140	1060	61	857	640	3440	6970	8930
5	8620	5640	4790	2070	51	1220	-582	243	250	3650	7320	9370
6	8430	5700	4580	2310	973	1860	-665	-629	-109	3880	6780	9920
7	8240	5840	4640	2150	968	1970	-14	-640	-56	4140	6780	9950
8	8040	5820	4680	2350	171	2020	696	-304	30	4530	6970	10000
9	7670	5670	4600	2650	1050	1960	941	203	-692	4530	7120	9680
10	7750	5790	4450	2800	1050	1800	985	436	-734	4380	6770	9750
11	8170	5890	4210	2760	830	2070	793	537	-900	4410	6910	9390
12	7950	5760	4150	2650	961	2030	401	502	-798	5190	7290	9220
13	7850	5790	3980	2530	827	1540	462	-173	335	5000	7630	8740
14	7480	5510	4150	2360	693	1690	120	-680	221	5270	7830	8780
15	7540	5000	3930	1820	569	1810	397	37	901	5420	8140	8640
16	7380	5060	3830	1760	249	1850	786	-248	728	5470	8350	9000
17	7040	5120	3750	1710	20	1960	778	-497	612	5720	8270	8720
18	7030	5250	3350	1620	562	1870	762	-575	240	5680	8500	8620
19	6840	5400	3280	1810	899	1940	853	-875	338	5800	9280	8540
20	6740	5350	3210	1810	1150	1600	633	-1700	-81	5650	9340	8430
21	6880	5350	2990	1790	1220	1210	498	-1940	-28	5360	9340	8390
22	6740	5620	3130	1730	1140	487	6.2	-2160	775	5380	9690	8060
23	6640	5870	3230	1760	25	-114	-317	-1890	934	5850	9530	7920
24	6660	5940	2950	1730	544	482	4.9	-1750	1340	6020	9560	8110
25	6720	5910	2710	1620	932	772	-576	-1150	1680	5820	9580	8180
26	6410	5760	2450	1200	1030	783	-702	-645	1760	5770	9500	8000
27	6340	5670	2660	928	168	285	-323	-379	1760	5870	9230	7840
28	6430	5800	2840	1010	1120	432	-783	-706	2190	6320	9330	7630
29	6170	5740	2840	1130	---	677	-935	-878	2300	6500	9600	7490
30	6210	5540	2690	1330	---	794	127	-655	2440	6610	9470	7690
31	6240	---	2500	1370	---	614	---	-105	---	6400	9280	---
TOTAL	227950	171030	117200	58978	19471	42732	4014.1	-14936	16908	157160	253580	262430
MEAN	7353	5701	3781	1903	695	1378	134	-482	564	5070	8180	8748
MAX	8660	6440	5330	2800	1220	2390	985	857	2440	6610	9690	10000
MIN	6170	5000	2450	928	-140	-114	-935	-2160	-900	2920	6200	7490
CFSM	2.85	2.21	1.46	0.74	0.27	0.53	0.05	-0.19	0.22	1.96	3.17	3.39
IN.	3.28	2.46	1.69	0.85	0.28	0.62	0.06	-0.22	0.24	2.26	3.65	3.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	3861	3686	2762	2482	1853	1874	1442	916	806	1532	2255	3077
MAX	7353	7981	4908	7189	6278	8408	5599	3016	1865	5070	8180	8748
(WY)	2002	2000	2000	1998	1998	1998	1998	1998	1996	2002	2002	2002
MIN	1344	1550	714	457	214	-26.0	-383	-482	381	212	192	517
(WY)	2001	2001	2001	1997	1999	1997	1997	2002	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	873568.78		1316517.1			
ANNUAL MEAN	2393		3607		2163	
HIGHEST ANNUAL MEAN					3607	2002
LOWEST ANNUAL MEAN					951	1999
HIGHEST DAILY MEAN	8660	Oct 3	10000	Sep 8	10000	Sep 8 2002
LOWEST DAILY MEAN	-1370	Mar 21	-2160	May 22	-2160	May 22 2002
ANNUAL SEVEN-DAY MINIMUM	-475	May 3	-1640	May 19	-1640	May 19 2002
MAXIMUM PEAK FLOW					*17500	Oct 14 1953
MAXIMUM PEAK STAGE			5.86	Sep 7		
ANNUAL RUNOFF (CFSM)	0.93		1.40		0.84	
ANNUAL RUNOFF (INCHES)	12.59		18.97		11.38	
10 PERCENT EXCEEDS	6520		8440		5690	
50 PERCENT EXCEEDS	1050		2690		1510	
90 PERCENT EXCEEDS	-137		-107		30	

* Measured
Note.--Negative figures indicate reverse flow

02234500 ST. JOHNS RIVER NEAR SANFORD, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.73	4.58	3.98	2.04	1.04	1.74	1.11	0.93	1.56	2.73	4.16	5.57
2	5.72	4.58	3.91	2.07	1.02	1.72	1.13	0.87	1.50	2.86	4.22	5.59
3	5.70	4.60	3.84	2.10	1.03	1.69	1.15	0.81	1.42	2.93	4.35	5.59
4	5.67	4.58	3.77	2.12	1.06	1.73	1.15	0.72	1.37	2.95	4.44	5.60
5	5.63	4.54	3.71	2.14	1.17	1.77	1.18	0.65	1.34	3.01	4.49	5.72
6	5.58	4.50	3.64	2.09	1.23	1.79	1.29	0.72	1.32	3.06	4.54	5.79
7	5.54	4.48	3.59	1.99	1.17	1.75	1.38	0.79	1.34	3.08	4.65	5.81
8	5.50	4.45	3.54	1.92	1.20	1.73	1.38	0.79	1.33	3.12	4.71	5.81
9	5.47	4.40	3.49	1.83	1.20	1.70	1.28	0.74	1.35	3.17	4.74	5.80
10	5.41	4.36	3.44	1.74	1.16	1.66	1.19	0.65	1.44	3.22	4.77	5.77
11	5.36	4.31	3.39	1.63	1.15	1.61	1.14	0.59	1.52	3.25	4.79	5.74
12	5.30	4.26	3.33	1.52	1.13	1.56	1.12	0.52	1.60	3.33	4.82	5.72
13	5.26	4.22	3.28	1.42	1.10	1.50	1.14	0.45	1.66	3.43	4.95	5.74
14	5.22	4.30	3.22	1.38	1.09	1.48	1.12	0.46	1.61	3.55	5.15	5.74
15	5.21	4.28	3.17	1.39	1.13	1.44	1.12	0.48	1.60	3.61	5.27	5.68
16	5.15	4.30	3.12	1.39	1.17	1.38	1.11	0.49	1.53	3.65	5.35	5.62
17	5.08	4.35	3.04	1.37	1.20	1.31	1.08	0.46	1.49	3.66	5.37	5.56
18	5.03	4.38	2.96	1.33	1.23	1.23	1.03	0.45	1.53	3.68	5.40	5.49
19	4.98	4.41	2.90	1.30	1.25	1.15	0.97	0.45	1.57	3.67	5.45	5.41
20	4.95	4.41	2.81	1.25	1.20	1.05	0.89	0.61	1.64	3.66	5.54	5.34
21	4.93	4.41	2.74	1.18	1.13	0.99	0.83	0.84	1.74	3.68	5.58	5.31
22	4.92	4.39	2.67	1.14	1.10	1.00	0.77	1.02	1.95	3.77	5.59	5.23
23	4.88	4.37	2.59	1.11	1.16	1.08	0.80	1.22	2.15	3.84	5.59	5.17
24	4.85	4.35	2.52	1.09	1.42	1.18	0.86	1.36	2.26	3.88	5.57	5.20
25	4.86	4.32	2.46	1.04	1.52	1.17	0.86	1.42	2.33	3.91	5.54	5.22
26	4.81	4.27	2.37	1.02	1.58	1.15	0.90	1.41	2.33	3.94	5.52	5.22
27	4.73	4.22	2.34	1.05	1.59	1.13	0.98	1.38	2.35	4.05	5.50	5.18
28	4.67	4.17	2.29	1.09	1.72	1.14	0.98	1.39	2.37	4.08	5.49	5.14
29	4.63	4.11	2.21	1.11	---	1.15	0.99	1.44	2.40	4.10	5.52	5.08
30	4.60	4.04	2.16	1.10	---	1.15	0.97	1.51	2.55	4.12	5.56	5.01
31	4.60	---	2.09	1.08	---	1.12	---	1.55	---	4.14	5.56	---
MEAN	5.16	4.36	3.05	1.48	1.22	1.40	1.06	0.88	1.74	3.52	5.10	5.50
MAX	5.73	4.60	3.98	2.14	1.72	1.79	1.38	1.55	2.55	4.14	5.59	5.81
MIN	4.60	4.04	2.09	1.02	1.02	0.99	0.77	0.45	1.32	2.73	4.16	5.01

CAL YR 2001 MEAN 2.13 MAX 5.83 MIN 0.36
WTR YR 2002 MEAN 2.88 MAX 5.81 MIN 0.45

02234500 ST. JOHNS RIVER NEAR SANFORD, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1941-56, 1962, 1965-71, 1974, January 2000 to September 2002.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 2000 to September 2002 (discontinued).
WATER TEMPERATURE: July 2000 to September 2002 (discontinued).

INSTRUMENTATION.--Water-quality monitor and data-collection platform.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 2,620 µS/cm @ 25 °C, July 8, 2001; minimum daily mean, 421 µS/cm @ 25 °C, Oct. 2, 2001.
WATER TEMPERATURE: Maximum daily mean, 33.8 °C, Aug. 11, 2000; minimum daily mean, 9.0 °C, Jan. 5, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 1,720 µS/cm @ 25 °C, May 18-19; minimum daily mean, 421 µS/cm @ 25 °C, Oct. 2.
WATER TEMPERATURE: Maximum daily mean, 31.5 °C, May 6; minimum daily mean, 11.1 °C, Jan. 9.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	551	539	764	1020	1200	1460	1550	1230	1380	677	426
2	421	546	564	763	1030	1210	1450	1570	1340	1390	645	424
3	429	541	578	756	1040	1210	1430	1580	1370	1420	619	427
4	433	540	583	770	1040	1230	1430	1590	1410	1400	612	428
5	433	538	593	779	1040	1250	1430	1600	1480	1400	585	431
6	433	539	596	796	1050	1250	1410	1610	1490	1350	576	431
7	436	546	605	812	1060	1300	1320	1610	1490	1320	575	433
8	440	543	613	812	1060	1280	1440	1570	1490	1300	587	430
9	459	544	618	814	1070	1290	1480	1630	1490	1280	574	428
10	496	543	632	823	1070	1300	1490	1650	1400	1260	557	427
11	497	542	633	832	1070	1300	1500	1650	1170	1180	528	432
12	497	541	643	823	1080	1320	1510	1660	1090	1160	498	435
13	498	543	655	820	1090	1340	1500	1670	1160	1160	480	436
14	492	541	661	825	1090	1410	1510	1680	1290	1090	464	430
15	502	547	675	824	1100	1420	1510	1680	1420	1020	464	430
16	508	552	681	831	1100	1420	1510	1700	1470	970	472	431
17	508	553	691	832	1100	1400	1510	1710	1450	1010	464	433
18	520	557	697	849	1110	1390	1510	1720	1450	1100	456	434
19	517	550	706	862	1120	1390	1510	1720	1460	958	455	434
20	526	537	715	876	1150	1400	1510	1190	1450	883	437	434
21	529	534	732	894	1150	1410	1520	1280	1420	868	440	441
22	540	514	732	900	1150	1410	1520	1340	1410	862	454	459
23	546	507	726	905	1150	1410	1540	1290	1400	888	446	473
24	548	506	725	904	1130	1430	1550	1320	1400	818	444	464
25	547	501	725	920	1130	1430	1570	1310	1410	829	442	465
26	549	512	731	937	1150	1440	1570	1300	1440	831	438	458
27	549	516	737	945	1150	1440	1570	1300	1480	798	444	457
28	563	521	750	940	1180	1440	1570	1290	1460	761	438	470
29	561	530	740	943	---	1450	1530	1170	1420	728	431	473
30	548	527	755	964	---	1450	1540	1140	1390	685	428	471
31	553	---	767	990	---	1450	---	1200	---	678	427	---
MEAN	500	535	671	855	1100	1360	1500	1490	1390	1060	502	442
MAX	563	557	767	990	1180	1450	1570	1720	1490	1420	677	473
MIN	421	501	539	756	1020	1200	1320	1140	1090	678	427	424

CAL YR 2001 MEAN 1400 MAX 2620 MIN 421
WTR YR 2002 MEAN 949 MAX 1720 MIN 421

02234500 ST. JOHNS RIVER NEAR SANFORD, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.3	20.9	22.9	15.2	24.0	15.2	26.0	28.8	28.1	27.8	30.4	29.1
2	24.2	21.5	23.1	14.6	23.9	16.0	25.9	28.7	29.1	27.7	30.4	29.3
3	24.7	22.1	23.2	13.9	22.9	17.4	25.5	29.0	29.1	28.8	29.7	29.5
4	25.1	22.4	22.9	12.1	21.9	17.4	24.8	30.2	30.2	28.8	29.5	29.2
5	25.6	22.1	22.5	11.7	20.6	15.6	25.2	31.0	30.2	28.5	29.2	29.1
6	25.4	21.1	22.3	12.3	19.4	15.6	25.6	31.5	30.6	28.9	29.7	29.0
7	25.2	20.8	22.6	12.4	18.4	16.6	24.7	31.4	30.9	29.5	29.6	29.1
8	24.9	21.3	23.2	11.3	18.0	18.2	23.3	31.0	30.3	29.2	28.9	28.9
9	24.1	20.8	23.4	11.1	17.9	20.7	22.9	30.6	30.1	28.4	28.6	29.1
10	24.0	21.1	23.8	11.5	18.8	21.7	23.9	30.4	30.1	28.2	28.6	29.2
11	24.3	21.1	23.8	11.8	19.0	21.5	24.9	29.6	29.5	28.3	28.2	29.0
12	24.8	21.0	24.2	12.6	19.2	21.8	24.6	28.8	28.9	28.4	28.0	28.5
13	25.0	21.0	24.2	13.4	18.1	22.1	24.1	28.5	28.9	28.2	28.0	28.2
14	25.1	20.9	24.2	14.1	17.4	22.4	24.5	29.4	29.1	28.3	27.9	28.4
15	25.4	20.6	24.3	14.4	17.8	23.5	24.8	28.6	29.4	29.0	28.1	28.8
16	25.3	20.3	24.2	15.2	18.1	24.7	26.7	27.9	29.1	29.7	28.5	29.2
17	24.4	20.2	23.5	15.4	17.9	25.8	27.8	28.5	28.2	30.3	29.3	29.7
18	23.2	20.7	23.1	15.3	17.4	26.3	28.7	29.8	27.2	31.1	29.3	29.9
19	23.2	20.9	22.2	16.2	17.4	26.2	29.1	29.5	26.7	31.2	29.3	30.0
20	23.8	21.1	21.2	17.6	17.9	25.4	28.4	26.8	26.4	30.5	29.1	29.7
21	24.1	21.4	19.7	18.9	18.7	24.9	27.9	25.2	25.9	29.8	29.4	29.3
22	24.7	21.7	18.9	19.5	19.3	24.7	27.5	25.1	25.8	29.4	29.8	29.0
23	25.0	21.7	18.9	20.4	18.8	24.3	28.2	25.0	25.6	29.4	30.1	28.7
24	25.3	21.9	19.1	21.1	18.1	24.3	28.8	25.2	26.2	29.9	30.4	28.5
25	25.6	22.4	18.1	21.4	18.3	24.0	28.1	25.3	26.5	30.7	30.2	28.5
26	24.9	23.0	16.6	21.7	18.9	25.5	28.8	25.7	27.0	30.9	29.8	28.5
27	22.7	23.1	14.9	21.5	18.5	25.7	29.4	26.2	27.3	30.7	29.5	28.6
28	20.7	22.9	14.8	21.9	16.6	25.7	29.4	26.3	27.8	31.0	29.2	29.0
29	20.2	22.8	15.3	22.9	---	25.9	29.4	26.6	28.0	30.6	29.1	29.3
30	19.8	22.8	15.9	23.4	---	26.1	29.3	26.6	28.1	30.1	29.2	29.3
31	20.3	---	15.7	23.6	---	25.9	---	27.7	---	30.2	29.1	---
MEAN	24.0	21.5	21.1	16.4	19.0	22.3	26.6	28.2	28.3	29.5	29.2	29.1
MAX	25.6	23.1	24.3	23.6	24.0	26.3	29.4	31.5	30.9	31.2	30.4	30.0
MIN	19.8	20.2	14.8	11.1	16.6	15.2	22.9	25.0	25.6	27.7	27.9	28.2

CAL YR 2001 MEAN 24.6 MAX 32.5 MIN 9.0
WTR YR 2002 MEAN 24.6 MAX 31.5 MIN 11.1

02234500 ST. JOHNS RIVER NEAR SANFORD, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT													
09...	1215	9680	5.48	452	448	7.0	7.0	24.0	7.0	280	6.4	20	E.14
24...	0720	8730	4.86	546	537	6.7	7.2	24.9	1.2	280	4.0	5	.11
NOV													
06...	1245	7380	4.44	521	516	7.5	7.7	21.1	1.4	240	6.4	2	.07
21...	0850	6600	4.41	533	520	7.5	7.3	20.9	1.3	240	7.1	4	E.05
DEC													
04...	1145	4870	3.78	571	576	7.2	7.5	22.9	1.6	240	5.7	2	.07
17...	1505	4020	3.03	671	647	7.5	7.7	23.6	3.2	240	6.7	E4	.10
JAN													
04...	1348	1640	2.15	776	759	7.8	7.7	11.8	2.9	200	9.7	8	.08
14...	1530	2540	1.39	823	821	7.8	7.6	14.1	2.7	160	10.0	2	<.01
30...	1145	1570	1.11	947	925	7.5	7.5	22.9	3.6	140	7.4	6	.08
FEB													
14...	0923	854	1.09	1060	1060	7.6	7.8	16.8	3.4	120	9.2	5	.02
26...	1045	830	1.58	1120	1120	7.8	7.9	18.3	4.5	120	9.6	9	.01
MAR													
12...	1406	2270	1.61	1300	1290	8.1	7.7	22.2	4.9	120	9.2	20	.02
28...	1348	-167	1.14	1420	1400	8.0	7.6	24.9	5.8	100	7.8	12	.01
APR													
09...	1215	945	1.30	1460	1450	8.3	7.8	22.2	6.6	80	8.8	17	.02
25...	0950	-1060	.86	1520	1520	8.4	8.3	28.8	7.5	100	5.9	21	<.01
MAY													
08...	1207	-688	.81	1520	1520	8.0	8.0	30.9	12	80	2.6	38	.04
21...	1220	-2250	.84	1280	1260	7.7	7.9	25.1	8.0	40	9.8	24	<.01
JUN													
04...	1254	1270	1.38	1380	1350	8.5	8.2	30.4	4.6	50	7.2	15	.02
19...	1300	541	1.51	1430	1390	8.5	8.2	27.3	4.7	50	8.8	18	<.01
JUL													
02...	1320	3280	2.86	1390	1370	7.7	7.7	28.0	36	50	7.7	118	.01
17...	1215	5480	3.67	973	938	6.2	7.2	30.0	2.4	240	4.4	7	.16
31...	1225	5720	4.08	678	654	6.3	7.2	30.2	2.2	240	2.2	6	.28
AUG													
14...	1206	8270	5.15	456	445	6.6	7.3	28.2	2.6	240	4.6	2	.10
26...	1230	10000	5.51	431	420	7.2	7.2	30.0	5.1	240	2.9	18	.06
SEP													
11...	1040	9940	5.74	421	414	7.0	7.6	28.9	2.2	240	3.6	8	<.01
24...	1205	8000	5.19	460	444	6.8	7.4	28.5	2.3	240	5.5	4	.08

< -- Less than
E -- Estimated value
Note.--Negative figures indicate reverse flow

02234500 ST. JOHNS RIVER NEAR SANFORD, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SULFIDE TOTAL (MG/L AS S) (00745)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)
OCT													
09...	.15	E.070	E2.1	E.16	.17	E.13	30.0	2.0	.140	92	24.0	7.60	49.0
24...	.10	.040	E1.6	.14	E.07	.07	32.0	2.0	.070	110	28.0	9.20	58.0
NOV													
06...	.06	.020	E1.7	.16	E.09	.06	33.0	2.0	.060	110	28.0	9.20	56.0
21...	.07	E.020	E1.6	E.17	E.06	E.05	29.0	2.0	.050	110	28.0	9.00	55.0
DEC													
04...	.23	.020	E1.4	.12	E.07	.04	30.0	2.0	E.070	--	29.0	--	62.0
17...	.10	.050	1.9	.20	.09	.07	28.0	1.0	.070	140	34.0	12.0	73.0
JAN													
04...	.09	.010	1.5	.23	.06	.05	30.0	2.0	.050	150	38.0	13.0	86.0
14...	.04	<.010	1.6	.24	.07	.04	28.0	1.0	.040	160	39.0	14.0	95.0
30...	.12	<.010	1.8	.15	.05	.03	25.0	1.0	.030	180	43.0	17.0	110
FEB													
14...	.03	<.010	1.6	.11	.04	.02	3.6	2.0	.020	190	46.0	19.0	130
26...	.04	<.010	1.3	.03	.06	.02	22.0	1.0	.030	200	49.0	19.0	130
MAR													
12...	.04	<.010	1.4	<.02	.05	<.01	22.0	1.0	<.010	230	54.0	22.0	150
28...	.02	<.010	1.4	<.02	.04	<.01	20.0	1.0	.010	250	58.0	24.0	170
APR													
09...	.02	<.010	1.8	<.02	.07	<.01	20.0	1.0	<.010	250	60.0	25.0	170
25...	<.01	<.010	2.2	<.02	.07	<.01	19.0	1.0	.020	250	60.0	25.0	190
MAY													
08...	.04	<.010	2.5	<.02	.08	<.01	21.0	1.0	.020	270	64.0	26.0	190
21...	<.01	<.010	1.2	.03	.06	.02	9.6	<1.0	.020	250	64.0	22.0	160
JUN													
04...	.02	<.010	1.1	<.02	.04	<.01	14.0	<1.0	<.010	260	66.0	23.0	160
19...	.02	<.010	1.7	.17	.10	<.01	14.0	<1.0	.020	260	63.0	24.0	170
JUL													
02...	.01	<.010	2.5	<.02	.14	<.01	15.0	<1.0	<.010	240	56.0	23.0	170
17...	.15	.020	1.8	.03	.09	.06	26.0	2.0	.070	170	41.0	17.0	120
31...	.28	.060	1.9	.08	.21	.17	27.0	2.0	.190	130	33.0	11.0	75.0
AUG													
14...	.10	.040	1.6	.13	.22	.21	27.0	2.0	.220	96	25.0	7.90	48.0
26...	.05	.040	1.8	.10	.20	.14	24.0	2.0	.150	94	25.0	7.40	44.0
SEP													
11...	.09	<.010	1.4	<.02	.13	<.01	23.0	2.0	.110	89	24.0	6.90	45.0
24...	.07	.020	1.5	.09	.08	.09	23.0	2.0	.090	94	25.0	7.50	48.0

< -- Less than
E -- Estimated value

02234500 ST. JOHNS RIVER NEAR SANFORD, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT													
09...	4.20	E45	17.0	92.0	9.30	E304	6.1	.5	17.0	--	580	780	492
24...	3.80	51	21.0	113	9.50	372	3.4	.6	19.0	--	700	487	399
NOV													
06...	4.40	E52	21.0	111	8.40	362	<.1	.6	18.0	--	700	479	358
21...	4.20	E50	22.0	111	7.00	350	<.1	.6	17.0	--	660	466	353
DEC													
04...	4.30	E51	7.9	123	6.10	386	<.1	.5	18.0	18.0	680	493	367
17...	4.80	59	30.0	148	6.30	E427	<.1	.6	21.0	--	800	480	355
JAN													
04...	5.30	66	36.0	168	6.30	473	<.1	.7	23.0	--	870	400	291
14...	5.40	67	38.0	183	5.90	503	11.0	1.5	21.0	--	880	350	275
30...	5.70	71	50.0	210	4.20	548	8.1	1.0	25.0	--	970	324	211
FEB													
14...	6.20	70	62.0	244	.69	645	<.1	.9	27.0	--	1120	279	189
26...	6.00	70	68.0	258	.23	674	13.0	.9	28.0	--	1150	249	147
MAR													
12...	6.80	68	88.0	302	.11	772	18.0	1.3	30.0	--	1380	236	122
28...	6.90	61	114	323	.23	871	27.0	1.3	34.0	--	1500	165	75
APR													
09...	7.10	64	114	336	.37	878	50.0	1.3	33.0	--	1540	146	36
25...	7.20	64	120	360	1.20	938	92.0	1.4	33.0	--	1540	114	16
MAY													
08...	7.20	70	121	358	3.00	929	46.0	1.4	34.0	--	1620	215	16
21...	5.80	105	88.0	273	6.30	707	35.0	1.0	23.0	--	1170	109	11
JUN													
04...	6.20	91	100	308	4.60	822	33.0	1.1	32.0	--	1370	62	7
19...	6.80	80	103	320	5.20	845	41.0	1.2	34.0	--	1450	95	7
JUL													
02...	6.80	68	101	322	5.80	815	28.0	1.2	35.0	--	1410	1400	22
17...	5.80	38	89.0	205	6.60	611	13.0	.8	26.0	--	1060	561	364
31...	5.10	52	43.0	134	8.90	459	<.1	.5	22.0	--	910	759	518
AUG													
14...	4.50	52	17.0	87.0	9.30	305	<.1	.5	18.0	--	660	639	481
26...	4.30	53	15.0	81.0	9.40	285	<.1	.4	19.0	--	610	709	414
SEP													
11...	3.80	51	14.0	81.0	8.30	278	<.1	.6	17.0	--	550	555	395
24...	3.80	54	15.0	88.0	7.80	290	<.1	.5	17.0	--	560	448	344

< -- Less than
E -- Estimated value

02234600 WEKIVA SPRINGS NEAR APOPKA, FL

LOCATION.--Lat 28°42'43", long 81°27'36", in NE$^{1}/_{4}$ sec.36, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080101, at head of Wekiva River, 4.1 mi northeast of Apopka and 14 mi upstream from the mouth of Wekiva River.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1932 to September 1999 (periodic discharge measurements only), October 1999 to September 2002 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD MARCH 1932 TO SEPTEMBER 1999.--Maximum discharge measured, 91.7 ft^3/s, Oct. 17, 1960; minimum measured, 51.6 ft^3/s, May 25, 1990.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	e51	60	57	56	55	54	59	54	66	72	81
2	41	e51	60	62	56	55	54	58	53	69	67	80
3	40	e51	60	70	56	54	55	58	53	62	66	79
4	40	e53	60	66	55	57	56	58	53	54	63	78
5	41	e53	60	64	55	56	57	57	53	48	59	79
6	41	e56	60	63	55	55	56	57	52	45	56	78
7	41	e55	60	62	55	54	55	57	53	41	59	75
8	41	e55	61	61	55	54	56	57	54	40	66	73
9	42	e54	60	60	55	54	55	56	54	41	63	69
10	42	e54	60	59	55	53	55	56	53	41	57	65
11	42	e54	60	59	55	53	56	56	54	40	51	62
12	44	e54	60	59	55	54	56	55	54	40	49	60
13	44	e59	60	59	54	55	58	55	54	45	56	59
14	45	e65	60	60	54	54	58	55	56	66	67	57
15	48	e67	60	63	54	54	59	54	56	69	74	54
16	47	e65	59	62	54	54	58	54	55	64	79	52
17	46	e64	59	61	53	54	59	54	56	58	77	50
18	46	e63	60	60	53	54	58	55	58	52	75	51
19	47	e62	59	60	53	54	58	55	57	48	71	54
20	49	e62	59	59	53	54	58	55	58	49	69	53
21	49	e62	59	59	53	54	58	55	61	67	68	51
22	50	e61	58	58	54	54	57	55	62	73	65	48
23	50	e61	58	58	58	54	58	54	64	73	62	47
24	50	e61	58	58	66	53	58	54	65	68	60	50
25	51	e61	58	57	64	54	57	54	67	62	57	65
26	52	e62	57	57	61	54	58	53	60	60	57	71
27	e52	e62	57	57	57	54	60	53	49	54	64	68
28	e51	e62	57	57	55	54	58	53	40	53	60	64
29	e51	e62	57	57	---	54	58	53	e44	74	64	59
30	e51	e61	57	56	---	54	58	53	50	80	77	56
31	e51	---	57	57	---	54	---	54	---	77	84	---
TOTAL	1425	1763	1830	1857	1559	1680	1711	1712	1652	1779	2014	1888
MEAN	46.0	58.8	59.0	59.9	55.7	54.2	57.0	55.2	55.1	57.4	65.0	62.9
MAX	52	67	61	70	66	57	60	59	67	80	84	81
MIN	40	51	57	56	53	53	54	53	40	40	49	47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

MEAN	64.1	61.7	59.6	58.7	58.8	57.2	55.4	52.3	54.3	56.1	60.7	58.9
MAX	88.4	72.6	67.1	64.2	65.8	63.9	58.6	55.2	56.1	57.4	65.0	62.9
(WY)	2000	2000	2000	2000	2000	2000	2000	2002	2000	2002	2002	2002
MIN	46.0	53.8	52.6	52.1	54.8	53.5	50.4	47.3	51.8	55.0	56.6	53.9
(WY)	2002	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	19577		20870			
ANNUAL MEAN	53.6		57.2		58.2	
HIGHEST ANNUAL MEAN					63.6	2000
LOWEST ANNUAL MEAN					53.7	2001
HIGHEST DAILY MEAN	e95	Sep 15	84	Aug 31	111	Oct 9 1999
LOWEST DAILY MEAN	40	Sep 26-28	a40		b40	
ANNUAL SEVEN-DAY MINIMUM	41	Sep 25	41	Oct 1	41	Sep 25 2001
MAXIMUM PEAK STAGE			14.02	Aug 31	14.31	Oct 9 1999
10 PERCENT EXCEEDS	61		66		67	
50 PERCENT EXCEEDS	53		57		56	
90 PERCENT EXCEEDS	47		49		50	

e Estimated
a Oct 1,3,4, Jun 28, Jul 8,11,12
b Sep 26-28, Oct 1,3,4, 2001, Jun 28, Jul 8,11,12, 2002

02234610 ROCK SPRINGS NEAR APOPKA, FL

LOCATION.--Lat 28°45'20", long 81°29'58", in NE¼ sec.15, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080101, on left concrete retaining wall of spring pool, 750 ft downstream of head of springs, 5.7 mi north of Apopka, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1931 to September 1998 (discharge measurements only), October 1998 to September 2002 (discontinued).

GAGE.--Nonrecording gage. Datum of gage is 27.54 ft above NGVD of 1929 (St. Johns River Water Management District bench mark). Prior to February 3, 1997, several different reference points at same location at various datums.

REMARKS.--Records poor. Discharge computed from relation between artesian pressure at OR652 well and discharge at measuring site. Artesian pressures are published as water levels for OR652 well (284634081262003) in Water Resources Data, Northeast Florida Volume 1B, Ground Water.

EXTREMES FOR PERIOD FEBRUARY 1933 TO SEPTEMBER 1998.--Maximum discharge measured, 83 ft^3/s, Oct. 17, 1960; minimum measured, 48 ft^3/s, May 22, 1991.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	55	55	53	e51	e52	50	50	42	45	49	53
2	55	55	55	53	e51	e52	50	50	43	46	49	54
3	55	56	54	53	e51	e52	50	49	42	46	49	54
4	55	56	54	53	e51	e53	50	49	42	46	49	54
5	55	56	54	53	e50	e52	51	48	42	46	50	54
6	55	56	54	54	e50	e52	51	48	41	47	50	54
7	55	56	54	54	e51	e52	50	48	41	46	50	54
8	54	55	54	53	e51	e52	50	47	41	47	50	54
9	55	55	54	53	e51	e52	50	47	41	46	50	54
10	55	55	54	53	e51	e52	50	46	41	47	50	54
11	55	55	54	53	e51	e52	50	46	41	47	50	53
12	55	55	54	53	e51	e52	50	45	41	47	50	53
13	55	55	54	53	e51	e52	50	45	41	47	50	53
14	55	56	54	53	e50	e52	51	45	42	47	51	53
15	55	56	54	e54	e51	52	51	44	42	48	51	53
16	55	56	53	e55	e50	52	51	44	42	48	51	53
17	55	56	53	e55	e50	51	51	44	42	48	51	53
18	55	56	54	e54	e50	51	51	44	42	47	51	53
19	55	56	54	e54	e50	51	51	44	42	47	52	53
20	55	56	53	e54	e50	51	51	44	42	47	52	53
21	55	56	53	e54	e50	51	51	44	43	47	52	54
22	55	56	53	e53	e51	51	50	44	43	47	52	53
23	56	56	53	e53	e53	51	50	43	44	48	52	53
24	56	56	53	e53	e55	51	50	43	44	48	52	54
25	55	55	53	e52	e54	50	50	43	44	48	51	54
26	55	55	54	e52	e53	51	49	43	45	48	51	54
27	55	55	53	e52	e53	51	49	42	45	48	51	54
28	55	55	53	e52	e52	50	49	43	45	48	52	54
29	55	55	53	e52	---	50	50	42	45	49	52	53
30	55	55	53	e52	---	50	50	42	45	49	52	53
31	56	---	53	e52	---	50	---	42	---	49	53	---
TOTAL	1707	1666	1663	1647	1433	1593	1507	1398	1276	1464	1575	1605
MEAN	55.1	55.5	53.6	53.1	51.2	51.4	50.2	45.1	42.5	47.2	50.8	53.5
MAX	56	56	55	55	55	53	51	50	45	49	53	54
MIN	54	55	53	52	50	50	49	42	41	45	49	53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	53.1	52.8	51.9	51.4	50.5	48.4	45.7	43.9	43.6	45.8	47.6	49.5
MAX	57.4	57.5	56.3	55.1	53.5	51.4	50.2	49.5	46.9	50.9	50.8	53.5
(WY)	1999	2000	2000	2000	2000	2002	2002	1999	1999	1999	2002	2002
MIN	42.8	43.4	44.8	44.5	44.8	42.6	40.7	38.2	39.8	42.0	42.8	43.1
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	16887		18534			
ANNUAL MEAN	46.3		50.8		48.7	
HIGHEST ANNUAL MEAN					51.4	1999
LOWEST ANNUAL MEAN					43.5	2001
HIGHEST DAILY MEAN	56	Sep 28	56	Many days	*59	
LOWEST DAILY MEAN	37	May 18-28,31	41	Jun 6-13	37	May 18-28,31 2001
ANNUAL SEVEN-DAY MINIMUM	37	May 18	41	Jun 6	37	May 18 2001
MAXIMUM PEAK STAGE			31.37	Sep 26	31.37	Sep 26 2002
10 PERCENT EXCEEDS	55		55		56	
50 PERCENT EXCEEDS	45		52		49	
90 PERCENT EXCEEDS	39		44		42	

e Estimated
* Oct 1-8, 1998, Oct. 17,22,23, 1999

02234635 WEKIVA RIVER NEAR APOPKA, FL

LOCATION.--Lat 28°42'48", long 81°26'44", in SE$^{1}/_{4}$ sec.30, T.20 S., R.29 E., Seminole County, Hydrologic Unit 03080101, on downstream side of abandoned bridge located on eastern edge of Wekiva Springs State Park at Wekiva River Marina, 0.3 mi downstream from Rock Springs Run, 0.9 mi downstream from Wekiva Springs and 5.0 mi northeast of Apopka.

DRAINAGE AREA.--58.3 mi^2.

PERIOD OF RECORD.--July 1995 to March 2002 (discontinued).

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 9.92 ft above NGVD of 1929 (levels by St. Johns River Water Management District).

REMARKS.--Records fair. Flow includes large ground-water inflow.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD OCTOBER 2001 TO MARCH 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	133	131	124	125	135	---	---	---	---	---	---
2	149	133	131	141	125	133	---	---	---	---	---	---
3	147	137	131	163	125	133	---	---	---	---	---	---
4	144	137	131	153	124	143	---	---	---	---	---	---
5	143	140	130	146	124	141	---	---	---	---	---	---
6	142	137	131	141	123	138	---	---	---	---	---	---
7	141	135	132	139	125	135	---	---	---	---	---	---
8	141	133	131	135	127	135	---	---	---	---	---	---
9	142	132	131	133	126	136	---	---	---	---	---	---
10	141	131	130	131	125	135	---	---	---	---	---	---
11	139	131	130	131	127	133	---	---	---	---	---	---
12	138	131	130	129	126	---	---	---	---	---	---	---
13	136	132	129	130	125	---	---	---	---	---	---	---
14	140	141	129	133	125	---	---	---	---	---	---	---
15	149	141	128	142	125	---	---	---	---	---	---	---
16	143	137	129	139	125	---	---	---	---	---	---	---
17	140	136	128	136	125	---	---	---	---	---	---	---
18	137	135	129	134	125	---	---	---	---	---	---	---
19	138	134	128	132	124	---	---	---	---	---	---	---
20	141	134	127	131	123	---	---	---	---	---	---	---
21	140	133	127	130	124	---	---	---	---	---	---	---
22	140	133	126	130	127	---	---	---	---	---	---	---
23	139	132	126	129	142	---	---	---	---	---	---	---
24	138	132	126	127	166	---	---	---	---	---	---	---
25	139	132	126	127	160	---	---	---	---	---	---	---
26	139	132	126	127	151	---	---	---	---	---	---	---
27	135	132	125	127	143	---	---	---	---	---	---	---
28	134	132	125	126	137	---	---	---	---	---	---	---
29	134	131	125	126	---	---	---	---	---	---	---	---
30	134	131	125	125	---	---	---	---	---	---	---	---
31	133	---	124	126	---	---	---	---	---	---	---	---
TOTAL	4348	4020	3977	4143	3649	1497	---	---	---	---	---	---
MEAN	140	134	128	134	130	136	---	---	---	---	---	---
MAX	152	141	132	163	166	143	---	---	---	---	---	---
MIN	133	131	124	124	123	133	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

MEAN	175	151	155	164	156	166	150	136	140	149	160	173
MAX	239	180	188	247	216	238	249	192	190	190	244	233
(WY)	2000	1996	1996	1996	1998	1996	1996	1996	1996	1996	1995	1995
MIN	126	118	115	109	106	113	107	96.5	99.8	116	121	132
(WY)	2001	2001	2001	2001	2001	2001	2000	2001	2001	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		#FOR 2002 WATER YEAR		#WATER YEARS 1995 - 2002	
ANNUAL TOTAL	44913					
ANNUAL MEAN	123				156	
HIGHEST ANNUAL MEAN					205	1996
LOWEST ANNUAL MEAN					119	2001
HIGHEST DAILY MEAN	235	Sep 15	166	Feb 24	*389	Mar 31 1996
LOWEST DAILY MEAN	90	May 24	123	Feb 6,20	90	May 24 2001
ANNUAL SEVEN-DAY MINIMUM	92	May 19	124	Feb 1	92	May 19 2001
MAXIMUM PEAK FLOW					395	Mar 31 1996
MAXIMUM PEAK STAGE					4.61	Mar 31 1996
INSTANTANEOUS LOW FLOW					89	May 24,25 2001
10 PERCENT EXCEEDS	152		142		211	
50 PERCENT EXCEEDS	114		132		146	
90 PERCENT EXCEEDS	100		125		110	

* Mar 31, Apr 1, 1996
\# Includes partial year(s) of record

02234990 LITTLE WEKIVA RIVER NEAR ALTAMONTE SPRINGS, FL

LOCATION.--Lat 28°41'13", long 81°23'50", in SE¼ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, on left bank 50 ft downstream from bridge on State Highway 434, 200 ft upstream from Sanlando Springs outlet, 1.4 mi northeast of Post Office in Altamonte Springs, and 5.5 mi upstream from mouth.

DRAINAGE AREA.--90.7 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by St. Johns River Water Management District). From Feb. 11, 1981 to Nov. 28, 1985, at site 75 ft downstream at same datum.

REMARKS.--Records fair. Flow includes occasional pumpage from Cranes Roost basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	17	9.0	13	2.2	19	2.4	5.3	e5.3	101	41	93
2	43	21	5.9	26	2.9	15	3.0	4.7	e4.6	130	76	98
3	34	23	5.6	18	1.7	12	3.4	5.5	e4.0	121	103	95
4	31	18	11	24	1.7	17	5.6	5.7	e4.0	90	123	82
5	30	23	16	14	2.7	20	5.0	5.1	e4.0	59	126	92
6	28	27	15	12	2.9	11	2.3	5.4	e5.8	39	121	103
7	24	20	7.1	15	1.2	9.7	2.0	e4.9	e11	28	137	91
8	27	16	8.2	16	0.28	12	1.8	e4.8	e5.7	27	134	79
9	29	15	4.3	6.7	2.1	8.5	1.9	e4.7	e4.6	20	132	75
10	20	14	4.1	4.9	0.53	6.3	1.4	e4.4	e4.4	18	104	57
11	18	11	13	4.3	0.74	6.4	1.1	e4.2	e6.0	13	73	48
12	19	10	4.0	3.7	1.9	6.5	4.3	e4.2	e5.5	31	72	48
13	17	17	3.9	2.5	1.7	8.1	2.5	e4.2	e6.5	59	82	60
14	21	16	4.3	4.8	0.59	5.7	8.0	e4.2	e9.5	60	76	62
15	27	13	6.2	8.0	0.59	5.9	5.6	e4.0	e8.5	37	96	54
16	30	18	3.8	3.2	0.69	5.7	11	e4.0	e7.5	34	101	54
17	22	9.9	3.8	2.9	0.66	5.1	5.0	e4.0	14	23	92	62
18	21	9.1	12	3.3	0.61	4.9	4.5	e4.2	17	18	84	51
19	21	12	3.9	4.4	0.59	4.5	4.8	e4.9	16	15	89	56
20	21	15	3.6	2.5	0.62	2.7	4.8	e4.4	19	45	134	63
21	20	10	4.3	2.3	1.0	3.0	4.5	e4.2	29	46	164	68
22	22	7.8	7.1	6.6	1.8	3.3	5.0	e4.2	34	90	156	62
23	26	7.5	3.9	2.3	11	2.3	5.3	e4.2	52	113	132	57
24	20	9.6	4.3	2.2	16	2.1	5.2	e4.1	86	97	99	61
25	21	6.8	13	2.2	20	2.1	4.2	e4.1	86	77	81	54
26	24	7.0	4.1	3.6	27	2.1	7.0	e4.0	75	62	82	60
27	23	15	3.4	2.0	23	1.8	6.4	e4.0	93	63	67	59
28	20	6.1	4.9	1.9	19	2.5	3.8	e4.0	97	60	96	49
29	21	5.7	6.4	3.1	---	1.6	4.2	e4.0	90	56	96	41
30	27	5.7	3.4	2.9	---	1.4	5.0	e4.2	94	51	99	37
31	18	---	3.7	1.6	---	1.5	---	e7.0	---	40	90	---
TOTAL	769	406.2	203.2	219.9	145.70	209.7	131.0	140.8	898.9	1723	3158	1971
MEAN	24.8	13.5	6.55	7.09	5.20	6.76	4.37	4.54	30.0	55.6	102	65.7
MAX	44	27	16	26	27	20	11	7.0	97	130	164	103
MIN	17	5.7	3.4	1.6	0.28	1.4	1.1	4.0	4.0	13	41	37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

MEAN	38.1	26.5	23.2	27.1	26.1	28.9	23.6	16.8	31.6	52.8	62.5	59.9
MAX	123	160	129	79.9	137	108	89.8	57.4	113	157	171	122
(WY)	1996	1995	1998	1986	1998	1998	1987	1991	1994	1974	1994	1994
MIN	5.52	1.98	2.74	1.29	5.20	2.45	2.50	3.90	4.25	11.2	12.0	11.8
(WY)	2001	2001	2001	2001	2002	2000	2000	2000	1998	2000	1999	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL	8141.26		9976.40			
ANNUAL MEAN	22.3		27.3		35.1	
HIGHEST ANNUAL MEAN					60.4	1995
LOWEST ANNUAL MEAN					18.4	1990
HIGHEST DAILY MEAN	290	Sep 16	164	Aug 21	638	Nov 16 1994
LOWEST DAILY MEAN	0.13	Jan 18	0.28	Feb 8	0.13	Jan 18 2001
ANNUAL SEVEN-DAY MINIMUM	0.21	Jan 12	0.62	Feb 14	0.21	Jan 12 2001
MAXIMUM PEAK FLOW			285	Aug 28	*1070	Nov 16 1994
MAXIMUM PEAK STAGE			27.64	Jul 13	*30.58	Nov 16 1994
INSTANTANEOUS LOW FLOW			0.14	Feb 8	0.10	Jun 3 1999
10 PERCENT EXCEEDS	50		90		80	
50 PERCENT EXCEEDS	9.0		11		20	
90 PERCENT EXCEEDS	1.3		2.3		6.6	

e Estimated
* From floodmark

02234998 LITTLE WEKIVA RIVER NEAR LONGWOOD, FL

LOCATION.--Lat 28°42'12", long 81°23'32", in SW¼ sec.35, T.20 S., R.29 E., Seminole County, Hydrologic Unit 03080101, on downstream side of bridge on Springs Landing Road, 0.4 mi west of Markham Woods Road, 1.0 mi north of State Highway 434, 3.1 mi west of Longwood, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--94.1 mi^2.

PERIOD OF RECORD.--June 1995 to March 2002 (discontinued).

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (levels by Seminole County Engineer).

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD OCTOBER 2001 TO MARCH 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	67	55	50	44	71	---	---	---	---	---	---
2	151	70	53	78	45	68	---	---	---	---	---	---
3	132	84	51	55	42	60	---	---	---	---	---	---
4	123	70	52	62	42	67	---	---	---	---	---	---
5	117	74	57	51	42	70	---	---	---	---	---	---
6	115	80	57	49	45	60	---	---	---	---	---	---
7	106	70	52	62	43	56	---	---	---	---	---	---
8	114	63	54	74	41	57	---	---	---	---	---	---
9	120	62	50	61	44	55	---	---	---	---	---	---
10	97	64	48	69	40	50	---	---	---	---	---	---
11	92	59	52	74	41	47	---	---	---	---	---	---
12	89	57	50	73	41	---	---	---	---	---	---	---
13	90	63	50	70	44	---	---	---	---	---	---	---
14	95	71	50	76	40	---	---	---	---	---	---	---
15	108	61	50	85	40	---	---	---	---	---	---	---
16	112	67	50	69	40	---	---	---	---	---	---	---
17	91	59	49	68	40	---	---	---	---	---	---	---
18	86	56	49	71	39	---	---	---	---	---	---	---
19	89	57	49	80	39	---	---	---	---	---	---	---
20	88	63	48	74	42	---	---	---	---	---	---	---
21	84	59	47	72	44	---	---	---	---	---	---	---
22	86	55	47	e72	48	---	---	---	---	---	---	---
23	96	54	47	e70	69	---	---	---	---	---	---	---
24	81	56	46	e65	79	---	---	---	---	---	---	---
25	87	54	49	e55	73	---	---	---	---	---	---	---
26	80	54	48	e76	85	---	---	---	---	---	---	---
27	83	60	47	e48	79	---	---	---	---	---	---	---
28	74	54	45	e46	74	---	---	---	---	---	---	---
29	75	53	49	e66	---	---	---	---	---	---	---	---
30	88	53	46	e60	---	---	---	---	---	---	---	---
31	74	---	46	44	---	---	---	---	---	---	---	---
TOTAL	3071	1869	1543	2025	1385	---	---	---	---	---	---	---
MEAN	99.1	62.3	49.8	65.3	49.5	---	---	---	---	---	---	---
MAX	151	84	57	85	85	---	---	---	---	---	---	---
MIN	74	53	45	44	39	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

MEAN	111	66.1	74.3	73.8	67.8	79.7	53.5	39.7	67.7	95.7	91.7	129
MAX	208	99.4	206	142	195	195	119	78.9	136	143	176	205
(WY)	1996	1996	1998	1998	1998	1998	1996	1996	1996	1996	1995	2001
MIN	25.7	22.9	23.7	21.1	19.6	22.5	21.9	17.9	30.1	34.1	33.0	40.6
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		#FOR 2002 WATER YEAR		#WATER YEARS 1995 - 2002	
ANNUAL TOTAL	20977					
ANNUAL MEAN	57.5				77.9	
HIGHEST ANNUAL MEAN					122	1996
LOWEST ANNUAL MEAN					45.8	2001
HIGHEST DAILY MEAN			151	Oct 2	648	Dec 29 1997
LOWEST DAILY MEAN	502	Sep 16	39	Feb 18,19	14	May 20,21,24 2001
ANNUAL SEVEN-DAY MINIMUM	14	May 20,21,24	40	Feb 14	15	May 18 2001
MAXIMUM PEAK FLOW	15	May 18			661	Dec 29 1997
MAXIMUM PEAK STAGE					22.47	Sep 18 1999
INSTANTANEOUS LOW FLOW					13	May 24 2001
10 PERCENT EXCEEDS			91		163	
50 PERCENT EXCEEDS			60		57	
90 PERCENT EXCEEDS			44		25	

e Estimated
Includes partial year(s) of record

022349993 WEKIVA RIVER AT OLD R.R. CROSSING NEAR SANFORD, FL

LOCATION.--Lat 28°47'33", long 81°24'49", in SE¼ sec.33, T.19 S., R.29 E., Lake County, Hydrologic Unit 03080101, near right bank, 40 ft upstream from abandoned railroad crossing, 0.4 mi west of Markham Woods Road, 2.5 mi downstream from Little Wekiva River, 8.3 mi upstream from mouth, and 8.5 mi southwest of Sanford.

DRAINAGE AREA.--185 mi^2.

PERIOD OF RECORD.--July 1995 to March 2002 (discontinued).

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 6.75 ft above NGVD of 1929 (Seminole County bench mark).

REMARKS.--Records fair. Flow includes large ground-water inflow.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD OCTOBER 2001 TO MARCH 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	e197	205	182	181	221	---	---	---	---	---	---
2	211	e196	207	209	179	212	---	---	---	---	---	---
3	206	e200	207	258	177	208	---	---	---	---	---	---
4	205	e202	207	260	178	222	---	---	---	---	---	---
5	199	e206	207	250	176	228	---	---	---	---	---	---
6	193	e202	207	238	177	221	---	---	---	---	---	---
7	189	e200	207	230	177	213	---	---	---	---	---	---
8	189	e198	207	220	181	205	---	---	---	---	---	---
9	192	e195	206	214	182	202	---	---	---	---	---	---
10	193	e193	202	207	180	198	---	---	---	---	---	---
11	191	e196	200	204	181	192	---	---	---	---	---	---
12	186	e198	201	203	181	---	---	---	---	---	---	---
13	183	e206	201	202	181	---	---	---	---	---	---	---
14	188	e230	200	203	182	---	---	---	---	---	---	---
15	212	e228	200	221	180	---	---	---	---	---	---	---
16	214	e226	200	224	180	---	---	---	---	---	---	---
17	212	224	198	219	180	---	---	---	---	---	---	---
18	205	220	199	212	178	---	---	---	---	---	---	---
19	199	215	200	205	176	---	---	---	---	---	---	---
20	202	214	197	205	175	---	---	---	---	---	---	---
21	205	213	192	203	174	---	---	---	---	---	---	---
22	211	213	189	198	178	---	---	---	---	---	---	---
23	212	210	191	198	212	---	---	---	---	---	---	---
24	212	208	187	192	261	---	---	---	---	---	---	---
25	213	207	186	189	267	---	---	---	---	---	---	---
26	214	207	192	190	257	---	---	---	---	---	---	---
27	209	205	187	190	241	---	---	---	---	---	---	---
28	206	207	184	187	231	---	---	---	---	---	---	---
29	201	206	184	186	---	---	---	---	---	---	---	---
30	e199	205	184	185	---	---	---	---	---	---	---	---
31	e197	---	183	184	---	---	---	---	---	---	---	---
TOTAL	6266	6227	6117	6468	5403	---	---	---	---	---	---	---
MEAN	202	208	197	209	193	---	---	---	---	---	---	---
MAX	218	230	207	260	267	---	---	---	---	---	---	---
MIN	183	193	183	182	174	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

MEAN	306	228	245	262	240	272	225	187	206	240	261	314
MAX	464	291	428	449	480	500	444	289	338	321	480	441
(WY)	1996	1996	1998	1996	1998	1998	1996	1996	1996	1996	1995	1995
MIN	172	147	147	136	129	147	149	130	141	154	162	197
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		#FOR 2002 WATER YEAR		#WATER YEARS 1995 - 2002	
ANNUAL TOTAL	70925					
ANNUAL MEAN	194				248	
HIGHEST ANNUAL MEAN					352	1996
LOWEST ANNUAL MEAN						2001
HIGHEST DAILY MEAN	968	Sep 16	267	Feb 25	1070	Apr 1 1996
LOWEST DAILY MEAN	120	May 25	174	Feb 21	120	May 25 2001
ANNUAL SEVEN-DAY MINIMUM	121	May 19	177	Feb 16	121	May 19 2001
MAXIMUM PEAK FLOW					1090	Apr 1 1996
MAXIMUM PEAK STAGE					4.98	Sep 15 2001
INSTANTANEOUS LOW FLOW					119	May 24,25 2001
10 PERCENT EXCEEDS	270		223		397	
50 PERCENT EXCEEDS	172		202		213	
90 PERCENT EXCEEDS	129		181		148	

e Estimated
Includes partial year(s) of record

02235000 WEKIVA RIVER NEAR SANFORD, FL

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

DRAINAGE AREA.--189 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 4.96 ft above NGVD of 1929. Prior to Jan. 19, 1960, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow includes large ground-water inflow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	262	243	216	240	267	194	193	207	554	555	658
2	295	263	240	248	238	258	196	191	205	578	513	695
3	286	272	238	292	237	253	196	190	200	555	491	655
4	280	277	235	294	236	266	202	189	197	505	475	606
5	272	284	234	285	236	267	212	189	194	458	459	611
6	265	281	235	274	237	260	207	188	192	418	437	575
7	260	277	234	267	236	249	201	188	194	379	458	538
8	263	276	231	261	240	242	197	190	195	370	492	515
9	263	276	227	257	241	238	196	188	200	398	485	493
10	262	275	221	253	240	233	195	186	199	394	463	462
11	261	274	219	251	241	228	195	188	196	353	433	438
12	254	274	218	251	239	223	195	187	202	320	414	418
13	250	271	215	253	239	223	202	186	205	351	431	414
14	257	276	209	259	238	220	209	188	208	507	498	415
15	283	282	207	279	237	217	215	189	211	516	559	405
16	282	283	204	283	236	215	216	188	208	490	580	391
17	277	283	201	279	237	213	216	190	209	447	547	373
18	270	280	204	275	235	210	210	190	230	403	526	360
19	264	278	207	269	235	209	204	191	241	359	500	357
20	269	273	204	264	233	207	200	193	246	327	479	359
21	272	272	202	263	233	207	198	196	250	367	463	355
22	277	267	204	260	237	205	196	197	246	445	453	348
23	278	261	205	259	264	205	195	193	258	503	449	353
24	277	260	207	253	314	203	195	192	313	508	442	417
25	281	258	210	250	323	202	192	192	311	489	426	472
26	280	254	215	250	314	201	192	191	311	455	413	471
27	272	250	212	249	297	200	197	194	333	428	434	465
28	266	251	212	246	279	200	198	194	325	427	433	443
29	263	249	214	244	---	198	195	195	372	513	427	418
30	263	244	215	243	---	197	193	198	481	610	468	390
31	265	---	214	242	---	195	---	203	---	611	596	---
TOTAL	8411	8083	6736	8069	7012	6911	6009	5927	7339	14038	14799	13870
MEAN	271	269	217	260	250	223	200	191	245	453	477	462
MAX	304	284	243	294	323	267	216	203	481	611	596	695
MIN	250	244	201	216	233	195	192	186	192	320	413	348

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2002, BY WATER YEAR (WY)

MEAN	313	263	262	284	289	289	254	227	259	313	329	361
MAX	699	711	526	567	583	681	506	324	514	654	578	1030
(WY)	1961	1995	1970	1970	1998	1960	1996	1991	1968	1974	1969	1960
MIN	200	182	177	169	164	165	165	158	160	174	181	201
(WY)	1982	1936	1991	1991	1991	1939	1938	1939	1950	1950	2000	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1936 - 2002	
ANNUAL TOTAL	88424		107204			
ANNUAL MEAN	242		294		287	
HIGHEST ANNUAL MEAN					454	1960
LOWEST ANNUAL MEAN					203	1981
HIGHEST DAILY MEAN	1040	Sep 16	695	Sep 2	2060	Sep 17 1945
LOWEST DAILY MEAN	150	May 10	186	May 10,13	105	Jun 5-13 1939
ANNUAL SEVEN-DAY MINIMUM	152	May 7	187	May 9	105	Jun 5 1939
MAXIMUM PEAK FLOW			707	Sep 2	2060	Sep 17 1945
MAXIMUM PEAK STAGE			3.29	Sep 2	6.09	Sep 12 1960
10 PERCENT EXCEEDS	326		477		414	
50 PERCENT EXCEEDS	209		254		250	
90 PERCENT EXCEEDS	169		195		194	

02235000 WEKIVA RIVER NEAR SANFORD, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1932-35, 1954, 1965-71, 1973-77, 1980-84, 1993, 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV													
07...	1315	277	2.19	408	445	8.7	8.2	22.1	.75	20	10.7	<1	.02
FEB													
14...	1140	239	1.83	452	546	8.1	8.2	17.9	.94	10	10.2	<1	.02
MAY													
09...	0848	184	1.68	525	498	7.8	8.1	25.4	1.1	10	8.2	3	<.01
AUG													
27...	0810	414	2.60	368	409	6.8	7.5	25.4	3.1	280	3.5	7	.02

Date	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SULFIDE TOTAL (MG/L AS S) (00745)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)
NOV													
07...	.03	<.010	E.40	.63	E.13	.11	8.7	<1.0	.110	160	44.0	12.0	26.0
FEB													
14...	.02	<.010	.40	.55	.07	.09	5.1	<1.0	.090	180	47.0	14.0	37.0
MAY													
09...	<.01	<.010	.30	.24	.09	.08	3.0	<1.0	.080	170	46.0	14.0	33.0
AUG													
27...	.02	<.010	1.5	.25	.16	.13	29.0	2.0	.130	150	41.0	11.0	27.0

Date	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV												
07...	2.40	E111	40.0	47.0	9.30	266	<.1	.2	9.4	400	49	28
FEB												
14...	2.20	114	54.0	69.0	8.40	321	6.1	.3	9.5	540	27	10
MAY												
09...	1.90	116	43.0	58.0	6.40	283	<.1	.3	9.5	460	21	4
AUG												
27...	2.30	90	38.0	47.0	9.60	299	<.1	.3	10.0	540	593	473

< -- Less than
E -- Estimated value

02235200 BLACK WATER CREEK NEAR CASSIA, FL

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

DRAINAGE AREA.--126 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 18.55 ft above NGVD of 1929 (Florida Department of Transportation bench mark). Sept. 20, 1962 to Aug. 7, 1967, and Oct. 1, 1969 to Mar. 23, 1981, crest-stage gage; Aug. 7, 1967 to Sept. 30, 1969 and Mar. 23, 1981 to June 10, 1983, water-stage recorder; June 10, 1983 to June 10, 1985, nonrecording gage at site 1,000 ft upstream at same datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	81	69	31	50	45	32	14	7.3	49	70	173
2	240	81	68	34	49	44	31	14	7.1	88	70	168
3	223	88	66	39	48	44	30	13	6.8	94	81	159
4	211	89	64	39	47	54	30	13	6.5	81	88	155
5	199	96	61	38	45	58	30	12	6.2	69	87	173
6	188	97	59	38	43	59	29	12	6.4	66	84	177
7	181	95	57	37	43	60	28	12	8.2	59	87	171
8	178	92	56	36	43	65	27	12	7.9	54	96	162
9	177	88	54	36	42	69	26	11	7.3	50	93	160
10	165	84	53	36	41	72	25	11	6.6	46	88	155
11	154	80	52	35	41	73	24	10	6.3	42	83	150
12	148	76	52	35	40	73	23	9.9	6.1	39	83	145
13	142	74	50	35	40	74	24	9.7	5.9	41	96	141
14	136	87	49	37	39	74	24	9.4	5.8	51	120	140
15	135	95	47	42	38	71	26	9.0	5.6	54	158	135
16	135	93	46	42	38	68	25	8.7	5.4	55	188	129
17	134	95	44	42	37	64	24	8.5	6.0	55	176	123
18	130	97	43	42	36	61	23	8.4	6.6	55	162	118
19	126	96	41	41	36	59	22	8.4	7.7	54	152	111
20	129	95	40	42	35	56	21	8.4	8.8	55	145	105
21	125	94	39	42	35	53	20	8.1	11	65	139	101
22	122	91	38	43	35	51	19	7.8	12	86	129	99
23	120	88	37	44	40	48	19	7.5	15	83	123	100
24	117	86	36	46	50	45	18	7.2	17	76	114	109
25	115	84	36	47	51	43	18	7.0	20	71	107	131
26	117	82	35	49	50	41	17	7.0	20	72	100	133
27	109	79	34	49	49	39	17	7.4	18	89	103	126
28	102	76	33	49	47	38	16	8.3	16	93	111	121
29	95	74	33	50	---	36	15	7.7	23	88	132	117
30	90	72	33	50	---	34	14	7.3	34	82	156	114
31	85	---	32	50	---	33	---	7.2	---	76	173	---
TOTAL	4588	2605	1457	1276	1188	1704	697	296.9	320.5	2038	3594	4101
MEAN	148	86.8	47.0	41.2	42.4	55.0	23.2	9.58	10.7	65.7	116	137
MAX	260	97	69	50	51	74	32	14	34	94	188	177
MIN	85	72	32	31	35	33	14	7.0	5.4	39	70	99
CFSM	1.17	0.69	0.37	0.33	0.34	0.44	0.18	0.08	0.08	0.52	0.92	1.08
IN.	1.35	0.77	0.43	0.38	0.35	0.50	0.21	0.09	0.09	0.60	1.06	1.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2002, BY WATER YEAR (WY)

MEAN	83.3	55.8	51.0	66.5	63.7	72.0	59.5	24.2	27.2	37.4	53.6	106
MAX	269	278	203	261	242	273	214	79.3	142	130	160	418
(WY)	1969	1995	1995	1998	1998	1998	1984	1991	1991	1991	1969	1968
MIN	3.15	2.28	2.28	3.94	4.68	8.27	9.52	4.84	2.66	4.60	5.06	3.31
(WY)	1991	1991	1991	1991	1991	2001	1999	2000	2000	2000	1990	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1967 - 2002	
ANNUAL TOTAL	21632.4		23865.4			
ANNUAL MEAN	59.3		65.4		58.4	
HIGHEST ANNUAL MEAN					118	1995
LOWEST ANNUAL MEAN					15.7	1981
HIGHEST DAILY MEAN	776	Sep 17	260	Oct 1	776	Sep 17 2001
LOWEST DAILY MEAN	4.3	Jan 6,7	5.4	Jun 16	2.0	Nov 20-24 1990
ANNUAL SEVEN-DAY MINIMUM	4.4	Jan 3	5.9	Jun 11	2.0	Nov 18 1990
MAXIMUM PEAK FLOW			270	Oct 1	783	Sep 17 2001
MAXIMUM PEAK STAGE			7.78	Oct 1	9.93	Sep 1 1968
INSTANTANEOUS LOW FLOW			5.4	Jun 16		
ANNUAL RUNOFF (CFSM)	0.47		0.52		0.46	
ANNUAL RUNOFF (INCHES)	6.39		7.05		6.30	
10 PERCENT EXCEEDS	127		137		144	
50 PERCENT EXCEEDS	15		50		31	
90 PERCENT EXCEEDS	5.6		8.9		7.6	

02235200 BLACK WATER CREEK NEAR CASSIA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-71, 1973-74, 1978-84, 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV													
07...	0945	95	6.74	198	199	6.0	7.0	17.5	1.0	560	1.2	<1	.07
FEB													
13...	1319	40	5.97	230	227	6.4	6.8	16.1	2.6	480	4.6	2	.05
MAY													
09...	1028	11	5.10	271	272	7.0	7.3	24.2	3.9	480	4.9	2	<.01
AUG													
27...	1105	105	6.92	179	174	5.4	6.7	24.3	4.8	640	2.9	4	.02

Date	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SULFIDE TOTAL (MG/L AS S) (00745)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)
NOV													
07...	E.13	<.010	E2.5	<.02	E.05	.03	73.0	4.0	E.050	93	27.0	6.00	7.5
FEB													
13...	.04	.010	2.1	.09	.04	.04	47.0	<1.0	.020	100	29.0	6.90	7.9
MAY													
09...	<.01	.010	1.9	.40	.05	.05	46.0	3.0	.050	120	36.0	8.00	8.3
AUG													
27...	.02	.020	2.3	.03	.04	.02	60.0	5.0	.030	80	23.0	5.30	8.0

Date	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV												
07...	1.90	E25	39.0	13.0	11.0	281	<.1	.1	13.0	410	1670	1330
FEB												
13...	1.50	33	48.0	14.0	11.0	252	<.1	.1	15.0	410	1260	1010
MAY												
09...	1.60	45	56.0	15.0	13.0	272	<.1	.1	18.0	530	1190	848
AUG												
27...	1.40	28	25.0	15.0	13.0	256	<.1	.1	13.0	380	1580	1090

< -- Less than
E -- Estimated value

02235500 BLUE SPRINGS NEAR ORANGE CITY, FL

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

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1932 to September 1998 (discharge measurements only), November 1998 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929. Prior to Dec. 7, 2001 at site 250 ft downstream at same datum. November 1998 to September 1999 at datum 0.74 ft lower. Prior to November 23, 1998, nonrecording gage at site 30 ft downstream at datum 0.74 ft lower.

REMARKS.--Records fair. Discharge affected by backwater from St. Johns River. Discharge record for Oct. 1 to Dec. 7, 2001 not published due to bad velocity-meter data.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	161	166	159	154	152	141	135	140	148
2	---	---	---	162	166	158	e154	152	141	136	140	149
3	---	---	---	158	166	158	e154	153	140	136	140	148
4	---	---	---	155	166	157	e153	150	141	138	142	151
5	---	---	---	156	163	158	153	148	139	137	142	149
6	---	---	---	161	164	158	150	148	139	136	143	148
7	---	---	---	161	167	158	150	148	140	137	140	149
8	---	---	162	159	165	159	151	147	146	137	139	148
9	---	---	161	159	165	157	153	147	146	136	138	148
10	---	---	162	164	164	157	153	145	145	138	141	151
11	---	---	161	169	163	157	153	144	146	138	141	151
12	---	---	160	170	165	156	153	145	144	140	144	149
13	---	---	161	168	167	157	153	145	142	142	140	150
14	---	---	161	168	166	154	153	144	140	140	141	150
15	---	---	160	166	163	156	153	143	142	139	140	151
16	---	---	161	168	164	156	153	142	141	140	140	149
17	---	---	163	169	163	155	154	143	139	141	141	151
18	---	---	163	166	163	156	153	144	135	140	142	150
19	---	---	162	168	164	156	155	141	130	140	148	149
20	---	---	162	167	167	158	155	140	129	139	148	151
21	---	---	162	165	163	158	155	137	131	138	143	150
22	---	---	161	163	161	157	155	137	129	138	144	151
23	---	---	164	163	157	154	154	138	128	138	147	151
24	---	---	164	164	157	155	153	138	128	137	147	151
25	---	---	162	165	158	155	154	138	130	139	149	154
26	---	---	162	167	160	154	153	138	131	142	149	154
27	---	---	161	166	158	153	151	138	132	141	149	155
28	---	---	165	166	159	153	151	138	132	140	147	152
29	---	---	165	166	---	154	151	139	134	141	147	150
30	---	---	163	167	---	154	152	139	132	141	147	153
31	---	---	162	167	---	154	---	139	---	142	147	---
TOTAL	---	---	3890	5094	4570	4841	4589	4440	4113	4302	4446	4511
MEAN	---	---	162	164	163	156	153	143	137	139	143	150
MAX	---	---	165	170	167	159	155	153	146	142	149	155
MIN	---	---	160	155	157	153	150	137	128	135	138	148

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	112	115	138	142	142	141	148	127	129	128	127	131
MAX	125	162	162	164	163	158	155	143	137	139	143	150
(WY)	2000	1999	2002	2002	2002	2000	1999	2002	2002	2002	2002	2002
MIN	99.0	91.8	98.6	105	110	114	130	106	112	108	93.4	101
(WY)	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		#WATER YEARS 1999 - 2002	
ANNUAL TOTAL	13767		44796			
ANNUAL MEAN	121		151		133	
HIGHEST ANNUAL MEAN					151	2002
LOWEST ANNUAL MEAN					103	2001
HIGHEST DAILY MEAN	165	Dec 28	170	Jan 12	201	Nov 28 1998
LOWEST DAILY MEAN	83	Feb 2	128	Jun 23,24	49	Nov 7 2000
ANNUAL SEVEN-DAY MINIMUM	93	Jan 11	129	Jun 19	71	Nov 2 2000
MAXIMUM PEAK STAGE			4.56	Sep 13	4.65	Nov 2 1999
10 PERCENT EXCEEDS	162		165		163	
50 PERCENT EXCEEDS	112		151		138	
90 PERCENT EXCEEDS	94		138		98	

e Estimated
Includes partial year(s) record

02235500 BLUE SPRINGS NEAR ORANGE CITY, FL

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1964-94, 1998 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1998 to current year.
WATER TEMPERATURE: December 1998 to current year.

INSTRUMENTATION.--Water-quality monitor and data-collection platform.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 2,150 µS/cm @ 25 °C, Sept. 18, 2001; minimum daily mean, 980 µS/cm @ 25 °C, April 26,27, 2002.
WATER TEMPERATURE: Maximum daily mean, 23.5°C, April 17, 2000; minimum daily mean, 22.5°C, Dec. 20, 2000.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 1,660 µS/cm @ 25 °C, Oct. 2; minimum daily mean, 980 µS/cm @ 25 °C, Apr. 26,27.
WATER TEMPERATURE: Maximum daily mean, 23.2 °C, May 4; minimum daily mean, 22.9°C, Oct. 26-29, Nov. 6-10, 12,14,15, May 22, 23.

REMARKS.--Extremes may have been exceeded during periods of missing record.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	1310	---	---	---	---	---	1370	1310	1410	1320	---
2	1660	1310	---	---	---	---	---	1360	1310	1410	1310	---
3	1640	1300	---	---	---	---	---	1340	1310	1420	1300	---
4	1620	1300	---	---	---	---	---	1330	1310	1420	1290	---
5	1600	1300	---	---	---	---	---	1300	1310	1420	1280	---
6	1590	1300	---	---	---	---	---	1300	1320	1440	1280	---
7	1560	1300	---	---	---	---	---	1320	1310	1450	1280	---
8	1540	1300	---	---	---	---	---	1260	1320	1450	---	---
9	1510	1290	---	---	---	---	---	1240	1310	1450	---	---
10	1510	1290	---	---	---	---	---	1250	1320	1410	---	---
11	1490	1290	---	---	---	---	---	1200	1320	1390	---	---
12	1480	1280	---	---	---	---	---	1260	1320	1350	---	---
13	1460	1270	---	---	---	---	---	1340	1330	1370	---	---
14	1450	1270	---	---	---	---	---	1310	1330	1360	---	---
15	1450	1270	---	---	---	---	---	---	1330	1350	---	---
16	1450	1270	---	---	---	---	1420	---	1330	1350	---	---
17	1440	1270	---	---	---	---	1410	---	1330	1350	---	---
18	1420	1270	---	---	---	---	1390	---	1340	---	---	---
19	1420	1260	---	---	---	---	1370	---	1340	---	---	---
20	1400	1260	---	---	---	---	1330	---	1340	---	---	---
21	1390	1250	---	---	---	---	1240	---	1330	---	---	---
22	1380	1250	---	---	---	---	1180	1310	1340	---	---	---
23	1370	1260	---	---	---	---	1110	1310	1340	---	---	---
24	1350	1260	---	---	---	---	1080	1310	1360	---	---	---
25	1360	1250	---	---	---	---	1020	1310	1360	---	---	---
26	1330	1250	---	---	---	---	980	1310	1370	---	---	---
27	1320	---	---	---	---	---	980	1300	1370	---	---	---
28	1320	---	---	---	---	---	1150	1290	1370	---	---	---
29	1320	---	---	---	---	---	1390	1290	1390	---	---	---
30	1320	---	---	---	---	---	1380	1310	1390	---	---	---
31	1310	---	---	---	---	---	---	1310	---	---	---	---
MEAN	1450	---	---	---	---	---	---	---	1340	---	---	---
MAX	1660	---	---	---	---	---	---	---	1390	---	---	---
MIN	1310	---	---	---	---	---	---	---	1310	---	---	---

02235500 BLUE SPRINGS NEAR ORANGE CITY, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	23.0	---	---	---	---	---	23.1	23.0	23.0	23.0	---
2	23.0	23.0	---	---	---	---	---	23.1	23.1	23.0	23.0	---
3	23.1	23.1	---	---	---	---	---	23.1	23.1	23.1	23.0	---
4	23.1	23.0	---	---	---	---	---	23.2	23.1	23.1	23.1	---
5	23.1	23.0	---	---	---	---	---	23.1	23.1	23.0	23.1	---
6	23.1	22.9	---	---	---	---	---	23.0	23.1	23.1	23.1	---
7	23.1	22.9	---	---	---	---	---	23.0	23.1	23.1	23.1	---
8	23.1	22.9	---	---	---	---	---	23.1	23.0	23.1	---	---
9	23.1	22.9	---	---	---	---	---	23.1	23.1	23.1	---	---
10	23.1	22.9	---	---	---	---	---	23.1	23.1	23.0	---	---
11	23.1	23.0	---	---	---	---	---	23.1	23.0	23.1	---	---
12	23.1	22.9	---	---	---	---	---	23.1	23.1	23.1	---	---
13	23.1	23.0	---	---	---	---	---	23.1	23.1	23.1	---	---
14	23.1	22.9	---	---	---	---	---	23.0	23.1	23.1	---	---
15	23.1	22.9	---	---	---	---	---	---	23.1	23.1	---	---
16	23.1	23.0	---	---	---	---	23.0	---	23.0	23.1	---	---
17	23.0	23.0	---	---	---	---	23.0	---	23.0	23.1	---	---
18	23.0	23.0	---	---	---	---	23.0	---	23.0	---	---	---
19	23.1	23.0	---	---	---	---	23.0	---	23.0	---	---	---
20	23.1	23.0	---	---	---	---	23.1	---	23.0	---	---	---
21	23.1	23.0	---	---	---	---	23.1	---	23.0	---	---	---
22	23.1	23.0	---	---	---	---	23.1	22.9	23.0	---	---	---
23	23.1	23.0	---	---	---	---	23.0	22.9	23.0	---	---	---
24	23.1	23.0	---	---	---	---	23.0	23.0	23.0	---	---	---
25	23.1	23.0	---	---	---	---	23.1	23.0	23.0	---	---	---
26	22.9	23.0	---	---	---	---	23.1	23.0	23.1	---	---	---
27	22.9	---	---	---	---	---	23.1	23.0	23.0	---	---	---
28	22.9	---	---	---	---	---	23.1	23.0	23.0	---	---	---
29	22.9	---	---	---	---	---	23.0	23.0	23.1	---	---	---
30	23.0	---	---	---	---	---	23.1	23.1	23.0	---	---	---
31	23.0	---	---	---	---	---	---	23.1	---	---	---	---
MEAN	23.1	---	---	---	---	---	---	---	23.0	---	---	---
MAX	23.1	---	---	---	---	---	---	---	23.1	---	---	---
MIN	22.9	---	---	---	---	---	---	---	23.0	---	---	---

02235500 BLUE SPRINGS NEAR ORANGE CITY, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
DEC													
18...	1215	168	--	1280	7.3	23.0	<5	.3	.02	<.01	<.20	.730	E.05
APR													
15...	1403	156	.88	1430	7.1	23.2	<5	1.5	.03	<.01	<.20	.580	.04
JUN													
05...	1230	142	1.03	1310	--	23.1	5	--	.02	<.01	<.20	.520	.06
SEP													
24...	1330	149	4.00	982	7.0	23.2	<5	--	<.01	<.01	<.20	.790	.04

Date	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
DEC													
18...	E.070	240	63.0	21.0	150	6.30	141	46.0	290	<.1	8.30	E709	770
APR													
15...	.070	250	62.0	22.0	170	6.80	139	53.0	330	<.1	8.30	784	800
JUN													
05...	.080	240	61.0	21.0	160	6.20	138	47.0	300	<.1	8.20	728	780
SEP													
24...	.060	200	57.0	15.0	110	4.80	140	33.0	200	<.1	7.90	553	620

< -- Less than
E -- Estimated value

02236000 ST. JOHNS RIVER NEAR DE LAND, FL

LOCATION (REVISED).--Lat 29°00'29", long 81°22'58", in land grant 38, T.17 S., R.29 E., Lake County, Hydrologic Unit 03080101, attached to fender pilings near center of channel under Francis P. Whitehair Bridge on State Highway 44 , 5 mi west of DeLand, and 142 mi upstream from mouth.

DRAINAGE AREA.--3,066 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR FL-75-1: Drainage area, WDR FL-96-1A: 1995.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 0.09 ft below NGVD of 1929. Prior to May 28, 1936, nonrecording gage at site of former Crows Bluff Bridge about 1,000 ft downstream and May 28, 1936 to July 21, 1970, water-stage recorder at site 0.4 mi downstream at datum 1.11 ft lower. July 22, 1970 to Sept. 30, 1993, water-stage recorder at present site and datum. Oct. 1, 1993 to April 4, 2000, water-stage recorder near right bank 100 ft upstream. Oct. 1, 1959 to Sept. 30, 1975, Oct. 1, 1984 to Mar. 21, 1986, June 16 to Sept. 23, 1991, and Oct. 1, 1992 to Sept. 30, 1993, water-stage recorder for St. Johns River near Sanford (station 02234500) used as auxiliary gage for this station.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10500	6880	6340	2830	1560	2370	633	726	337	e4060	e7340	e9070
2	9960	6990	6190	2880	1260	2930	571	1100	932	e4640	e7410	e9010
3	9690	7180	6010	2330	828	2640	666	1660	1320	e4890	e7630	e8890
4	9880	7150	5740	2360	-64	1490	912	1640	1270	e5020	e7670	e8710
5	9910	6700	5510	2910	274	1940	-150	854	623	e5140	e7620	e8810
6	9890	6260	5400	3230	1290	2620	-403	-320	328	e5280	e7580	e8840
7	9920	6340	5350	3060	1330	2570	471	-367	420	e5410	e7560	e8850
8	9800	6490	5370	3300	400	2700	1270	345	560	e5410	e7460	e8780
9	9830	6670	5380	3440	1520	2700	1710	849	-509	e5420	e7290	e8710
10	9710	6750	5250	3460	1560	2620	1580	1120	-851	e5500	e7180	e8520
11	9680	6610	5050	3460	1290	2670	1370	1160	-1140	e5560	e7050	e8500
12	9470	6550	4840	3430	1580	2710	991	1060	-682	e5880	e7060	e8490
13	9950	6280	4780	3070	638	2220	1060	637	689	e5890	e7160	e8630
14	9940	5920	4760	2940	804	2350	782	-500	1050	e6300	e7550	e8500
15	9340	4670	4610	2500	994	2450	1040	560	1510	e6380	e7900	e8480
16	8570	4120	4610	2520	603	2490	1410	501	1530	e6390	e8120	e8470
17	8090	4490	4560	2380	352	2520	1420	375	1350	e6390	e8260	e8430
18	7930	4800	4270	2140	943	2520	1380	411	1160	e6460	e8260	e8400
19	7750	5250	4360	2480	1330	2560	1440	-561	1190	e6460	e8590	e8380
20	7580	5650	4180	2440	1820	2260	1410	-2220	717	e6330	e8930	e8110
21	7450	5910	4010	2450	1810	1800	1380	-2350	e700	e6170	e9070	e8090
22	7590	6170	4050	2240	1580	1090	711	-2360	e1260	e6300	e9140	e7950
23	7590	6270	4010	2220	211	253	206	-2520	e1540	e6560	e9120	e7870
24	7750	6330	3820	2220	927	845	390	-2130	e1860	e6710	e9190	e7930
25	7750	6440	3570	2100	1560	1380	339	-891	e2180	e6710	e9180	e7880
26	7630	6550	3180	1560	1760	1370	-189	-314	e2300	e6660	e9170	e7820
27	7460	6500	3490	1350	591	1080	316	170	e2480	e6760	e9100	e7670
28	7180	6450	3720	1230	1730	1080	226	-562	e2790	e6940	e9150	e7660
29	6670	6390	3670	1500	---	1220	-166	-1320	e3000	e7130	e9210	e7640
30	6580	6420	3360	1720	---	1370	943	-650	e3220	e7190	e9180	e7560
31	6780	---	3110	1750	---	1330	---	e205	---	e7260	e9120	---
TOTAL	267820	185180	142550	77500	30481	62148	23719	-3692	33134	187200	254250	250650
MEAN	8639	6173	4598	2500	1089	2005	791	-119	1104	6039	8202	8355
MAX	10500	7180	6340	3460	1820	2930	1710	1660	3220	7260	9210	9070
MIN	6580	4120	3110	1230	-64	253	-403	-2520	-1140	4060	7050	7560
CFSM	2.81	2.01	1.50	0.81	0.35	0.65	0.26	-0.04	0.36	1.97	2.67	2.72
IN.	3.25	2.24	1.73	0.94	0.37	0.75	0.29	-0.04	0.40	2.27	3.08	3.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2002, BY WATER YEAR (WY)

MEAN	4903	4380	3295	2770	2494	2551	2382	1521	1759	2950	3486	4047
MAX	15800	10680	8528	8509	7106	9912	9811	5170	7004	11750	10280	12060
(WY)	1954	1954	1995	1998	1998	1998	1960	1983	1934	1968	1960	1960
MIN	446	251	234	763	591	256	284	-119	229	316	234	405
(WY)	1982	1981	1981	1939	1982	2000	1999	2002	1962	2000	2000	1958

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1934 - 2002	
ANNUAL TOTAL	1065345.8		1510940			
ANNUAL MEAN	2919		4140		3048	
HIGHEST ANNUAL MEAN					6433	1960
LOWEST ANNUAL MEAN					743	1981
HIGHEST DAILY MEAN	11800	Sep 27,28	10500	Oct 1	17100	Oct 15 1953
LOWEST DAILY MEAN	-1150	Mar 21	-2520	May 23	-3260	Sep 10 2000
ANNUAL SEVEN-DAY MINIMUM	73	May 4	-1860	May 19	-2130	Sep 7 2000
MAXIMUM PEAK STAGE			4.11	Oct 2	6.06	Oct 11 1953
ANNUAL RUNOFF (CFSM)	0.95		1.35		0.99	
ANNUAL RUNOFF (INCHES)	12.91		18.31		13.49	
10 PERCENT EXCEEDS	7450		8660		6260	
50 PERCENT EXCEEDS	1470		3460		2430	
90 PERCENT EXCEEDS	377		366		819	

e Estimated
Note.--Negative figures indicate reverse flow

02236000 ST. JOHNS RIVER NEAR DE LAND, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.09	3.12	2.47	1.29	0.57	1.12	0.74	0.55	1.18	---	2.40	3.47
2	4.10	3.11	2.42	1.30	0.58	1.03	0.76	0.49	1.09	1.73	2.44	3.51
3	4.07	3.12	2.38	1.41	0.63	1.03	0.79	0.38	1.01	1.74	2.51	3.55
4	4.02	3.09	2.37	1.47	0.72	1.22	0.76	0.26	0.96	1.73	2.60	3.61
5	3.98	3.08	2.37	1.42	0.80	1.23	0.83	0.23	0.98	1.75	2.68	3.72
6	3.91	3.10	2.37	1.30	0.81	1.15	0.95	0.38	0.98	1.77	2.75	3.78
7	3.85	3.09	2.35	1.19	0.74	1.08	1.01	0.45	0.98	1.76	2.87	3.81
8	3.82	3.05	2.30	1.07	0.81	1.05	0.97	0.44	0.97	1.79	2.97	3.82
9	3.79	2.98	2.25	0.93	0.74	1.05	0.87	0.35	1.02	1.84	3.06	3.83
10	3.75	2.92	2.22	0.81	0.72	1.05	0.74	0.25	1.12	1.88	3.13	3.84
11	3.71	2.85	2.20	0.72	0.73	0.98	0.72	0.19	1.21	1.89	3.18	3.82
12	3.68	2.79	2.19	0.59	0.70	0.93	0.72	0.14	1.28	1.88	3.21	3.80
13	3.61	2.77	2.19	0.55	0.66	0.92	0.75	0.10	1.27	1.92	3.32	3.79
14	3.54	2.94	2.16	0.56	0.66	0.89	0.74	0.12	1.22	2.00	3.45	3.81
15	3.55	3.09	2.12	0.69	0.74	0.83	0.72	0.12	1.14	2.05	3.48	3.76
16	3.51	3.23	2.05	0.72	0.80	0.76	0.69	0.14	1.07	2.09	3.50	3.70
17	3.48	3.27	2.00	0.72	0.84	0.68	0.66	0.14	1.04	2.09	3.50	3.63
18	3.48	3.28	1.96	0.70	0.84	0.59	0.59	0.11	1.09	2.10	3.51	3.56
19	3.46	3.26	1.89	0.64	0.84	0.51	0.52	0.15	1.15	2.10	3.48	3.49
20	3.45	3.22	1.81	0.57	0.73	0.46	0.46	0.48	1.25	2.12	3.47	3.48
21	3.44	3.15	1.75	0.49	0.64	0.46	0.40	0.76	---	2.20	3.47	3.46
22	3.43	3.07	1.71	0.48	0.60	0.55	0.38	0.96	---	2.26	3.47	3.41
23	3.41	3.00	1.65	0.49	0.75	0.72	0.43	1.12	---	2.26	3.46	3.37
24	3.36	2.95	1.63	0.48	0.97	0.79	0.49	1.19	---	2.27	3.44	3.39
25	3.28	2.89	1.62	0.44	1.06	0.76	0.52	1.16	---	2.29	3.41	3.42
26	3.25	2.82	1.59	0.49	1.09	0.73	0.55	1.09	---	2.34	3.38	3.44
27	3.21	2.77	1.54	0.59	1.16	0.73	0.64	1.04	---	2.44	3.38	3.43
28	3.15	2.69	1.42	0.65	1.20	0.73	0.65	1.06	---	2.42	3.36	3.39
29	3.13	2.61	1.34	0.65	---	0.75	0.65	1.11	---	2.39	3.39	3.33
30	3.14	2.53	1.31	0.63	---	0.76	0.58	1.17	---	2.38	3.42	3.28
31	3.15	---	1.30	0.60	---	0.73	---	1.20	---	2.39	3.44	---
MEAN	3.57	2.99	1.97	0.79	0.79	0.85	0.68	0.56	---	---	3.20	3.59
MAX	4.10	3.28	2.47	1.47	1.20	1.23	1.01	1.20	---	---	3.51	3.84
MIN	3.13	2.53	1.30	0.44	0.57	0.46	0.38	0.10	---	---	2.40	3.28

CAL YR 2001 MEAN 1.39 MAX 4.31 MIN 0.07

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948, 1949, 1954, 1962, 1966-95, 2000 to 2002.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 2000 to September 2002 (discontinued).
WATER TEMPERATURE: October 2000 to September 2002 (discontinued).

INSTRUMENTATION.--Water-quality monitor and data-collection platform.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 2,010 µS/cm @ 25 °C, July 10, 2001; minimum daily mean, 433 µS/cm @ 25 °C, Sept. 20,21,2002.
WATER TEMPERATURE: Maximum daily mean, 30.7 °C, July 31, 2001, Aug. 14, 2001; minimum daily mean, 11.6 °C, Jan. 5, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 1,410 µS/cm @ 25 °C, May 10; minimum daily mean, 433 µS/cm @ 25 °C, Sept. 20,21.
WATER TEMPERATURE: Maximum daily mean, 30.6 °C, July 19; minimum daily mean, 16.8 °C, Mar. 5.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	483	576	564	---	---	---	1250	1270	1290	1160	698	441
2	475	574	569	---	---	1070	1260	1160	1340	1150	678	442
3	466	565	584	---	---	1100	1260	1060	1310	1180	648	442
4	462	565	598	---	---	1110	1270	1190	1180	1210	627	442
5	464	562	609	---	---	1110	1280	1310	1180	1230	618	443
6	469	564	618	---	---	1110	1280	1340	1210	1240	603	445
7	469	565	629	---	---	1130	1270	1340	1220	1240	588	444
8	468	567	635	---	---	1150	1270	1350	1250	1230	576	446
9	466	568	---	---	---	1170	1240	1380	1260	1230	578	446
10	473	569	---	---	---	1180	1110	1410	1220	1200	576	445
11	490	569	---	---	---	1190	1140	1260	1190	1170	566	442
12	502	570	---	---	---	1210	1240	1230	1170	1140	553	440
13	511	571	---	---	---	1210	1290	1290	1170	1100	527	440
14	515	556	---	---	---	1220	1290	1310	1240	1080	486	438
15	513	552	---	---	---	1220	1280	1320	1210	1020	477	438
16	519	559	---	---	---	1250	1260	1360	1120	975	472	438
17	526	565	---	---	---	1280	1200	1370	1110	960	479	439
18	530	569	---	---	---	1290	1240	1380	1170	967	471	440
19	538	573	---	---	---	1290	1280	1380	1210	1030	472	442
20	541	572	---	---	---	1280	1300	1310	1240	966	476	433
21	546	569	---	---	---	1280	1310	1270	1220	904	467	433
22	550	564	---	---	---	1280	1310	1340	1230	866	465	443
23	556	558	---	---	---	1270	1330	1310	1220	848	468	452
24	563	550	---	---	---	1270	1330	1320	1210	864	468	456
25	566	547	---	---	---	1280	1350	1320	1210	832	466	459
26	567	544	---	---	---	1190	1360	1320	1200	818	460	461
27	570	546	---	---	---	1130	1350	1320	1200	771	455	464
28	571	550	---	---	---	1210	1340	1320	1250	769	454	463
29	577	553	---	---	---	1260	1340	1310	1260	753	449	468
30	580	560	---	---	---	1250	1320	1300	1260	739	443	475
31	577	---	---	---	---	1240	---	1290	---	714	441	---
MEAN	519	562	---	---	---	---	1280	1300	1220	1010	523	447
MAX	580	576	---	---	---	---	1360	1410	1340	1240	698	475
MIN	462	544	---	---	---	---	1110	1060	1110	714	441	433

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	20.7	22.3	---	---	---	25.7	27.8	26.6	26.7	29.5	28.3
2	23.4	21.3	22.4	---	---	17.3	25.9	27.8	27.5	26.7	29.0	28.6
3	23.3	21.9	22.6	---	---	17.6	25.5	28.2	27.8	27.1	28.7	28.7
4	23.7	22.2	22.7	---	---	17.6	25.1	29.2	28.7	27.7	28.7	28.6
5	24.1	22.0	22.5	---	---	16.8	24.9	29.7	29.2	28.0	28.9	28.5
6	24.7	21.2	22.3	---	---	16.9	24.7	29.5	29.6	27.8	29.0	28.3
7	25.1	20.6	22.4	---	---	17.1	24.4	29.3	29.8	28.4	29.0	28.3
8	24.7	20.4	22.8	---	---	17.5	23.9	29.6	29.4	28.8	28.5	28.3
9	24.1	20.5	---	---	---	18.7	23.8	29.2	29.3	28.4	28.0	28.3
10	23.8	20.5	---	---	---	19.9	24.1	28.6	29.4	27.9	27.8	28.3
11	23.9	20.7	---	---	---	21.1	24.4	28.7	29.5	27.9	27.6	28.3
12	24.1	20.6	---	---	---	22.1	24.1	28.8	29.4	28.2	27.4	27.8
13	24.4	20.6	---	---	---	22.4	24.0	29.1	29.6	27.8	27.1	27.6
14	24.7	20.6	---	---	---	22.4	24.1	29.0	29.4	27.9	26.7	27.7
15	25.0	20.4	---	---	---	22.6	24.3	28.5	29.1	28.4	27.1	28.0
16	24.9	20.2	---	---	---	23.2	24.8	28.1	29.1	29.1	27.4	28.5
17	24.0	20.2	---	---	---	24.2	25.2	27.9	28.7	29.9	28.0	28.7
18	22.9	20.5	---	---	---	25.2	25.7	28.1	27.8	30.3	28.3	28.9
19	22.8	20.7	---	---	---	25.8	26.7	27.7	27.4	30.6	28.6	29.0
20	23.3	21.0	---	---	---	26.0	27.3	27.0	27.0	30.5	28.4	28.6
21	23.8	20.9	---	---	---	25.8	28.0	25.9	26.6	29.6	28.3	28.4
22	24.2	20.8	---	---	---	25.6	28.6	25.0	26.3	28.7	28.5	28.3
23	24.5	21.2	---	---	---	24.9	28.4	24.1	25.8	28.7	28.7	28.1
24	25.0	21.6	---	---	---	24.3	28.4	23.9	26.0	28.9	29.0	27.9
25	25.4	21.9	---	---	---	24.0	28.1	24.3	26.0	29.5	29.2	27.9
26	24.8	22.1	---	---	---	24.2	28.0	24.8	26.3	29.6	29.1	27.9
27	22.7	22.3	---	---	---	24.4	28.5	25.2	26.7	29.2	28.7	28.2
28	20.8	22.4	---	---	---	24.7	28.4	25.3	27.0	29.6	28.5	28.3
29	20.0	22.4	---	---	---	25.1	28.3	25.6	27.1	29.9	28.3	28.5
30	19.7	22.3	---	---	---	25.6	28.2	26.2	27.1	30.0	28.1	28.6
31	20.0	---	---	---	---	25.8	---	26.6	---	29.8	28.1	---
MEAN	23.6	21.2	---	---	---	---	26.1	27.4	28.0	28.8	28.3	28.3
MAX	25.4	22.4	---	---	---	---	28.6	29.7	29.8	30.6	29.5	29.0
MIN	19.7	20.2	---	---	---	---	23.8	23.9	25.8	26.7	26.7	27.6

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT													
09...	0915	10100	3.78	456	457	6.6	7.0	24.0	2.0	320	1.7	7	.10
23...	0920	7540	3.40	547	546	6.7	7.3	24.2	.66	320	2.3	4	.06
NOV													
06...	0945	5610	3.08	553	544	6.8	7.8	21.1	1.3	240	3.2	<1	.04
21...	1110	6190	3.14	559	555	7.0	7.7	20.7	.95	240	3.7	3	.05
DEC													
04...	0930	5740	2.35	589	588	6.9	7.8	22.4	.90	240	3.3	<1	.06
17...	1145	4590	2.00	685	674	7.1	7.5	23.5	2.3	200	3.9	E2	.09
JAN													
04...	1030	2330	1.48	802	792	7.4	7.8	13.7	2.2	140	7.5	<1	.09
14...	1245	3080	.55	846	848	7.4	7.7	14.2	3.5	160	8.6	4	.05
30...	0845	1290	.63	944	922	7.3	7.7	22.1	3.2	120	5.6	5	.08
FEB													
13...	1113	816	.66	1020	1010	7.4	7.7	19.2	2.8	100	7.0	5	.05
26...	1440	2150	1.09	1050	1050	7.3	7.7	18.7	2.8	80	6.7	13	.06
MAR													
12...	1005	2440	.88	1220	1220	7.4	7.6	21.6	5.2	100	7.3	8	.02
28...	1040	301	.76	1240	1210	7.1	7.5	24.3	2.5	80	5.1	5	.06
APR													
09...	0855	826	.91	1300	1280	7.4	7.8	23.1	3.5	50	6.4	7	.02
25...	0742	-258	.49	1340	1340	7.3	7.8	27.7	5.4	100	4.4	16	.10
MAY													
08...	0825	-44	.47	1350	1340	7.3	7.7	29.1	3.6	70	2.8	11	.15
21...	0935	-2510	.72	1250	1230	7.2	7.7	25.5	5.6	40	8.4	19	.01
JUN													
04...	1002	1130	.95	1170	1170	7.5	8.0	28.4	3.2	30	7.1	10	.01
19...	0949	1580	1.11	1220	1210	7.7	7.8	27.2	2.9	40	5.4	12	<.01
JUL													
02...	0959	E4640	1.80	1170	1150	7.0	7.5	26.5	7.1	100	4.4	16	.02
17...	0930	E6390	2.16	970	946	6.4	7.1	29.3	2.4	240	2.5	8	.16
31...	0920	E7260	2.45	727	703	6.4	7.1	29.4	3.2	240	2.0	6	.14
AUG													
14...	0931	E7550	3.58	493	485	6.8	7.2	26.5	2.9	320	2.8	6	.04
26...	0940	E9170	3.38	465	454	6.5	7.3	29.0	2.4	280	1.5	7	.04
SEP													
11...	0825	E8500	3.91	442	431	6.7	7.5	28.2	1.9	240	1.5	12	.04
24...	0900	E7930	3.38	460	451	6.3	7.3	27.6	1.7	240	2.2	2	.03

< -- Less than
E -- Estimated value
Note.--Negative figures indicate reverse flow

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SULFIDE TOTAL (MG/L AS S) (00745)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)
OCT													
09...	E.13	<.010	E1.7	<.02	.14	.05	30.0	2.0	E.130	99	26.0	8.00	49.0
23...	.05	.020	E1.6	<.02	E.09	.11	35.0	2.0	.100	110	29.0	9.50	59.0
NOV													
06...	.04	<.010	E1.5	.12	E.09	.07	33.0	2.0	.070	110	29.0	9.80	63.0
21...	.05	.010	E1.4	.10	E.07	.05	28.0	2.0	.050	120	30.0	9.80	61.0
DEC													
04...	.06	<.010	E1.3	.11	E.07	.05	28.0	4.0	.060	120	31.0	10.0	63.0
17...	.09	.020	1.8	.17	.06	.06	26.0	1.0	.060	140	37.0	12.0	77.0
JAN													
04...	.10	.010	1.3	.32	.07	.05	26.0	2.0	.060	160	41.0	14.0	86.0
14...	.06	<.010	1.4	.31	.08	.05	24.0	<1.0	.070	170	43.0	15.0	94.0
30...	.09	<.010	1.4	.27	.06	.05	20.0	1.0	.060	200	48.0	18.0	100
FEB													
13...	.06	<.010	1.1	.23	.05	.04	1.6	2.0	.040	200	50.0	19.0	120
26...	.07	<.010	.90	.27	.08	.05	16.0	<1.0	.050	220	56.0	19.0	110
MAR													
12...	.03	<.010	1.2	.06	.05	.02	19.0	<1.0	.020	230	55.0	21.0	140
28...	.14	<.010	1.0	.15	.05	.03	16.0	<1.0	.040	230	57.0	22.0	140
APR													
09...	.04	<.010	.80	.16	.06	.02	9.0	<1.0	.030	240	60.0	22.0	150
25...	.11	<.010	1.5	<.02	.09	.01	15.0	1.0	.020	250	60.0	23.0	160
MAY													
08...	.36	<.010	1.8	<.02	.07	<.01	16.0	2.0	.040	260	62.0	24.0	160
21...	.03	<.010	.80	<.02	.03	.02	10.0	<1.0	.030	240	60.0	22.0	150
JUN													
04...	.03	<.010	.80	<.02	.03	<.01	13.0	<1.0	.010	240	62.0	20.0	130
19...	.01	<.010	.90	<.02	.06	<.01	9.8	<1.0	.010	240	61.0	22.0	140
JUL													
02...	.03	<.010	1.2	.03	.07	<.01	17.0	<1.0	.020	220	55.0	20.0	140
17...	.16	.020	1.5	.08	.10	.08	27.0	2.0	.090	180	45.0	17.0	120
31...	.13	.060	1.8	.12	.16	.12	27.0	2.0	.130	140	37.0	12.0	78.0
AUG													
14...	.04	.030	1.5	.15	.19	.18	26.0	2.0	.190	110	28.0	8.50	52.0
26...	.04	.020	1.4	.07	.18	.15	25.0	2.0	.160	100	28.0	8.20	48.0
SEP													
11...	.05	.010	1.2	.07	.14	.11	26.0	3.0	.120	96	26.0	7.50	45.0
24...	.03	.010	1.4	.08	.09	.10	23.0	2.0	.110	100	27.0	7.80	48.0

< -- Less than
E -- Estimated value

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT												
09...	4.10	E48	20.0	92.0	9.30	330	<.1	.5	15.0	570	535	407
23...	4.50	54	22.0	114	10.0	369	<.1	.7	18.0	680	503	375
NOV												
06...	4.50	E57	23.0	116	9.00	366	<.1	.7	17.0	690	449	352
21...	4.20	E56	25.0	118	7.40	368	<.1	.6	17.0	680	410	318
DEC												
04...	4.20	E56	7.9	125	6.20	382	<.1	.5	17.0	690	445	328
17...	4.60	66	32.0	148	6.50	E452	<.1	.6	20.0	790	423	318
JAN												
04...	4.90	73	42.0	168	6.80	505	<.1	.6	21.0	850	326	236
14...	5.10	75	46.0	181	6.60	525	4.2	.9	20.0	880	340	235
30...	5.10	84	60.0	196	6.10	547	3.6	.9	21.0	930	239	162
FEB												
13...	5.30	87	65.0	217	3.60	595	<.1	.9	22.0	990	204	131
26...	4.80	88	83.0	219	4.90	657	<.1	.9	20.0	1030	177	113
MAR												
12...	6.00	76	87.0	273	1.80	727	18.0	1.1	26.0	1250	203	107
28...	5.90	81	96.0	267	3.30	713	9.8	1.0	26.0	1250	136	83
APR												
09...	6.20	107	78.0	291	4.80	733	15.0	1.2	24.0	1060	83	28
25...	6.30	83	103	300	3.00	800	62.0	1.2	29.0	1320	96	25
MAY												
08...	6.20	86	101	298	4.00	803	36.0	1.2	27.0	1340	87	20
21...	5.50	93	89.0	269	6.00	691	19.0	1.0	24.0	1150	75	12
JUN												
04...	5.20	104	79.0	246	4.40	683	29.0	.9	20.0	1030	45	9
19...	5.60	93	90.0	263	5.00	693	37.0	1.0	24.0	1190	75	12
JUL												
02...	5.50	63	105	252	6.30	681	19.0	.8	29.0	1230	292	98
17...	5.50	44	96.0	201	7.30	609	6.1	.7	25.0	1060	568	344
31...	4.80	53	54.0	142	8.90	491	<.1	.5	21.0	910	644	428
AUG												
14...	4.30	58	25.0	94.0	9.30	329	<.1	.5	16.0	660	560	420
26...	4.20	58	20.0	87.0	9.90	309	<.1	.5	17.0	630	517	341
SEP												
11...	3.80	56	17.0	82.0	8.90	288	<.1	.6	16.0	570	504	362
24...	3.80	57	16.0	87.0	8.10	303	<.1	.5	16.0	560	426	309

< -- Less than
E -- Estimated value

02236125 ST. JOHNS RIVER AT ASTOR, FL

LOCATION.--Lat 29°10'00", long 81°31'20", in NW¼ sec. 29, T.15 S., R.28 E., Lake County, Hydrologic Unit 03080101, near center of channel on bridge pile under State Highway 40 Bridge over the St. Johns River, 6.6 mi west of U.S. Highway 17 and 127 mi upstream from mouth.

DRAINAGE AREA.--3,330 mi^2.

PERIOD OF RECORD.--September 1931 to July 1934 (daily gage heights and miscellaneous discharge measurements only), February 1994 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7780	7540	7180	2920	1950	2710	710	1500	1050	6340	7400	9140
2	9050	7830	6900	3020	1420	3300	742	2020	2370	5930	6830	8540
3	9630	7890	6010	1640	693	2410	906	2540	2240	5410	6010	7400
4	9740	7520	5130	2840	-253	1960	1040	2720	1980	5350	5830	6380
5	9790	5330	5160	3490	145	3000	-908	464	1140	5370	5920	7960
6	10000	5900	5280	3790	2110	3310	-741	-471	517	5410	6010	9260
7	9720	6890	5790	3860	1030	2880	404	100	1060	5170	5910	9550
8	9210	7770	6120	4200	1110	3040	1760	1120	846	4820	4970	9280
9	8880	8160	5850	4030	1970	3080	2130	1810	-883	5010	4900	9060
10	8530	8070	5460	3980	1720	3060	1740	1900	-898	5430	5880	9410
11	8770	7680	4590	3990	1570	2970	1730	1830	-1580	5890	6470	9770
12	8900	7110	4530	3940	1920	2470	1200	1630	-508	6320	7040	9380
13	9250	5810	4740	2890	1440	2270	1290	810	1500	6110	7820	9670
14	9360	4080	5230	2790	721	2840	1330	247	2000	5660	8290	10100
15	8720	1360	5120	2510	819	2920	1590	577	2260	6250	9430	e9050
16	8290	3910	5190	2860	773	3060	1980	517	2400	6450	9740	9210
17	6650	5220	4960	2360	478	3050	2050	492	2030	6020	10700	9250
18	7190	6220	4800	2700	787	2830	2090	957	2310	5860	11100	9530
19	7250	7120	5530	2920	1600	2590	2070	-1070	1930	5830	11000	9090
20	7270	7890	4700	3110	2270	1870	1880	-3070	1870	5690	10900	9160
21	7750	8040	4550	2970	2170	1550	1800	-3010	1220	6620	10900	8600
22	8140	7920	4620	2480	2070	405	786	-3400	1660	7080	10700	e8350
23	8320	7720	4410	2300	-260	-427	260	-2670	2110	6680	10700	e8100
24	8630	7850	3820	2630	986	1160	939	-2140	3890	6700	10700	7860
25	8530	7990	3830	2650	1440	1410	388	-469	4250	6750	10500	7890
26	7960	7890	2800	1400	2080	1500	-5.5	268	4750	6890	e10500	8530
27	7200	7860	4330	1240	54	1110	307	680	5130	7430	10600	7680
28	6490	7820	4400	1640	2530	1320	345	-477	5310	7400	10600	7790
29	5730	7700	3880	1960	---	1280	579	-1520	5870	7200	10700	7560
30	6650	7460	3540	2280	---	1610	1590	-798	6240	7240	10400	7460
31	7190	---	3010	1910	---	1300	---	667	---	7380	9760	---
TOTAL	256570	207550	151460	87300	35343	67838	31981.5	3754	64064	191690	268210	260010
MEAN	8276	6918	4886	2816	1262	2188	1066	121	2135	6184	8652	8667
MAX	10000	8160	7180	4200	2530	3310	2130	2720	6240	7430	11100	10100
MIN	5730	1360	2800	1240	-260	-427	-908	-3400	-1580	4820	4900	6380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

MEAN	5430	5600	4350	4217	2801	3013	2572	1336	1782	2980	3316	4342
MAX	9026	8974	9206	9123	6591	10760	7498	3601	2609	6184	8652	8667
(WY)	1996	2000	1995	1998	1998	1998	1998	1998	1994	2002	2002	2002
MIN	1491	2293	1145	1174	785	695	291	42.9	661	547	664	950
(WY)	2001	2001	2001	1997	1999	2000	1999	1994	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	978488		1625770.5			
ANNUAL MEAN	5233		4454		3487	
HIGHEST ANNUAL MEAN					5211	1995
LOWEST ANNUAL MEAN					1706	1999
HIGHEST DAILY MEAN	10100	Sep 23,24,27	11100	Aug 18	11700	Mar 9 1998
LOWEST DAILY MEAN	-5540	Sep 15	-3400	May 22	-6180	Sep 15 1999
ANNUAL SEVEN-DAY MINIMUM	356	Jan 9	-2260	May 19	-2270	Sep 6 2000
MAXIMUM PEAK STAGE			3.17	Oct 1	3.91	Sep 17 2001
INSTANTANEOUS LOW FLOW					-6180	Sep 15 1999
10 PERCENT EXCEEDS	8900		9180		8200	
50 PERCENT EXCEEDS	4980		4080		2780	
90 PERCENT EXCEEDS	1830		517		317	

e Estimated
Note.--Negative figures indicate reverse flow.

02236125 ST. JOHNS RIVER AT ASTOR, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.14	2.22	1.47	0.90	0.35	0.83	0.58	0.35	1.03	0.89	1.17	2.15
2	3.08	2.17	1.45	0.93	0.37	0.72	0.62	0.27	0.91	0.97	1.29	2.25
3	2.98	2.15	1.47	1.11	0.44	0.72	0.63	0.13	0.81	0.99	1.46	2.37
4	2.90	2.14	1.57	1.12	0.56	0.95	0.60	0.01	0.79	0.99	1.62	2.52
5	2.81	2.26	1.63	1.00	0.65	0.90	0.71	0.08	0.83	1.00	1.70	2.64
6	2.71	2.33	1.64	0.84	0.63	0.78	0.84	0.25	0.84	0.99	1.77	2.66
7	2.63	2.29	1.60	0.69	0.54	0.73	0.88	0.34	0.82	0.99	1.99	2.63
8	2.63	2.16	1.53	0.52	0.62	0.73	0.80	0.29	0.81	1.06	2.20	2.65
9	2.65	2.02	1.49	0.37	0.53	0.71	0.67	0.19	0.93	1.12	2.33	2.70
10	2.66	1.92	1.50	0.26	0.53	0.66	0.54	0.07	1.05	1.11	2.38	2.69
11	2.61	1.87	1.55	0.14	0.52	0.62	0.53	0.01	1.14	1.03	2.39	2.63
12	2.54	1.85	1.58	0.04	0.47	0.60	0.55	-0.02	1.14	0.98	2.38	2.54
13	2.46	1.95	1.57	0.07	0.46	0.63	0.58	-0.04	1.09	1.00	2.38	2.51
14	2.38	2.26	1.51	0.12	0.47	0.60	0.59	-0.04	1.02	1.07	2.40	2.49
15	2.39	2.58	1.46	0.34	0.57	0.53	0.55	-0.02	0.90	1.09	2.37	2.44
16	2.40	2.74	1.41	0.37	0.66	0.44	0.50	0.02	0.84	1.08	2.33	2.35
17	2.51	2.74	1.36	0.38	0.67	0.35	0.45	0.03	0.80	1.09	2.26	2.26
18	2.53	2.69	1.32	0.35	0.66	0.24	0.40	-0.02	0.88	1.14	2.22	2.19
19	2.54	2.58	1.20	0.27	0.65	0.18	0.32	0.07	0.96	1.15	2.13	2.15
20	2.56	2.42	1.17	0.18	0.50	0.18	0.23	0.49	1.06	1.17	2.09	2.19
21	2.53	2.28	1.16	0.13	0.41	0.22	0.19	0.79	1.16	1.24	2.06	2.24
22	2.45	2.18	1.12	0.18	0.37	0.38	0.21	1.00	1.28	1.24	2.02	2.26
23	2.39	2.10	1.10	0.22	0.59	0.58	0.28	1.16	1.37	1.24	2.01	2.29
24	2.31	2.02	1.09	0.20	0.79	0.63	0.37	1.17	1.35	1.25	1.97	2.33
25	2.22	1.91	1.09	0.14	0.88	0.60	0.40	1.06	1.31	1.24	1.92	2.41
26	2.19	1.82	1.13	0.25	0.88	0.56	0.43	0.95	1.24	1.24	1.94	2.39
27	2.17	1.73	1.02	0.40	0.97	0.55	0.52	0.91	1.15	1.25	1.91	2.34
28	2.21	1.65	0.87	0.45	0.93	0.57	0.54	0.93	1.03	1.24	1.88	2.27
29	2.31	1.58	0.81	0.44	---	0.60	0.49	1.00	0.92	1.22	1.90	2.20
30	2.33	1.51	0.82	0.40	---	0.61	0.39	1.04	0.87	1.20	1.94	2.20
31	2.29	---	0.86	0.37	---	0.58	---	1.06	---	1.16	2.03	---
MEAN	2.53	2.14	1.31	0.43	0.60	0.58	0.51	0.44	1.01	1.11	2.01	2.40
MAX	3.14	2.74	1.64	1.12	0.97	0.95	0.88	1.17	1.37	1.25	2.40	2.70
MIN	2.17	1.51	0.81	0.04	0.35	0.18	0.19	-0.04	0.79	0.89	1.17	2.15

WTR YR 2002 MEAN 1.26 MAX 3.14 MIN -0.04

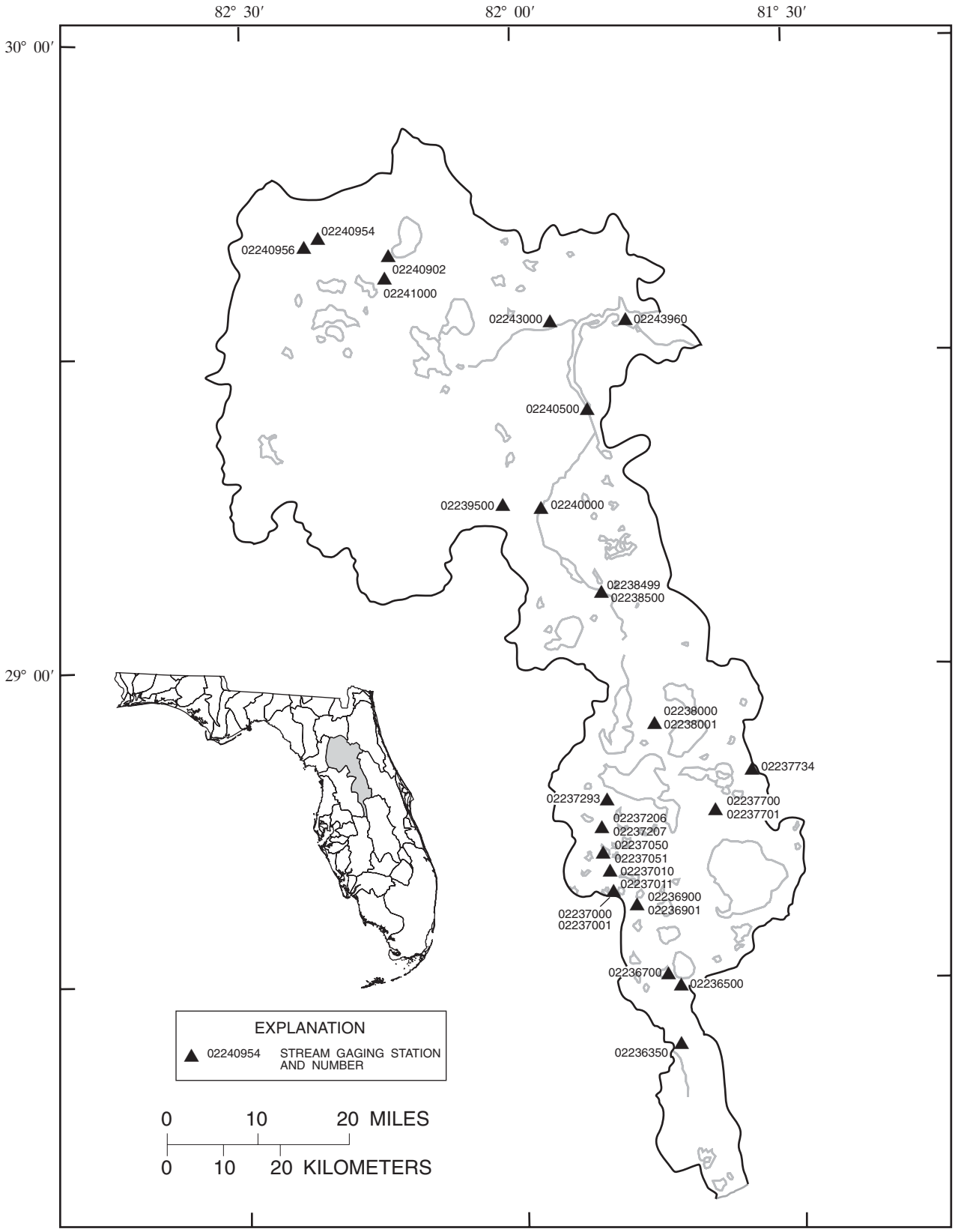

Figure 6.--Location of stream gaging stations in the Ocklawaha River basin.

02236350 GREEN SWAMP RUN NEAR EVA, FL

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

DRAINAGE AREA.--43 mi^2, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 116.16 ft above NGVD of 1929.

REMARKS.--Records good except for period of estimated daily discharge, which is fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	0.24	0.00	0.00	0.00	0.01	0.00	0.00	e0.00	e4.0	e9.0	26
2	14	0.18	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e3.5	e8.5	26
3	12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e2.8	e9.0	29
4	11	0.20	0.00	0.00	0.00	0.02	0.00	0.00	e0.00	e2.4	e9.8	29
5	9.8	0.26	0.00	0.00	0.00	0.02	0.00	0.00	e0.00	e2.2	e9.4	29
6	8.8	0.16	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e2.2	e12	29
7	7.8	0.08	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e2.5	e17	28
8	7.0	0.05	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e2.9	e14	27
9	6.3	0.03	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e3.8	e12	26
10	5.7	0.01	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e4.4	e11	24
11	5.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e5.6	e11	25
12	4.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e7.4	e10	26
13	4.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e8.2	e15	28
14	3.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e7.8	e13	33
15	3.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e7.6	e16	35
16	3.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e7.4	e12	38
17	2.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e7.2	e9.8	47
18	2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e6.8	e10	51
19	2.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e6.0	e11	54
20	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e6.8	e9.6	51
21	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.01	e6.5	9.0	49
22	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.06	e6.2	8.8	50
23	2.0	0.00	0.00	0.00	0.01	0.00	0.00	0.00	e0.60	e7.0	7.9	53
24	1.8	0.00	0.00	0.00	0.10	0.00	0.00	0.00	e5.5	e7.8	7.3	57
25	1.7	0.00	0.00	0.00	0.08	0.00	0.00	0.00	e4.4	e8.2	6.9	62
26	1.5	0.00	0.00	0.00	0.06	0.00	0.00	0.00	e5.0	e7.9	9.0	63
27	1.3	0.00	0.00	0.00	0.05	0.00	0.00	0.00	e4.5	e7.4	8.3	61
28	0.96	0.00	0.00	0.00	0.03	0.00	0.00	0.00	e4.1	e7.2	8.0	58
29	0.70	0.00	0.00	0.00	---	0.00	0.00	0.00	e4.5	e7.0	9.0	55
30	0.51	0.00	0.00	0.00	---	0.00	0.00	e0.00	e5.0	e9.8	13	52
31	0.36	---	0.00	0.00	---	0.00	---	e0.00	---	e9.5	22	---
TOTAL	145.73	1.44	0.00	0.00	0.33	0.05	0.00	0.00	33.67	186.0	338.3	1221
MEAN	4.70	0.048	0.000	0.000	0.012	0.002	0.000	0.000	1.12	6.00	10.9	40.7
MAX	15	0.26	0.00	0.00	0.10	0.02	0.00	0.00	5.5	9.8	22	63
MIN	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.2	6.9	24
CFSM	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.14	0.25	0.95
IN.	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.16	0.29	1.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2002, BY WATER YEAR (WY)

MEAN	14.1	8.96	9.95	11.7	11.8	14.9	13.2	2.13	3.66	8.08	12.0	13.2
MAX	54.9	55.7	114	116	122	158	60.7	15.7	34.6	42.3	69.0	48.4
(WY)	1995	1983	1998	1998	1998	1998	1998	1987	1994	1982	1995	1982
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1981	1981	1981	1981	1981	1981	1981	1980	1980	1979	1980	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1979 - 2002	
ANNUAL TOTAL	667.77		1926.52			
ANNUAL MEAN	1.83		5.28		10.3	
HIGHEST ANNUAL MEAN					50.9	1998
LOWEST ANNUAL MEAN					0.11	1992
HIGHEST DAILY MEAN	51	Sep 17	63	Sep 26	194	Dec 28,29 1997
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Nov 11	0.00	Many days
MAXIMUM PEAK FLOW			65	Sep 25	195	Dec 28 1997
MAXIMUM PEAK STAGE			4.84	Sep 25	5.78	Apr 9 1984
ANNUAL RUNOFF (CFSM)	0.043		0.12		0.24	
ANNUAL RUNOFF (INCHES)	0.58		1.67		3.26	
10 PERCENT EXCEEDS	2.1		14		35	
50 PERCENT EXCEEDS	0.00		0.00		0.18	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02236500 BIG CREEK NEAR CLERMONT, FL

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

DRAINAGE AREA.--68 mi^2, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 98.97 ft above NGVD of 1929.

REMARKS.--Records fair. Some interconnection at high stages with Little Creek and Withlacoochee River basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.84	0.08	0.00	0.00	0.02	0.31	0.00	0.00	0.00	13	40	174
2	0.68	0.07	0.00	0.00	0.00	0.31	0.00	0.00	0.00	13	39	188
3	0.59	0.08	0.00	0.07	0.00	0.32	0.00	0.00	0.00	11	38	186
4	0.51	0.08	0.00	0.29	0.00	0.52	0.00	0.00	0.00	9.8	39	178
5	0.44	0.08	0.00	0.26	0.00	0.55	0.00	0.00	0.00	8.7	38	169
6	0.39	0.07	0.00	0.22	0.00	0.50	0.00	0.00	0.00	7.6	36	161
7	0.35	0.06	0.00	0.21	0.00	0.41	0.00	0.00	0.00	6.3	51	150
8	0.33	0.06	0.00	0.15	0.00	0.38	0.00	0.00	0.00	5.4	65	140
9	0.26	0.06	0.00	0.12	0.00	0.33	0.00	0.00	0.00	7.4	61	128
10	0.21	0.06	0.00	0.09	0.00	0.32	0.00	0.00	0.00	11	55	117
11	0.17	0.05	0.00	0.09	0.00	0.31	0.00	0.00	0.00	12	49	106
12	0.13	0.05	0.00	0.08	0.00	0.30	0.00	0.00	0.00	17	47	98
13	0.11	0.07	0.00	0.08	0.00	0.39	0.00	0.00	0.00	24	58	94
14	0.10	0.13	0.00	0.09	0.00	0.44	0.00	0.00	0.00	32	56	88
15	0.09	0.14	0.00	0.39	0.00	0.39	0.00	0.00	0.00	32	61	87
16	0.08	0.09	0.00	0.39	0.00	0.36	0.00	0.00	0.00	31	58	84
17	0.07	0.07	0.00	0.25	0.00	0.34	0.00	0.00	0.00	29	54	83
18	0.07	0.07	0.00	0.21	0.00	0.28	0.00	0.00	0.00	27	50	79
19	0.07	0.06	0.00	0.14	0.00	0.23	0.00	0.00	0.00	25	50	75
20	0.07	0.06	0.00	0.11	0.00	0.16	0.00	0.00	0.00	23	46	70
21	0.07	0.06	0.00	0.10	0.00	0.11	0.00	0.00	0.08	24	42	64
22	0.36	0.05	0.00	0.10	0.00	0.12	0.00	0.00	0.27	23	39	59
23	0.43	0.05	0.00	0.09	0.01	0.08	0.00	0.00	0.80	22	34	58
24	0.36	0.04	0.00	0.09	0.63	0.04	0.00	0.00	4.8	22	31	64
25	0.33	0.03	0.00	0.08	0.52	0.0	0.00	0.00	9.0	29	29	74
26	0.24	0.02	0.00	0.08	0.50	0.00	0.00	0.00	7.6	34	32	80
27	0.11	0.02	0.00	0.07	0.43	0.00	0.00	0.00	7.9	34	32	80
28	0.08	0.00	0.00	0.07	0.35	0.00	0.00	0.00	7.4	32	39	81
29	0.08	0.00	0.00	0.07	---	0.00	0.00	0.00	6.9	30	69	81
30	0.08	0.00	0.00	0.06	---	0.00	0.00	0.00	9.4	29	109	81
31	0.08	---	0.00	0.04	---	0.00	---	0.00	---	40	147	---
TOTAL	7.78	1.76	0.00	4.09	2.46	7.50	0.00	0.00	54.15	664.2	1594	3177
MEAN	0.25	0.059	0.000	0.13	0.088	0.24	0.000	0.000	1.80	21.4	51.4	106
MAX	0.84	0.14	0.00	0.39	0.63	0.55	0.00	0.00	9.4	40	147	188
MIN	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.4	29	58
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.32	0.76	1.56
IN.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.36	0.87	1.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

MEAN	29.8	19.5	17.7	22.4	23.0	32.5	23.1	6.89	7.46	20.2	29.8	38.3
MAX	238	112	147	177	139	268	200	72.2	63.8	205	190	413
(WY)	1961	1960	1998	1998	1998	1960	1960	1959	1959	1959	1960	1960
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.003
(WY)	1981	1981	1994	1981	2001	1999	1994	1977	1981	1981	2001	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1958 - 2002	
ANNUAL TOTAL	54.50		5512.94			
ANNUAL MEAN	0.15		15.1		22.6	
HIGHEST ANNUAL MEAN					137	1960
LOWEST ANNUAL MEAN					0.12	2001
HIGHEST DAILY MEAN	6.7	Sep 15	188	Sep 2	684	Sep 13 1960
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Nov 28	0.00	Many days
MAXIMUM PEAK FLOW			189	Sep 2	691	Sep 13 1960
MAXIMUM PEAK STAGE			5.25	Sep 2	6.23	Sep 13 1960
ANNUAL RUNOFF (CFSM)	0.002		0.22		0.33	
ANNUAL RUNOFF (INCHES)	0.03		3.02		4.52	
10 PERCENT EXCEEDS	0.15		58		61	
50 PERCENT EXCEEDS	0.00		0.08		5.3	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

02236700 LITTLE CREEK NEAR CLERMONT, FL

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

DRAINAGE AREA.--14.7 mi^2.

PERIOD OF RECORD.--Water years 1945-47, 1952-56, 1966, 1967 (discharge measurements only), July 1958 to July 1960 (miscellaneous low-flow measurements only), July 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 90.08 ft above NGVD of 1929. July 18, 1958 to July 5, 1960, non-recording gage at same site at different datum.

REMARKS.--Records good. Some interconnection at high stages with Big Creek is possible.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.0	20	137
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.0	22	146
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.8	27	147
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.4	36	145
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.0	44	144
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.4	41	141
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.0	51	139
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.6	61	138
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.1	60	136
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.7	58	130
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.8	55	123
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11	55	120
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14	66	119
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	72	117
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16	76	117
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	76	118
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10	71	128
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.9	65	128
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.5	63	126
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.6	56	127
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.4	74	118
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.9	84	110
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.7	89	107
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.4	99	116
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3	4.8	97	114
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.2	5.5	58	109
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.8	7.2	56	105
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.1	11	53	101
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	2.9	13	64	96
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	3.1	16	105	92
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	20	130	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.40	258.7	1984	3694
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.71	8.35	64.0	123
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.8	20	130	147
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.6	20	92
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.57	4.35	8.38
IN.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.65	5.02	9.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2002, BY WATER YEAR (WY)

MEAN	14.9	9.63	12.7	18.2	16.5	20.0	14.6	3.28	4.28	9.72	16.1	21.2
MAX	88.3	42.8	123	154	119	127	87.8	15.2	41.8	64.0	110	123
(WY)	1996	1996	1998	1998	1998	1998	1987	1998	1991	1984	1984	2002
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1979 - 2002	
ANNUAL TOTAL	0.00		5958.10			
ANNUAL MEAN	0.000		16.3		13.4	
HIGHEST ANNUAL MEAN					51.9	1998
LOWEST ANNUAL MEAN					0.000	2001
HIGHEST DAILY MEAN	0.00	Jan 1	147	Sep 3	261	Sep 29 1979
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Many days
MAXIMUM PEAK FLOW			148	Sep 2	850	Mar 18 1960
MAXIMUM PEAK STAGE			8.99	Sep 2	10.85	Mar 18 1960
ANNUAL RUNOFF (CFSM)	0.000		1.11		0.91	
ANNUAL RUNOFF (INCHES)	0.00		15.08		12.42	
10 PERCENT EXCEEDS	0.00		79		41	
50 PERCENT EXCEEDS	0.00		0.00		1.6	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

* From floodmark

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

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

DRAINAGE AREA.--165 mi^2.

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

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

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

REMARKS.--Records good. Since 1956, flow regulated by earthen dam and concrete spillway with radial lift gates at outlet. Discharge computed from relation between discharge, head, and gate openings. An undetermined amount of water is diverted at times through a gated culvert in dam for irrigation of citrus groves.

COOPERATION.--Gate-opening record provided by Lake County Water Authority.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	-0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	-1.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	-2.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	-2.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	-2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	-2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	-2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	-1.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	-1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	-1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	-1.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	-1.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	-1.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	-1.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	-1.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	-1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	-1.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	-1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	-1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	-1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	-1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	-1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	-1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	-1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	-1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	-1.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	-0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	-0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	-0.52	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	-0.45	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	-0.45	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	-41.19	-0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	-1.33	-0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	-2.8	-0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFSM	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IN.	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2002, BY WATER YEAR (WY)

MEAN	37.5	23.6	20.5	34.2	33.1	49.8	45.4	22.6	14.6	21.0	33.9	42.5
MAX	420	309	204	408	369	417	516	334	245	279	313	337
(WY)	1961	1961	1970	1998	1998	1998	1960	1960	1959	1959	1959	1959
MIN	-1.33	-0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-4.02
(WY)	2002	2002	1962	1963	1962	1962	1962	1962	1961	1961	1961	1994

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1957 - 2002	
ANNUAL TOTAL	-41.38		-41.38			
ANNUAL MEAN	-0.11		-0.11		31.3	
HIGHEST ANNUAL MEAN					238	1960
LOWEST ANNUAL MEAN					-0.31	1994
HIGHEST DAILY MEAN	0.00	Many days	0.00	Many days	584	Apr 5 1960
LOWEST DAILY MEAN	-2.8	Oct 3	-2.8	Oct 3	-28	Sep 24 1994
ANNUAL SEVEN-DAY MINIMUM	-2.1	Oct 2	-2.1	Oct 2	-17	Sep 23 1994
MAXIMUM PEAK STAGE			91.61	Oct 2	98.15	Apr 22 1959
ANNUAL RUNOFF (CFSM)	-0.001		-0.001		0.19	
ANNUAL RUNOFF (INCHES)	-0.01		-0.01		2.57	
10 PERCENT EXCEEDS	0.00		0.00		119	
50 PERCENT EXCEEDS	0.00		0.00		1.7	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

Note.--Negative figures indicate reverse flow.

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

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91.37	91.26	90.96	---	90.79	90.71	90.40	---	---	---	90.49	90.88
2	91.47	91.25	90.95	---	90.78	90.69	90.38	---	---	---	90.50	90.87
3	91.50	91.25	90.94	---	90.76	90.70	90.40	---	---	---	90.51	90.86
4	91.46	91.25	90.93	---	90.74	90.75	90.40	---	---	---	90.53	90.85
5	91.45	91.23	90.92	---	90.72	90.73	90.36	---	---	---	90.53	90.86
6	91.45	91.19	90.91	---	90.69	90.72	90.33	---	---	---	90.54	90.87
7	91.45	91.17	90.90	---	90.70	90.71	90.31	---	---	---	90.55	90.85
8	91.45	91.16	90.89	---	90.71	90.71	90.30	---	---	---	90.55	90.84
9	91.44	91.15	90.89	---	90.70	90.71	---	---	---	---	90.55	90.82
10	91.42	91.14	90.89	---	90.70	90.70	---	---	---	---	90.55	90.81
11	91.41	91.13	90.89	---	90.70	90.69	---	---	---	---	90.54	90.79
12	91.40	91.12	90.88	---	90.69	90.68	---	---	---	---	90.54	90.79
13	91.40	91.12	90.88	---	90.68	90.67	---	---	---	---	90.57	90.78
14	91.39	91.12	90.87	---	90.67	90.66	---	---	---	90.42	90.58	90.78
15	91.40	91.10	90.86	---	90.66	90.66	---	---	---	---	90.59	90.80
16	91.39	91.09	90.86	---	90.65	90.65	---	---	---	---	90.61	90.79
17	91.36	91.08	90.84	---	90.65	90.64	---	---	---	---	90.60	90.79
18	91.34	91.08	---	---	90.63	90.63	---	---	---	---	90.61	90.78
19	91.33	91.07	---	90.84	90.62	90.62	---	---	---	---	90.67	90.80
20	91.33	91.06	---	90.84	90.61	90.61	---	---	---	---	90.66	90.79
21	91.34	91.05	---	90.84	90.60	90.60	---	---	---	90.49	90.65	90.78
22	91.37	91.04	---	90.84	90.62	90.60	---	---	---	90.47	90.65	90.76
23	91.37	91.03	---	90.84	90.70	90.59	---	---	---	90.45	90.63	90.75
24	91.37	91.03	---	90.83	90.77	90.58	---	---	---	90.42	90.62	90.78
25	91.37	91.02	---	90.83	90.76	90.57	---	---	---	90.40	90.61	90.86
26	91.36	91.01	---	90.82	90.75	90.55	---	---	---	90.41	90.61	90.86
27	91.32	91.00	---	90.82	90.73	90.53	---	---	---	90.46	90.62	90.84
28	91.29	90.99	---	90.81	90.71	90.51	---	---	---	90.42	90.61	90.84
29	91.27	90.98	---	90.81	---	90.50	---	---	---	90.38	90.63	90.83
30	91.26	90.97	---	90.80	---	90.47	---	---	---	90.40	90.75	90.82
31	91.26	---	---	90.80	---	90.43	---	---	---	90.49	90.89	---
MEAN	91.38	91.10	---	---	90.70	90.63	---	---	---	---	90.60	90.82
MAX	91.50	91.26	---	---	90.79	90.75	---	---	---	---	90.89	90.88
MIN	91.26	90.97	---	---	90.60	90.43	---	---	---	---	90.49	90.75

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

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

DRAINAGE AREA.--165 mi^2.

PERIOD OF RECORD.--September 1956 to July 1957 (fragmentary), August 1957 to current year (gage heights only). Prior to October 1968, published as Palatlakaha Creek at Cherry Lake Outlet, near Groveland (auxiliary).

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 97.73 ft, Apr. 5, 1960; minimum unknown, below lowest recordable stage.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92.24	91.64	91.36	91.02	91.12	91.08	---	90.01	89.11	---	91.39	93.14
2	92.15	91.64	91.35	91.11	91.12	91.07	---	89.98	89.09	---	91.47	93.13
3	91.98	91.64	91.34	91.24	91.10	91.08	---	89.95	89.07	---	91.57	93.10
4	91.91	91.63	91.33	91.22	91.08	91.13	---	89.91	89.04	---	91.64	93.07
5	91.88	91.63	91.32	91.21	91.06	91.12	---	89.88	89.02	---	91.68	93.05
6	91.87	91.61	91.30	91.21	91.04	91.11	---	89.85	88.99	---	91.70	93.05
7	91.86	91.60	91.29	91.19	91.05	91.10	---	89.82	89.00	---	91.72	93.02
8	91.85	91.58	91.29	91.18	91.07	91.09	---	89.79	---	---	91.74	93.00
9	91.83	91.57	91.28	91.17	91.06	91.09	---	89.75	---	---	91.73	92.98
10	91.82	91.56	91.27	91.16	91.05	91.08	---	89.72	---	---	91.71	92.97
11	91.80	91.55	91.27	91.15	91.05	91.06	---	89.68	---	---	91.69	92.96
12	91.79	91.54	91.27	91.14	91.04	91.05	---	89.65	---	89.84	91.68	92.96
13	91.79	91.53	91.26	91.13	91.03	91.05	---	89.61	---	---	91.78	92.95
14	91.78	91.54	91.25	91.16	91.02	91.04	---	89.58	---	---	91.94	92.95
15	91.78	91.54	91.24	91.22	91.00	91.02	---	89.54	---	89.99	92.05	92.97
16	91.77	91.52	91.23	91.22	91.00	91.01	---	89.50	---	89.99	92.14	92.95
17	91.76	91.50	91.21	91.21	90.99	91.00	---	89.48	---	89.98	92.17	92.95
18	91.74	91.49	91.21	91.21	90.97	90.98	---	89.45	---	89.97	92.18	92.95
19	91.73	91.48	91.19	91.20	90.95	90.97	---	89.47	89.24	89.96	92.28	92.96
20	91.73	91.48	91.17	91.19	90.94	90.95	---	89.45	---	90.04	92.32	92.96
21	91.74	91.46	91.15	91.19	90.93	90.94	---	89.41	---	90.34	92.30	92.94
22	91.77	91.45	91.14	91.19	90.95	90.93	90.33	89.37	---	90.53	92.28	92.94
23	91.77	91.44	91.12	91.19	91.06	90.90	90.29	89.33	---	90.66	92.26	92.99
24	91.77	91.43	91.12	91.18	91.16	90.88	90.25	89.30	---	90.76	92.25	93.02
25	91.77	91.42	91.10	91.17	91.16	90.87	90.21	89.27	---	90.83	92.23	93.11
26	91.75	91.42	91.09	91.17	91.15	90.87	90.17	89.24	---	90.90	92.24	93.11
27	91.72	91.41	91.07	91.16	91.13	---	90.14	89.21	---	91.01	92.29	93.10
28	91.69	91.40	91.06	91.16	91.10	---	90.11	89.19	---	91.05	92.29	93.08
29	91.67	91.39	91.05	91.15	---	---	90.08	89.16	---	91.08	92.33	93.07
30	91.66	91.37	91.04	91.15	---	---	90.04	89.13	---	91.14	92.63	93.05
31	91.66	---	91.03	91.14	---	---	---	89.12	---	91.32	93.02	---
MEAN	91.81	91.52	91.21	91.17	91.05	---	---	89.54	---	---	92.02	93.02
MAX	92.24	91.64	91.36	91.24	91.16	---	---	90.01	---	---	93.02	93.14
MIN	91.66	91.37	91.03	91.02	90.93	---	---	89.12	---	---	91.39	92.94

02237000 PALATLAKAHA RIVER NEAR MASCOTTE, FL

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

DRAINAGE AREA.--182 mi^2.

PERIOD OF RECORD.--May 1945 to February 1956, April 1964 to September 1965, October 1965 to September 1995 (gage heights and periodic discharge measurements only), January to September 2002 (gage heights only).

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 458 ft^3/s, Oct. 4,5, 1945; maximum gage height, 96.66 ft, former site, present datum, Oct. 11,12, 1953; gates closed and no flow or leakage only for many days in 1972-83, 2002; minimum gage height unknown, below lowest recordable stage.

GAGE HEIGHT, FEET, PERIOD JANUARY 2002 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	91.08	91.01	90.76	---	---	---	91.38	92.79
2	---	---	---	---	91.07	91.02	90.74	---	---	---	91.44	92.84
3	---	---	---	---	91.05	91.03	90.74	---	---	---	91.57	92.87
4	---	---	---	---	91.03	91.07	90.74	---	---	---	91.65	92.89
5	---	---	---	---	91.01	91.05	90.72	---	---	---	91.66	92.92
6	---	---	---	---	91.00	91.05	90.69	---	---	---	91.66	92.94
7	---	---	---	---	91.01	91.04	90.68	---	---	---	91.68	92.94
8	---	---	---	---	91.01	91.04	---	---	---	---	91.69	92.93
9	---	---	---	---	91.00	91.03	---	---	---	---	91.68	92.92
10	---	---	---	---	91.00	91.03	---	---	---	---	91.67	92.91
11	---	---	---	---	91.00	91.02	---	---	---	---	91.66	92.91
12	---	---	---	---	90.99	91.01	---	---	---	---	91.66	92.90
13	---	---	---	---	90.97	91.01	---	---	---	---	91.71	92.90
14	---	---	---	---	90.96	91.00	---	---	---	---	91.80	92.90
15	---	---	---	---	90.95	90.99	---	---	---	---	91.89	92.90
16	---	---	---	---	90.95	90.98	---	---	---	---	91.95	92.90
17	---	---	---	---	90.94	90.97	---	---	---	---	91.98	92.91
18	---	---	---	---	90.92	90.96	---	---	---	---	92.01	92.90
19	---	---	---	---	90.92	90.95	---	---	---	---	92.11	92.92
20	---	---	---	---	90.91	90.92	---	---	---	---	92.15	92.92
21	---	---	---	---	90.90	90.91	---	---	---	90.84	92.18	92.91
22	---	---	---	---	90.91	90.89	---	---	---	90.93	92.19	92.90
23	---	---	---	91.14	90.99	90.86	---	---	---	90.99	92.20	92.94
24	---	---	---	91.13	91.07	90.85	---	---	---	91.03	92.20	92.96
25	---	---	---	91.13	91.07	90.84	---	---	---	91.06	92.19	93.04
26	---	---	---	91.12	91.06	90.85	---	---	---	91.11	92.20	93.05
27	---	---	---	91.11	91.04	90.84	---	---	---	91.19	92.26	93.05
28	---	---	---	91.11	91.02	90.83	---	---	---	91.20	92.26	93.04
29	---	---	---	91.11	---	90.81	---	---	---	91.21	92.32	93.03
30	---	---	---	91.10	---	90.80	---	---	---	91.23	92.55	93.01
31	---	---	---	91.10	---	90.78	---	---	---	91.35	92.73	---
MEAN	---	---	---	---	90.99	90.95	---	---	---	---	91.94	92.93
MAX	---	---	---	---	91.08	91.07	---	---	---	---	92.73	93.05
MIN	---	---	---	---	90.90	90.78	---	---	---	---	91.38	92.79

02237001 PALATLAKAHA RIVER BELOW SPILLWAY, NEAR MASCOTTE, FL

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

DRAINAGE AREA.--182 mi^2.

RPERIOD OF RECORD.--April 1964 to September 1995 and January 2002 to September 2002 (gage heights only).

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 93.00 ft, Oct. 1, 1979; minimum unknown, below lowest recordable stage.

GAGE HEIGHT, FEET, PERIOD JANUARY 2002 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	87.36	87.31	86.85	---	---	87.06	88.46	89.48
2	---	---	---	---	87.34	87.30	86.82	---	---	87.14	88.49	89.50
3	---	---	---	---	87.32	87.31	86.80	---	---	87.18	88.56	89.52
4	---	---	---	---	87.30	87.38	86.79	---	---	87.21	88.75	89.52
5	---	---	---	---	87.27	87.38	86.77	---	---	87.24	---	89.53
6	---	---	---	---	87.24	87.36	86.74	---	---	87.25	---	89.56
7	---	---	---	---	87.24	87.36	86.70	---	---	87.25	---	89.56
8	---	---	---	---	87.26	87.36	86.66	---	---	87.25	---	89.55
9	---	---	---	---	87.24	87.34	86.62	---	---	87.24	88.72	89.54
10	---	---	---	---	87.23	87.33	86.60	---	---	87.25	88.71	89.53
11	---	---	---	---	87.23	87.31	86.57	---	---	87.25	88.69	89.53
12	---	---	---	---	87.21	87.29	86.54	---	---	87.26	88.70	89.53
13	---	---	---	---	87.19	87.28	86.53	---	---	87.30	88.80	89.54
14	---	---	---	---	87.18	87.26	86.52	---	---	87.54	88.85	89.54
15	---	---	---	---	87.15	87.23	86.52	---	---	87.58	88.93	89.54
16	---	---	---	---	87.14	87.22	---	---	---	87.61	88.96	89.54
17	---	---	---	---	87.12	87.19	---	---	---	87.61	88.96	89.56
18	---	---	---	---	87.10	87.17	---	---	---	87.60	88.96	89.54
19	---	---	---	---	87.07	87.14	---	---	---	87.59	88.97	89.54
20	---	---	---	---	87.05	87.11	---	---	---	87.59	89.00	89.52
21	---	---	---	---	87.03	87.10	---	---	---	---	88.99	89.52
22	---	---	---	87.48	87.04	87.08	---	---	---	---	88.98	89.50
23	---	---	---	87.47	87.16	87.04	---	---	---	---	88.97	89.50
24	---	---	---	87.45	87.29	87.01	---	---	---	---	88.95	89.52
25	---	---	---	87.44	87.32	87.00	---	---	---	---	88.94	89.60
26	---	---	---	87.42	87.33	87.01	---	---	86.53	88.40	88.93	89.62
27	---	---	---	87.40	87.34	86.99	---	---	86.58	88.46	88.94	89.62
28	---	---	---	87.39	87.32	86.96	---	---	86.67	88.46	88.94	89.61
29	---	---	---	87.41	---	86.94	---	---	86.77	88.45	89.01	89.60
30	---	---	---	87.40	---	86.91	---	---	86.89	88.44	89.27	89.59
31	---	---	---	87.38	---	86.88	---	---	---	88.47	89.44	---
MEAN	---	---	---	---	87.22	87.18	---	---	---	---	---	89.55
MAX	---	---	---	---	87.36	87.38	---	---	---	---	---	89.62
MIN	---	---	---	---	87.03	86.88	---	---	---	---	---	89.48

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

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

DRAINAGE AREA.--186 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

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

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

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88.99	88.60	88.08	---	---	---	---	---	---	---	88.62	89.68
2	88.97	88.58	88.06	---	---	---	---	---	---	---	88.65	89.70
3	88.96	88.56	---	---	---	---	---	---	---	---	88.79	89.71
4	88.94	88.55	---	---	---	---	---	---	---	---	88.91	89.72
5	88.93	88.54	---	---	---	---	---	---	---	---	88.92	89.74
6	88.91	88.52	---	---	---	---	---	---	---	---	88.91	89.76
7	88.90	88.50	---	---	---	---	---	---	---	---	88.93	89.76
8	88.88	88.48	---	---	---	---	---	---	---	---	88.94	89.76
9	88.86	88.46	---	---	---	---	---	---	---	---	88.93	89.75
10	88.84	88.44	---	---	---	---	---	---	---	---	88.91	89.74
11	88.83	88.42	---	---	---	---	---	---	---	---	88.89	89.74
12	88.81	88.40	---	---	---	---	---	---	---	---	88.90	89.74
13	88.79	88.37	---	---	---	---	---	---	---	---	89.00	89.74
14	88.78	88.37	---	---	---	---	---	---	---	---	89.05	89.74
15	88.77	88.35	---	---	---	---	---	---	---	---	89.12	89.74
16	88.76	88.33	---	---	---	---	---	---	---	---	89.16	89.74
17	88.73	88.32	---	---	---	---	---	---	---	---	89.16	89.76
18	88.71	88.30	---	---	---	---	---	---	---	---	89.16	89.75
19	88.70	88.28	---	---	---	---	---	---	---	---	89.17	89.74
20	88.69	88.27	---	---	---	---	---	---	---	---	89.19	89.73
21	88.71	88.25	---	---	---	---	---	---	---	---	89.19	89.72
22	88.76	88.23	---	---	---	---	---	---	---	88.46	89.18	89.71
23	88.76	88.21	---	---	---	---	---	---	---	88.51	89.17	89.70
24	88.75	88.23	---	---	---	---	---	---	---	88.51	89.16	89.72
25	88.74	88.21	---	---	---	---	---	---	---	88.50	89.14	89.80
26	88.71	88.19	---	---	---	---	---	---	---	88.52	89.14	89.81
27	88.69	88.17	---	---	---	---	---	---	---	88.62	89.15	89.82
28	88.66	88.15	---	---	---	---	---	---	---	88.62	89.14	89.81
29	88.64	88.12	---	---	---	---	---	---	---	88.62	89.21	89.81
30	88.62	88.10	---	---	---	---	---	---	---	88.61	89.47	89.80
31	88.61	---	---	---	---	---	---	---	---	88.63	89.64	---
MEAN	88.79	88.35	---	---	---	---	---	---	---	---	89.06	89.75
MAX	88.99	88.60	---	---	---	---	---	---	---	---	89.64	89.82
MIN	88.61	88.10	---	---	---	---	---	---	---	---	88.62	89.68

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

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

DRAINAGE AREA.--186 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 92.25 ft, Mar. 19, 1998; minimum unknown, below lowest recordable stage.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87.63	87.25	86.86	86.34	86.71	86.80	86.39	85.41	---	87.38	87.77	88.27
2	87.62	87.23	86.85	86.45	86.70	86.80	86.36	85.37	---	87.48	87.85	88.26
3	87.60	87.22	86.83	86.62	86.68	86.81	86.34	85.32	---	87.52	88.01	88.24
4	87.58	87.22	86.81	86.64	86.66	86.87	86.33	85.27	---	87.54	88.03	88.23
5	87.57	87.23	86.79	86.66	86.63	86.88	86.31	85.23	---	87.56	87.99	88.24
6	87.56	87.20	86.77	86.68	86.62	86.88	86.28	---	---	87.57	87.94	88.25
7	87.55	87.18	86.76	86.69	86.62	86.88	86.24	---	---	87.56	87.95	88.25
8	87.53	87.16	86.74	86.69	86.64	86.88	86.21	---	---	87.55	87.93	88.25
9	87.51	87.14	86.73	86.69	86.63	86.88	86.17	---	---	87.54	87.89	88.24
10	87.49	87.13	86.71	86.69	86.62	86.87	86.14	---	---	87.55	87.86	88.22
11	87.47	87.11	86.70	86.69	86.62	86.85	86.11	---	---	87.56	87.83	88.22
12	87.45	87.09	86.69	86.68	86.61	86.84	86.08	---	---	87.59	87.83	88.21
13	87.43	87.08	86.67	86.68	86.59	86.82	86.05	---	---	87.70	87.92	88.21
14	87.42	87.08	86.65	86.71	86.58	86.80	86.02	---	---	87.83	88.00	88.20
15	87.41	87.07	86.63	86.77	86.56	86.78	86.01	---	---	87.80	88.06	88.19
16	87.39	87.05	86.61	86.79	86.55	86.76	85.98	---	---	87.77	88.10	88.18
17	87.36	87.03	86.59	86.79	86.54	86.74	85.95	---	---	87.74	88.08	88.17
18	87.34	87.01	86.58	86.79	86.53	86.73	85.92	---	---	87.70	88.07	88.15
19	87.32	87.01	86.55	86.79	86.51	86.70	85.88	---	---	87.67	88.08	88.13
20	87.32	87.00	86.53	86.78	86.49	86.68	85.85	---	---	87.73	88.09	88.12
21	87.33	86.98	86.51	86.78	86.48	86.65	85.81	---	---	87.92	88.07	88.11
22	87.38	86.96	86.48	86.78	86.49	86.63	85.77	---	---	87.92	88.06	88.09
23	87.37	86.95	86.47	86.77	86.60	86.60	85.73	---	---	87.89	88.05	88.07
24	87.36	86.97	86.47	86.76	86.75	86.57	85.69	---	85.57	87.85	88.03	88.08
25	87.37	86.96	86.45	86.75	86.78	86.55	85.65	---	85.89	87.82	88.01	88.15
26	87.36	86.95	86.44	86.74	86.80	86.55	85.61	---	86.10	87.84	88.00	88.16
27	87.33	86.94	86.42	86.73	86.81	86.53	85.57	---	86.26	87.89	88.01	88.15
28	87.31	86.92	86.40	86.72	86.80	86.51	85.53	---	86.40	87.86	88.00	88.14
29	87.29	86.90	86.39	86.74	---	86.48	85.48	---	86.64	87.82	88.06	88.13
30	87.28	86.88	86.38	86.74	---	86.45	85.45	---	86.94	87.80	88.21	88.11
31	87.27	---	86.36	86.73	---	86.42	---	---	---	87.79	88.29	---
MEAN	87.43	87.06	86.61	86.71	86.63	86.72	85.96	---	---	87.70	88.00	88.18
MAX	87.63	87.25	86.86	86.79	86.81	86.88	86.39	---	---	87.92	88.29	88.27
MIN	87.27	86.88	86.36	86.34	86.48	86.42	85.45	---	---	87.38	87.77	88.07

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

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

DRAINAGE AREA.--193 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 90.59 ft, Aug. 14, 1983; minimum unknown, below lowest recordable stage.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86.36	86.10	85.78	85.21	85.26	84.98	84.28	---	---	85.54	86.96	88.24
2	86.36	86.09	85.76	85.32	85.24	84.98	84.24	---	---	85.67	86.90	88.24
3	86.34	86.10	85.75	85.49	85.22	84.96	84.22	---	---	85.76	86.80	88.24
4	86.33	86.11	85.73	85.48	85.19	85.00	84.21	---	---	85.81	---	88.23
5	86.32	86.11	85.71	85.48	85.16	84.99	84.17	---	---	85.88	---	88.25
6	86.32	86.10	85.69	85.48	85.14	84.97	84.11	---	---	85.95	---	88.25
7	86.31	86.08	85.68	85.47	85.14	84.95	84.05	---	---	85.97	---	88.25
8	86.30	86.07	85.66	85.46	85.13	84.94	84.00	---	---	85.97	87.73	88.26
9	86.29	86.06	85.65	85.45	85.11	84.91	83.94	---	---	85.97	87.72	88.25
10	86.28	86.04	85.63	85.44	85.10	84.89	83.89	---	---	85.99	87.72	88.23
11	86.26	86.03	85.62	85.42	85.08	84.86	83.84	---	---	86.01	87.71	88.22
12	86.25	86.02	85.60	85.41	85.06	84.83	83.79	---	---	86.11	87.72	88.22
13	86.24	86.01	85.58	85.41	85.04	84.81	83.75	---	---	86.27	87.82	88.22
14	86.23	86.00	85.57	85.43	85.01	84.77	83.74	---	---	86.55	87.91	88.21
15	86.22	86.00	85.55	85.48	84.99	84.74	83.75	---	---	86.58	87.96	88.20
16	86.21	85.98	85.53	85.47	84.98	84.71	83.73	---	---	86.59	88.03	88.19
17	86.19	85.97	85.51	85.46	84.96	84.68	---	---	---	86.59	88.03	88.17
18	86.17	85.96	85.49	85.45	84.92	84.65	---	---	---	86.58	88.03	88.16
19	86.16	85.95	85.47	85.44	84.90	84.61	---	---	---	86.57	88.03	88.14
20	86.15	85.94	85.44	85.43	84.87	84.58	---	---	---	86.57	88.04	88.12
21	86.17	85.92	85.42	85.42	84.84	84.55	---	---	---	---	88.04	88.11
22	86.20	85.91	85.40	85.40	84.85	84.52	---	---	---	---	88.04	88.09
23	86.20	85.90	85.38	85.39	84.95	84.47	---	---	84.04	---	88.05	88.08
24	86.20	85.90	85.37	85.37	85.07	84.43	---	---	84.40	---	88.03	88.09
25	86.20	85.88	85.35	85.36	85.08	84.42	---	---	84.85	---	88.02	88.16
26	86.19	85.86	85.33	85.34	85.06	84.50	---	---	85.01	87.08	88.01	88.17
27	86.17	85.85	85.31	85.32	85.02	84.48	---	---	85.07	87.02	88.01	88.16
28	86.14	85.83	85.29	85.31	85.00	84.45	---	---	85.07	87.00	88.01	88.15
29	86.12	85.82	85.27	85.32	---	84.41	---	---	85.17	86.99	88.03	88.13
30	86.12	85.80	85.25	85.31	---	84.37	---	---	85.32	86.98	88.14	88.12
31	86.11	---	85.23	85.28	---	84.32	---	---	---	86.96	88.23	---
MEAN	86.23	85.98	85.52	85.40	85.05	84.70	---	---	---	---	---	88.19
MAX	86.36	86.11	85.78	85.49	85.26	85.00	---	---	---	---	---	88.26
MIN	86.11	85.80	85.23	85.21	84.84	84.32	---	---	---	---	---	88.08

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

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

DRAINAGE AREA.--193 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 88.06 ft, Mar. 20, 1998; minimum, 80.35 ft, June 21, 2001.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.88	83.52	83.13	82.61	83.00	82.97	82.64	81.73	80.71	83.09	83.92	84.08
2	83.85	83.51	83.12	82.75	82.98	82.97	82.61	81.69	80.69	83.16	83.95	84.05
3	83.84	83.51	83.10	82.99	82.96	82.97	82.60	81.62	80.66	83.19	84.01	84.03
4	83.83	83.50	83.09	83.01	82.94	83.05	82.60	81.57	80.64	83.21	---	84.02
5	83.82	83.53	83.07	83.02	82.91	83.05	82.57	81.54	80.61	83.26	---	84.03
6	83.81	83.50	83.05	83.03	82.89	83.05	82.54	81.48	80.60	83.29	---	84.03
7	83.81	83.48	82.99	83.04	82.89	83.05	82.51	81.41	80.73	83.28	---	84.01
8	83.79	83.46	82.94	83.04	82.90	83.04	82.47	81.38	80.88	83.28	83.99	83.99
9	83.78	83.44	82.94	83.03	82.89	83.04	82.44	81.35	80.86	83.29	83.97	83.97
10	83.77	83.42	82.93	83.02	82.87	83.03	82.41	81.29	80.85	83.31	83.95	83.94
11	83.75	83.41	82.93	83.01	82.86	83.01	82.39	81.21	80.85	83.33	83.93	83.93
12	83.74	83.39	82.91	83.01	82.85	83.00	82.36	81.17	80.85	83.43	83.96	83.92
13	83.73	83.37	82.90	83.01	82.83	82.99	82.33	81.13	80.86	83.62	84.11	83.91
14	83.71	83.39	82.89	83.03	82.81	82.97	82.33	81.10	80.83	83.97	84.13	83.90
15	83.70	83.38	82.87	83.10	82.79	82.95	82.36	81.06	80.85	83.92	84.11	83.89
16	83.69	83.37	82.86	83.10	82.78	82.93	82.35	81.03	80.84	83.88	84.10	83.88
17	83.67	83.35	82.84	83.10	82.77	82.91	82.32	81.00	80.93	83.86	84.06	83.86
18	83.65	83.34	82.83	83.10	82.75	82.89	82.28	80.98	81.13	83.83	84.03	83.85
19	83.63	83.33	82.81	83.09	82.72	82.86	82.25	80.98	81.16	83.81	84.00	83.83
20	83.63	83.31	82.79	83.08	82.70	82.84	82.21	80.96	81.21	83.86	84.00	83.82
21	83.63	83.29	82.77	83.07	82.68	82.80	82.18	80.94	81.19	83.97	83.97	83.81
22	83.67	83.27	82.75	83.06	82.69	82.76	82.14	80.90	81.28	83.95	83.96	83.80
23	83.67	83.25	82.73	83.05	82.81	82.70	82.05	80.87	81.55	83.94	83.94	83.79
24	83.66	83.24	82.73	83.05	82.96	82.68	81.96	80.85	81.88	83.92	83.92	83.82
25	83.65	83.22	82.72	83.03	82.98	82.63	81.91	80.82	82.25	83.90	83.90	83.94
26	83.64	83.21	82.70	83.02	82.99	82.73	81.88	80.80	82.50	83.95	83.90	83.93
27	83.61	83.19	82.68	83.01	82.99	82.74	81.85	80.79	82.64	84.02	83.93	83.92
28	83.58	83.18	82.67	83.01	82.97	82.73	81.82	80.78	82.75	84.00	83.91	83.90
29	83.56	83.17	82.65	83.03	---	82.71	81.79	80.77	82.87	83.97	83.93	83.88
30	83.54	83.15	82.64	83.03	---	82.69	81.76	80.75	82.98	83.95	84.05	83.86
31	83.53	---	82.62	83.01	---	82.66	---	80.73	---	83.95	84.12	---
MEAN	83.70	83.36	82.86	83.02	82.86	82.88	82.26	81.12	81.29	83.66	---	83.92
MAX	83.88	83.53	83.13	83.10	83.00	83.05	82.64	81.73	82.98	84.02	---	84.08
MIN	83.53	83.15	82.62	82.61	82.68	82.63	81.76	80.73	80.60	83.09	---	83.79

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

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

DRAINAGE AREA.--208 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 86.81 ft, Feb. 23, 1983; minimum unknown, below lowest recordable stage.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82.96	82.58	82.25	81.79	81.89	81.62	81.21	80.29	78.61	81.66	83.27	83.86
2	82.95	82.57	82.24	---	81.87	81.62	81.19	80.24	78.57	81.70	83.28	83.86
3	82.94	82.56	82.22	82.07	81.85	81.62	81.17	80.20	78.52	81.71	83.31	83.85
4	82.93	82.57	82.21	82.06	81.82	81.70	81.17	80.15	78.46	81.70	83.32	83.84
5	82.92	82.58	82.19	82.06	81.79	81.69	81.14	80.10	78.41	81.72	83.31	83.86
6	82.91	82.56	82.18	82.06	81.78	81.68	81.11	80.05	78.38	81.75	83.30	83.88
7	82.90	82.55	82.17	82.05	81.77	81.67	81.08	80.00	78.46	81.75	83.33	83.87
8	82.88	82.53	82.16	82.04	81.77	81.66	81.06	79.95	78.54	81.75	83.34	83.86
9	82.87	82.52	82.14	82.03	81.75	81.65	81.02	79.90	78.52	81.77	83.32	83.84
10	82.85	82.50	82.13	82.02	81.74	81.63	80.99	79.84	78.49	81.80	83.31	83.83
11	82.84	82.49	82.12	82.01	81.72	81.61	80.97	79.78	78.47	81.82	83.29	83.82
12	82.82	82.47	82.10	82.00	81.69	81.59	80.94	79.73	78.45	81.88	83.30	83.82
13	82.81	82.46	82.09	---	81.67	81.57	80.91	79.67	78.48	82.06	83.43	83.81
14	82.80	82.46	82.08	82.05	81.64	81.55	80.90	79.61	78.44	82.52	83.57	83.81
15	82.78	82.45	82.06	82.05	81.62	81.52	80.89	79.54	78.44	82.63	83.63	83.80
16	82.77	82.44	82.04	82.04	81.60	81.50	80.87	79.47	78.42	82.67	83.67	83.78
17	82.74	82.43	82.03	82.04	81.58	81.48	80.84	79.41	78.51	82.68	83.68	83.77
18	82.72	82.42	---	82.03	81.55	81.46	80.81	79.35	79.16	82.68	83.68	83.75
19	82.71	82.41	---	82.02	81.53	81.43	80.78	79.32	79.57	82.67	83.66	83.73
20	82.70	82.40	---	82.01	81.51	81.40	80.75	79.27	79.65	82.73	83.66	83.72
21	82.70	82.39	---	82.00	81.49	81.38	80.71	79.20	79.65	82.99	83.64	83.70
22	82.72	82.38	---	81.99	81.50	81.35	80.67	79.12	79.76	83.10	83.62	83.68
23	82.71	82.37	---	81.98	81.58	81.32	80.63	79.06	80.00	83.14	83.60	83.65
24	82.71	82.35	---	81.97	81.68	81.30	80.59	79.00	80.27	83.14	83.58	83.68
25	82.71	82.34	---	81.95	81.69	81.29	80.55	78.94	80.81	83.14	83.55	83.78
26	82.68	82.33	---	81.94	81.68	81.37	80.51	78.88	81.19	83.18	83.55	83.79
27	82.66	82.31	81.87	81.93	81.65	81.35	80.47	78.83	81.33	83.27	83.58	83.77
28	82.63	82.30	81.86	81.92	81.63	81.32	80.43	78.77	81.43	83.28	83.59	83.75
29	82.61	82.29	81.84	81.94	---	81.30	80.38	78.71	81.51	83.28	83.62	83.73
30	82.60	82.27	81.83	81.92	---	81.27	80.34	78.66	81.57	83.28	83.69	83.70
31	82.59	---	81.81	81.91	---	81.24	---	78.65	---	83.28	83.84	---
MEAN	82.78	82.44	---	---	81.68	81.49	80.84	79.47	79.34	82.48	83.50	83.79
MAX	82.96	82.58	---	---	81.89	81.70	81.21	80.29	81.57	83.28	83.84	83.88
MIN	82.59	82.27	---	---	81.49	81.24	80.34	78.65	78.38	81.66	83.27	83.65

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

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

DRAINAGE AREA.--208 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 85.00 ft, Feb. 17, 1998; minimum, 75.89 ft, June 21, 2001.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.52	---	79.31	---	79.22	79.19	79.17	78.74	77.63	79.30	79.65	79.76
2	79.51	---	79.32	---	79.31	79.19	79.16	78.71	77.60	79.32	79.66	79.75
3	79.48	---	79.34	---	79.29	79.19	79.17	78.68	77.58	79.32	79.68	79.75
4	79.48	---	79.35	---	79.27	79.24	79.18	78.65	77.54	79.32	79.67	79.75
5	79.46	---	79.34	---	79.30	79.20	79.18	78.61	77.50	79.33	79.69	79.76
6	79.47	---	79.31	---	79.30	79.19	79.17	78.58	77.49	79.34	79.68	79.77
7	79.46	---	79.29	---	79.34	79.20	79.16	78.54	77.53	79.32	79.69	79.76
8	79.47	---	79.26	---	79.34	79.20	79.16	78.52	77.54	79.32	79.68	79.76
9	79.46	79.40	79.25	---	79.34	79.19	79.15	78.48	77.57	79.33	79.67	79.75
10	79.45	79.39	79.30	---	79.34	79.18	79.14	78.44	77.59	79.34	79.65	79.75
11	79.45	79.38	79.32	---	79.33	79.18	79.13	78.41	77.60	79.31	79.62	79.74
12	79.44	79.39	79.33	---	79.34	79.17	79.12	78.37	77.62	79.32	79.62	79.74
13	79.45	79.40	79.32	---	79.33	79.18	79.11	78.34	77.66	79.38	79.66	79.74
14	79.44	79.41	79.28	---	79.31	79.18	79.11	78.30	77.66	79.42	79.67	79.73
15	79.43	79.41	79.27	---	79.31	79.18	79.11	78.25	77.68	79.42	79.67	79.73
16	79.42	79.38	79.26	79.23	79.30	79.19	79.12	78.20	77.69	79.44	79.67	79.71
17	79.42	79.33	---	79.24	79.30	79.19	79.10	78.15	77.72	79.40	79.63	79.71
18	79.41	79.29	---	79.23	79.29	79.19	79.09	78.11	77.91	79.38	79.67	79.70
19	79.40	79.26	---	79.22	79.28	79.18	79.07	78.09	78.09	79.38	79.74	79.69
20	79.40	79.27	---	79.20	79.26	79.17	79.04	78.05	78.20	79.42	79.77	79.68
21	79.39	79.28	---	79.19	79.28	79.17	79.02	78.01	78.27	79.45	79.77	79.67
22	79.39	79.32	---	79.18	79.23	79.19	78.99	77.97	78.38	79.50	79.77	79.66
23	79.39	79.35	---	79.18	79.24	79.18	78.97	77.92	78.56	79.50	79.77	79.65
24	79.39	79.35	---	79.18	79.24	79.17	78.94	77.88	78.88	79.52	79.77	79.66
25	79.40	79.36	---	79.20	79.20	79.18	78.91	77.84	79.29	79.54	79.76	79.66
26	79.41	79.37	---	79.20	79.18	79.21	78.88	77.80	79.29	79.59	79.76	79.65
27	79.40	79.36	---	79.19	79.17	79.19	78.86	77.77	79.28	79.61	79.71	79.62
28	---	79.32	---	79.19	79.18	79.19	78.83	77.73	79.28	79.63	79.71	79.60
29	79.40	79.31	---	79.21	---	79.18	78.80	77.69	79.28	79.63	79.76	79.58
30	---	79.31	---	79.21	---	79.18	78.78	77.66	79.28	79.64	79.76	79.57
31	---	---	---	79.22	---	79.17	---	77.65	---	79.65	79.78	---
MEAN	---	---	---	---	79.28	79.19	79.05	78.20	78.11	79.43	79.70	79.70
MAX	---	---	---	---	79.34	79.24	79.18	78.74	79.29	79.65	79.78	79.77
MIN	---	---	---	---	79.17	79.17	78.78	77.65	77.49	79.30	79.62	79.57

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

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

DRAINAGE AREA.--221 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair. Flow regulated by manipulation of gates in spillway. Discharge computed from relation between discharge, head, and gate openings.

COOPERATION.--Gate-opening record provided by the Lake County Water Authority.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.2	0.42	0.19	0.28	0.33	0.14	0.00	e0.00	e1.6	3.2	3.6
2	2.1	1.2	0.41	0.69	0.27	0.33	0.11	0.00	e0.00	e1.6	2.8	3.5
3	2.0	1.2	0.38	1.5	0.26	0.35	0.12	0.00	e0.00	e1.4	2.5	3.5
4	1.8	1.3	0.37	1.3	0.26	0.84	0.15	0.00	e0.00	e1.4	2.4	3.4
5	1.7	1.8	0.35	1.1	0.24	0.72	0.12	0.00	e0.00	e1.3	2.2	3.4
6	1.7	1.3	0.34	0.95	0.25	0.59	0.08	0.00	e0.00	e1.3	2.1	3.4
7	1.6	1.0	0.35	0.85	0.30	0.53	0.05	0.00	e0.00	e1.2	2.3	3.4
8	1.5	0.89	0.35	0.76	0.33	0.49	0.02	0.00	e0.00	e1.2	2.6	3.3
9	1.5	0.83	0.35	0.69	0.32	0.44	0.00	0.00	e0.00	e1.1	2.5	3.3
10	1.4	0.79	0.33	0.65	0.30	0.41	0.00	0.00	e0.00	e1.2	2.3	3.3
11	1.3	0.77	0.32	0.61	0.29	0.41	0.00	0.00	e0.00	e1.2	2.1	3.3
12	1.3	0.76	0.30	0.57	0.28	0.40	0.00	0.00	e0.00	e1.3	2.1	3.3
13	1.3	0.74	0.30	0.55	0.28	0.38	0.00	0.00	e0.00	1.5	2.9	3.3
14	1.2	0.77	0.30	0.61	0.27	0.36	0.00	e0.00	e0.00	3.2	3.4	3.3
15	1.4	0.79	0.28	0.75	0.26	0.35	0.00	e0.00	e0.00	3.2	3.4	3.3
16	1.4	0.76	0.27	0.53	0.26	0.32	0.00	e0.00	e0.00	3.0	3.4	3.2
17	1.4	0.71	0.26	0.42	0.25	0.29	0.00	e0.00	e0.00	2.9	3.2	3.2
18	1.3	0.68	0.27	0.37	0.22	0.27	0.00	e0.00	e0.00	2.5	3.2	3.1
19	1.3	0.67	0.25	0.33	0.20	0.25	0.00	e0.00	e0.00	1.9	3.2	2.9
20	1.4	0.66	0.24	0.33	0.19	0.23	0.00	e0.00	e0.00	1.9	3.4	2.8
21	1.4	0.62	0.22	0.33	0.18	0.23	0.00	e0.00	e0.00	3.1	3.4	2.7
22	1.5	0.59	0.20	0.32	0.22	0.21	0.00	e0.00	e0.00	3.5	3.3	2.8
23	1.5	0.56	0.21	0.32	0.48	0.20	0.00	e0.00	e0.00	3.4	2.9	2.9
24	1.5	0.53	0.24	0.30	0.73	0.19	0.00	e0.00	e0.00	3.4	2.5	3.1
25	1.5	0.51	0.24	0.30	0.60	0.22	0.00	e0.00	e0.00	3.3	2.3	3.6
26	1.4	0.51	0.24	0.30	0.52	0.38	0.00	e0.00	e0.10	3.4	2.4	3.4
27	1.3	0.50	0.22	0.30	0.44	0.31	0.00	e0.00	e0.49	3.6	2.9	3.3
28	1.2	0.48	0.22	0.31	0.35	0.25	0.00	e0.00	e0.77	3.5	2.9	3.2
29	1.2	0.47	0.21	0.34	---	0.22	0.00	e0.00	e1.2	3.4	3.3	3.1
30	1.2	0.44	0.20	0.33	---	0.19	0.00	e0.00	e1.4	3.4	3.7	2.9
31	1.2	---	0.20	0.30	---	0.17	---	e0.00	---	3.3	3.8	---
TOTAL	45.8	24.03	8.84	17.20	8.83	10.86	0.79	0.00	3.96	73.2	88.6	96.8
MEAN	1.48	0.80	0.29	0.55	0.32	0.35	0.026	0.000	0.13	2.36	2.86	3.23
MAX	2.3	1.8	0.42	1.5	0.73	0.84	0.15	0.00	1.4	3.6	3.8	3.6
MIN	1.2	0.44	0.20	0.19	0.18	0.17	0.00	0.00	0.00	1.1	2.1	2.7
CFSM	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
IN.	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

MEAN	19.6	8.13	13.1	44.7	46.2	59.2	48.2	8.45	6.15	18.1	18.3	24.7
MAX	238	93.9	154	439	540	605	365	81.5	57.2	198	311	201
(WY)	1996	1996	1998	1998	1998	1998	1998	1970	1970	1983	1984	1995
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1979	1979	1979	1981	1981	1981	1981	1977	1977	1977	2000	1977

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	127.77		378.91			
ANNUAL MEAN	0.35		1.04		26.2	
HIGHEST ANNUAL MEAN					194	1970
LOWEST ANNUAL MEAN					0.13	2001
HIGHEST DAILY MEAN	4.8	Sep 15	3.8	Aug 31	727	Feb 20 1998
LOWEST DAILY MEAN	0.00	Many days	0.00	Apr 9-Jun 25	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Apr 9	0.00	Some years
MAXIMUM PEAK STAGE			71.16	Aug 30,31	74.18	Apr 3 1970
ANNUAL RUNOFF (CFSM)	0.002		0.005		0.12	
ANNUAL RUNOFF (INCHES)	0.02		0.06		1.61	
10 PERCENT EXCEEDS	1.4		3.3		54	
50 PERCENT EXCEEDS	0.00		0.44		2.2	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

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

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.72	70.47	70.24	70.14	70.19	70.21	70.12	69.51	68.57	70.56	70.95	71.08
2	70.67	70.46	70.24	70.30	70.19	70.21	70.11	69.47	68.54	70.55	70.82	71.06
3	70.64	70.47	70.23	70.55	70.18	70.22	70.11	69.44	68.53	70.52	70.75	71.03
4	70.61	70.50	70.22	70.49	70.18	70.37	70.12	69.40	68.49	70.51	70.73	71.01
5	70.59	70.60	70.22	70.43	70.17	70.34	70.11	69.37	68.47	70.50	70.70	71.02
6	70.57	70.48	70.21	70.40	70.18	70.30	70.09	69.33	68.46	70.48	70.66	71.02
7	70.56	70.41	70.22	70.37	70.20	70.28	70.07	69.30	68.52	70.46	70.70	71.00
8	70.54	70.39	70.22	70.35	70.21	70.26	70.05	69.26	68.55	70.46	70.77	70.98
9	70.52	70.37	70.22	70.33	70.21	70.25	70.02	69.23	68.55	70.44	70.74	70.97
10	70.51	70.36	70.21	70.32	70.20	70.24	70.00	69.19	68.51	70.46	70.72	70.96
11	70.50	70.35	70.21	70.30	70.20	70.24	69.99	69.11	68.47	70.48	70.68	70.98
12	70.49	70.35	70.20	70.29	70.19	70.23	69.97	69.05	68.44	70.49	70.68	70.97
13	70.48	70.34	70.20	70.28	70.19	70.23	69.96	69.02	68.45	70.53	70.85	70.95
14	70.48	70.35	70.20	70.30	70.19	70.22	69.97	68.98	68.45	70.95	71.02	70.96
15	70.51	70.36	70.19	70.34	70.18	70.22	69.99	---	68.42	70.94	71.01	70.96
16	70.51	70.35	70.19	70.28	70.18	70.21	69.97	---	68.40	70.89	71.00	70.95
17	70.51	70.33	70.18	70.24	70.18	70.20	69.95	---	68.47	70.83	70.95	70.92
18	70.50	70.32	70.19	70.22	70.16	70.19	69.93	---	68.69	70.75	70.92	70.89
19	70.50	70.32	70.18	70.21	70.15	70.18	69.90	---	68.83	70.62	70.94	70.84
20	70.51	70.32	70.17	70.21	70.14	70.17	69.88	---	68.87	70.63	71.01	70.81
21	70.52	70.31	70.16	70.21	70.14	70.17	69.84	---	68.87	70.92	71.00	70.79
22	70.55	70.30	70.15	70.21	70.16	70.16	69.81	---	68.98	71.03	70.96	70.81
23	70.55	70.29	70.15	70.20	70.26	70.15	69.78	---	69.15	71.01	70.83	70.84
24	70.54	70.28	70.17	70.20	70.34	70.15	69.74	---	69.27	70.99	70.75	70.90
25	70.53	70.27	70.17	70.20	70.30	70.16	69.70	---	69.62	70.97	70.72	71.07
26	70.51	70.27	70.17	70.20	70.27	70.23	69.67	---	70.07	71.00	70.72	71.02
27	70.49	70.27	70.16	70.20	70.25	70.20	69.64	---	70.26	71.07	70.84	70.97
28	70.47	70.26	70.16	70.20	70.22	70.17	69.61	---	70.35	71.03	70.83	70.94
29	70.47	70.26	70.16	70.21	---	70.16	69.57	---	70.47	71.01	70.97	70.89
30	70.47	70.25	70.15	70.21	---	70.15	69.54	---	70.53	70.99	71.13	70.84
31	70.47	---	70.15	70.20	---	70.13	---	---	---	70.98	71.13	---
MEAN	70.53	70.36	70.19	70.28	70.20	70.21	69.91	---	68.94	70.74	70.85	70.95
MAX	70.72	70.60	70.24	70.55	70.34	70.37	70.12	---	70.53	71.07	71.13	71.08
MIN	70.47	70.25	70.15	70.14	70.14	70.13	69.54	---	68.40	70.44	70.66	70.79

CAL YR 2001 MEAN 68.80 MAX 71.21 MIN 67.04

02237700 APOPKA-BEAUCLAIR CANAL NEAR ASTATULA, FL

LOCATION.--Lat 28°43'20", long 81°41'06", in NW¼ sec.26, T.20 S., R.26 E., Lake County, Hydrologic Unit 03080102, near left bank 80 ft upstream from lock and dam, 500 ft upstream from bridge on County Road 48, and 3.0 mi east of Astatula.

DRAINAGE AREA.--184 mi^2.

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

REVISED RECORDS.--WSP 1905: Drainage area.

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

REMARKS.--Records fair. Since May 1956, flow regulated at station by manipulation of gates in spillway. Discharge computed from relation between discharge, head, and gate openings.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	17	13	15	17	6.9	0.00	0.00	1.1	6.0	14
2	21	20	16	14	14	19	7.1	0.00	0.00	0.40	6.7	14
3	22	19	15	13	14	18	6.9	0.00	0.00	0.40	8.0	14
4	22	18	14	13	13	15	7.1	0.00	0.00	0.00	8.1	13
5	21	15	16	16	13	15	6.3	0.00	0.00	0.00	7.4	15
6	21	17	15	17	16	15	6.9	0.00	0.00	0.40	6.5	15
7	20	18	16	14	18	15	7.9	0.00	0.00	2.3	7.4	14
8	20	19	16	14	9.5	16	9.2	0.00	0.00	7.1	8.1	14
9	22	18	16	16	15	16	8.8	0.10	0.00	4.0	8.3	14
10	21	18	15	16	15	15	7.0	0.10	0.00	6.2	8.7	14
11	21	18	16	16	14	14	7.1	0.70	0.00	6.2	8.7	14
12	21	18	16	16	15	11	8.1	0.60	0.00	3.0	9.1	15
13	22	17	16	16	13	8.7	6.8	0.00	0.00	8.4	10	15
14	22	14	17	17	13	9.8	6.3	0.00	0.00	7.1	11	15
15	20	11	15	16	14	10	6.7	0.00	0.00	6.1	11	14
16	20	14	16	16	14	10	7.2	0.10	0.00	6.4	12	14
17	17	16	15	16	13	11	7.3	0.00	0.00	4.0	11	14
18	19	17	14	16	14	10	8.1	0.00	0.00	6.8	11	14
19	20	17	14	17	15	11	6.1	0.00	0.00	6.4	10	14
20	19	17	13	17	16	10	2.1	0.00	0.00	7.6	11	15
21	20	17	14	17	15	8.4	0.50	0.00	0.00	7.0	11	15
22	20	18	15	17	14	7.6	0.00	0.00	1.0	7.5	11	14
23	20	19	15	18	8.9	7.8	0.00	0.00	0.10	7.0	12	14
24	21	19	16	18	15	9.2	4.0	0.00	0.00	6.8	12	15
25	20	18	13	16	17	9.0	4.0	0.00	0.50	6.9	12	16
26	18	18	3.8	15	16	8.4	0.30	0.00	0.20	7.5	12	17
27	15	18	14	16	8.0	7.5	2.6	0.00	0.00	7.3	13	16
28	16	18	14	16	15	7.6	3.3	0.00	0.00	6.9	13	15
29	16	18	15	16	---	8.4	0.00	0.00	0.00	6.8	14	15
30	17	18	14	17	---	10	0.00	0.00	0.40	6.4	14	15
31	19	---	13	17	---	9.3	---	0.00	---	6.2	14	---
TOTAL	613	522	454.8	492	392.4	359.7	154.60	1.60	2.20	160.20	318.0	437
MEAN	19.8	17.4	14.7	15.9	14.0	11.6	5.15	0.052	0.073	5.17	10.3	14.6
MAX	22	20	17	18	18	19	9.2	0.70	1.0	8.4	14	17
MIN	15	11	3.8	13	8.0	7.5	0.00	0.00	0.00	0.00	6.0	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

MEAN	66.2	48.6	54.7	82.7	83.8	106	104	41.9	55.5	58.5	75.4	89.5
MAX	343	280	336	540	414	450	480	316	278	336	384	344
(WY)	1961	1970	1995	1998	1998	1983	1983	1959	1959	1968	1995	1968
MIN	0.000	0.000	0.000	0.000	0.000	0.065	0.10	0.052	0.000	0.000	0.000	0.000
(WY)	1972	1972	1972	1965	1968	1968	1968	2002	1971	1971	1971	1971

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1958 - 2002	
ANNUAL TOTAL	4802.60		3907.50			
ANNUAL MEAN	13.2		10.7		72.5	
HIGHEST ANNUAL MEAN					224	1970
LOWEST ANNUAL MEAN					10.7	2002
HIGHEST DAILY MEAN	47	Sep 16	22	Oct 3,4,9,13,14	754	Mar 19 1960
LOWEST DAILY MEAN	0.00	Jun 9	0.00	Apr 22	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	0.01	Jul 8	0.00	Apr 29	0.00	Some years
MAXIMUM PEAK STAGE			64.59	Sep 26	68.48	Oct 6 1960
10 PERCENT EXCEEDS	23		18		251	
50 PERCENT EXCEEDS	13		13		30	
90 PERCENT EXCEEDS	0.70		0.00		7.0	

02237700 APOPKA-BEAUCLAIR CANAL NEAR ASTATULA, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63.69	63.70	63.53	63.27	63.42	63.51	63.23	62.61	62.64	63.06	63.15	63.88
2	63.81	63.70	63.49	63.34	63.36	63.67	63.24	62.35	62.66	63.02	63.21	63.91
3	63.84	63.67	63.41	63.19	63.33	63.55	63.21	62.36	62.58	63.03	63.31	63.91
4	63.85	63.60	63.38	63.25	63.20	63.22	63.22	62.43	62.51	62.99	63.31	63.86
5	63.83	63.31	63.43	63.45	63.24	63.28	63.13	62.43	62.67	62.99	63.27	64.07
6	63.82	63.51	63.43	63.45	63.45	63.43	63.15	62.43	62.72	63.02	63.20	64.04
7	63.71	63.62	63.45	63.26	63.39	63.42	63.30	62.65	62.73	63.09	63.27	63.96
8	63.71	63.62	63.47	63.36	63.19	63.48	63.42	62.77	---	63.12	63.31	63.93
9	63.84	63.61	63.44	63.44	63.39	63.47	63.37	62.80	---	63.08	63.33	63.93
10	63.82	63.62	63.43	63.48	63.40	63.39	63.23	62.87	---	63.11	63.37	63.93
11	63.82	63.62	63.47	63.47	63.33	63.47	63.23	62.97	---	63.12	63.36	64.00
12	63.82	63.57	63.46	63.49	63.38	63.57	63.23	62.91	---	63.08	63.40	64.09
13	63.91	63.55	63.47	63.42	63.30	63.37	63.21	62.74	---	63.30	63.48	64.07
14	63.88	63.33	63.50	63.52	63.30	63.46	63.15	62.31	---	63.24	63.55	64.13
15	63.70	63.17	63.43	63.43	63.36	63.51	63.16	62.33	---	63.15	63.58	64.00
16	63.68	63.31	63.48	63.49	63.33	63.53	63.19	62.79	---	63.14	63.64	63.98
17	63.54	63.48	63.43	63.49	63.23	63.56	63.20	62.75	---	63.11	63.60	63.96
18	63.65	63.54	63.31	63.44	63.31	63.53	63.20	62.83	---	63.16	63.54	63.99
19	63.69	63.53	63.36	63.55	63.42	63.57	63.17	62.68	---	63.17	63.53	64.01
20	63.68	63.52	63.25	63.50	63.47	63.50	63.08	62.45	---	63.15	63.54	64.04
21	63.73	63.52	63.30	63.53	63.43	63.31	63.02	62.30	---	63.23	63.61	64.03
22	63.71	63.59	63.39	63.51	63.36	63.21	62.93	62.19	62.94	63.27	63.61	64.01
23	63.71	63.63	63.43	63.56	63.18	63.28	62.94	62.18	62.92	63.22	63.66	64.01
24	63.76	63.66	63.38	63.59	63.39	63.41	63.10	62.65	62.92	63.22	63.71	64.06
25	63.73	63.62	63.28	63.48	63.50	63.39	63.09	62.75	62.97	63.22	63.64	64.20
26	63.57	63.55	63.09	63.43	63.47	63.34	62.96	62.73	63.01	63.27	63.64	64.37
27	63.42	63.58	63.36	63.45	63.16	63.24	63.09	62.62	62.91	63.26	63.76	64.16
28	63.44	63.61	63.36	63.47	63.34	63.28	63.06	62.52	62.91	63.23	63.80	64.11
29	63.48	63.62	63.32	63.49	---	63.34	62.82	62.38	62.88	63.22	63.90	64.07
30	63.52	63.57	63.32	63.53	---	63.49	62.87	62.23	62.94	63.19	63.88	64.06
31	63.66	---	63.29	63.55	---	63.42	---	62.33	---	63.18	63.94	---
MEAN	63.71	63.55	63.39	63.45	63.34	63.43	63.14	62.56	---	63.15	63.52	64.03
MAX	63.91	63.70	63.53	63.59	63.50	63.67	63.42	62.97	---	63.30	63.94	64.37
MIN	63.42	63.17	63.09	63.19	63.16	63.21	62.82	62.18	---	62.99	63.15	63.86

CAL YR 2001 MEAN 63.48 MAX 64.05 MIN 62.80

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

LOCATION.--Lat 28°43'22", long 81°41'06", in NW¼ sec.26, T.20 S., R.26 E., Lake County, Hydrologic Unit 3080102, near left bank at downstream end of lock, 300 ft upstream from bridge on County Road 48, and 3.0 mi east of Astatula.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--January 1957 to current year (gage heights only). Prior to October 1967, published as Apopka-Beauclair Canal near Astatula (auxiliary).

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929. Prior to July 14, 1958, nonrecording gage at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 65.93 ft, Mar. 14, 1958; minimum, 59.71 ft, June 12-15, 17, 22, 2001.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61.46	61.23	61.28	61.10	61.37	61.38	61.08	60.74	---	61.58	61.72	62.36
2	61.44	61.20	61.34	61.25	61.34	61.45	61.08	60.72	---	61.37	61.75	62.32
3	61.41	61.23	61.33	61.17	61.30	61.39	61.08	60.70	---	61.29	61.80	62.27
4	61.38	61.20	61.31	61.16	61.22	61.31	61.09	60.69	---	61.24	61.82	62.27
5	61.41	61.24	61.33	61.30	61.23	61.31	61.06	60.68	---	61.21	61.80	62.32
6	61.42	61.27	61.32	61.30	61.33	61.39	61.04	60.64	---	61.20	61.79	62.39
7	61.43	61.31	61.32	61.13	61.31	61.39	61.10	60.59	---	61.18	61.85	62.35
8	61.43	61.29	61.34	61.19	61.23	61.41	61.16	60.57	---	61.18	61.86	62.32
9	61.39	61.28	61.37	61.23	61.30	61.39	61.05	60.55	---	61.17	61.84	62.30
10	61.33	61.28	61.42	61.26	61.25	61.35	60.97	60.54	---	61.17	61.87	62.27
11	61.31	61.27	61.39	61.22	61.23	61.33	60.99	60.57	---	61.13	61.83	62.27
12	61.29	61.26	61.35	61.24	61.27	61.21	60.99	60.55	---	61.13	61.83	62.26
13	61.28	61.25	61.34	61.25	61.19	61.21	60.98	60.49	---	61.39	61.87	62.25
14	61.27	61.29	61.34	61.34	61.18	61.21	60.92	60.49	---	61.75	62.21	62.26
15	61.39	61.23	61.32	61.33	61.23	61.20	60.95	60.52	---	61.44	62.24	62.36
16	61.41	61.25	61.36	61.34	61.19	61.19	61.01	60.53	---	61.41	62.19	62.41
17	61.38	61.27	61.31	61.33	61.11	61.21	61.02	60.64	---	61.40	62.15	62.42
18	61.36	61.27	61.21	61.29	61.19	61.20	60.97	60.69	---	61.41	62.12	62.41
19	61.33	61.26	61.22	61.34	61.26	61.22	60.93	60.60	---	61.37	62.10	62.37
20	61.31	61.24	61.15	61.35	61.28	61.20	60.90	60.58	---	61.40	62.13	62.37
21	61.29	61.22	61.15	61.36	61.24	61.18	60.90	60.54	60.66	61.76	62.20	62.37
22	61.39	61.21	61.21	61.37	61.21	61.20	60.89	60.50	60.67	61.82	62.18	62.34
23	61.37	61.20	61.23	61.42	61.23	61.19	60.87	60.52	60.65	61.71	62.09	62.33
24	61.32	61.20	61.17	61.46	61.42	61.19	60.91	60.54	60.77	61.71	62.04	62.35
25	61.36	61.19	61.11	61.42	61.38	61.17	60.87	60.53	60.94	61.68	62.06	62.39
26	61.34	61.29	61.03	61.38	61.36	61.15	60.79	60.56	61.00	61.71	62.11	62.40
27	61.28	61.35	61.16	61.40	61.22	61.11	60.82	60.58	61.05	61.72	62.14	62.41
28	61.27	61.32	61.16	61.41	61.27	61.16	60.82	60.58	61.00	61.72	62.23	62.42
29	61.26	61.31	61.14	61.41	---	61.17	60.74	60.52	61.08	61.73	62.31	62.43
30	61.26	61.28	61.15	61.42	---	61.15	60.74	60.48	61.42	61.71	62.26	62.42
31	61.25	---	61.11	61.42	---	61.13	---	60.40	---	61.72	62.43	---
MEAN	61.35	61.26	61.26	61.31	61.26	61.25	60.96	60.58	---	61.46	62.03	62.35
MAX	61.46	61.35	61.42	61.46	61.42	61.45	61.16	60.74	---	61.82	62.43	62.43
MIN	61.25	61.19	61.03	61.10	61.11	61.11	60.74	60.40	---	61.13	61.72	62.25

CAL YR 2001 MEAN 60.69 MAX 62.21 MIN 59.72

02237734 WOLF BRANCH AT FCRR NEAR MOUNT DORA, FL

LOCATION.--Lat 28°47'47", long 81°36'29", in NW¼ sec.34, T.19 S., R.27 E., Lake County, Hydrologic Unit 3080102, on right bank 50 ft downstream from culvert under Florida Central Railroad, 0.25 mi south of State Highway 46, 1.1 mi east of U.S. Highway 441, and 2.1 mi southeast of Mount Dora.

DRAINAGE AREA.--4.67 mi^2.

PERIOD OF RECORD.--July to September 1991 (discharge measurements only), January 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (St. Johns River Water Management District bench mark). Prior to Mar. 4, 1997, at datum 67.39 ft higher, and Mar. 4, 1997 to Mar. 26, 1998, at datum 76.00 ft higher.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	0.67	0.42	0.00	0.14	0.19	0.00	0.00	0.00	3.1	6.2	11
2	4.3	0.67	0.39	0.00	0.14	0.19	0.00	0.00	0.00	3.9	5.6	10
3	3.9	0.79	0.38	0.00	0.12	0.20	0.00	0.00	0.00	4.2	5.2	9.9
4	3.6	0.84	0.37	0.00	0.11	0.33	0.00	0.00	0.00	3.9	5.0	9.6
5	3.2	1.1	0.34	0.00	0.09	0.35	0.00	0.00	0.00	3.7	4.6	9.7
6	3.0	1.1	0.32	0.00	0.06	0.36	0.00	0.00	0.00	3.5	4.3	10
7	2.8	1.1	0.30	0.00	0.07	0.35	0.00	0.00	0.00	3.2	4.2	10
8	2.6	0.97	0.29	0.03	0.07	0.35	0.00	0.00	0.00	3.1	4.2	9.7
9	2.4	0.92	0.27	0.03	0.06	0.35	0.00	0.00	0.00	3.2	4.1	8.8
10	2.3	0.86	0.25	0.04	0.06	0.33	0.00	0.00	0.00	3.4	3.9	7.7
11	2.1	0.82	0.24	0.04	0.06	0.30	0.00	0.00	0.00	3.4	3.6	6.8
12	1.9	0.77	0.22	0.04	0.05	0.28	0.00	0.00	0.00	3.6	3.3	6.1
13	1.8	0.74	0.21	0.05	0.04	0.24	0.00	0.00	0.00	4.4	3.4	5.6
14	1.6	0.88	0.20	0.07	0.03	0.21	0.00	0.00	0.00	7.0	4.1	5.1
15	1.6	0.94	0.19	0.12	0.02	0.18	0.00	0.00	0.00	7.9	7.0	4.7
16	1.5	0.92	0.16	0.16	0.00	0.16	0.05	0.00	0.00	7.3	9.6	4.3
17	1.3	0.88	0.13	0.18	0.00	0.16	0.07	0.00	0.00	6.5	9.8	4.1
18	1.2	0.84	0.10	0.19	0.00	0.13	0.07	0.00	0.00	5.8	9.8	4.9
19	1.1	0.82	0.07	0.20	0.00	0.11	0.06	0.00	0.00	5.1	9.4	4.9
20	1.2	0.79	0.05	0.20	0.00	0.09	0.05	0.00	0.00	4.9	8.4	5.0
21	1.1	0.75	0.03	0.23	0.00	0.07	0.03	0.00	0.00	7.0	7.6	5.5
22	1.1	0.71	0.00	0.23	0.00	0.06	0.00	0.00	0.00	9.4	6.6	5.4
23	1.1	0.69	0.00	0.23	0.00	0.04	0.00	0.00	0.00	9.6	5.9	5.1
24	1.1	0.64	0.00	0.22	0.10	0.02	0.00	0.00	0.00	9.0	5.2	5.1
25	1.1	0.61	0.00	0.22	0.16	0.00	0.00	0.00	0.00	8.3	4.8	5.7
26	1.0	0.58	0.00	0.22	0.20	0.00	0.00	0.00	0.17	8.1	6.0	7.6
27	0.93	0.55	0.00	0.20	0.22	0.00	0.00	0.00	0.33	7.6	7.3	8.0
28	0.83	0.52	0.00	0.20	0.20	0.00	0.00	0.00	0.64	7.3	7.6	7.4
29	0.75	0.49	0.00	0.19	---	0.00	0.00	0.00	1.2	8.2	7.5	6.6
30	0.70	0.47	0.00	0.17	---	0.00	0.00	0.00	2.0	7.8	7.7	5.9
31	0.69	---	0.00	0.15	---	0.00	---	0.00	---	6.9	10	---
TOTAL	58.70	23.43	4.93	3.61	2.00	5.05	0.33	0.00	4.34	180.3	191.9	210.2
MEAN	1.89	0.78	0.16	0.12	0.071	0.16	0.011	0.000	0.14	5.82	6.19	7.01
MAX	4.9	1.1	0.42	0.23	0.22	0.36	0.07	0.00	2.0	9.6	10	11
MIN	0.69	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.1	3.3	4.1
CFSM	0.41	0.17	0.03	0.02	0.02	0.03	0.00	0.00	0.03	1.25	1.33	1.50
IN.	0.47	0.19	0.04	0.03	0.02	0.04	0.00	0.00	0.03	1.44	1.53	1.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

MEAN	2.65	1.53	1.76	2.25	1.47	1.65	0.87	0.19	0.60	1.98	2.15	3.61
MAX	7.47	7.04	7.51	6.83	6.17	7.80	4.25	1.45	2.04	5.82	9.01	7.30
(WY)	1996	1995	1995	1996	1998	1998	1996	1996	1994	2002	1995	2001
MIN	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.006
(WY)	1998	2001	2001	2001	1992	1992	1992	1992	1992	2000	1992	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1992 - 2002	
ANNUAL TOTAL	332.94		684.79			
ANNUAL MEAN	0.91		1.88		1.83	
HIGHEST ANNUAL MEAN					4.02	1995
LOWEST ANNUAL MEAN					0.44	1997
HIGHEST DAILY MEAN	26	Sep 16	11	Sep 1	28	Nov 17 1994
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Dec 22	0.00	Many days
MAXIMUM PEAK FLOW			11	Sep 1	28	Nov 17 1994
MAXIMUM PEAK STAGE			76.51	Sep 1	77.34	Sep 16 2001
ANNUAL RUNOFF (CFSM)	0.20		0.40		0.39	
ANNUAL RUNOFF (INCHES)	2.65		5.45		5.33	
10 PERCENT EXCEEDS	1.8		7.0		5.1	
50 PERCENT EXCEEDS	0.00		0.22		0.69	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

02238000 HAINES CREEK AT LISBON, FL

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

DRAINAGE AREA.--648 mi^2.

PERIOD OF RECORD.--July 1942 to September 1978, October 1978 to September 1985 (gage heights only), October 1985 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to Mar. 16, 1998 datum of gage at present site 0.30 ft lower. Prior to Aug. 22, 1956, nonrecording gage at site 1,000 ft downstream at datum 58.93 ft higher, and Aug. 22, 1956 to Mar. 5, 1957, at present datum. Mar. 6 to Oct. 8, 1957, nonrecording gage at present site at datum 0.30 ft higher. Oct. 9, 1957 to Sept. 30, 1996, water-stage recorder at present site at present datum. Mar. 6 to Oct. 8, 1957, auxiliary non-recording gage and Oct. 9, 1957 to Sept. 30, 1996, auxiliary water-stage recorder at downstream side of lock and dam at present datum. Since Oct. 1, 1996, auxiliary water-stage recorder at downstream side of lock and dam at datum, 0.30 ft lower.

REMARKS.--Records poor. Since Dec. 23, 1956, flow regulated at station by manipulation of gates in spillway. Discharge computed from relation between discharge, head, gate openings, and lockages. See WDR FL-91 for history of low flows and minimum gage heights.

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	28	30	27	30	28	29	27	29	27	28	30
2	52	27	31	27	29	28	29	28	30	27	27	30
3	28	29	27	27	29	28	28	28	28	28	29	27
4	28	28	30	28	28	26	30	32	28	30	29	26
5	28	27	28	27	28	27	30	30	29	30	27	26
6	30	29	28	28	29	29	31	28	28	30	26	27
7	30	30	29	28	27	29	31	28	28	31	26	28
8	27	30	29	27	27	31	29	29	30	27	27	30
9	27	30	31	28	30	33	30	28	30	27	28	26
10	27	30	28	29	31	31	30	28	28	27	30	26
11	28	29	30	30	29	29	29	31	28	28	29	26
12	28	28	41	30	29	30	28	29	28	28	26	26
13	32	29	56	29	29	30	29	27	28	28	27	26
14	29	27	57	27	28	31	30	28	28	30	27	28
15	27	28	57	27	30	31	29	28	29	28	27	30
16	28	28	56	28	29	33	30	28	30	28	28	26
17	27	30	41	30	29	33	28	27	27	28	30	28
18	27	30	27	30	28	30	29	30	26	27	30	27
19	28	29	29	32	29	30	29	27	28	28	26	27
20	29	30	27	30	30	32	32	27	27	31	27	27
21	28	29	27	29	30	30	31	28	26	29	27	29
22	27	29	29	29	27	30	29	28	27	27	27	30
23	27	31	30	29	26	32	28	27	28	27	27	27
24	29	31	27	30	30	32	30	28	26	28	30	26
25	28	32	27	30	30	30	29	31	27	28	32	26
26	27	29	28	28	31	30	30	32	26	28	26	26
27	27	30	28	29	26	31	32	31	27	30	26	27
28	28	29	30	30	27	31	31	28	28	30	26	29
29	27	30	27	29	---	31	28	28	29	28	27	30
30	28	28	28	30	---	32	28	27	29	27	26	26
31	28	---	27	30	---	27	---	28	---	27	28	---
TOTAL	944	874	1020	892	805	935	886	884	840	877	856	823
MEAN	30.5	29.1	32.9	28.8	28.8	30.2	29.5	28.5	28.0	28.3	27.6	27.4
MAX	80	32	57	32	31	33	32	32	30	31	32	30
MIN	27	27	27	27	26	26	28	27	26	27	26	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2002, BY WATER YEAR (WY)

MEAN	158	141	130	196	222	332	313	170	187	211	219	229
MAX	1128	1180	1009	1409	1397	1495	1210	1191	1073	1008	1057	995
(WY)	1961	1961	1961	1998	1998	1998	1987	1960	1960	1960	1960	1960
MIN	0.000	0.000	5.81	1.87	1.57	2.19	4.77	3.52	14.0	14.2	13.3	27.0
(WY)	1957	1957	1957	1975	1975	1975	1968	1968	1957	1957	1967	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1957 - 2002	
ANNUAL TOTAL	8768.7		10636			
ANNUAL MEAN	24.0		29.1		209	
HIGHEST ANNUAL MEAN					892	1960
LOWEST ANNUAL MEAN					23.0	2001
HIGHEST DAILY MEAN	92	Sep 27	80	Oct 1	*1560	Feb 26 1998
LOWEST DAILY MEAN	3.7	Sep 15	26	Many days	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	6.5	Mar 29	27	Jun 20	0.00	Some years
MAXIMUM PEAK STAGE			62.77	Sep 26	64.50	Apr 5,7,8 1960
10 PERCENT EXCEEDS	31		31		792	
50 PERCENT EXCEEDS	25		28		54	
90 PERCENT EXCEEDS	8.5		27		22	

* Feb 26, Mar 9, 1998

02238000 HAINES CREEK AT LISBON, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61.58	61.36	61.34	61.10	61.36	61.31	61.30	60.98	60.41	---	61.94	62.47
2	61.59	61.37	61.33	61.17	61.34	61.37	61.27	60.96	60.40	---	61.98	62.50
3	61.60	61.39	61.32	61.24	61.33	61.39	61.28	60.94	60.41	---	61.99	62.49
4	61.60	61.39	61.29	61.23	61.30	61.44	61.28	60.92	60.40	---	62.00	62.50
5	61.60	61.34	61.29	61.23	61.25	61.41	61.25	60.89	60.39	---	61.99	62.56
6	61.61	61.38	61.29	61.27	61.29	61.42	61.22	60.86	60.37	61.34	61.98	62.56
7	61.58	61.40	61.30	61.24	61.32	61.42	61.21	60.85	60.41	61.34	62.00	62.55
8	61.55	61.40	61.32	61.24	61.27	61.44	61.22	60.84	60.45	61.35	61.97	62.54
9	61.56	61.40	61.32	61.24	61.28	61.45	61.20	60.82	60.43	61.35	61.96	62.54
10	61.55	61.39	61.32	61.24	61.30	61.45	61.18	60.80	60.42	61.36	61.96	62.55
11	61.56	61.39	61.32	61.24	61.28	61.44	61.17	60.77	60.42	61.37	61.95	62.55
12	61.56	61.37	61.31	61.25	61.28	61.46	61.16	60.75	60.42	61.37	61.97	62.55
13	61.56	61.35	61.30	61.24	61.26	61.46	61.16	60.72	60.46	61.45	62.08	62.54
14	61.56	61.33	61.30	61.29	61.24	61.46	61.19	60.68	60.57	61.62	62.16	62.60
15	61.52	61.33	61.28	61.32	61.25	61.45	61.20	60.64	60.57	61.61	62.20	62.60
16	61.52	61.34	61.26	61.32	61.26	61.45	61.20	60.62	60.56	61.61	62.21	62.59
17	61.46	61.34	61.27	61.33	61.24	61.45	61.19	60.61	60.59	61.60	62.22	62.59
18	61.45	61.35	61.27	61.33	61.21	61.44	61.18	60.61	60.68	61.60	62.22	62.59
19	61.46	61.36	61.25	61.34	61.23	61.44	61.17	60.59	60.73	61.59	62.23	62.58
20	61.46	61.37	61.21	61.34	61.24	61.43	61.16	60.51	60.74	61.59	62.23	62.59
21	61.48	61.36	61.19	61.34	61.23	61.42	61.14	60.48	60.74	61.70	62.23	62.58
22	61.49	61.37	61.19	61.34	61.24	61.36	61.11	60.43	---	61.83	62.22	62.57
23	61.50	61.37	61.20	61.35	61.27	61.32	61.09	60.44	---	61.86	62.22	62.58
24	61.51	61.38	61.21	61.36	61.37	61.33	61.07	60.46	---	61.87	62.21	62.61
25	61.50	61.37	61.16	61.36	61.38	61.34	61.06	60.46	---	61.88	62.21	62.70
26	61.44	61.37	61.14	61.34	61.39	61.36	61.04	60.43	---	61.89	62.23	62.74
27	61.39	61.36	61.15	61.35	61.34	61.35	61.03	60.41	---	61.94	62.25	62.71
28	61.34	61.37	61.14	61.35	61.31	61.33	61.02	60.41	---	61.94	62.26	62.69
29	61.33	61.36	61.14	61.36	---	61.32	60.99	60.40	---	61.96	62.28	62.67
30	61.33	61.35	61.13	61.36	---	61.33	60.98	60.41	---	61.95	62.34	62.65
31	61.36	---	61.12	61.37	---	61.32	---	60.42	---	61.94	62.46	---
MEAN	61.50	61.37	61.25	61.29	61.29	61.40	61.16	60.65	---	---	62.13	62.58
MAX	61.61	61.40	61.34	61.37	61.39	61.46	61.30	60.98	---	---	62.46	62.74
MIN	61.33	61.33	61.12	61.10	61.21	61.31	60.98	60.40	---	---	61.94	62.47

CAL YR 2001 MEAN 60.81 MAX 61.67 MIN 59.85

02238001 HAINES CREEK BELOW BURRELL DAM, AT LISBON, FL

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

DRAINAGE AREA.--648 mi^2.

PERIOD OF RECORD.--March 1957 to current year (gage heights only). Prior to October 1967, published as Haines Creek at Lisbon (auxiliary).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to Oct. 9, 1957, nonrecording gage at present site at datum 0.30 ft higher. Oct. 10, 1957 to Sept. 30, 1996, water-stage recorder at present site at datum 0.30 ft higher.

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

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.59	---	57.04	56.89	57.21	57.18	57.22	57.02	56.31	---	57.96	58.74
2	57.56	---	57.04	56.95	57.21	57.21	57.21	56.99	56.31	---	58.00	58.78
3	57.53	---	57.01	57.04	57.20	57.25	57.22	56.95	56.30	---	58.07	58.78
4	57.52	---	56.99	57.01	57.20	57.41	57.21	56.93	56.28	---	58.07	58.80
5	57.52	---	56.98	56.99	57.13	57.37	57.19	56.88	56.26	---	58.09	58.81
6	57.53	---	56.97	57.04	57.15	57.36	57.17	56.84	56.26	57.28	58.09	58.82
7	57.51	---	56.97	57.04	57.20	57.38	57.14	56.83	56.25	57.25	58.11	58.80
8	57.49	---	56.98	57.02	57.17	57.37	57.12	56.80	56.24	57.25	58.11	58.79
9	57.47	---	56.97	57.00	57.17	57.38	57.12	56.78	56.22	57.26	58.09	58.78
10	57.47	---	56.97	57.00	57.18	57.38	57.12	56.74	56.20	57.28	58.07	58.78
11	57.47	---	56.97	57.01	57.18	57.36	57.12	56.70	56.20	57.28	58.06	58.77
12	57.46	---	56.98	57.01	57.17	57.37	57.12	56.67	56.20	57.31	58.06	58.75
13	57.45	---	57.00	57.02	57.16	57.39	57.13	56.67	56.24	57.40	58.13	58.74
14	57.46	---	57.01	57.05	57.14	57.36	57.15	56.62	56.40	57.57	58.20	58.76
15	57.45	---	57.01	57.13	57.14	57.35	57.16	56.56	56.39	57.55	58.21	58.77
16	57.44	---	56.99	57.13	57.15	57.35	57.16	56.54	56.41	57.54	58.22	58.75
17	57.40	57.17	57.00	57.15	57.16	57.34	57.16	56.54	56.49	57.54	58.23	58.74
18	57.37	57.16	57.00	57.16	57.11	57.33	57.16	56.54	56.62	57.52	58.25	58.73
19	---	57.16	56.98	57.17	57.11	57.33	57.15	56.49	56.68	57.53	58.28	58.72
20	---	57.17	56.96	57.17	57.13	57.33	57.15	56.45	56.75	57.58	58.30	58.72
21	---	57.15	56.93	57.17	57.13	57.34	57.13	56.42	56.79	57.77	58.30	58.71
22	---	57.14	56.93	57.17	57.14	57.29	57.12	56.38	---	57.83	58.30	58.70
23	---	57.14	56.93	57.18	57.20	57.27	57.08	56.38	---	---	58.30	58.69
24	---	57.13	56.95	57.19	57.27	57.26	57.06	56.38	---	---	58.30	58.72
25	---	57.11	56.93	57.19	57.26	57.26	57.07	56.37	---	57.91	58.30	58.80
26	---	57.10	56.94	57.19	57.27	57.28	57.05	56.34	---	57.91	58.31	58.79
27	---	57.09	56.91	57.19	57.28	57.29	57.04	56.34	---	57.94	58.33	58.80
28	---	57.08	56.91	57.20	57.21	57.25	57.04	56.32	---	57.96	58.33	58.79
29	---	57.07	56.92	57.20	---	57.25	57.02	56.33	---	57.98	58.39	58.78
30	---	57.06	56.91	57.21	---	57.24	57.00	56.32	---	57.97	58.49	58.76
31	---	---	56.91	57.20	---	57.23	---	56.31	---	57.96	58.70	---
MEAN	---	---	56.97	57.10	57.18	57.31	57.13	56.59	---	---	58.21	58.76
MAX	---	---	57.04	57.21	57.28	57.41	57.22	57.02	---	---	58.70	58.82
MIN	---	---	56.91	56.89	57.11	57.18	57.00	56.31	---	---	57.96	58.69

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

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

DRAINAGE AREA.--879 mi^2.

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

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 0.30 ft above NGVD of 1929. June 9, 1967 to Sept. 30, 1970, at datum 0.30 ft lower. Prior to June 9, 1967 at datum 0.42 ft lower. This is the auxiliary gage for station 02238500 located at downstream side of spillway structure.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 59.66 ft, Mar. 13, 1993; minimum, 45.45 ft, Mar. 6, 1973, result of dike failure.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.07	56.86	56.64	56.46	56.83	56.81	56.82	56.60	55.88	56.88	57.59	58.33
2	57.13	56.85	56.61	56.54	56.77	56.96	56.81	56.58	55.88	56.88	57.63	58.38
3	57.14	56.85	56.59	56.55	56.77	56.91	56.83	56.54	55.87	56.89	57.70	58.38
4	57.14	56.80	56.55	56.55	56.76	56.92	56.83	56.52	55.86	56.89	57.70	58.36
5	57.13	56.64	56.55	56.59	56.67	56.93	56.72	56.42	55.85	56.88	57.70	58.46
6	57.16	56.79	56.55	56.71	56.84	56.95	56.73	56.41	55.82	56.89	57.70	58.44
7	57.04	56.84	56.58	56.58	56.87	56.96	56.74	56.40	55.82	56.85	57.71	58.41
8	57.05	56.84	56.60	56.59	56.71	56.98	56.79	56.41	55.79	56.85	57.69	58.39
9	57.04	56.84	56.59	56.60	56.78	57.00	56.78	56.40	55.74	56.87	57.67	58.39
10	57.06	56.82	56.60	56.61	56.81	56.96	56.75	56.36	55.74	56.91	57.68	58.41
11	57.08	56.81	56.59	56.61	56.75	56.97	56.69	56.30	55.72	56.92	57.67	58.43
12	57.08	56.75	56.57	56.63	56.77	57.03	56.74	56.29	55.75	56.93	57.70	58.42
13	57.09	56.70	56.58	56.60	56.72	57.01	56.74	56.29	55.82	57.03	57.78	58.38
14	57.10	56.61	56.60	56.66	56.69	56.98	56.76	56.16	56.00	57.16	57.85	58.42
15	57.00	56.61	56.56	56.72	56.74	56.97	56.78	56.14	55.98	57.12	57.82	58.39
16	57.02	56.68	56.55	56.74	56.76	56.97	56.76	56.13	56.02	57.12	57.84	58.39
17	56.90	56.70	56.60	56.75	56.72	56.96	56.77	56.15	56.09	57.12	57.84	58.37
18	56.92	56.71	56.57	56.74	56.67	56.95	56.76	56.19	56.18	57.14	57.86	58.36
19	56.94	56.75	56.57	56.82	56.75	56.96	56.76	56.01	56.26	57.13	57.88	58.34
20	56.94	56.77	56.51	56.76	56.81	56.96	56.74	55.91	56.28	57.21	57.92	58.33
21	56.97	56.74	56.50	56.80	56.76	56.96	56.72	55.91	56.30	57.41	57.93	58.31
22	56.98	56.76	56.53	56.75	56.74	56.82	56.71	55.79	56.48	57.49	57.91	58.31
23	57.02	56.78	56.59	56.81	56.67	56.83	56.64	55.93	56.59	57.50	57.91	58.30
24	57.04	56.77	56.55	56.85	56.85	56.87	56.65	55.98	56.67	57.53	57.92	58.34
25	57.00	56.74	56.49	56.83	56.88	56.88	56.68	55.97	56.74	57.57	57.92	58.45
26	56.88	56.72	56.47	56.75	56.90	56.89	56.61	55.89	56.82	57.55	57.93	58.52
27	56.83	56.71	56.53	56.78	56.77	56.86	56.63	55.89	56.80	57.55	57.99	58.48
28	56.74	56.71	56.53	56.80	56.79	56.84	56.67	55.84	56.80	57.58	57.98	58.42
29	56.74	56.70	56.52	56.82	---	56.86	56.60	55.85	56.82	57.62	58.05	58.39
30	56.81	56.69	56.50	56.84	---	56.89	56.59	55.88	56.87	57.61	58.10	58.36
31	56.86	---	56.46	56.84	---	56.88	---	55.86	---	57.59	58.30	---
MEAN	57.00	56.75	56.56	56.70	56.77	56.93	56.73	56.16	56.17	57.18	57.83	58.39
MAX	57.16	56.86	56.64	56.85	56.90	57.03	56.83	56.60	56.87	57.62	58.30	58.52
MIN	56.74	56.61	56.46	56.46	56.67	56.81	56.59	55.79	55.72	56.85	57.59	58.30

CAL YR 2001 MEAN 56.17 MAX 57.16 MIN 55.26
WTR YR 2002 MEAN 56.93 MAX 58.52 MIN 55.72

02238500 OCKLAWAHA RIVER AT MOSS BLUFF, FL

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

DRAINAGE AREA.--879 mi^2.

PERIOD OF RECORD.--February 1943 to September 1965 (discharge measurements only), October 1965 to September 1966 (discharge measurements and gage heights only), October 1966 to July 1967 (discharge measurements only), August 1967 to current year.

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929. Prior to Aug. 12, 1943, nonrecording gage, and Aug. 12, 1943 to Sept. 30, 1955, water-stage recorder at site 0.3 mi downstream at datum 0.12 ft lower; Nov. 1, 1963 to Aug. 10, 1967, nonrecording gage at site 0.3 mi downstream at present datum; Aug. 11, 1967 to Sept. 30, 1969, water-stage recorder at site 0.3 mi downstream at present datum. Auxiliary gage at upstream side of spillway structure.

REMARKS.--Records poor. Flow regulated by manipulation of gates in spillway. Discharge computed from relation between discharge, gate openings, and lockages.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	65	71	23	37	20	30	41	20	20	17	49
2	46	69	74	18	18	23	21	41	33	23	15	44
3	44	67	65	18	25	23	19	25	35	42	48	24
4	44	64	66	20	23	18	45	41	19	35	45	35
5	46	65	65	18	18	18	48	59	31	33	30	44
6	44	64	50	18	23	25	64	35	30	57	34	36
7	40	72	34	18	18	20	60	39	25	46	14	45
8	43	69	36	23	20	24	30	48	31	23	30	38
9	44	64	41	25	19	38	30	23	36	18	40	26
10	35	75	41	20	33	47	32	28	29	33	50	21
11	48	74	36	20	20	27	26	30	34	18	50	55
12	50	69	34	32	29	29	19	30	37	20	15	60
13	55	64	42	23	19	20	26	27	12	20	12	67
14	51	61	36	18	18	41	39	55	17	56	12	79
15	44	68	46	18	38	39	45	62	42	28	12	55
16	48	62	36	20	29	69	40	51	33	36	17	56
17	43	71	36	23	30	42	26	31	33	36	28	57
18	44	67	36	20	24	49	24	26	12	34	31	57
19	44	67	33	48	31	46	43	20	28	37	14	55
20	54	64	23	28	22	53	57	29	12	44	13	71
21	46	67	36	23	23	31	55	29	14	26	15	66
22	44	60	41	20	18	24	41	28	12	33	14	55
23	44	85	36	20	18	29	31	13	21	30	17	57
24	48	73	20	38	34	48	36	14	18	32	24	55
25	48	95	18	20	23	31	40	34	18	35	48	52
26	47	76	20	25	23	26	41	40	20	17	29	32
27	35	70	20	28	18	23	55	40	18	29	24	31
28	42	60	35	38	19	38	56	13	25	47	24	46
29	43	64	43	38	---	42	38	16	22	39	31	50
30	35	64	36	35	---	39	39	18	27	33	33	29
31	55	---	24	39	---	21	---	40	---	33	37	---
TOTAL	1438	2055	1230	775	670	1023	1156	1026	744	1013	823	1447
MEAN	46.4	68.5	39.7	25.0	23.9	33.0	38.5	33.1	24.8	32.7	26.5	48.2
MAX	84	95	74	48	38	69	64	62	42	57	50	79
MIN	35	60	18	18	18	18	19	13	12	17	12	21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

MEAN	220	167	188	273	294	360	350	180	193	220	230	244
MAX	1085	1024	883	1396	1446	1603	1380	539	891	859	735	853
(WY)	1970	1970	1954	1998	1998	1998	1970	1970	1991	1974	1995	1969
MIN	0.50	0.000	13.9	11.8	12.8	10.0	11.1	7.61	7.87	20.9	9.15	7.50
(WY)	1975	1974	1979	1979	1979	1975	1975	1975	1975	1973	1972	1972

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1944 - 2002	
ANNUAL TOTAL	10790		13400			
ANNUAL MEAN	29.6		36.7		243	
HIGHEST ANNUAL MEAN					777	1970
LOWEST ANNUAL MEAN					23.8	2001
HIGHEST DAILY MEAN	95	Nov 25	95	Nov 25	2340	Feb 20 1983
LOWEST DAILY MEAN	18	Jan 1	a12		*0.00	
ANNUAL SEVEN-DAY MINIMUM	18	Jan 1	16	Jun 20	*0.00	
MAXIMUM PEAK STAGE			38.12	Sep 1	50.71	Sep 12 1960
10 PERCENT EXCEEDS	57		64		670	
50 PERCENT EXCEEDS	23		34		59	
90 PERCENT EXCEEDS	18		18		22	

* Many days 1973-74 water years
a Jun 13,18,22, Aug 13-15

02238500 OCKLAWAHA RIVER AT MOSS BLUFF, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.39	35.87	35.63	35.07	34.93	34.72	34.69	34.72	34.19	34.62	35.83	37.92
2	36.38	35.86	35.62	35.06	34.93	34.69	34.65	34.70	34.26	34.58	35.86	37.61
3	36.36	35.87	35.60	35.07	34.93	34.72	34.62	34.70	34.14	34.55	35.93	37.17
4	36.34	35.87	35.59	35.06	34.93	34.96	34.64	34.79	34.09	34.63	35.84	36.90
5	36.34	35.90	35.57	35.03	34.91	34.97	34.69	34.81	34.03	34.63	35.68	37.07
6	36.32	35.90	35.52	35.01	34.90	34.92	34.73	34.67	34.02	34.67	35.60	37.32
7	36.31	35.87	35.39	35.01	34.90	34.90	34.73	34.62	34.03	34.68	35.48	37.27
8	36.29	35.84	35.33	35.01	34.91	34.89	34.64	34.66	34.01	34.56	35.43	37.03
9	36.24	35.81	35.30	35.00	34.90	34.90	34.55	34.60	34.05	34.47	35.35	36.77
10	36.22	35.80	35.31	34.99	34.92	34.95	34.56	34.58	33.98	34.44	35.33	36.57
11	36.21	35.81	35.31	34.98	34.92	34.89	34.57	34.64	34.00	34.42	35.29	36.51
12	36.20	35.80	35.30	35.01	34.91	34.85	34.58	34.54	34.08	34.45	35.39	36.47
13	36.21	35.78	35.30	35.02	34.89	34.85	34.59	34.39	34.08	34.51	36.88	36.50
14	36.20	35.79	35.30	35.00	34.84	34.81	34.67	34.60	34.08	34.69	36.81	36.74
15	36.18	35.80	35.30	35.02	34.80	34.79	34.65	34.67	34.11	34.69	36.59	37.17
16	36.15	35.79	35.27	35.02	34.82	34.84	34.59	34.68	34.18	34.61	36.46	37.11
17	36.12	35.79	35.24	35.03	34.84	34.87	34.57	34.60	34.15	34.56	36.34	36.95
18	36.08	35.78	35.22	35.02	34.81	34.85	34.52	34.47	34.13	34.52	36.39	36.81
19	36.06	35.78	35.20	35.03	34.81	34.82	34.53	34.39	34.10	34.53	36.27	36.67
20	36.06	35.78	35.18	35.04	34.78	34.83	34.57	34.30	34.12	34.67	36.22	36.69
21	36.05	35.76	35.16	35.01	34.74	34.82	34.60	34.24	34.12	34.96	36.12	36.96
22	36.04	35.74	35.15	35.00	34.74	34.78	34.53	34.19	34.12	35.32	35.97	36.86
23	36.03	35.74	35.14	34.96	34.75	34.74	34.43	34.17	34.34	35.88	35.85	36.68
24	36.03	35.74	35.13	34.92	34.89	34.78	34.51	34.15	34.45	35.74	35.78	36.60
25	36.02	35.75	35.12	34.90	34.90	34.76	34.69	34.25	34.41	35.93	35.80	36.98
26	36.02	35.75	35.12	34.99	34.87	34.70	34.74	34.33	34.45	35.88	35.76	36.91
27	35.98	35.73	35.09	35.02	34.84	34.67	34.84	34.36	34.43	36.32	35.70	36.79
28	35.95	35.68	35.08	35.02	34.77	34.64	34.91	34.20	34.47	36.51	35.63	36.69
29	35.94	35.65	35.08	35.01	---	34.63	34.80	34.13	34.60	36.53	35.61	36.61
30	35.92	35.64	35.07	34.98	---	34.68	34.72	34.16	34.65	36.40	35.86	36.41
31	35.91	---	35.07	34.94	---	34.70	---	34.14	---	36.05	37.31	---
MEAN	36.15	35.79	35.28	35.01	34.86	34.80	34.64	34.47	34.20	35.06	35.95	36.89
MAX	36.39	35.90	35.63	35.07	34.93	34.97	34.91	34.81	34.65	36.53	37.31	37.92
MIN	35.91	35.64	35.07	34.90	34.74	34.63	34.43	34.13	33.98	34.42	35.29	36.41

WTR YR 2002 MEAN 35.26 MAX 37.92 MIN 33.98

02239500 SILVER SPRINGS NEAR OCALA, FL

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

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records fair. Discharge measurements made 4 to 5 mi downstream from head of springs; surface inflow between head of springs and measuring site is subtracted when measurable. Prior to Nov. 20, 1959, measurements made at site 0.7 mi downstream from head of springs. Discharge computed from relation between artesian pressure at Sharpes Ferry Well and discharge at measuring site. Artesian pressures are published as water levels for Sharpes Ferry Well (291115081592501) in Water Resources Data for Florida, Volume 1B, Ground Water.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	559	578	547	511	494	456	453	425	379	386	466	456
2	558	579	545	517	491	474	451	421	378	391	469	505
3	e560	579	543	515	489	477	450	418	375	394	467	531
4	e565	582	e540	502	489	466	450	413	370	395	467	544
5	570	584	536	505	486	454	450	410	367	395	473	534
6	576	573	539	521	492	467	447	408	369	396	480	527
7	573	567	544	512	497	474	444	411	371	395	480	551
8	570	569	545	500	489	472	444	410	366	393	475	568
9	568	570	543	500	488	470	443	407	365	398	475	581
10	574	570	539	503	489	468	444	404	366	402	476	590
11	580	569	535	503	487	469	446	400	366	406	477	593
12	583	566	533	506	487	475	449	402	368	408	480	593
13	584	567	536	505	484	477	449	406	367	410	486	591
14	584	574	537	505	482	472	449	407	365	407	487	585
15	579	577	530	506	482	468	448	395	361	406	487	571
16	580	570	529	501	486	467	444	395	356	407	491	578
17	577	564	534	503	480	465	443	398	357	409	498	593
18	578	560	536	502	474	462	444	405	358	412	501	605
19	582	561	529	507	472	464	441	400	356	411	487	614
20	582	566	521	505	479	464	443	393	356	409	489	619
21	579	566	515	501	483	465	442	392	361	413	502	617
22	583	559	516	495	482	459	439	389	365	418	511	620
23	586	560	526	497	484	455	434	389	368	422	521	622
24	583	559	530	501	473	458	430	385	366	427	527	621
25	580	555	526	502	472	458	430	385	368	432	529	605
26	574	553	525	498	475	460	428	384	372	435	531	608
27	572	551	517	496	470	460	425	385	374	442	533	618
28	570	549	518	497	452	454	427	383	375	446	528	622
29	570	549	519	496	---	452	429	386	376	450	527	626
30	573	550	513	493	---	451	426	384	380	454	509	631
31	578	---	513	492	---	452	---	381	---	460	425	---
TOTAL	17830	16976	16459	15597	13508	14385	13242	12371	11021	12829	15254	17519
MEAN	575	566	531	503	482	464	441	399	367	414	492	584
MAX	586	584	547	521	497	477	453	425	380	460	533	631
MIN	558	549	513	492	452	451	425	381	356	386	425	456

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2002, BY WATER YEAR (WY)

MEAN	834	820	794	776	767	770	776	759	742	749	774	812
MAX	1280	1229	1156	1088	1050	1015	1148	1112	1053	1067	1189	1236
(WY)	1961	1961	1961	1961	1961	1998	1960	1960	1960	1960	1960	1960
MIN	474	450	438	428	411	413	422	386	358	362	411	460
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1933 - 2002	
ANNUAL TOTAL	162462		176991			
ANNUAL MEAN	445		485		781	
HIGHEST ANNUAL MEAN					1058	1960
LOWEST ANNUAL MEAN					419	2001
HIGHEST DAILY MEAN	586	Oct 23	631	Sep 30	*1290	Oct 7 1960
LOWEST DAILY MEAN	350	Jun 27	356	Jun 16,19,20	350	Jun 27 2001
ANNUAL SEVEN-DAY MINIMUM	354	Jun 14	358	Jun 15	354	Jun 14 2001
MAXIMUM PEAK STAGE			1.84	Sep 25,26	5.50	Sep 6 1933
10 PERCENT EXCEEDS	570		579		979	
50 PERCENT EXCEEDS	420		486		772	
90 PERCENT EXCEEDS	359		385		610	

e Estimated
* Oct 7,13-17,20, 1960

02239500 SILVER SPRINGS NEAR OCALA, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.15	1.03	0.82	0.57	0.37	0.19	0.07	-0.04	-0.26	0.05	0.50	1.71
2	1.16	1.04	0.81	0.57	0.36	0.20	0.06	-0.05	-0.27	0.05	0.53	1.57
3	1.16	1.04	0.80	0.56	0.35	0.21	0.06	-0.05	-0.28	0.06	0.54	1.49
4	1.15	1.04	0.78	0.54	0.35	0.22	0.06	-0.06	-0.29	0.07	0.54	1.46
5	1.15	1.03	0.78	0.54	0.34	0.21	0.06	-0.07	-0.30	0.07	0.55	1.57
6	1.15	1.02	0.77	0.53	0.33	0.20	0.05	-0.08	-0.28	0.08	0.56	1.66
7	1.14	1.00	0.76	0.52	0.34	0.20	0.04	-0.08	-0.29	0.08	0.56	1.59
8	1.14	1.00	0.74	0.51	0.33	0.19	0.04	-0.09	-0.30	0.09	0.57	1.53
9	1.14	0.99	0.75	0.50	0.32	0.19	0.03	-0.10	-0.31	0.09	0.56	1.51
10	1.14	0.98	0.81	0.49	0.31	0.19	0.03	-0.11	-0.31	0.10	0.56	1.49
11	1.14	0.98	0.80	0.48	0.30	0.18	0.03	-0.12	-0.32	0.11	0.57	1.48
12	1.14	0.97	0.78	0.48	0.29	0.18	0.03	-0.13	-0.32	0.13	0.59	1.48
13	1.14	0.96	0.77	0.48	0.29	0.18	0.03	-0.14	-0.32	0.14	0.70	1.50
14	1.13	0.97	0.76	0.48	0.28	0.17	0.06	-0.14	-0.30	0.16	0.74	1.56
15	1.13	0.97	0.75	0.50	0.27	0.16	0.07	-0.15	-0.30	0.17	0.75	1.69
16	1.12	0.96	0.74	0.48	0.26	0.16	0.05	-0.16	-0.32	0.17	0.77	1.73
17	1.11	0.94	0.73	0.47	0.25	0.15	0.04	-0.15	-0.30	0.17	0.79	1.70
18	1.11	0.93	0.72	0.46	0.25	0.15	0.03	-0.16	-0.27	0.18	0.81	1.66
19	1.10	0.93	0.71	0.45	0.24	0.14	0.03	-0.17	-0.27	0.19	0.92	1.64
20	1.10	0.92	0.70	0.45	0.23	0.13	0.02	-0.17	-0.26	0.20	0.97	1.63
21	1.10	0.91	0.68	0.44	0.23	0.14	0.02	-0.18	-0.26	0.23	0.92	1.66
22	1.10	0.90	0.67	0.43	0.22	0.13	0.01	-0.20	-0.20	0.28	0.90	1.65
23	1.10	0.89	0.67	0.42	0.23	0.12	0.00	-0.21	-0.11	0.31	0.89	1.64
24	1.09	0.89	0.66	0.41	0.23	0.12	-0.01	-0.21	-0.06	0.33	0.88	1.65
25	1.08	0.88	0.65	0.41	0.23	0.11	-0.01	-0.22	-0.03	0.36	0.89	1.79
26	1.07	0.87	0.63	0.42	0.22	0.11	-0.01	-0.23	-0.01	0.38	0.90	1.82
27	1.06	0.86	0.62	0.41	0.20	0.10	-0.02	-0.24	0.00	0.46	0.91	1.77
28	1.05	0.84	0.61	0.40	0.19	0.09	-0.02	-0.24	0.01	0.52	0.95	1.73
29	1.05	0.83	0.60	0.40	---	0.08	-0.02	-0.25	0.02	0.54	0.99	1.69
30	1.04	0.83	0.59	0.39	---	0.08	-0.03	-0.26	0.03	0.52	1.13	1.66
31	1.04	---	0.58	0.38	---	0.07	---	-0.26	---	0.50	1.66	---
MEAN	1.11	0.95	0.72	0.47	0.28	0.15	0.03	-0.15	-0.22	0.22	0.78	1.62
MAX	1.16	1.04	0.82	0.57	0.37	0.22	0.07	-0.04	0.03	0.54	1.66	1.82
MIN	1.04	0.83	0.58	0.38	0.19	0.07	-0.03	-0.26	-0.32	0.05	0.50	1.46

CAL YR 2001 MEAN 0.02 MAX 1.28 MIN -0.69
WTR YR 2002 MEAN 0.50 MAX 1.82 MIN -0.32

02239500 SILVER SPRINGS NEAR OCALA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1960, 1962-79, 1981-85, 1989, 1991, 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
DEC													
20...	1502	521	1.71	480	7.4	21.8	<5	5.4	<.01	<.01	<.20	1.00	.03
APR													
09...	0738	444	.03	466	7.4	23.1	<5	2.1	.01	<.01	<.20	.920	.04
AUG													
14...	0810	486	.71	474	7.0	23.2	<5	2.8	.01	<.01	.90	1.00	.05
SEP													
25...	0727	610	1.77	482	7.3	23.2	<5	2.0	.01	<.01	<.20	1.00	.04

Date	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
DEC													
20...	.040	220	73.0	10.0	6.2	.70	168	53.0	10.0	.2	10.0	E273cl	650
APR													
09...	.040	230	76.0	9.70	6.2	.60	188	41.0	10.0	.2	11.0	286	560
AUG													
14...	.040	230	76.0	9.50	6.3	.60	189	43.0	10.0	.2	11.0	280	560
SEP													
25...	.050	230	76.0	9.50	6.4	.60	182	46.0	10.0	.2	10.0	276	600

< -- Less than
E -- Estimated value
cl-- Holding time exceeded by the laboratory

02240000 OCKLAWAHA RIVER NEAR CONNER, FL

(Former national stream-quality accounting network station)

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

DRAINAGE AREA.--1,196 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 31.79 ft above NGVD of 1929.

REMARKS.--Records good except for period of estimated daily discharge, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	810	672	579	525	543	534	479	456	410	455	604	1070
2	815	650	577	527	541	533	474	455	411	452	603	985
3	805	630	574	531	540	541	470	454	410	448	609	896
4	795	630	572	530	542	564	470	455	405	451	593	828
5	788	628	569	528	541	561	471	457	403	452	579	e800
6	783	624	564	528	544	554	471	455	400	451	566	e775
7	780	619	552	529	549	548	472	449	402	452	553	e740
8	776	615	544	529	552	543	467	448	400	449	544	e730
9	767	609	541	529	548	541	460	447	400	446	527	e690
10	762	606	546	530	547	542	458	443	398	444	517	e675
11	758	608	549	530	547	538	458	443	397	442	512	e660
12	754	606	547	531	545	531	459	442	399	443	526	e645
13	754	603	544	534	545	530	457	435	401	447	711	e655
14	753	609	543	537	540	524	461	437	400	455	724	e675
15	747	612	542	554	537	520	465	441	400	458	696	e940
16	737	610	539	552	539	520	460	442	401	455	683	e990
17	728	606	534	546	541	521	457	442	405	450	662	e940
18	721	605	532	543	541	519	454	436	408	449	662	e890
19	717	604	528	543	540	514	453	429	406	447	661	e840
20	714	601	526	546	541	511	453	425	404	452	659	e785
21	712	598	526	544	538	509	454	420	403	470	646	e735
22	710	595	526	541	535	504	452	417	416	509	623	e710
23	708	596	527	538	541	497	445	415	438	575	605	e715
24	705	598	526	537	556	497	443	413	445	576	591	e775
25	703	598	525	536	561	497	454	414	444	607	585	866
26	698	597	523	544	557	491	458	417	445	615	591	925
27	689	593	522	548	548	485	460	419	442	670	587	886
28	685	588	523	549	540	481	466	416	441	705	581	849
29	682	584	525	546	---	479	464	410	450	717	581	818
30	680	581	525	545	---	479	459	408	454	695	631	789
31	677	---	524	543	---	481	---	410	---	646	932	---
TOTAL	22913	18275	16774	16673	15239	16089	13824	13450	12438	15783	19144	24277
MEAN	739	609	541	538	544	519	461	434	415	509	618	809
MAX	815	672	579	554	561	564	479	457	454	717	932	1070
MIN	677	581	522	525	535	479	443	408	397	442	512	645
CFSM	0.62	0.51	0.45	0.45	0.45	0.43	0.38	0.36	0.35	0.42	0.51	0.67
IN.	0.71	0.57	0.52	0.52	0.47	0.50	0.43	0.42	0.39	0.49	0.59	0.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

MEAN	1096	984	985	1074	1059	1173	1174	956	978	1030	1073	1164
MAX	1855	1584	1574	2494	2826	3047	2553	1802	2062	2104	1867	1900
(WY)	1983	1946	1938	1998	1998	1998	1987	1931	1982	1982	1934	1934
MIN	496	480	466	437	433	496	461	434	415	437	483	506
(WY)	2001	2001	2001	2001	2001	2001	2002	2002	2002	2001	2001	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1930 - 2002	
ANNUAL TOTAL	192811		204879			
ANNUAL MEAN	528		561		1062	
HIGHEST ANNUAL MEAN					1654	1930
LOWEST ANNUAL MEAN					491	2001
HIGHEST DAILY MEAN	1400	Sep 15	1070	Sep 1	4010	Apr 9 1982
LOWEST DAILY MEAN	e417	Jul 7	397	Jun 11	397	Jun 11 2002
ANNUAL SEVEN-DAY MINIMUM	426	Feb 2	399	Jun 8	399	Jun 8 2002
MAXIMUM PEAK FLOW			1080	Aug 31	4430	Apr 9 1982
MAXIMUM PEAK STAGE			5.50	Sep 1	9.14	Sep 6 1933
ANNUAL RUNOFF (CFSM)	0.44		0.47		0.89	
ANNUAL RUNOFF (INCHES)	5.98		6.35		12.03	
10 PERCENT EXCEEDS	713		738		1620	
50 PERCENT EXCEEDS	488		541		932	
90 PERCENT EXCEEDS	435		436		649	

e Estimated

02240000 OCKLAWAHA RIVER NEAR CONNER, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.26	3.81	3.56	3.11	3.01	2.81	2.72	2.62	2.13	2.71	3.96	5.47
2	4.29	3.81	3.55	3.13	3.00	2.80	2.69	2.61	2.14	2.68	3.96	5.28
3	4.26	3.85	3.53	3.15	2.98	2.87	2.66	2.60	2.13	2.64	3.99	5.05
4	4.21	3.85	3.52	3.13	2.99	3.04	2.67	2.62	2.07	2.68	3.91	4.84
5	4.19	3.84	3.50	3.11	2.97	3.03	2.69	2.64	2.04	2.69	3.82	4.90
6	4.18	3.82	3.47	3.10	2.98	2.99	2.70	2.61	2.01	2.69	3.74	---
7	4.17	3.79	3.39	3.10	3.01	2.97	2.72	2.55	2.04	2.70	3.66	---
8	4.16	3.77	3.34	3.09	3.02	2.95	2.69	2.54	2.01	2.68	3.61	---
9	4.12	3.75	3.32	3.09	2.99	2.94	2.63	2.53	2.01	2.65	3.49	---
10	4.11	3.73	3.35	3.08	2.98	2.96	2.63	2.49	1.99	2.64	3.43	---
11	4.10	3.74	3.37	3.07	2.97	2.94	2.64	2.49	1.97	2.62	3.39	---
12	4.09	3.73	3.35	3.08	2.95	2.90	2.66	2.48	2.01	2.63	3.49	---
13	4.10	3.72	3.34	3.09	2.94	2.91	2.64	2.40	2.03	2.68	4.53	---
14	4.10	3.74	3.33	3.11	2.90	2.87	2.68	2.42	2.03	2.77	4.60	---
15	4.08	3.76	3.33	3.21	2.87	2.85	2.72	2.47	2.03	2.81	4.48	---
16	4.04	3.75	3.30	3.19	2.88	2.87	2.67	2.48	2.05	2.78	4.41	---
17	4.01	3.73	3.27	3.15	2.88	2.89	2.63	2.48	2.10	2.73	4.29	---
18	3.98	3.72	3.25	3.12	2.88	2.88	2.60	2.41	2.14	2.72	4.29	---
19	3.96	3.72	3.23	3.11	2.86	2.86	2.59	2.34	2.12	2.71	4.28	---
20	3.96	3.71	3.21	3.12	2.86	2.84	2.59	2.30	2.11	2.76	4.26	---
21	3.96	3.69	3.20	3.10	2.83	2.84	2.60	2.24	2.10	2.95	4.18	---
22	3.95	3.67	3.20	3.07	2.81	2.81	2.58	2.20	2.24	3.26	4.06	---
23	3.94	3.67	3.20	3.05	2.84	2.77	2.51	2.18	2.50	3.74	3.96	---
24	3.94	3.69	3.18	3.03	2.93	2.78	2.49	2.16	2.57	3.75	3.88	---
25	3.94	3.69	3.16	3.02	2.96	2.80	2.60	2.17	2.57	3.94	3.83	4.78
26	3.92	3.68	3.14	3.07	2.92	2.75	2.65	2.20	2.58	3.98	3.86	4.96
27	3.87	3.66	3.13	3.08	2.87	2.71	2.67	2.23	2.56	4.26	3.83	4.86
28	3.85	3.62	3.13	3.08	2.83	2.69	2.72	2.20	2.55	4.43	3.78	4.75
29	3.84	3.60	3.14	3.06	---	2.68	2.70	2.12	2.65	4.49	3.78	4.65
30	3.84	3.58	3.13	3.04	---	2.70	2.66	2.10	2.70	4.40	4.02	4.56
31	3.83	---	3.12	3.02	---	2.72	---	2.12	---	4.16	5.14	---
MEAN	4.04	3.73	3.30	3.10	2.93	2.85	2.65	2.39	2.21	3.14	4.00	---
MAX	4.29	3.85	3.56	3.21	3.02	3.04	2.72	2.64	2.70	4.49	5.14	---
MIN	3.83	3.58	3.12	3.02	2.81	2.68	2.49	2.10	1.97	2.62	3.39	---

02240500 OCKLAWAHA RIVER AT EUREKA, FL

LOCATION.--Lat 29°22'18", long 81°54'07", in SW¼ sec.9, T.13 S., R.24 E., Marion County, Hydrologic Unit 03080102, near right bank on upstream end of bridge pier on County Road 316 in Eureka, 3.1 mi downstream from Eaton Creek, and 33.1 mi upstream from mouth.

DRAINAGE AREA.--1,367 mi^2.

PERIOD OF RECORD.--February 1930 to June 1934, September 1943 to December 1952, January 1981 to current year.

REVISED RECORDS.--WDR FL-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Feb. 13, 1930 to June 30, 1934, nonrecording gage, and Sept. 16, 1943 to Dec. 31, 1952, water-stage recorder near present site at datum 15.44 ft higher.

REMARKS.--Records good except for period of estimated daily discharge, which is fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	826	e765	e790	514	592	594	501	514	434	602	846	1370
2	815	e760	e785	515	589	591	505	506	434	584	840	1860
3	812	751	e780	521	585	603	503	505	437	563	829	1960
4	811	761	e775	516	582	688	507	505	441	548	815	1830
5	807	774	e770	514	577	685	524	510	444	544	815	1700
6	802	770	e765	514	577	664	527	516	447	539	805	1590
7	800	763	e760	512	592	649	532	511	462	532	792	1490
8	805	762	e750	509	616	636	533	503	470	535	781	1420
9	e800	767	e740	514	612	621	531	498	474	544	764	1360
10	e795	774	e735	521	604	608	531	493	478	562	748	1310
11	e790	781	e730	530	602	597	531	491	486	569	737	1270
12	e785	794	e720	540	598	585	533	491	489	569	739	1220
13	e780	812	e710	542	597	598	533	485	504	606	777	1200
14	e780	851	e695	558	595	588	533	478	521	614	845	1220
15	e775	882	e685	631	590	569	535	479	513	610	891	1380
16	e765	883	e675	623	588	554	538	475	516	602	932	1630
17	e765	878	e670	601	588	549	539	471	528	593	977	1820
18	e765	870	e650	588	588	544	540	464	543	589	1010	1760
19	e765	868	e645	578	587	535	540	463	549	584	1010	1620
20	e765	e865	e640	576	587	527	535	463	564	597	978	1480
21	e765	e855	e638	577	e585	522	528	454	570	641	961	1380
22	e770	e850	655	577	585	523	522	449	588	696	928	1340
23	e767	e845	527	574	600	514	522	443	612	725	908	1340
24	e765	e840	525	569	647	507	522	434	620	740	885	1340
25	e765	e835	522	569	643	506	519	430	648	759	865	1460
26	e765	e830	518	592	631	504	523	431	695	787	852	1580
27	e765	e825	513	594	618	499	524	433	730	809	844	1680
28	e765	e820	515	593	602	494	516	434	693	809	839	1690
29	e765	e810	517	617	---	491	511	430	647	813	841	1630
30	e765	e800	517	610	---	493	513	423	621	838	901	1550
31	e765	---	517	598	---	498	---	423	---	847	1070	---
TOTAL	24230	24441	20434	17387	16757	17536	15751	14605	16158	19950	26825	45480
MEAN	782	815	659	561	598	566	525	471	539	644	865	1516
MAX	826	883	790	631	647	688	540	516	730	847	1070	1960
MIN	765	751	513	509	577	491	501	423	434	532	737	1200
CFSM	0.57	0.60	0.48	0.41	0.44	0.41	0.38	0.34	0.39	0.47	0.63	1.11
IN.	0.66	0.67	0.56	0.47	0.46	0.48	0.43	0.40	0.44	0.54	0.73	1.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

MEAN	1234	1099	1088	1185	1159	1281	1295	991	1053	1127	1183	1340
MAX	2131	1940	1847	2516	2912	3231	2763	1915	2743	2385	2174	2617
(WY)	1950	1948	1950	1998	1998	1998	1987	1931	1982	1982	1934	1933
MIN	550	551	583	478	451	566	525	471	462	488	489	632
(WY)	2001	2001	1991	2001	2001	2002	2002	2002	2001	2000	2000	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1930 - 2002	
ANNUAL TOTAL	224446		259554			
ANNUAL MEAN	615		711		1170	
HIGHEST ANNUAL MEAN					1829	1930
LOWEST ANNUAL MEAN					569	2001
HIGHEST DAILY MEAN	2160	Sep 17	1960	Sep 3	6110	Apr 11 1982
LOWEST DAILY MEAN	417	Jul 7	423	May 30,31	417	Jul 7 2001
ANNUAL SEVEN-DAY MINIMUM	428	Jul 1	429	May 25	428	Jul 1 2001
MAXIMUM PEAK FLOW			1960	Sep 3	6230	Sep 7 1933
MAXIMUM PEAK STAGE			22.29	Sep 3	26.52	Apr 11 1982
INSTANTANEOUS LOW FLOW			417	May 31	411	Jul 7 2001
ANNUAL RUNOFF (CFSM)	0.45		0.52		0.86	
ANNUAL RUNOFF (INCHES)	6.11		7.06		11.62	
10 PERCENT EXCEEDS	810		944		1890	
50 PERCENT EXCEEDS	540		606		1020	
90 PERCENT EXCEEDS	450		494		640	

e Estimated

02240902 PRAIRIE CREEK NEAR GAINESVILLE, FL

LOCATION.--Lat 29°36'38", long 82°14'53", in NW¼ sec.19, T.10 S., R.21 E., Alachua County, Hydrologic Unit 03080102, on downstream side of foot bridge (old railroad bridge), 100 ft downstream from State Highway 20, 150 ft downstream from control structure at outlet of Newnans Lake, 7 mi southeast of Gainesville, and 8.4 mi upstream from mouth.

DRAINAGE AREA.--114 mi^2.

PERIOD OF RECORD.--1947-48, 1956, 1965-67 (miscellaneous discharge measurements and gage heights only), August 1978 to April 2002 (discontinued).

REVISED RECORDS.--WDR FL-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 61.79 ft above NGVD of 1929 (Florida Department of Transportation bench mark). Prior to Aug. 24, 1978, nonrecording gage at site 100 ft upstream at datum 0.50 ft higher. Aug. 24, 1978 to Mar. 9, 1999, at site 100 ft upstream at same datum.

REMARKS.--Records good. Some regulation by stoplogs in control structure at outlet of Newnans Lake.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD OCTOBER 2001 TO APRIL 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
24	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	---	---	---	---	---
25	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	---	---	---	---	---
26	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	---	---	---	---	---
27	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	---	---	---	---	---
28	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	---	---	---	---	---
29	0.00	0.00	0.00	0.00	---	0.00	e0.00	---	---	---	---	---
30	0.00	0.00	0.00	0.00	---	0.00	e0.00	---	---	---	---	---
31	0.00	---	0.00	0.00	---	0.00	---	---	---	---	---	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	---	---	---	---	---
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---
IN.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	59.9	36.2	35.1	53.4	84.0	101	94.1	59.3	37.2	35.9	40.3	69.1
MAX	277	170	161	330	564	554	323	241	117	134	295	355
(WY)	1993	1986	1998	1998	1998	1998	1987	1983	1991	1996	1978	1985
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.010	0.085
(WY)	2001	2001	2001	2001	2001	2000	2000	2000	2001	2000	2000	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	#FOR 2002 WATER YEAR	#WATER YEARS 1978 - 2002
ANNUAL TOTAL	21.84	0.00	
ANNUAL MEAN	0.060	0.000	58.8
HIGHEST ANNUAL MEAN			177 1998
LOWEST ANNUAL MEAN			0.000 2002
HIGHEST DAILY MEAN	3.1 Jul 20	0.00	1290 Feb 25 1998
LOWEST DAILY MEAN	0.00 Many days	0.00	0.00 Many days
ANNUAL SEVEN-DAY MINIMUM	0.00 Jan 1	0.00 Oct 1	0.00 Many days
MAXIMUM PEAK FLOW			1290 Feb 25 1998
MAXIMUM PEAK STAGE		1.58 Oct 1	8.77 Feb 25 1998
ANNUAL RUNOFF (CFSM)	0.001	0.000	0.52
ANNUAL RUNOFF (INCHES)	0.01	0.00	7.01
10 PERCENT EXCEEDS	0.09	0.00	151
50 PERCENT EXCEEDS	0.00	0.00	32
90 PERCENT EXCEEDS	0.00	0.00	0.10

e Estimated
* Includes partial year(s) record

02240902 PRAIRIE CREEK NEAR GAINESVILLE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.58	1.40	1.37	1.24	1.48	1.42	1.25	---	---	---	---	---
2	1.57	1.40	1.37	1.24	1.47	1.43	1.23	---	---	---	---	---
3	1.57	1.40	1.36	1.25	1.47	1.47	1.23	---	---	---	---	---
4	1.57	1.40	1.36	1.24	1.46	1.50	1.22	---	---	---	---	---
5	1.57	1.40	1.35	1.23	1.45	1.48	1.20	---	---	---	---	---
6	1.56	1.40	1.34	1.24	1.44	1.47	1.18	---	---	---	---	---
7	1.56	1.39	1.34	1.25	1.45	1.46	1.15	---	---	---	---	---
8	1.56	1.39	1.34	1.24	1.45	1.46	1.12	---	---	---	---	---
9	1.55	1.39	1.39	1.23	1.45	1.46	1.09	---	---	---	---	---
10	1.54	1.39	1.43	1.23	1.45	1.46	1.07	---	---	---	---	---
11	1.54	1.39	1.42	1.23	1.45	1.45	1.05	---	---	---	---	---
12	1.53	1.39	1.40	1.22	1.45	1.45	1.02	---	---	---	---	---
13	1.53	1.39	1.40	1.24	1.44	1.48	1.01	---	---	---	---	---
14	1.52	1.42	1.39	1.34	1.44	1.45	1.06	---	---	---	---	---
15	1.52	1.42	1.38	1.45	1.44	1.44	1.04	---	---	---	---	---
16	1.52	1.42	1.38	1.42	1.44	1.43	1.01	---	---	---	---	---
17	1.50	1.40	1.37	1.42	1.44	1.43	0.97	---	---	---	---	---
18	1.49	1.40	1.38	1.42	1.44	1.42	0.94	---	---	---	---	---
19	1.47	1.40	1.37	1.41	1.44	1.41	0.91	---	---	---	---	---
20	1.47	1.40	1.36	1.41	1.44	1.40	0.87	---	---	---	---	---
21	1.46	1.40	1.34	1.42	1.44	1.40	0.82	---	---	---	---	---
22	1.46	1.39	1.33	1.45	1.44	1.39	0.76	---	---	---	---	---
23	1.45	1.39	1.32	1.44	1.47	1.38	0.70	---	---	---	---	---
24	1.45	1.39	1.31	1.44	1.47	1.37	---	---	---	---	---	---
25	1.44	1.39	1.30	1.43	1.45	1.37	---	---	---	---	---	---
26	1.43	1.39	1.29	1.43	1.44	1.36	---	---	---	---	---	---
27	1.42	1.39	1.28	1.43	1.44	1.35	---	---	---	---	---	---
28	1.41	1.39	1.27	1.45	1.43	1.33	---	---	---	---	---	---
29	1.40	1.38	1.26	1.50	---	1.31	---	---	---	---	---	---
30	1.40	1.38	1.26	1.49	---	1.29	---	---	---	---	---	---
31	1.40	---	1.25	1.48	---	1.27	---	---	---	---	---	---
MEAN	1.50	1.40	1.35	1.35	1.45	1.41	---	---	---	---	---	---
MAX	1.58	1.42	1.43	1.50	1.48	1.50	---	---	---	---	---	---
MIN	1.40	1.38	1.25	1.22	1.43	1.27	---	---	---	---	---	---

02240954 HOGTOWN CREEK NEAR ARREDONDO, FL

LOCATION.--Lat 29°38'17", long 82°23'33", in NE¼ sec.10, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080102, near right bank at downstream side of bridge on County Road 30, 2.5 mi northeast of Arredondo, and 4.2 mi west of Gainesville.

DRAINAGE AREA.--41.2 mi².

PERIOD OF RECORD.--December 1971 to September 2002 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	2.1	2.1	1.9	7.6	3.1	1.2	0.19	0.91	3.1	3.8	14
2	8.6	2.0	2.1	2.2	6.0	3.9	1.1	0.16	0.70	1.9	32	11
3	7.3	2.0	2.1	2.9	5.0	9.9	1.2	0.15	0.50	1.7	19	8.0
4	6.4	1.9	2.1	2.5	4.4	30	1.2	0.16	0.87	11	32	6.4
5	5.7	2.0	2.1	2.3	3.8	23	1.1	0.14	0.60	11	119	9.2
6	5.4	2.0	2.1	2.5	3.6	15	0.97	0.14	0.42	20	58	11
7	5.2	1.9	2.1	3.0	4.2	11	0.93	0.14	0.66	11	28	7.6
8	4.8	1.9	2.1	2.6	4.8	8.4	0.85	0.12	0.87	5.2	16	5.4
9	4.3	1.9	3.1	2.4	4.2	6.9	0.77	0.10	0.72	10	9.9	4.1
10	4.0	1.9	6.2	2.4	3.8	5.9	0.77	0.09	0.64	12	6.9	3.4
11	3.8	1.9	8.5	2.4	3.6	5.1	0.78	0.09	0.56	11	5.0	2.9
12	3.6	1.9	5.5	2.4	3.3	4.6	0.77	0.08	0.53	7.7	6.6	2.6
13	3.5	2.0	3.9	3.0	3.1	7.4	0.95	0.07	0.47	4.7	32	7.0
14	3.5	3.1	3.3	6.4	3.1	9.5	2.1	0.10	0.87	4.1	22	13
15	3.5	5.5	2.9	30	3.0	6.8	1.7	0.10	0.70	3.1	28	35
16	3.2	4.9	2.6	24	3.0	4.9	1.0	0.06	0.42	2.1	28	28
17	2.9	3.5	2.5	13	2.9	4.0	0.82	0.07	0.42	1.5	19	20
18	2.7	2.8	2.7	8.2	2.7	3.4	0.71	0.10	0.74	3.4	14	14
19	2.7	2.5	2.6	6.0	2.7	3.0	0.59	0.40	1.1	4.1	15	10
20	2.7	2.4	2.4	5.0	2.7	2.7	0.51	0.53	9.0	4.0	19	8.0
21	2.7	2.4	2.2	5.3	2.7	2.5	0.44	0.34	12	39	34	7.4
22	2.7	2.3	2.1	8.6	2.8	2.3	0.36	0.22	8.9	24	26	6.3
23	2.8	2.3	2.1	9.1	4.6	2.0	0.33	0.16	25	15	18	4.7
24	2.8	2.4	2.1	6.5	10	1.9	0.26	0.16	12	10	12	5.0
25	2.7	2.4	2.0	5.3	9.9	1.9	0.26	0.14	6.1	7.2	8.7	33
26	2.4	2.3	1.9	6.7	5.7	1.8	0.26	0.11	5.9	7.3	6.7	36
27	2.2	2.2	1.9	7.9	4.1	1.8	0.24	0.17	6.7	8.8	7.1	27
28	2.1	2.1	1.9	6.9	3.3	1.8	0.23	0.31	4.6	8.1	9.5	18
29	2.1	2.1	2.0	13	---	1.5	0.22	0.20	4.2	6.0	9.2	13
30	2.1	2.1	1.9	17	---	1.4	0.22	0.20	4.6	3.9	11	10
31	2.1	---	1.9	10	---	1.3	---	0.41	---	2.6	16	---
TOTAL	120.5	72.7	85.0	221.4	120.6	188.7	22.84	5.41	111.70	264.5	671.4	381.0
MEAN	3.89	2.42	2.74	7.14	4.31	6.09	0.76	0.17	3.72	8.53	21.7	12.7
MAX	10	5.5	8.5	30	10	30	2.1	0.53	25	39	119	36
MIN	2.1	1.9	1.9	1.9	2.7	1.3	0.22	0.06	0.42	1.5	3.8	2.6
CFSM	0.09	0.06	0.07	0.17	0.10	0.15	0.02	0.00	0.09	0.21	0.53	0.31
IN.	0.11	0.07	0.08	0.20	0.11	0.17	0.02	0.00	0.10	0.24	0.61	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

MEAN	14.0	9.37	14.8	19.4	24.2	24.2	19.8	8.78	18.4	19.7	26.1	24.4
MAX	54.0	27.8	92.3	43.8	122	74.2	62.2	23.0	63.1	51.7	130	103
(WY)	1999	1986	1998	1979	1998	1988	1983	1983	1972	1996	1978	1988
MIN	0.89	2.42	2.74	2.61	4.09	4.67	0.76	0.17	1.21	1.83	4.99	3.51
(WY)	1988	2002	2002	2001	1996	2000	2002	2002	1988	1988	1993	1995

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL	3331.9		2265.75			
ANNUAL MEAN	9.13		6.21		18.2	
HIGHEST ANNUAL MEAN					36.7	1998
LOWEST ANNUAL MEAN					6.21	2002
HIGHEST DAILY MEAN	159	Jul 21	119	Aug 5	860	Sep 7 1988
LOWEST DAILY MEAN	1.4	Aug 29,30	0.06	May 16	0.06	May 16 2002
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 24	0.08	May 11	0.08	May 11 2002
MAXIMUM PEAK FLOW			136	Aug 5	1040	Sep 7 1988
MAXIMUM PEAK STAGE			57.78	Aug 5	60.53	Sep 7 1988
INSTANTANEOUS LOW FLOW			0.05	May 16	0.05	May 16 2002
ANNUAL RUNOFF (CFSM)	0.22		0.15		0.44	
ANNUAL RUNOFF (INCHES)	3.01		2.05		6.00	
10 PERCENT EXCEEDS	22		14		37	
50 PERCENT EXCEEDS	3.5		3.0		9.2	
90 PERCENT EXCEEDS	2.1		0.35		2.9	

02240956 HAILE SINK NEAR ARREDONDO, FL

LOCATION.--Lat 29°37'41", long 82°24'40", in NE¼ sec.16, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080l02, on northwest rim of sink, 1.6 mi north of Arredondo, and 5.2 mi west of Gainesville.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1971 to September l977, February 1978 to September 2002 (gage heights only), discontinued.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Sink has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 60.15 ft, Sept. 10,11, 1988; minimum, unknown; water level below lowest recordable gage height for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum gage height observed, 40.75 ft, Aug. 7; minimum observed, 36.68 ft, June 17.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	40.75	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	36.68	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	37.16	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

02241000 CAMPS CANAL NEAR ROCHELLE, FL

LOCATION.--Lat 29°34'33", long 82°15'00", in SW¼ sec.31, Moses Levy Land Grant, Alachua County, Hydrologic Unit 03080102, near left bank on downstream side of bridge on County Road 234, 2.2 mi southwest of Rochelle, and 5.0 mi upstream from Orange Lake.

DRAINAGE AREA.--775 mi^2, includes Paynes Prairie, a diked sinkhole area of 650 mi^2, approximately, which is noncontributing except by pumpage.

PERIOD OF RECORD.--March 1948 to November 1952 (discharge measurements only), August 1957 to September 1960, March 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 53.44 ft above NGVD of 1929. Mar. 16, 1948 to Nov. 14, 1952, reference point at datum 15.27 ft higher. Aug. 8, 1957 to Oct. 28, 1960, water-stage recorder at datum 5.00 ft higher.

REMARKS.--Records good. Seasonal diversion out of or into canal above station by drainage and/or pumpage for irrigation of pastures in Paynes Prairie.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IN.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2002, BY WATER YEAR (WY)

MEAN	50.8	34.4	28.1	39.9	61.5	104	97.0	58.0	39.9	37.2	59.8	69.0
MAX	232	181	114	178	273	504	426	221	276	221	385	347
(WY)	1960	1986	1984	1984	1998	1959	1959	1959	1959	1959	1978	1985
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	2001	2000	2000	2000	2000	2000	2000	2000	1999	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1957 - 2002	
ANNUAL TOTAL	0.00		0.00			
ANNUAL MEAN	0.000		0.000		54.8	
HIGHEST ANNUAL MEAN					193	1959
LOWEST ANNUAL MEAN					a0.000	
HIGHEST DAILY MEAN	0.00	Jan 1	0.00		1040	Mar 24 1959
LOWEST DAILY MEAN	0.00	Jan 1	0.00		0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Many days
MAXIMUM PEAK FLOW					1040	Mar 24 1959
MAXIMUM PEAK STAGE			5.02	Oct 1	13.21	Mar 24 1959
ANNUAL RUNOFF (CFSM)	0.000		0.000		0.071	
ANNUAL RUNOFF (INCHES)	0.00		0.00		0.96	
10 PERCENT EXCEEDS	0.00		0.00		157	
50 PERCENT EXCEEDS	0.00		0.00		22	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a 2001,2002 water years

02241000 CAMPS CANAL NEAR ROCHELLE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.00	4.52	4.41	4.37	4.37	4.36	4.35	4.32	4.30	4.29	4.29	4.50
2	4.96	4.52	4.40	4.37	4.37	4.36	4.34	4.32	4.30	4.29	4.29	4.47
3	4.92	4.52	4.40	4.37	4.37	4.36	4.34	4.32	4.29	4.29	4.29	4.42
4	4.88	4.51	4.40	4.37	4.37	4.36	4.34	4.32	4.30	4.29	4.29	4.40
5	4.84	4.51	4.40	4.37	4.37	4.36	4.34	4.32	4.29	4.29	4.29	4.44
6	4.80	4.50	4.40	4.37	4.37	4.36	4.34	4.31	4.29	4.30	4.29	4.53
7	4.76	4.47	4.40	4.37	4.37	4.36	4.34	4.31	4.29	4.30	4.29	4.50
8	4.72	4.46	4.39	4.37	4.37	4.36	4.34	4.31	4.29	4.30	4.29	4.48
9	4.67	4.44	4.40	4.37	4.37	4.36	4.34	4.31	4.29	4.30	4.29	4.45
10	4.63	4.44	4.40	4.37	4.37	4.36	4.34	4.31	4.29	4.29	4.29	4.41
11	4.62	4.43	4.40	4.37	4.37	4.36	4.34	4.31	4.29	4.29	4.29	4.37
12	4.60	4.43	4.40	4.37	4.36	4.36	4.34	4.31	4.29	4.29	4.29	4.35
13	4.58	4.43	4.40	4.37	4.36	4.36	4.34	4.31	4.29	4.29	4.29	4.38
14	4.57	4.44	4.40	4.37	4.36	4.36	4.34	4.31	4.29	4.29	4.29	4.38
15	4.56	4.44	4.40	4.39	4.36	4.36	4.34	4.30	4.29	4.29	4.29	4.54
16	4.55	4.43	4.40	4.39	4.36	4.36	4.34	4.30	4.29	4.29	4.29	4.57
17	4.55	4.43	4.39	4.39	4.36	4.36	4.33	4.30	4.29	4.29	4.29	4.53
18	4.55	4.43	4.39	4.38	4.36	4.36	4.33	4.30	4.29	4.29	4.29	4.51
19	4.55	4.42	4.39	4.38	4.36	4.36	4.33	4.30	4.29	4.29	4.29	4.50
20	4.56	4.42	4.39	4.38	4.36	4.35	4.33	4.30	4.29	4.29	4.29	4.49
21	4.55	4.42	4.39	4.38	4.36	4.35	4.33	4.30	4.29	4.29	4.29	4.49
22	4.55	4.42	4.39	4.38	4.36	4.35	4.33	4.30	4.29	4.29	4.29	4.48
23	4.55	4.42	4.38	4.38	4.36	4.35	4.33	4.30	4.29	4.29	4.28	4.48
24	4.55	4.42	4.38	4.38	4.36	4.35	4.33	4.30	4.29	4.29	4.28	4.49
25	4.55	4.41	4.38	4.38	4.36	4.35	4.33	4.30	4.29	4.29	4.28	4.50
26	4.54	4.41	4.38	4.38	4.36	4.35	4.32	4.30	4.29	4.29	4.28	4.55
27	4.53	4.41	4.38	4.38	4.36	4.35	4.32	4.30	4.29	4.29	4.28	4.54
28	4.53	4.41	4.38	4.38	4.36	4.35	4.32	4.30	4.29	4.29	4.28	4.51
29	4.53	4.41	4.38	4.38	---	4.35	4.32	4.30	4.29	4.29	4.33	4.50
30	4.53	4.41	4.38	4.38	---	4.35	4.32	4.29	4.29	4.29	4.55	4.49
31	4.52	---	4.37	4.37	---	4.35	---	4.29	---	4.29	4.52	---
MEAN	4.64	4.44	4.39	4.38	4.36	4.36	4.33	4.31	4.29	4.29	4.31	4.47
MAX	5.00	4.52	4.41	4.39	4.37	4.36	4.35	4.32	4.30	4.30	4.55	4.57
MIN	4.52	4.41	4.37	4.37	4.36	4.35	4.32	4.29	4.29	4.29	4.28	4.35

CAL YR 2001 MEAN 4.52 MAX 5.24 MIN 4.36
WTR YR 2002 MEAN 4.38 MAX 5.00 MIN 4.28

02243000 ORANGE CREEK AT ORANGE SPRINGS, FL

LOCATION.--Lat 29°30'34", long 81°56'47", in NE¼ sec.25, T.11 S., R.23 E., Marion County, Hydrologic Unit 03080102, near right bank at downstream side of bridge on State Highway 21, 0.2 mi northwest of Orange Springs, and 0.45 mi upstream from Little Orange Creek.

DRAINAGE AREA.--1,119 mi^2, includes Paynes Prairie, a diked sinkhole area of 650 mi^2, approximately, which is noncontributing except by pumpage.

PERIOD OF RECORD.--November 1941 to June 1942 (discharge measurements only), July 1942 to December 1952, October 1955 to September 1971, October 1971 to April 1975 (discharge measurements only), May 1975 to current year.

REVISED RECORDS.--WDR FL-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 19.81 ft above NGVD of 1929. Prior to Oct. 18, 1955, and Oct. 13, 1971 to May 6, 1975, nonrecording gage at same site and datum. Feb. 4, 1980 to May 7, 1981, temporary gage 125 ft downstream at same datum.

REMARKS.--Records good except for period of estimated daily discharge, which is fair. Records include some flow diverted, during periods of high stages, from Santa Fe Lake in Suwannee River basin through Lochloosa Creek. Since April 1963, concrete dam at outlet of Orange Lake, 11 mi upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1941 reached a stage of 10.6 ft, from information by local resident, discharge 2,400 ft^3/s, from rating curve extended above 1,500 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	9.2	5.4	5.0	13	7.9	3.0	1.9	1.9	42	29	e32
2	32	8.8	5.3	5.6	12	7.8	2.9	1.8	1.5	34	27	e28
3	29	8.8	5.2	7.8	11	8.8	3.0	1.8	1.4	28	36	e27
4	27	9.3	5.2	7.3	10	11	5.5	1.6	1.4	26	44	e27
5	25	8.8	5.1	6.9	9.6	9.5	13	1.6	1.3	23	36	e28
6	23	8.1	5.0	7.4	9.2	8.8	7.9	1.7	1.4	26	29	e29
7	22	7.6	5.0	7.5	9.3	8.4	5.9	1.7	2.1	23	25	e27
8	21	7.4	5.1	7.1	9.5	8.1	4.8	1.6	2.1	19	e25	e25
9	19	7.2	19	6.7	9.0	7.8	4.3	1.5	1.9	18	e23	e23
10	18	6.9	28	6.6	8.7	7.3	4.3	1.3	1.8	21	e22	e23
11	17	6.8	18	6.5	8.5	6.7	4.2	1.5	1.9	24	e20	e23
12	16	6.9	14	6.4	7.9	6.3	4.2	1.4	2.0	22	e25	e22
13	16	6.7	12	7.3	7.6	12	4.2	1.3	2.5	20	e50	e26
14	15	8.8	11	12	7.5	12	6.1	1.4	5.4	19	e41	e40
15	15	12	9.6	40	7.2	9.9	7.0	1.3	3.6	17	e46	e53
16	14	10	8.9	26	7.0	8.8	5.2	1.3	2.6	14	e43	e46
17	13	8.9	8.3	21	6.7	7.8	4.2	1.4	2.8	12	e38	e40
18	12	8.3	7.8	17	6.3	6.8	3.7	1.4	3.7	11	e33	e34
19	11	8.1	7.3	15	6.0	6.0	3.3	1.6	5.4	12	e33	e28
20	11	7.6	7.0	14	5.9	5.4	3.0	1.7	5.8	15	e38	e27
21	10	6.9	6.6	13	5.8	5.4	2.7	1.4	6.2	24	e52	e26
22	9.9	6.4	6.3	14	5.6	7.1	2.4	1.4	20	32	e45	e25
23	9.8	6.4	6.2	13	7.8	6.7	2.3	1.4	29	36	e35	e24
24	9.5	6.4	6.2	12	15	5.6	2.2	1.3	16	38	e32	e30
25	18	6.4	5.8	12	13	5.0	2.1	1.3	14	33	e27	e53
26	19	6.1	5.6	15	11	4.7	2.1	1.3	22	34	e26	e56
27	14	6.0	5.5	15	9.6	4.3	2.0	1.4	19	78	e27	e45
28	12	5.7	5.5	15	8.5	3.7	1.9	1.6	17	70	e28	e37
29	11	5.6	5.5	15	---	3.6	1.9	1.4	26	59	e28	e33
30	10	5.5	5.3	14	---	3.5	1.9	1.4	66	46	e30	e28
31	9.7	---	5.2	13	---	3.2	---	1.5	---	36	e34	---
TOTAL	524.9	227.6	255.9	384.1	248.2	219.9	121.2	46.2	287.7	912	1027	965
MEAN	16.9	7.59	8.25	12.4	8.86	7.09	4.04	1.49	9.59	29.4	33.1	32.2
MAX	36	12	28	40	15	12	13	1.9	66	78	52	56
MIN	9.5	5.5	5.0	5.0	5.6	3.2	1.9	1.3	1.3	11	20	22
CFSM	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.03	0.03	0.03
IN.	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.03	0.03	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002, BY WATER YEAR (WY)

MEAN	163	116	97.7	112	139	188	167	92.9	70.8	81.3	131	173
MAX	934	652	536	522	1003	1095	909	504	558	627	790	1001
(WY)	1965	1948	1948	1970	1970	1998	1970	1959	1959	1959	1965	1964
MIN	3.00	3.04	3.59	4.93	5.09	4.83	4.04	1.49	2.31	3.44	2.52	2.59
(WY)	1991	1991	1991	2001	1991	2000	2002	2002	2000	1992	1993	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002	
ANNUAL TOTAL	4927.7		5219.7			
ANNUAL MEAN	13.5		14.3		129	
HIGHEST ANNUAL MEAN					500	1948
LOWEST ANNUAL MEAN					6.39	1990
HIGHEST DAILY MEAN	265	Sep 15	78	Jul 27	1940	Sep 13 1964
LOWEST DAILY MEAN	1.4	May 25,27-29	a1.3		1.0	Jun 19 2000
ANNUAL SEVEN-DAY MINIMUM	1.5	May 23	1.4	May 10	1.3	Jun 16 2000
MAXIMUM PEAK FLOW			84	Jul 27	2170	Sep 13 1964
MAXIMUM PEAK STAGE			3.47	Jul 27	9.86	Sep 13 1964
INSTANTANEOUS LOW FLOW			1.2	Many days		
ANNUAL RUNOFF (CFSM)	0.012		0.013		0.12	
ANNUAL RUNOFF (INCHES)	0.16		0.17		1.56	
10 PERCENT EXCEEDS	27		33		375	
50 PERCENT EXCEEDS	6.8		8.8		45	
90 PERCENT EXCEEDS	2.3		1.9		5.5	

e Estimated
a May 10,15,16,24-26, Jun 5

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

LOCATION.--Lat 29°30'30", long 81°48'15", in NW¼ sec.28, T.11 S., R.25 E., Putnam County, Hydrologic Unit 03080102, at downstream side of control structure of Rodman Dam, 8.4 mi east of Orange Springs, and 11.6 mi upstream from mouth.

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

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

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Auxiliary gage at upstream side of control structure at same datum.

REMARKS.--Records fair. Flow regulated by manipulation of gates in spillway; dam completed and flow through spillway began on Sept. 30, 1968. Discharge computed from relation between discharge, head, and gate openings. Since November 1969, diversion above station from Lake Ocklawaha for boat lockages, through Cross-Florida Barge Canal (see station 02244032) to St. Johns River. Elevations published as Ocklawaha River below Rodman Dam previously published as Ocklawaha River at Rodman Dam.

COOPERATION.--Gate-opening record provided by Cross Florida Greenways and Trails.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	921	e652	e1790	925	995	840	518	483	449	1340	1230	1270
2	922	e652	e1780	1220	986	839	521	434	450	1190	1230	1540
3	922	e653	e1070	1430	981	856	526	434	450	973	1230	2010
4	922	e654	e1250	1190	975	1140	529	435	450	891	1230	2300
5	922	e655	e1670	834	962	1060	534	435	450	815	1230	2210
6	923	e656	e1760	719	846	910	537	435	451	777	1220	2150
7	922	e633	e1480	938	838	945	539	437	452	776	1220	2150
8	922	e619	e1920	1180	914	794	542	437	453	680	946	2140
9	921	e619	e2020	1010	810	469	545	437	453	629	814	1330
10	922	e620	e2150	883	818	481	548	437	453	629	815	e927
11	922	e621	e1840	1000	821	466	549	438	e454	630	815	e1130
12	923	e559	e2580	1010	821	427	550	439	e454	631	816	e1240
13	922	e467	e2220	969	820	414	552	441	e455	632	820	1400
14	923	e468	e1490	984	819	421	553	440	e456	634	822	1550
15	1010	e641	e2010	1110	821	428	555	439	e456	730	1010	1560
16	1070	e781	e1950	1270	825	437	557	440	e456	781	1160	2240
17	1070	e781	e1900	1270	826	444	560	441	608	779	1160	2560
18	1070	e781	e1850	1150	821	450	562	442	683	778	1160	2390
19	1070	e1140	e1790	1120	824	456	564	442	744	778	1160	2170
20	1070	e2340	e1730	1160	996	463	565	442	829	779	1170	2160
21	1060	e2650	e1650	1150	e1080	470	566	442	866	779	1170	1530
22	1060	e2390	e1310	940	e1070	473	567	442	1060	780	1160	1090
23	898	e2360	1030	807	e914	478	567	442	1140	780	1170	1090
24	763	e2160	1010	768	e856	483	568	443	1140	802	1170	1820
25	e770	e2030	1050	851	e914	488	571	444	1140	819	1050	2810
26	e765	e2000	1140	1010	e1100	494	571	444	1140	931	977	3130
27	e704	e1900	1000	1010	e1150	499	571	445	1280	1010	977	e2330
28	e650	e1830	615	1110	e897	502	572	446	1360	1010	880	1880
29	e651	e1810	719	1230	---	506	573	446	1350	1010	791	1880
30	e652	e1790	792	1110	---	510	566	447	1340	1150	757	1860
31	e645	---	873	988	---	508	---	448	---	1230	758	---
TOTAL	27887	35912	47439	32346	25500	18151	16598	13697	21922	26153	32118	55847
MEAN	900	1197	1530	1043	911	586	553	442	731	844	1036	1862
MAX	1070	2650	2580	1430	1150	1140	573	483	1360	1340	1230	3130
MIN	645	467	615	719	810	414	518	434	449	629	757	927
IN.	0.38	0.49	0.64	0.44	0.35	0.25	0.22	0.19	0.30	0.35	0.43	0.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002, BY WATER YEAR (WY)

MEAN	1259	1100	1229	1436	1450	1516	1451	1022	1083	1214	1329	1472
MAX	3288	2982	2871	4394	5004	5432	4518	2807	3765	3247	3182	3651
(WY)	1970	1970	1970	1998	1970	1998	1970	1970	1982	1974	1978	1979
MIN	384	310	478	423	531	421	345	357	378	387	445	554
(WY)	2001	2001	1994	1982	1982	2001	1992	1985	2001	2001	1993	1993

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1969 - 2002	
ANNUAL TOTAL	256558		353570			
ANNUAL MEAN	703		969		1296	
HIGHEST ANNUAL MEAN					3245	1970
LOWEST ANNUAL MEAN					519	2001
HIGHEST DAILY MEAN	3910	Sep 15	3130	Sep 26	9560	Feb 5 1970
LOWEST DAILY MEAN	a291		414	Mar 13	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	291	May 21	432	Mar 12	207	Jul 4 1969
MAXIMUM PEAK STAGE			6.00	Sep 26	9.64	Apr 12 1982
ANNUAL RUNOFF (INCHES)	3.47		4.79		6.41	
10 PERCENT EXCEEDS	1480		1820		2540	
50 PERCENT EXCEEDS	525		846		1040	
90 PERCENT EXCEEDS	355		449		448	

e Estimated
a May 21-28,30,31, July 8, 2001

02243960 OCKLAWAHA RIVER AT RODMAN DAM, NEAR ORANGE SPRINGS, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.36	---	---	3.53	3.92	3.37	1.22	1.59	1.94	4.40	4.01	3.69
2	4.30	---	---	3.83	3.90	3.12	1.39	1.64	1.86	4.26	4.10	4.48
3	4.25	---	---	4.57	3.87	2.99	1.41	1.49	1.79	3.97	4.17	4.81
4	4.20	---	---	4.51	3.84	3.59	1.35	1.39	1.79	3.62	4.08	5.25
5	4.15	---	---	3.99	3.77	3.99	1.37	1.32	1.83	3.46	4.06	5.39
6	4.10	---	---	3.15	3.49	3.57	1.45	1.31	1.86	3.25	4.17	5.40
7	4.04	---	---	3.16	3.16	3.50	1.52	1.68	1.90	3.15	4.13	5.35
8	4.00	---	---	4.07	3.52	3.22	1.63	2.02	1.86	3.05	4.05	5.33
9	4.00	---	---	4.12	3.39	2.20	1.70	1.90	1.88	2.89	3.70	4.84
10	4.01	---	---	3.65	3.37	1.99	1.90	1.63	1.94	2.86	3.63	---
11	4.00	---	---	3.60	3.40	1.97	2.23	1.36	2.11	2.85	3.58	---
12	3.97	---	---	3.74	3.48	1.93	2.26	1.24	2.25	2.91	3.52	---
13	3.92	---	---	3.47	3.46	1.77	2.27	1.45	2.24	2.97	3.55	4.37
14	3.88	---	---	3.15	3.43	1.85	2.25	1.73	2.24	2.87	3.73	4.68
15	3.98	---	---	3.71	3.42	1.69	1.89	1.82	2.11	2.95	3.91	4.80
16	4.22	---	---	4.19	3.41	1.34	1.40	1.79	2.06	3.11	4.06	5.15
17	4.25	---	---	4.17	3.38	1.23	1.28	1.70	2.42	3.12	4.20	5.74
18	4.26	---	---	4.17	3.33	1.29	1.21	1.68	2.80	3.14	4.26	5.70
19	4.25	---	---	4.02	3.31	1.41	1.73	1.65	2.89	3.18	4.22	5.43
20	4.24	---	---	4.13	3.57	1.37	2.21	1.73	3.16	3.30	4.29	5.39
21	4.22	---	---	4.07	---	1.35	2.17	1.84	3.34	3.30	4.47	5.03
22	4.18	---	4.89	3.76	---	1.38	1.83	1.89	3.71	3.31	4.49	4.32
23	3.97	---	4.39	3.33	---	1.42	1.42	1.95	3.98	3.34	4.08	4.34
24	3.62	---	4.10	3.19	---	1.44	1.44	1.92	3.97	3.34	3.94	4.85
25	3.49	---	4.07	3.25	---	1.41	1.44	1.84	3.98	3.31	3.88	5.57
26	3.36	---	4.14	3.68	---	1.34	1.94	1.74	4.02	3.33	3.86	5.97
27	3.32	---	4.14	3.60	---	1.38	2.39	1.68	4.14	3.52	3.81	---
28	3.39	---	3.29	3.80	---	1.47	2.38	1.77	4.33	3.54	3.60	5.18
29	3.41	---	2.83	4.18	---	1.45	1.97	1.90	4.38	3.51	3.41	5.09
30	3.44	---	2.82	4.15	---	1.44	1.50	1.95	4.41	3.72	3.14	5.04
31	3.45	---	3.31	3.91	---	1.40	---	1.97	---	4.02	3.15	---
MEAN	3.94	---	---	3.80	---	2.03	1.74	1.70	2.77	3.34	3.91	---
MAX	4.36	---	---	4.57	---	3.99	2.39	2.02	4.41	4.40	4.49	---
MIN	3.32	---	---	3.15	---	1.23	1.21	1.24	1.79	2.85	3.14	---

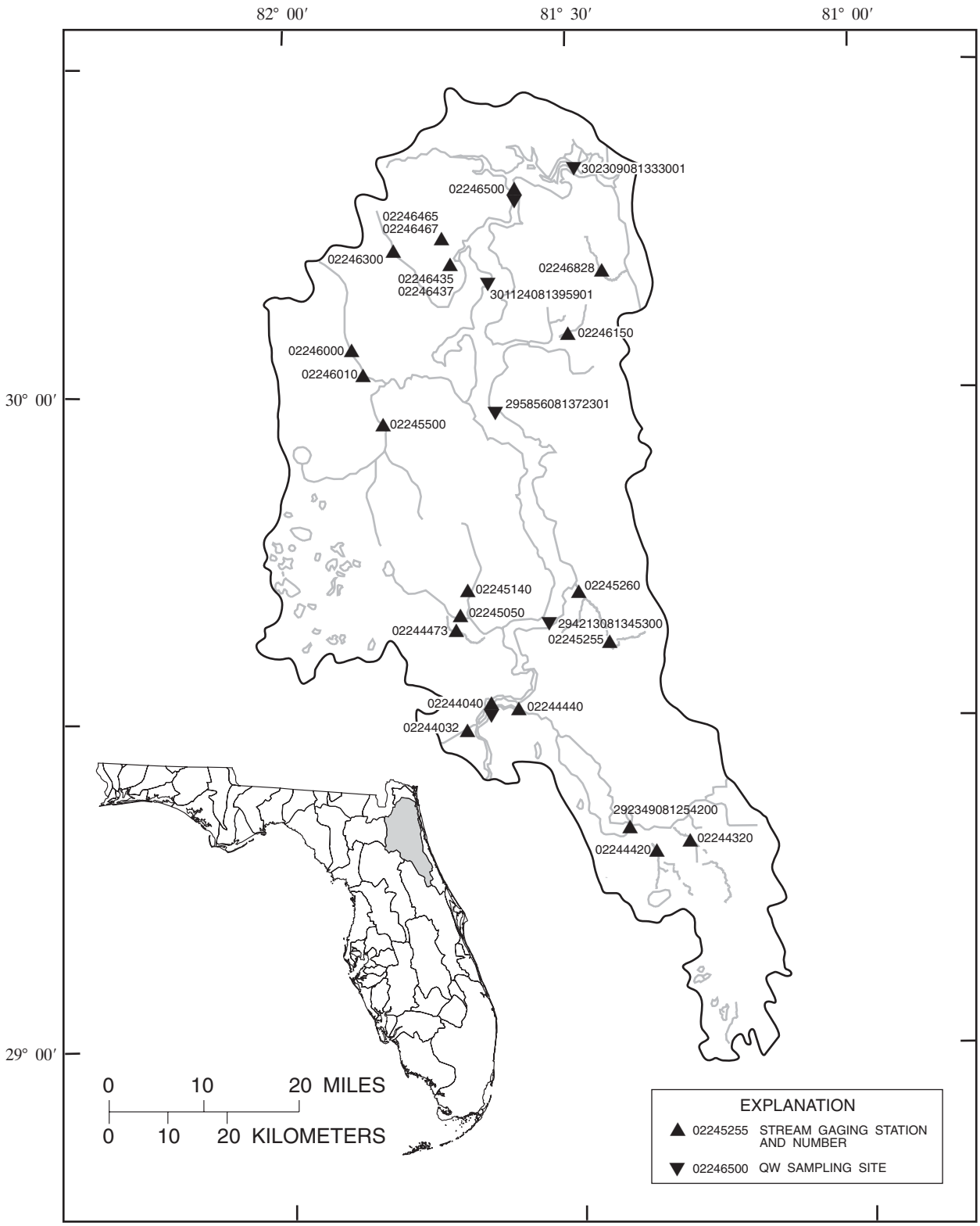

Figure 7.--Location of stream gaging stations in the St. Johns River basin below the Ocklawaha River basin.

02244032 CROSS-FLORIDA BARGE CANAL AT BUCKMAN LOCK, NEAR PALATKA, FL

LOCATION.--Lat 29°32'45", long 81°43'35", in land grant 37, T.11 S., R.26 E., Putnam County, Hydrologic Unit 03080103, at downstream side of Buckman Lock, 1.7 mi upstream from mouth, and 9.0 mi southwest of Palatka.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1969 to current year. Prior to October 1974, published as "at St. Johns Lock".

GAGE.--Nonrecording gage.

REMARKS.--Discharge at station is a diversion of flow, for boat lockages, from Lake Ocklawaha and Ocklawaha River into St. Johns River and is computed using daily volume of water used for lockage. Boat lock was closed for maintenance for the entire water year.

COOPERATION.--Lockage record provided by Cross Florida Greenways and Trails.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

MEAN	33.2	34.8	28.0	31.5	50.3	51.9	46.4	48.8	40.1	32.2	27.9	29.1
MAX	78.4	77.1	67.4	67.1	87.9	89.7	90.5	98.2	93.5	62.7	56.8	73.1
(WY)	1988	1988	1988	1976	1973	1985	1985	1997	1994	1988	1997	1987
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	2001	2001	2001	1996	1996	1996	1996	2000	2000	2000	1985	1985

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	0.00		0.00			
ANNUAL MEAN	0.000		0.000		37.9	
HIGHEST ANNUAL MEAN					65.4	1988
LOWEST ANNUAL MEAN					a0.000	
HIGHEST DAILY MEAN					430	Mar 15 1997
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Many days
10 PERCENT EXCEEDS	0.00		0.00		92	
50 PERCENT EXCEEDS	0.00		0.00		28	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a 2001,2002

02244040 ST. JOHNS RIVER AT BUFFALO BLUFF NEAR SATSUMA, FL

LOCATION.--Lat 29°35'46", long 81°41'00", in SE¼ sec.27, T.10 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank, 400 ft upstream from CSX Transportation bridge, 2.4 mi downstream from Cross-Florida Barge Canal, 3.2 mi northwest of Satsuma, and 89 mi upstream from mouth.

DRAINAGE AREA.--6,580 mi^2, approximately. Includes Paynes Prairie, a diked sinkhole area of about 650 mi^2, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1943 to July 1948 (gage heights only), October 1992 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 11.00 ft below NGVD of 1929.

REMARKS.--Records fair. Discharge represents net of much larger upstream and downstream discharges.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10300	10200	7620	1640	2280	4760	1220	3860	3550	5280	6660	6040
2	14500	9470	6610	-1170	482	5660	1780	6410	5680	5420	2910	6540
3	14000	8600	3050	-1760	-1820	7500	3620	7300	3870	6250	3260	4100
4	13700	7700	1350	5240	-1960	2960	3810	5310	-229	6500	5060	2430
5	14600	-2090	4390	5470	-3150	6860	-3970	-3990	728	7520	6050	11400
6	15500	3780	6690	10000	3760	6860	-1040	-3180	1850	8100	4800	13900
7	10800	11900	8630	7870	4560	5210	1730	1010	3790	4550	331	11000
8	6980	12900	8880	7140	2880	5390	7090	2450	332	4260	-1470	7270
9	7020	12100	8060	6670	1680	6600	9450	4620	-5580	6380	2700	8730
10	10400	9850	5200	7630	2210	6470	6840	4250	-4360	8310	5930	11500
11	11400	8700	3770	6980	2950	4730	2820	2620	-1430	10400	8040	14000
12	12200	5800	5410	5400	3700	5010	3030	535	689	8330	10500	14800
13	12400	-1360	7460	1290	2070	3660	3080	1920	3410	6270	13600	12900
14	12900	-4240	8590	202	-557	6290	4120	-390	5430	6660	13900	13900
15	7120	-9280	7950	177	-3030	6690	4550	-1980	3610	7150	13100	14600
16	5820	190	6500	2980	1300	7260	4840	-259	3560	8360	14400	13900
17	1730	7030	7640	2540	2820	7800	4510	863	2940	5890	14900	13600
18	6120	10000	7950	4010	-982	7180	4700	3450	2450	5670	14700	11600
19	6500	12100	8630	6450	4420	5530	5710	-8870	1850	7330	14800	10100
20	8530	13600	5230	4400	6850	3480	5920	-15200	1690	8120	14200	9950
21	11100	11600	3430	3070	6590	2940	3720	-8710	-1330	9260	13500	9540
22	12400	10400	4790	780	3830	-4020	2660	-11000	2010	9440	12300	7800
23	11400	12300	5730	1450	-3190	-3420	-525	-6220	4580	7480	11400	7460
24	11600	13300	5210	2380	-1980	3180	-709	198	7640	8580	12300	8550
25	12400	12700	3450	4540	1600	5170	2640	3160	7990	9040	13200	9030
26	9050	11800	2020	-3280	4280	5330	515	2680	9650	9000	11900	14700
27	6990	11600	7650	-1660	1140	2960	-1520	170	9620	8840	12600	15100
28	1720	10700	7250	1090	4860	2120	3200	-1840	10300	8980	11500	13600
29	1310	9890	3410	2430	---	964	4930	-4440	9880	9020	11700	11500
30	6540	9880	2190	3130	---	3020	4700	-1690	8660	9460	9090	5040
31	9300	---	885	3180	---	4270	---	1080	---	9500	7730	---
TOTAL	296330	241120	175625	100269	47593	138414	93421	-15883	102830	235350	295591	314580
MEAN	9559	8037	5665	3234	1700	4465	3114	-512	3428	7592	9535	10490
MAX	15500	13600	8880	10000	6850	7800	9450	7300	10300	10400	14900	15100
MIN	1310	-9280	885	-3280	-3190	-4020	-3970	-15200	-5580	4260	-1470	2430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2002, BY WATER YEAR (WY)

MEAN	6381	7206	5627	5778	4829	4876	3955	1874	3276	4558	3818	5862
MAX	12460	14270	14230	15230	13690	17290	10880	6302	7998	8414	9535	12050
(WY)	1996	1995	1995	1995	1998	1998	1998	1998	1994	1994	2002	1995
MIN	1027	227	1652	-278	952	1348	741	-512	545	756	317	745
(WY)	1994	1994	1994	1994	2001	2000	1997	2002	1993	2000	1993	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1993 - 2002	
ANNUAL TOTAL	1437833		2025240			
ANNUAL MEAN	3939		5549		4800	
HIGHEST ANNUAL MEAN					8048	1995
LOWEST ANNUAL MEAN					2608	2001
HIGHEST DAILY MEAN	17600	Sep 20	15500	Oct 6	23400	Nov 28 1994
LOWEST DAILY MEAN	-15100	Sep 15	-15200	May 20	-23900	May 20 1994
ANNUAL SEVEN-DAY MINIMUM	-3300	Mar 6	-6660	May 19	-11600	Nov 21 1993
MAXIMUM PEAK STAGE			13.08	Oct 1	14.51	Oct 7 1996
10 PERCENT EXCEEDS	11200		12300		12200	
50 PERCENT EXCEEDS	3430		5470		4460	
90 PERCENT EXCEEDS	-1370		-818		-1590	

Note.--Negative figures indicate reverse flow.

02244040 ST. JOHNS RIVER AT BUFFALO BLUFF NEAR SATSUMA, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.65	11.80	11.05	10.75	10.36	10.75	10.78	10.45	11.09	10.65	10.84	11.75
2	12.49	11.74	11.07	10.96	10.40	10.78	10.81	10.27	10.89	11.17	11.16	11.88
3	12.37	11.70	11.21	11.11	10.61	10.70	10.76	10.06	10.84	10.74	11.35	12.05
4	12.32	11.68	11.41	10.86	10.67	10.70	10.67	10.02	10.99	10.73	11.42	12.23
5	12.16	11.99	11.43	10.77	10.76	10.57	11.02	10.36	11.05	10.71	11.45	12.16
6	11.94	12.10	11.36	10.50	10.71	10.56	11.13	10.64	10.96	10.73	11.56	12.03
7	11.94	11.84	11.24	10.22	10.59	10.60	11.11	10.56	10.86	10.86	11.89	12.08
8	12.17	11.58	11.18	10.12	10.41	10.64	10.90	---	10.98	10.97	12.18	12.22
9	12.31	11.40	11.20	10.07	10.55	10.56	10.65	---	11.29	10.93	12.20	12.25
10	12.23	11.42	11.33	9.93	10.58	10.48	10.49	10.13	11.38	10.84	12.18	12.16
11	12.13	11.44	11.44	9.85	10.48	10.55	10.58	10.14	11.36	10.67	12.10	11.99
12	12.01	11.50	11.40	9.84	10.41	10.63	10.71	10.21	11.29	10.65	12.00	11.81
13	11.93	11.89	11.34	9.98	10.45	10.67	10.71	10.12	11.20	10.87	11.89	11.86
14	11.85	12.22	11.27	10.16	10.54	10.53	10.67	10.09	11.03	10.83	11.81	11.78
15	11.90	12.58	11.13	10.36	10.84	10.43	10.61	10.25	10.92	10.74	11.72	11.63
16	12.02	12.58	11.16	10.29	10.79	10.34	10.54	10.31	10.90	10.69	11.59	11.55
17	12.18	12.43	11.15	10.30	10.61	10.24	10.51	10.27	10.91	10.81	11.46	11.43
18	12.17	12.25	10.95	10.23	10.75	10.18	10.46	10.13	10.97	10.88	11.34	11.54
19	12.24	12.04	10.84	10.12	10.66	10.24	10.38	10.53	11.06	10.86	11.25	11.61
20	12.18	11.75	10.83	10.07	10.50	10.35	10.26	11.08	11.15	10.83	11.26	11.71
21	12.05	11.69	10.94	10.12	10.34	10.36	10.28	11.16	11.34	10.80	11.30	11.76
22	11.92	11.76	10.96	10.22	10.34	10.65	10.37	11.31	11.48	10.84	11.30	11.89
23	11.91	11.61	10.97	10.27	10.65	10.88	10.49	11.38	11.38	10.88	11.34	11.95
24	11.82	11.46	10.86	10.34	10.95	10.76	10.71	11.22	11.20	10.85	11.27	12.03
25	11.63	11.31	10.87	10.08	10.97	10.65	10.62	11.13	11.07	10.85	11.16	12.12
26	11.62	11.24	10.92	10.42	10.87	10.57	10.69	10.98	11.02	10.82	11.27	12.01
27	11.59	11.14	10.68	10.55	10.85	10.61	10.91	11.02	10.84	10.81	11.25	11.76
28	11.80	11.16	10.59	10.49	10.73	10.70	10.76	11.10	11.06	10.81	11.24	11.61
29	11.97	11.14	10.66	10.43	---	10.86	10.51	11.26	11.17	10.77	11.26	11.66
30	11.93	11.07	10.71	10.38	---	10.83	10.44	11.29	10.81	10.73	11.33	11.90
31	11.88	---	10.78	10.34	---	10.75	---	11.22	---	10.69	11.53	---
MEAN	12.04	11.72	11.06	10.33	10.62	10.58	10.65	---	11.08	10.81	11.51	11.88
MAX	12.65	12.58	11.44	11.11	10.97	10.88	11.13	---	11.48	11.17	12.20	12.25
MIN	11.59	11.07	10.59	9.84	10.34	10.18	10.26	---	10.81	10.65	10.84	11.43

CAL YR 2001 MEAN 10.75 MAX 13.64 MIN 9.55

02244040 ST. JOHNS RIVER AT BUFFALO BLUFF NEAR SATSUMA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1995 to current year.
WATER TEMPERATURE: April 1995 to current year.
DISSOLVED OXYGEN: March 1996 to current year.

INSTRUMENTATION.--Water-quality monitor and data-collection platform.

REMARKS.--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 1,520 µS/cm @ 25 °C, Mar. 5, 2001; minimum daily mean, 360 µS/cm @ 25 °C, Feb. 24, 1998.
WATER TEMPERATURE: Maximum daily mean, 32.7 °C, Aug. 1, 1999; minimum daily mean, 9.4 °C, Jan. 5, 2001.
DISSOLVED OXYGEN: Maximum daily mean, 11.8 mg/L, Nov. 1, 2001; minimum daily mean, 2.7 mg/L, Sept. 14, 2000.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 1,240 µS/cm @ 25 °C, June 21; minimum daily mean, 460 µS/cm @ 25 °C, Sept. 30.
WATER TEMPERATURE: Maximum daily mean, 31.3 °C, July 19; minimum daily mean, 11.2 °C, Jan. 9,10.
DISSOLVED OXYGEN: Maximum daily mean, 11.8 mg/L, Nov. 1; minimum daily mean, 3.8 mg/L, Sept. 20.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	868	635	635	773	887	904	994	1110	1090	1130	989	742
2	905	643	662	785	887	909	988	1120	1100	1150	984	728
3	946	653	671	782	884	955	985	1160	1090	1070	971	717
4	974	640	671	791	879	970	984	1110	1110	1100	945	716
5	980	632	668	812	869	973	991	1110	1100	1150	890	705
6	955	635	655	791	860	969	930	1050	1110	1160	872	710
7	942	623	661	750	869	989	915	1040	1110	1170	917	698
8	939	601	652	738	847	989	946	---	1120	1140	910	657
9	935	614	667	769	854	988	986	---	1100	1080	917	648
10	923	638	665	805	869	989	1030	1090	1080	1110	928	641
11	905	641	665	791	875	999	1060	1110	1070	1120	909	639
12	874	649	658	804	873	967	1050	1130	1070	1160	1000	628
13	846	648	671	804	879	888	1070	1130	1070	1180	1040	580
14	841	639	693	802	873	874	1070	1150	1020	1150	1010	569
15	844	616	704	794	863	857	1070	1140	1010	1120	973	572
16	828	608	713	786	856	824	1110	1130	1030	1110	867	566
17	828	626	692	799	865	842	1120	1130	1030	1100	794	593
18	816	660	704	816	872	850	1150	1120	1060	1100	760	567
19	792	652	720	808	872	851	1180	1130	1050	1070	765	551
20	784	641	723	789	861	889	1190	1110	1150	1070	758	520
21	754	626	715	776	937	901	1170	1130	1240	1060	803	530
22	714	621	730	775	972	918	1130	1130	1120	1050	864	543
23	676	615	727	777	957	869	1130	1110	1050	1060	867	568
24	655	627	716	779	885	826	1100	1100	931	1050	881	600
25	645	648	719	797	880	833	1100	1110	1060	1040	889	580
26	654	639	725	809	918	877	1100	1110	1180	1050	877	520
27	657	630	768	785	937	926	1070	1110	1230	1040	879	500
28	672	616	787	798	936	961	1110	1110	1230	1030	845	491
29	668	617	775	836	---	972	1120	1080	1220	1020	806	461
30	649	615	761	855	---	970	1150	1080	1180	1000	779	460
31	646	---	767	858	---	987	---	1090	---	997	758	---
MEAN	810	632	701	795	886	920	1070	---	1100	1090	885	600
MAX	980	660	787	858	972	999	1190	---	1240	1180	1040	742
MIN	645	601	635	738	847	824	915	---	931	997	758	460

02244040 ST. JOHNS RIVER AT BUFFALO BLUFF NEAR SATSUMA, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.5	19.8	22.5	14.4	21.9	16.4	25.6	28.5	27.1	28.4	30.7	28.9
2	22.8	20.4	22.7	14.4	22.2	16.2	25.6	28.5	27.8	28.4	30.5	29.0
3	22.9	21.2	22.6	13.8	21.6	16.4	25.4	28.8	28.6	28.7	30.3	28.9
4	23.2	21.6	22.4	13.0	20.9	16.4	25.1	29.2	29.2	29.0	29.8	28.9
5	23.6	21.6	22.4	12.3	19.7	15.8	25.0	29.4	29.3	29.1	29.5	28.8
6	24.1	20.9	22.3	11.9	19.1	15.7	24.3	29.1	29.6	29.1	29.8	28.5
7	24.5	20.4	22.3	11.9	19.2	15.7	23.7	29.1	29.7	29.5	29.8	28.8
8	24.2	20.1	22.5	11.6	18.2	16.3	23.6	---	29.5	29.6	29.3	28.7
9	23.9	20.0	22.9	11.2	17.7	17.1	23.8	---	29.3	29.3	28.7	28.8
10	23.7	20.2	23.0	11.2	17.9	18.0	23.9	29.5	28.9	29.1	28.3	28.8
11	23.7	20.4	23.1	11.6	17.9	18.8	24.0	29.4	28.5	29.1	28.2	28.9
12	23.8	20.5	23.2	12.4	17.8	19.5	24.0	29.4	28.3	29.3	28.0	28.6
13	24.1	20.4	23.5	13.1	17.6	19.9	24.0	29.3	28.8	29.1	27.7	28.1
14	24.4	20.3	23.7	13.3	17.4	20.4	24.2	29.0	29.2	29.0	27.7	27.9
15	24.5	20.0	23.8	13.6	17.6	21.1	24.5	28.5	29.8	29.4	28.1	28.0
16	24.4	19.7	23.7	14.1	17.9	21.9	25.1	28.1	30.1	30.2	28.0	28.7
17	23.6	19.8	23.4	14.6	17.9	22.9	25.7	28.3	29.8	30.8	28.4	29.3
18	22.7	20.0	22.9	15.3	17.7	23.8	26.3	28.3	29.0	31.1	29.2	29.6
19	22.5	20.2	22.1	15.9	17.5	24.4	26.8	27.9	28.6	31.3	29.8	29.5
20	22.7	20.4	21.2	16.7	17.7	24.8	27.4	25.9	28.3	31.1	29.3	29.4
21	23.1	20.4	20.0	17.1	18.1	24.8	28.0	24.6	27.9	30.4	28.8	29.1
22	23.6	20.2	19.1	17.5	18.4	24.4	28.2	24.0	27.2	30.0	29.2	28.8
23	24.1	20.4	18.4	18.0	18.1	23.3	28.1	23.3	26.8	29.9	29.7	28.7
24	24.4	20.8	18.2	18.7	17.5	22.9	27.6	23.6	26.9	29.9	30.1	28.5
25	24.8	21.5	17.7	19.5	17.5	23.3	27.7	24.2	27.0	29.8	30.4	28.3
26	24.5	21.9	16.9	19.6	17.8	24.0	27.9	24.8	27.2	30.0	30.3	28.2
27	22.9	22.2	15.8	19.1	17.8	24.5	28.1	25.1	27.5	30.2	30.2	28.3
28	21.4	22.3	14.8	19.4	16.9	24.5	28.3	25.5	28.1	30.0	29.5	28.4
29	20.5	22.4	14.8	20.0	---	24.6	28.3	26.0	28.8	30.2	29.1	28.6
30	19.9	22.5	14.9	20.7	---	25.0	28.6	26.4	28.7	30.4	29.0	28.8
31	19.4	---	14.8	21.3	---	25.4	---	26.7	---	30.6	28.9	---
MEAN	23.3	20.8	20.7	15.4	18.5	20.9	26.0	---	28.5	29.7	29.2	28.7
MAX	24.8	22.5	23.8	21.3	22.2	25.4	28.6	---	30.1	31.3	30.7	29.6
MIN	19.4	19.7	14.8	11.2	16.9	15.7	23.6	---	26.8	28.4	27.7	27.9

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.8	8.4	8.1	6.7	10.3	6.4	7.7	6.3	4.2	5.3	4.7
2	---	11.7	8.1	8.0	6.7	10.7	6.3	8.2	6.6	5.0	5.4	4.7
3	---	11.3	8.0	8.0	6.7	10.4	6.1	8.9	6.9	6.3	5.3	4.7
4	---	10.9	7.9	8.0	6.7	10.2	6.2	8.5	6.7	6.1	5.2	4.7
5	4.3	10.4	7.7	8.3	7.1	10.5	6.2	8.0	6.4	6.3	5.0	4.8
6	4.7	9.6	7.7	8.5	7.5	10.8	6.3	7.3	6.4	6.4	5.3	5.3
7	4.9	10.1	7.1	8.6	7.6	11.1	6.5	7.5	6.1	6.4	5.3	5.2
8	4.8	10.8	6.0	8.5	7.9	11.3	6.7	---	6.0	6.5	5.4	5.0
9	5.0	10.8	6.1	8.4	8.3	11.2	7.5	---	6.3	6.4	5.5	5.1
10	5.7	10.7	6.0	8.3	8.4	10.9	8.6	7.3	5.9	6.5	5.2	5.3
11	6.3	10.4	5.7	8.1	8.5	10.7	9.0	7.3	5.7	7.2	5.4	5.3
12	6.6	10.1	5.5	7.9	8.6	10.1	9.1	7.1	5.7	7.0	5.7	5.3
13	6.7	9.4	5.3	7.7	8.5	9.9	---	6.7	6.5	6.2	5.7	5.4
14	7.1	9.1	5.5	7.4	8.4	9.5	---	6.6	7.4	6.2	5.9	4.3
15	6.9	9.6	5.5	7.2	8.5	8.6	---	6.8	7.8	7.3	5.9	4.6
16	6.2	9.7	5.7	---	8.2	8.5	---	6.5	7.9	8.8	5.5	4.5
17	6.0	8.5	5.8	---	8.0	8.1	9.2	6.4	7.5	9.5	5.4	4.5
18	6.5	9.6	6.1	8.5	8.0	7.7	9.2	6.2	7.4	9.8	5.6	4.4
19	7.2	10.5	6.4	8.5	8.1	7.6	8.9	5.3	7.6	9.1	5.5	4.1
20	8.0	10.6	6.8	8.5	8.4	8.6	8.4	4.9	7.0	8.2	5.3	3.8
21	8.5	10.4	7.1	8.4	9.2	---	8.2	5.6	6.2	7.7	4.7	4.0
22	8.5	9.9	7.2	8.2	9.0	---	8.1	6.0	6.0	7.7	4.3	4.0
23	8.3	9.7	7.4	8.1	8.8	---	7.9	6.2	6.5	8.0	4.1	4.2
24	8.2	9.8	7.7	7.9	8.7	---	7.5	6.3	7.6	8.0	4.1	3.9
25	8.2	9.6	7.8	7.7	8.9	---	7.6	6.3	7.8	6.4	4.3	4.5
26	8.1	9.4	7.9	7.6	8.9	---	7.7	6.3	7.3	5.3	4.5	5.2
27	8.5	9.1	8.2	7.5	9.1	---	7.8	6.4	7.5	5.1	4.5	5.1
28	8.7	8.8	8.6	7.1	9.6	---	7.5	6.4	7.5	4.8	4.6	4.9
29	8.8	8.6	8.6	6.9	---	6.3	7.7	6.4	6.8	4.9	4.6	5.5
30	9.6	8.6	8.5	6.8	---	6.4	7.4	6.4	6.1	5.5	4.7	5.6
31	11.2	---	8.3	6.7	---	6.4	---	6.1	---	5.2	4.8	---
MEAN	---	10.0	7.1	---	8.2	---	---	---	6.8	6.7	5.1	4.8
MAX	---	11.8	8.6	---	9.6	---	---	---	7.9	9.8	5.9	5.6
MIN	---	8.5	5.3	---	6.7	---	---	---	5.7	4.2	4.1	3.8

02244320 MIDDLE HAW CREEK NEAR KORONA, FL

LOCATION.--Lat 29°21'35", long 81°18'42", in NW¼ sec.19, T.13 S., R.30 E., Flagler County, Hydrologic Unit 03080103, near center of span on downstream side of bridge on State Highway 11, 1.2 mi north of Codys Corner and 7.7 mi southwest of Korona.

DRAINAGE AREA.--78.3 mi^2.

PERIOD OF RECORD.--July 1975 to September 2002 (discontinued).

REVISED RECORDS.--WDR FL-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair except for period of estimated daily discharge, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	55	142	12	13	17	7.1	0.03	0.00	431	252	177
2	913	51	130	11	12	17	6.3	0.02	0.00	376	247	161
3	729	48	119	11	12	18	5.6	0.00	0.00	337	271	140
4	592	48	111	11	11	60	5.1	0.00	0.00	296	306	122
5	496	46	102	11	11	71	4.5	0.00	0.00	258	307	117
6	423	43	95	10	9.9	68	3.8	0.00	0.00	229	272	123
7	369	40	87	10	9.9	62	3.2	0.00	0.00	202	306	122
8	329	38	80	9.9	10	56	2.7	0.00	0.10	178	299	114
9	296	36	73	9.8	9.7	51	2.2	0.00	0.04	168	259	109
10	269	34	67	9.7	9.0	46	1.9	0.00	0.02	168	224	101
11	248	32	61	9.5	8.3	43	1.8	0.00	0.04	175	196	90
12	224	29	55	9.3	7.6	41	1.7	0.00	0.03	190	178	82
13	204	30	51	9.1	7.2	40	1.6	0.00	0.02	223	170	78
14	192	142	46	10	6.8	38	1.6	0.00	0.01	e229	179	75
15	181	370	43	19	6.5	36	1.4	0.00	0.00	e363	206	80
16	167	411	39	20	6.3	33	1.2	0.00	0.00	e545	233	82
17	152	375	36	22	6.1	31	1.1	0.00	0.02	e572	234	84
18	137	363	33	23	5.7	29	1.2	0.00	0.25	e566	222	90
19	126	347	30	23	5.3	27	0.98	0.00	0.74	e539	205	90
20	121	335	28	22	4.9	25	0.80	0.00	0.55	e588	264	93
21	115	324	26	20	4.5	23	0.62	0.00	15	e566	333	102
22	109	310	24	19	4.5	23	0.40	0.00	150	e530	333	116
23	104	294	22	18	7.3	21	0.24	0.00	229	e488	297	122
24	100	274	21	17	18	18	0.19	0.00	251	e455	258	123
25	96	253	19	16	18	16	0.16	0.00	252	e428	221	124
26	88	230	17	17	19	15	0.08	0.00	269	e396	190	128
27	80	209	16	17	20	13	0.05	0.00	351	e381	169	134
28	73	190	15	16	19	11	0.03	0.00	439	e356	156	131
29	66	173	14	15	---	9.8	0.02	0.00	460	e325	165	123
30	62	157	13	14	---	8.9	0.03	0.00	476	309	174	115
31	59	---	12	14	---	8.0	---	0.00	---	280	178	---
TOTAL	8180	5287	1627	455.3	282.5	975.7	57.60	0.05	2893.82	11147	7304	3348
MEAN	264	176	52.5	14.7	10.1	31.5	1.92	0.002	96.5	360	236	112
MAX	1060	411	142	23	20	71	7.1	0.03	476	588	333	177
MIN	59	29	12	9.1	4.5	8.0	0.02	0.00	0.00	168	156	75
CFSM	3.37	2.25	0.67	0.19	0.13	0.40	0.02	0.00	1.23	4.59	3.01	1.43
IN.	3.89	2.51	0.77	0.22	0.13	0.46	0.03	0.00	1.37	5.30	3.47	1.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

MEAN	134	65.4	43.4	70.4	62.9	68.2	53.6	12.1	49.9	63.2	78.0	169
MAX	374	435	232	239	259	269	374	197	300	360	354	858
(WY)	1996	1995	1998	1977	1998	1978	1982	1979	1976	2002	1978	2001
MIN	0.37	0.017	0.000	0.001	0.007	0.060	0.043	0.000	0.000	0.022	0.033	0.29
(WY)	1981	2001	2001	2001	2001	1985	1976	1978	1981	1993	1988	1989

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1975 - 2002	
ANNUAL TOTAL	46185.89		41557.97			
ANNUAL MEAN	127		114		71.8	
HIGHEST ANNUAL MEAN					125	1979
LOWEST ANNUAL MEAN					10.3	1981
HIGHEST DAILY MEAN	3400	Sep 16	1060	Oct 1	3400	Sep 16 2001
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	May 3	0.00	Many days
MAXIMUM PEAK FLOW			1090	Oct 1	3720	Sep 15,16 2001
MAXIMUM PEAK STAGE			11.68	Oct 1	14.15	Sep 15,16 2001
ANNUAL RUNOFF (CFSM)	1.62		1.45		0.92	
ANNUAL RUNOFF (INCHES)	21.94		19.74		12.47	
10 PERCENT EXCEEDS	326		331		219	
50 PERCENT EXCEEDS	19		38		12	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02244420 LITTLE HAW CREEK NEAR SEVILLE, FL

LOCATION.--Lat 29°19'20", long 81°23'10", in SE¼ sec.32, T.13 S., R.29 E., Flagler County, Hydrologic Unit 03080103, on right bank 600 ft downstream from bridge on State Highway 305, 1.4 mi downstream from Lake Disston, and 6.4 mi east of Seville.

DRAINAGE AREA.--93.0 mi^2.

PERIOD OF RECORD.--January 1951 to September 2002 (discontinued).

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

GAGE.--Water-stage recorder. Datum of gage is 5.74 ft above NGVD of 1929. Prior to Jan. 5, 1953, water-stage recorder at site 600 ft upstream at same datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	964	85	185	28	46	35	28	4.2	0.99	37	345	298
2	940	83	175	28	44	35	26	3.6	1.0	97	327	285
3	896	82	164	31	42	41	25	3.3	0.88	178	311	272
4	842	81	153	28	39	103	24	3.0	0.83	244	300	257
5	788	76	144	26	36	87	21	2.8	0.83	288	284	286
6	734	69	135	25	33	83	19	2.6	0.83	325	261	287
7	677	66	128	24	36	82	17	2.4	0.87	339	295	258
8	621	64	123	23	37	82	15	2.3	0.95	360	308	230
9	568	62	119	22	33	82	14	2.1	0.74	417	282	207
10	516	61	112	22	33	81	13	2.0	0.66	461	259	189
11	471	59	106	22	32	79	13	1.9	0.77	464	240	174
12	426	57	99	22	32	77	13	1.8	0.69	456	227	160
13	381	62	92	22	30	79	13	1.8	0.66	456	232	148
14	345	148	87	32	29	77	18	1.6	0.60	464	259	161
15	324	181	83	63	28	73	22	1.5	0.53	449	280	157
16	283	160	77	57	28	70	16	1.4	0.48	432	274	149
17	248	158	71	56	27	67	14	1.4	0.58	412	259	146
18	216	171	69	55	25	63	13	1.6	2.1	393	248	144
19	200	193	64	54	24	59	12	1.7	2.2	377	288	137
20	192	217	58	53	23	56	11	1.6	1.8	380	379	134
21	184	233	53	53	22	53	9.5	1.3	1.9	453	427	136
22	177	238	49	53	24	52	8.5	1.1	2.8	510	422	122
23	181	238	46	52	36	46	7.5	1.0	3.0	518	397	114
24	174	238	44	52	53	42	6.6	0.95	5.0	505	363	116
25	162	238	42	51	43	39	6.0	0.91	6.5	502	325	146
26	146	236	39	58	42	37	5.4	0.87	5.6	522	291	140
27	126	227	35	54	40	44	5.1	0.94	6.4	494	266	143
28	110	216	32	52	37	41	4.7	0.88	6.6	459	259	129
29	99	205	32	50	---	37	4.1	0.84	8.0	426	270	115
30	93	194	31	49	---	34	3.8	0.83	16	396	288	103
31	90	---	29	48	---	31	---	0.97	---	369	286	---
TOTAL	12174	4398	2676	1265	954	1867	408.2	55.19	80.79	12183	9252	5343
MEAN	393	147	86.3	40.8	34.1	60.2	13.6	1.78	2.69	393	298	178
MAX	964	238	185	63	53	103	28	4.2	16	522	427	298
MIN	90	57	29	22	22	31	3.8	0.83	0.48	37	227	103
CFSM	4.22	1.58	0.93	0.44	0.37	0.65	0.15	0.02	0.03	4.23	3.21	1.92
IN.	4.87	1.76	1.07	0.51	0.38	0.75	0.16	0.02	0.03	4.87	3.70	2.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2002, BY WATER YEAR (WY)

MEAN	161	74.0	51.9	70.2	82.4	95.3	63.7	17.5	29.6	67.4	91.3	168
MAX	635	433	290	347	334	539	379	131	338	393	348	860
(WY)	1970	1995	1998	1998	1998	1960	1982	1964	1991	2002	1978	1953
MIN	2.48	1.40	1.05	0.89	1.19	0.87	0.22	0.093	0.033	0.24	0.78	4.55
(WY)	1987	1987	2001	2001	2001	1968	1968	1968	1962	1977	1999	1986

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951 - 2002	
ANNUAL TOTAL	46139.04		50656.18			
ANNUAL MEAN	126		139		80.9	
HIGHEST ANNUAL MEAN					185	1960
LOWEST ANNUAL MEAN					7.63	1981
HIGHEST DAILY MEAN	1810	Sep 16	964	Oct 1	1810	Sep 16 2001
LOWEST DAILY MEAN	0.65	Mar 12	0.48	Jun 16	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	0.73	Mar 6	0.62	Jun 11	0.00	Some years
MAXIMUM PEAK FLOW			969	Oct 1	1840	Sep 15,16 2001
MAXIMUM PEAK STAGE			8.22	Oct 1	9.57	Sep 15,16 2001
INSTANTANEOUS LOW FLOW			0.44	Jun 16	0.44	Jun 16 2002
ANNUAL RUNOFF (CFSM)	1.36		1.49		0.87	
ANNUAL RUNOFF (INCHES)	18.46		20.26		11.82	
10 PERCENT EXCEEDS	242		380		235	
50 PERCENT EXCEEDS	20		62		26	
90 PERCENT EXCEEDS	0.97		1.8		1.5	

292349081254200 HAW CREEK AT MOUTH NEAR SEVILLE, FL

LOCATION.--Lat 29°23'49", long 81°25'42", in SE$^{1}/_{4}$ sec. 1, T.13 S., R.28 E., Volusia County, Hydrologic Unit 03080103, on left bank, 0.4 mi upstream from mouth, and 6.7 mi northeast of Seville.

DRAINAGE AREA.--230 mi^{2}.

PERIOD OF RECORD.--February 2001 to current year (discharge measurements only).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 1,090 ft^{3}/s, Aug. 20 2002; minimum measured, 9.8 ft^{3}/s, Feb. 15, 2001.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	Date	Time	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)
OCT			APR		
16...	0936	542	09...	0747	50
DEC			JUN		
27...	0929	139	25...	0749	333
FEB			AUG		
19...	0920	26	20...	0742	1090

02244440 DUNNS CREEK NEAR SATSUMA, FL

LOCATION.--Lat 29°34'39", long 81°37'35", in NE¼ sec.1, T.11 S., R.27 E., Putnam County, Hydrologic Unit 03080103, on bridge pile near left bank of the U.S. Highway 17 bridge, 0.3 mi upstream from Murphy Creek, 0.8 mi upstream from mouth, 2.4 mi northeast of Satsuma, and 3.1 mi southwest of San Mateo.

DRAINAGE AREA.--585 mi^2.

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

REVISED RECORDS.--WDR FL-93-1A: Drainage area.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 10.00 ft below NGVD of 1929. Prior to July 21, 1987, at site 200 ft downstream at present datum.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Discharge represents net of much larger upstream and downstream discharges.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2220	1110	1070	123	424	687	-412	250	792	820	1070	116
2	4190	1070	750	-992	-99	433	-389	1010	1350	605	-228	187
3	4110	766	-365	-1280	-928	785	186	1340	829	960	-266	-377
4	3800	472	-870	1190	-768	420	318	792	-340	1040	249	-1080
5	4130	-2210	-77	1150	-764	1380	-1890	-1670	-190	1300	877	1880
6	4560	-1240	527	2700	867	1110	-1160	-1870	308	1130	548	2280
7	2740	1430	1180	2050	911	688	-221	-334	770	457	-635	909
8	866	2530	1110	1790	1370	590	1320	689	-312	252	-1260	-343
9	521	2440	815	1420	460	1020	1510	1130	-1830	874	40	-144
10	1620	1200	25	1590	410	983	1200	879	-1390	1490	970	693
11	2290	880	-116	1340	723	327	50	417	-411	1890	1440	1930
12	2550	31	464	967	809	75	-336	-282	302	1320	2050	2490
13	2630	-2140	729	-49	277	21	38	61	906	615	3190	1950
14	2370	-2750	1030	-712	-403	840	309	-278	1280	1120	3330	2350
15	818	-3960	1340	-392	-1410	960	535	-811	984	1490	3320	2660
16	196	-886	685	473	-95	1040	571	-644	561	1330	3860	2940
17	-1170	1500	698	354	716	1110	390	-285	409	812	3810	2090
18	-297	2890	1310	824	-548	770	381	472	128	629	3370	928
19	-303	3980	1280	1340	842	168	515	-2650	65	982	2990	112
20	463	4540	541	1060	1490	-494	630	-4410	3.0	1230	2840	-38
21	1420	3170	-35	451	1280	-176	41	-2160	-952	1510	2290	-250
22	1860	2140	252	44	636	-1840	-408	-2990	-95	1410	1890	-506
23	1520	3230	382	133	-1320	-1840	-947	-1910	667	1460	1430	-668
24	1910	3490	818	996	-1000	120	-1130	103	1670	1780	1760	-336
25	2600	3290	243	1110	-35	720	-149	1170	1960	1860	1940	-237
26	1210	2490	99	-851	696	716	-620	1150	2070	2550	1160	1590
27	567	1880	1630	-443	-166	62	-1290	613	2230	2320	1280	2980
28	-1140	1780	1420	352	1070	-283	-3.3	91	2620	2220	945	2380
29	-1360	1480	405	679	---	-761	872	-946	1940	2250	969	1200
30	37	1470	126	798	---	-144	736	-550	1750	2280	798	-828
31	772	---	-339	594	---	146	---	58	---	2080	32	---
TOTAL	47700	36073	17127	18809	5445	9633	646.7	-11565	18074.0	42066	46059	26858
MEAN	1539	1202	552	607	194	311	21.6	-373	602	1357	1486	895
MAX	4560	4540	1630	2700	1490	1380	1510	1340	2620	2550	3860	2980
MIN	-1360	-3960	-870	-1280	-1410	-1840	-1890	-4410	-1830	252	-1260	-1080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

MEAN	654	736	469	847	729	575	288	-85.0	263	550	406	501
MAX	3011	3035	2205	2823	4431	2249	1670	265	931	1385	1486	3275
(WY)	1996	1995	1998	1983	1983	1983	1996	1982	1991	1997	2002	2001
MIN	-241	86.3	-177	-217	-184	-311	-576	-373	-195	-328	-749	-600
(WY)	1991	1991	1999	1991	1982	1995	1999	2002	1998	1999	1999	1978

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1978 - 2002	
ANNUAL TOTAL	288591.0		256925.7			
ANNUAL MEAN	791		704		552	
HIGHEST ANNUAL MEAN					975	1983
LOWEST ANNUAL MEAN					-128	1999
HIGHEST DAILY MEAN	10600	Sep 20	4560	Oct 6	10600	Sep 20 2001
LOWEST DAILY MEAN	e-7000	Sep 15	-4410	May 20	-8340	Sep 15 1999
ANNUAL SEVEN-DAY MINIMUM	-1090	Nov 10	-1990	May 17	-3130	Aug 29 1999
MAXIMUM PEAK STAGE			13.32	Nov 15	*14.82	Sep 16 2001
10 PERCENT EXCEEDS	2430		2360		2140	
50 PERCENT EXCEEDS	590		716		433	
90 PERCENT EXCEEDS	-890		-859		-900	

e Estimated
* From floodmark
Note.--Negative figures indicate reverse flow

02244440 DUNNS CREEK NEAR SATSUMA, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.74	11.87	11.15	10.89	10.48	10.86	10.94	10.60	11.23	10.76	10.98	11.89
2	12.51	11.82	11.18	11.10	10.53	10.88	10.97	10.40	11.02	10.89	11.31	12.03
3	12.43	11.79	11.33	11.27	10.76	10.81	10.90	10.18	10.99	10.88	11.50	12.21
4	12.37	11.78	11.54	10.99	10.84	10.85	10.82	10.16	11.15	10.87	11.57	12.40
5	12.21	12.15	11.54	10.88	10.92	10.68	11.20	10.54	11.20	10.84	11.60	12.22
6	11.97	12.22	11.46	10.59	10.82	10.68	11.29	10.81	11.11	10.86	11.72	12.08
7	12.02	11.91	11.33	10.34	10.71	10.73	11.26	10.72	11.00	10.99	12.07	12.17
8	12.29	11.63	11.28	10.23	10.55	10.76	11.00	10.54	11.15	11.11	12.36	12.34
9	12.41	11.46	11.30	10.18	10.68	10.68	10.76	10.34	11.50	11.06	12.36	12.36
10	12.31	11.50	11.44	10.04	10.71	10.60	10.62	10.26	11.58	10.94	12.31	12.25
11	12.20	11.53	11.56	9.96	10.62	10.68	10.73	10.27	11.54	10.76	12.22	12.06
12	12.07	11.61	11.50	9.96	10.54	10.76	10.85	10.35	11.46	10.77	12.10	11.86
13	11.98	12.05	11.42	10.12	10.58	10.81	10.85	10.27	11.35	11.00	11.97	11.94
14	11.90	12.40	11.35	10.30	10.69	10.65	10.81	10.26	11.18	10.96	11.87	11.85
15	12.00	12.80	11.22	10.51	11.01	10.55	10.74	10.42	11.07	10.87	11.80	11.69
16	12.11	12.74	11.26	10.42	10.93	10.45	10.67	10.47	11.05	10.85	11.65	11.50
17	12.31	12.55	11.25	10.44	10.75	10.35	10.64	10.43	11.06	10.94	11.51	11.46
18	12.28	12.34	11.06	10.36	10.90	10.30	10.60	10.26	11.13	11.02	11.39	11.54
19	12.34	12.11	10.94	10.22	10.78	10.37	10.51	10.77	11.21	10.98	11.29	11.67
20	12.27	11.80	10.96	10.19	10.56	10.50	10.39	11.36	11.31	10.96	11.32	11.80
21	12.13	11.77	11.07	10.25	10.46	10.47	10.43	11.38	11.52	10.90	11.36	11.93
22	12.00	11.85	11.07	10.35	10.47	10.85	10.53	11.62	11.62	10.95	11.37	12.01
23	11.99	11.68	11.09	10.40	10.84	11.07	10.67	11.77	11.51	11.00	11.42	12.09
24	11.90	11.51	10.98	10.28	11.12	10.90	10.87	11.53	11.30	10.97	11.34	12.12
25	11.69	11.36	11.00	10.19	11.11	10.77	10.77	11.25	11.17	10.97	11.23	12.27
26	11.73	11.30	11.06	10.58	10.99	10.70	10.85	11.12	11.12	10.94	11.35	12.10
27	11.71	11.28	10.78	10.71	11.02	10.75	11.07	11.18	10.94	10.93	11.32	11.81
28	11.96	11.23	10.69	10.62	10.86	10.85	10.91	11.28	10.74	10.93	11.32	11.68
29	12.11	11.22	10.79	10.55	---	11.01	10.65	11.45	10.66	10.89	11.34	11.76
30	12.04	11.16	10.84	10.49	---	10.96	10.58	11.46	10.63	10.85	11.43	12.05
31	11.96	---	10.92	10.49	---	10.88	---	11.37	---	10.81	11.66	---
MEAN	12.13	11.81	11.17	10.45	10.76	10.71	10.80	10.80	11.18	10.92	11.61	11.97
MAX	12.74	12.80	11.56	11.27	11.12	11.07	11.29	11.77	11.62	11.11	12.36	12.40
MIN	11.69	11.16	10.69	9.96	10.46	10.30	10.39	10.16	10.63	10.76	10.98	11.46

WTR YR 2002 MEAN 11.19 MAX 12.80 MIN 9.96

02244473 RICE CREEK NEAR SPRINGSIDE, FL

LOCATION.--Lat 29°41'17", long 81°44'32", in land grant 40, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on State Highway 100, 1.8 mi northwest of Springside, 5.9 mi northwest of Palatka, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--43.2 mi^2.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 1.04 ft above NGVD of 1929 (levels by Wardlin Engineering Associates).

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	5.2	6.3	5.7	39	12	3.8	2.5	2.0	26	18	27
2	99	5.2	6.2	5.9	28	12	3.8	2.3	1.9	25	33	24
3	78	5.3	6.2	7.2	22	14	13	2.2	1.8	18	27	20
4	59	5.4	6.2	7.2	19	20	17	2.1	1.7	16	32	15
5	45	5.5	6.3	6.8	16	19	14	2.1	1.7	13	62	14
6	33	5.3	6.2	7.0	14	15	11	2.1	1.8	11	64	13
7	25	5.1	6.2	7.2	14	13	8.8	2.0	2.4	8.7	52	10
8	21	4.9	6.3	7.0	15	12	7.2	2.1	5.6	7.5	38	8.6
9	18	4.9	8.2	6.7	14	11	6.1	2.0	7.1	12	25	7.6
10	15	4.8	12	6.7	13	11	5.7	1.9	4.6	15	20	6.7
11	13	4.9	12	6.6	13	9.2	6.0	1.9	5.5	12	16	6.2
12	12	4.9	10	6.5	11	8.4	6.5	1.9	7.5	8.6	14	6.2
13	11	4.9	9.3	7.4	10	14	16	1.8	5.7	7.4	19	10
14	10	8.3	8.5	12	10	19	35	1.9	4.3	7.3	24	15
15	9.9	16	8.0	46	9.9	15	37	1.8	3.2	6.7	24	44
16	9.1	14	7.7	55	9.7	12	23	1.8	2.7	5.7	28	57
17	8.1	11	7.4	37	9.3	10	14	1.9	2.7	4.9	29	52
18	7.4	8.7	7.3	24	8.5	8.8	10	1.9	3.5	4.6	22	41
19	7.0	7.9	7.0	19	8.0	7.4	7.5	2.0	5.6	4.8	16	31
20	6.8	7.6	6.7	16	7.8	6.8	6.0	2.4	15	16	17	25
21	6.7	7.3	6.3	14	7.8	6.3	5.0	2.1	24	23	22	33
22	6.8	7.0	6.0	15	7.7	6.0	4.2	2.0	45	30	18	26
23	7.1	7.0	6.0	15	11	5.5	3.6	2.0	74	62	13	18
24	7.4	7.4	6.1	14	33	5.3	3.3	2.0	88	50	10	17
25	7.3	7.5	6.1	13	33	5.1	3.1	1.9	57	31	8.7	55
26	6.3	7.0	5.9	17	23	4.9	2.9	1.8	74	23	7.5	85
27	5.3	6.7	5.7	17	18	4.7	2.8	1.8	72	19	7.3	91
28	5.0	6.6	5.8	20	14	4.4	2.7	1.9	62	39	7.7	75
29	5.0	6.4	5.9	89	---	4.2	2.5	1.9	40	79	11	58
30	5.2	6.4	5.8	99	---	4.1	2.5	1.9	23	56	13	45
31	5.2	---	5.7	63	---	4.0	---	1.9	---	25	23	---
TOTAL	679.6	209.1	219.3	672.9	438.7	304.1	284.0	61.8	645.3	667.2	721.2	936.3
MEAN	21.9	6.97	7.07	21.7	15.7	9.81	9.47	1.99	21.5	21.5	23.3	31.2
MAX	125	16	12	99	39	20	37	2.5	88	79	64	91
MIN	5.0	4.8	5.7	5.7	7.7	4.0	2.5	1.8	1.7	4.6	7.3	6.2
CFSM	0.51	0.16	0.16	0.50	0.36	0.23	0.22	0.05	0.50	0.50	0.54	0.72
IN.	0.59	0.18	0.19	0.58	0.38	0.26	0.24	0.05	0.56	0.57	0.62	0.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002, BY WATER YEAR (WY)

MEAN	37.2	23.6	40.5	45.6	60.5	57.1	35.0	13.3	32.9	37.6	57.2	68.0
MAX	152	123	324	146	367	203	149	142	177	149	303	267
(WY)	1993	1998	1998	1998	1998	1987	1983	1979	1982	1994	1978	1979
MIN	3.50	5.57	6.83	7.12	8.61	6.74	4.45	1.99	2.86	3.11	2.61	3.35
(WY)	1988	1979	1992	2001	2000	1976	1999	2002	1998	1988	1993	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1974 - 2002	
ANNUAL TOTAL	10617.1		5839.5			
ANNUAL MEAN	29.1		16.0		42.3	
HIGHEST ANNUAL MEAN					99.5	1998
LOWEST ANNUAL MEAN					15.6	1990
HIGHEST DAILY MEAN	711	Sep 23	125	Oct 1	2000	Aug 2 1978
LOWEST DAILY MEAN	1.9	May 28	1.7	Jun 4,5	1.7	Jun 10 2000
ANNUAL SEVEN-DAY MINIMUM	2.0	May 24	1.8	May 31	1.8	Jun 6 2000
MAXIMUM PEAK FLOW			138	Oct 1	a2990	Aug 1 1978
MAXIMUM PEAK STAGE			5.87	Oct 1	9.80	Aug 1 1978
INSTANTANEOUS LOW FLOW			1.7	Jun 4-6	*1.7	
ANNUAL RUNOFF (CFSM)	0.67		0.37		0.98	
ANNUAL RUNOFF (INCHES)	9.14		5.03		13.29	
10 PERCENT EXCEEDS	49		39		110	
50 PERCENT EXCEEDS	6.6		8.5		12	
90 PERCENT EXCEEDS	3.1		2.4		4.0	

a From rating curve extended above 1,130 ft^3/s
* Jun 10,11,21,2000, Jun 4-6,2002

02245050 ETONIA CREEK AT BARDIN, FL

LOCATION.--Lat 29°43'00", long 81°43'31", in NW¼ sec.17, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on Bardin Road, 0.2 mi north of Bardin, 4.6 mi upstream from mouth, and 6.2 mi northwest of Palatka.

DRAINAGE AREA.--219 mi^2.

PERIOD OF RECORD.--October 1973 to September 1990, June 1996 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 7.60 ft above NGVD of 1929 (levels by Wardlin Engineering Associates).

REMARKS.--Records poor. Records include an appreciable amount of ground-water flow from Hudson Pulp and Paper Corporation production wells.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	22	26	21	27	18	18	28	26	69	55	83
2	42	22	19	20	24	18	29	24	35	78	229	146
3	37	23	18	21	22	18	23	24	39	61	492	135
4	34	22	18	21	21	20	20	24	31	49	481	91
5	31	21	18	20	20	21	18	24	29	40	365	68
6	30	21	18	20	20	20	18	24	28	34	228	57
7	29	21	18	20	20	19	20	24	30	30	118	47
8	28	21	18	20	20	18	20	24	33	28	82	39
9	27	23	18	20	19	18	19	30	31	30	65	35
10	26	22	23	20	19	17	30	33	28	31	57	32
11	26	23	26	20	19	17	22	32	29	31	52	29
12	25	22	24	20	18	17	21	29	30	79	58	27
13	25	22	22	20	18	19	22	27	29	135	60	29
14	24	28	21	21	18	23	28	25	28	98	74	49
15	24	37	20	44	18	21	27	25	30	61	112	105
16	24	35	20	42	17	19	24	24	42	42	215	138
17	23	29	19	32	21	18	23	30	42	32	219	113
18	22	27	19	26	22	18	22	31	44	28	177	79
19	22	25	19	23	18	17	21	29	42	26	206	58
20	22	22	19	22	17	17	21	28	57	27	143	47
21	22	18	27	21	23	18	24	26	34	30	98	54
22	22	18	27	21	17	27	22	25	52	76	78	43
23	22	18	21	21	17	19	27	25	123	61	66	36
24	22	18	20	20	23	18	29	25	84	41	58	32
25	22	18	20	20	23	18	24	25	73	33	52	51
26	23	21	20	23	20	18	24	36	95	30	47	74
27	23	20	20	27	19	22	28	33	84	54	46	95
28	22	20	24	26	18	26	31	28	78	142	46	71
29	22	22	20	40	---	19	24	25	64	155	48	51
30	22	19	20	39	---	19	34	25	52	96	52	38
31	22	---	21	33	---	19	---	25	---	65	60	---
TOTAL	813	680	643	764	558	596	713	837	1422	1792	4139	1952
MEAN	26.2	22.7	20.7	24.6	19.9	19.2	23.8	27.0	47.4	57.8	134	65.1
MAX	48	37	27	44	27	27	34	36	123	155	492	146
MIN	22	18	18	20	17	17	18	24	26	26	46	27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002, BY WATER YEAR (WY)

MEAN	77.8	66.7	93.8	96.0	109	101	86.4	68.8	78.0	85.4	108	113
MAX	263	142	382	232	393	227	204	220	279	175	291	303
(WY)	1997	1998	1998	1998	1998	1986	1997	1979	1982	1982	1978	1988
MIN	26.2	22.7	20.7	24.6	19.9	19.2	23.8	27.0	21.2	20.4	35.7	46.2
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2001	2001	2000	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1974 - 2002	
ANNUAL TOTAL	13705		14909			
ANNUAL MEAN	37.5		40.8		90.6	
HIGHEST ANNUAL MEAN					154	1998
LOWEST ANNUAL MEAN					40.8	2002
HIGHEST DAILY MEAN	711	Sep 16	492	Aug 3	1780	Apr 28 1997
LOWEST DAILY MEAN	17	Some days	*17		a17	
ANNUAL SEVEN-DAY MINIMUM	18	Jul 23	18	Mar 7	18	Mar 7 2002
MAXIMUM PEAK FLOW			545	Aug 3	2650	Apr 28 1997
MAXIMUM PEAK STAGE			5.51	Aug 3	8.41	Apr 28 1997
10 PERCENT EXCEEDS	51		77		154	
50 PERCENT EXCEEDS	28		25		66	
90 PERCENT EXCEEDS	19		18		43	

* Feb 16,20,22,23, Mar 10-12,19,20
a Several days in 2001, 2002 water years

02245140 SIMMS CREEK NEAR BARDIN, FL

LOCATION.--Lat 29°44'07", long 81°42'36", in NE¼ sec.9, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, on right bank 0.4 mi downstream from bridge on Simms Creek Road, 1.7 mi northeast of Bardin, 2.7 mi upstream from Etonia Creek, and 6.7 mi northwest of Palatka.

DRAINAGE AREA.--47.3 mi^2.

PERIOD OF RECORD.--October 1973 to September 1975, March 1976 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (levels by Wardlin Engineering Associates). Prior to Feb. 26, 1976, at bridge 0.4 mi upstream at datum 7.26 ft higher.

REMARKS.--Records fair. Some artesian ground water inflow from well upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	12	15	11	36	16	9.4	6.6	5.3	128	62	300
2	39	12	15	12	30	16	10	6.3	5.0	102	93	211
3	33	14	14	13	27	17	15	6.2	4.8	93	186	161
4	29	16	15	13	24	23	14	6.0	4.6	62	274	118
5	26	15	14	13	22	e20	13	5.9	4.5	44	308	85
6	24	13	14	13	20	e19	12	5.9	4.5	36	252	65
7	23	13	14	13	20	e19	11	5.8	5.5	30	174	50
8	22	12	14	12	20	e18	10	5.7	6.5	27	118	44
9	20	12	15	12	19	e17	9.5	5.6	6.4	31	75	42
10	19	12	22	12	18	e16	9.1	5.5	7.4	33	58	37
11	18	12	26	12	18	e15	10	5.5	7.2	47	47	32
12	17	12	22	12	16	14	11	5.4	7.2	209	40	29
13	16	12	19	12	16	20	15	5.3	7.2	317	42	42
14	16	24	19	15	15	28	29	5.4	6.5	227	61	168
15	16	59	17	55	15	23	21	5.3	5.8	128	93	307
16	15	52	16	68	15	19	16	5.2	5.4	62	282	346
17	15	36	15	44	14	17	14	5.2	5.4	39	286	284
18	14	28	15	34	14	15	12	5.2	6.3	30	213	194
19	14	24	14	28	13	14	11	5.4	7.8	25	190	138
20	14	22	14	24	13	13	9.7	6.1	11	24	202	123
21	13	20	13	23	13	13	9.1	5.8	12	67	235	170
22	13	19	13	22	13	12	8.4	5.4	122	87	164	116
23	14	18	13	22	15	13	7.9	5.3	527	72	105	73
24	14	17	12	20	29	12	7.6	5.3	241	51	68	64
25	14	16	12	19	30	12	7.4	5.2	140	39	55	292
26	13	15	12	33	24	11	7.3	5.2	311	31	46	387
27	12	15	12	42	20	11	7.1	5.0	427	109	44	276
28	12	15	12	35	18	11	7.1	5.5	258	284	43	196
29	12	14	12	46	---	10	6.8	5.6	187	273	46	146
30	12	14	12	52	---	11	6.7	5.4	141	180	170	105
31	12	---	11	42	---	9.9	---	5.3	---	108	290	---
TOTAL	577	575	463	784	547	484.9	337.1	172.5	2490.3	2995	4322	4601
MEAN	18.6	19.2	14.9	25.3	19.5	15.6	11.2	5.56	83.0	96.6	139	153
MAX	46	59	26	68	36	28	29	6.6	527	317	308	387
MIN	12	12	11	11	13	9.9	6.7	5.0	4.5	24	40	29
CFSM	0.39	0.41	0.32	0.53	0.41	0.33	0.24	0.12	1.75	2.04	2.95	3.24
IN.	0.45	0.45	0.36	0.62	0.43	0.38	0.27	0.14	1.96	2.36	3.40	3.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002, BY WATER YEAR (WY)

MEAN	54.0	30.4	43.4	48.7	61.0	56.7	36.2	19.4	35.1	48.1	67.5	77.4
MAX	205	94.8	302	156	374	156	143	141	125	182	174	345
(WY)	1997	1998	1998	1998	1998	1986	1983	1979	1991	1994	1974	1979
MIN	8.55	10.2	11.2	10.9	12.9	10.4	8.49	5.56	6.91	6.49	7.95	6.64
(WY)	1988	1991	1991	2001	1989	1976	1989	2002	2000	1988	1999	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1974 - 2002	
ANNUAL TOTAL	11865.5		18348.8			
ANNUAL MEAN	32.5		50.3		48.5	
HIGHEST ANNUAL MEAN					106	1998
LOWEST ANNUAL MEAN					16.4	1990
HIGHEST DAILY MEAN	1470	Sep 15	527	Jun 23	2250	Oct 8 1996
LOWEST DAILY MEAN	6.1	May 20	4.5	Jun 5,6	4.1	Jul 10 1988
ANNUAL SEVEN-DAY MINIMUM	6.5	May 15	4.9	May 31	4.3	Jul 5 1988
MAXIMUM PEAK FLOW			739	Jun 23	a2840	Oct 8 1996
MAXIMUM PEAK STAGE			12.77	Jun 23	a14.96	Oct 8 1996
INSTANTANEOUS LOW FLOW			4.5	Jun 4-6	4.0	Jul 10 1988
ANNUAL RUNOFF (CFSM)	0.69		1.06		1.02	
ANNUAL RUNOFF (INCHES)	9.33		14.43		13.92	
10 PERCENT EXCEEDS	54		169		116	
50 PERCENT EXCEEDS	13		16		19	
90 PERCENT EXCEEDS	8.0		6.0		8.7	

e Estimated
a From floodmark

294213081345300 ST. JOHNS RIVER AT DANCY POINT NEAR SPUDS, FL

LOCATION.--Lat 29°42'13", long 81°34'53", in T.9 S., R.27 E., Putnam County, Hydrologic Unit 03080103, on Aids to Navigation marker (Dancy Point RFL: LLNR 7965), 6.0 mi west-southwest of Spuds, 5.0 mi north-northeast of Palatka and 68 mi upstream from mouth.

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE (TOP, BOTTOM): January 1998 to current year.
WATER TEMPERATURE (TOP, BOTTOM): January 1998 to current year.
DISSOLVED OXYGEN (TOP, BOTTOM): January 1998 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 1,980 µS/cm @ 25 °C, Sept. 16, 1999; minimum daily mean, 322 µS/cm @ 25 °C, Feb. 26, 1998.
SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 2,230 µS/cm @ 25 °C, Sept. 16, 1999; minimum daily mean, 323 µS/cm @ 25 °C, Feb. 26, 1998.
WATER TEMPERATURE (TOP): Maximum daily mean, 32.4 °C, Aug. 1, 1999; minimum daily mean, 9.7 °C, Jan. 4,5, 2001.
WATER TEMPERATURE BOTTOM): Maximum daily mean, 32.3 °C, Aug. 1, 1999; minimum daily mean, 9.6 °C, Jan. 4, 2001.
DISSOLVED OXYGEN (TOP): Maximum daily mean, 12.2 mg/L, Jan. 15, 2001; minimum daily mean, 1.1 mg/L, Sept. 27, 2001.
DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 12.2 mg/L, Jan. 15, 2001; minimum daily mean, 1.1 mg/L, Sept. 27, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 1,640 µS/cm @ 25 °C, June 11; minimum daily mean, 513 µS/cm @ 25 °C, Sept. 18.
SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 1,740 µS/cm @ 25 °C, June 11; minimum daily mean, 506 µS/cm @ 25 °C, Sept. 18.
WATER TEMPERATURE (TOP): Maximum daily mean, 30.9 °C, July 18,19,31; minimum daily mean 11.2 °C, Jan. 9.
WATER TEMPERATURE BOTTOM): Maximum daily mean, 30.7 °C, July 19,31; minimum daily mean 11.1 °C, Jan. 9.
DISSOLVED OXYGEN (TOP): Maximum daily mean, 10.9 mg/L, Mar. 8, May 24; minimum daily mean, 2.0 mg/L, Oct. 3,4.
DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 10.6 mg/L, Mar. 7-9; minimum daily mean, 1.7 mg/L, Oct. 3.

SPECIFIC CONDUCTANCE, TOP (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	799	650	610	745	803	892	1010	1090	1170	1140	991	803
2	796	664	612	751	801	887	1010	1110	1180	1130	988	797
3	808	673	613	744	803	882	1010	1120	1180	1100	985	798
4	811	669	614	752	808	870	1010	1130	1180	1080	984	803
5	834	667	619	765	805	878	1000	1130	1170	1080	960	780
6	852	671	617	771	808	900	999	1110	1170	1060	956	742
7	857	662	---	788	813	890	1000	1110	1170	1050	958	731
8	852	652	---	795	809	889	1010	1120	1170	1020	980	714
9	853	650	---	774	809	892	1020	1140	1170	998	999	705
10	850	634	---	741	811	897	1000	1170	1400	956	999	682
11	860	605	---	713	819	901	987	1190	1640	1070	981	671
12	890	596	---	710	823	905	983	1190	1570	1160	1010	646
13	871	604	---	719	832	910	982	1190	1470	1160	1010	625
14	842	623	---	724	839	920	982	1200	1280	1150	987	603
15	827	645	675	716	831	930	---	1200	1230	1150	984	573
16	825	662	676	726	832	936	---	1200	1220	1160	975	550
17	828	641	681	748	842	945	---	1200	1210	1170	948	525
18	827	615	690	765	855	968	---	1210	1200	1170	880	513
19	819	617	685	761	858	971	---	1200	1190	1170	820	518
20	818	620	695	784	871	968	---	1140	1180	1150	792	525
21	838	593	692	796	873	967	---	1110	1170	1140	794	539
22	844	588	699	807	864	970	---	1110	1170	1140	793	544
23	825	583	697	809	867	960	---	1100	1140	1120	786	544
24	784	594	692	817	870	958	---	1140	1080	1080	788	537
25	710	582	695	817	871	974	---	1120	1010	1070	799	533
26	682	582	698	818	877	986	---	1130	1040	1070	806	531
27	658	601	717	821	888	992	1050	1130	1050	1060	807	562
28	671	614	739	819	888	995	1050	1140	1050	1050	816	569
29	683	617	744	819	---	993	1060	1140	1100	1020	821	538
30	680	612	740	814	---	995	1070	1160	1130	1010	820	528
31	652	---	740	805	---	1000	---	1170	---	990	813	---
MEAN	798	626	---	772	838	936	---	1150	1200	1090	904	624
MAX	890	673	---	821	888	1000	---	1210	1640	1170	1010	803
MIN	652	582	---	710	801	870	---	1090	1010	956	786	513

294213081345300 ST. JOHNS RIVER AT DANCY POINT NEAR SPUDS, FL--Continued

SPECIFIC CONDUCTANCE, BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	798	649	609	744	802	---	1010	1100	1170	1080	998	734
2	796	664	610	749	800	---	1010	1110	1170	1110	995	783
3	808	672	612	743	803	---	1010	1130	1180	1060	994	778
4	807	669	613	751	807	---	1010	1140	1180	1070	991	783
5	835	667	618	763	803	---	1000	1140	1180	1030	973	758
6	853	671	617	770	805	899	998	1130	1180	1010	964	726
7	857	662	---	787	812	890	1000	1120	1180	1040	954	713
8	852	651	---	794	806	889	1010	1130	1190	995	970	704
9	852	649	---	770	806	892	1020	1140	1190	1100	990	699
10	849	633	---	740	810	897	1010	1160	1480	1100	985	675
11	860	605	---	714	816	901	987	1180	1740	1160	963	662
12	890	595	---	711	822	904	984	1180	1660	1200	981	637
13	870	604	---	720	830	910	982	1180	1490	1200	979	611
14	842	623	---	724	837	920	980	1180	1290	1180	955	593
15	828	646	675	716	828	928	---	1180	1220	1180	957	561
16	826	663	675	727	829	934	---	1190	1220	1180	949	541
17	829	641	681	750	838	943	---	1200	1200	1190	931	511
18	828	615	688	764	847	965	---	1210	1190	1170	873	506
19	821	617	684	762	855	970	---	1200	1170	1160	807	510
20	817	618	694	785	869	969	---	1150	1160	1160	776	518
21	838	593	688	797	871	967	---	1130	1150	1140	779	533
22	844	588	698	807	862	971	---	1120	1150	1130	779	537
23	823	582	697	809	855	960	---	1110	1110	1110	770	538
24	783	593	690	816	---	958	---	1120	1060	1100	774	530
25	712	579	694	818	---	973	---	1130	989	1090	783	527
26	682	580	698	818	---	985	---	1130	1020	1090	789	525
27	657	599	718	821	---	992	1060	1130	1030	1080	790	551
28	676	613	738	819	---	995	1060	1140	1040	1070	801	559
29	684	616	742	819	---	992	1070	1150	1090	1040	810	528
30	681	611	739	812	---	994	1080	1160	1100	1020	808	517
31	652	---	738	---	---	1000	---	1170	---	1010	712	---
MEAN	798	626	---	---	---	---	---	1150	1210	1100	890	612
MAX	890	672	---	---	---	---	---	1210	1740	1200	998	783
MIN	652	579	---	---	---	---	---	1100	989	995	712	506

TEMPERATURE, WATER, TOP (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.2	20.4	22.5	14.5	20.9	15.2	25.0	27.5	27.3	28.4	30.7	29.3
2	23.0	21.2	22.6	14.4	21.1	15.5	24.9	27.6	28.1	28.4	30.5	29.3
3	23.3	21.7	22.5	13.1	20.2	16.3	24.7	28.3	28.9	28.8	30.4	29.3
4	23.6	21.8	22.2	12.2	19.4	16.1	24.4	28.8	29.1	29.3	30.2	29.1
5	23.8	21.4	22.2	12.0	17.8	15.3	24.1	28.7	29.1	29.2	30.0	28.9
6	24.4	20.6	22.2	12.3	17.4	15.6	23.3	28.3	29.2	29.2	30.0	28.9
7	24.4	20.3	---	12.6	17.6	15.9	22.7	28.1	29.2	29.6	29.8	28.9
8	23.8	20.2	---	11.8	16.5	16.8	22.6	28.5	29.1	29.5	29.0	28.7
9	23.4	20.4	---	11.2	16.5	17.8	22.9	28.8	28.6	29.1	28.5	28.8
10	23.3	20.4	---	11.4	16.9	18.7	23.7	28.8	28.2	29.2	28.1	29.0
11	23.6	20.4	---	12.1	17.3	18.9	23.8	28.7	28.0	29.6	28.0	28.9
12	23.9	20.4	---	12.8	17.4	19.5	23.8	28.8	27.9	29.8	28.1	28.6
13	24.0	20.2	---	13.2	17.2	20.1	23.8	28.7	28.2	29.6	27.9	28.3
14	24.1	20.0	---	13.3	17.0	20.3	23.8	28.1	29.0	29.2	27.9	28.1
15	24.1	19.8	23.8	13.6	17.1	20.9	---	27.2	29.3	29.5	28.1	28.2
16	24.1	19.4	23.3	13.8	17.5	21.3	---	26.7	29.4	30.4	28.4	28.7
17	23.1	19.7	23.0	13.9	17.5	22.1	---	27.0	29.2	30.8	28.7	29.1
18	22.4	19.9	22.7	14.7	16.7	23.0	---	27.4	28.5	30.9	28.9	29.4
19	22.3	20.0	22.1	14.9	16.6	23.5	---	26.5	27.8	30.9	29.0	29.7
20	22.8	20.4	21.1	15.8	17.0	23.8	---	24.2	27.4	30.7	28.9	29.3
21	23.4	20.3	19.7	16.3	17.7	23.8	---	23.0	27.0	30.1	29.3	29.1
22	23.8	20.3	19.3	16.8	18.1	23.2	---	22.7	26.5	30.0	29.5	29.0
23	24.1	20.7	19.0	17.5	17.3	21.6	---	22.5	26.3	30.1	29.7	28.8
24	24.4	20.9	19.0	18.3	16.4	21.5	---	23.4	26.5	30.1	29.8	28.4
25	25.0	21.3	18.1	18.9	16.4	22.3	---	24.3	27.2	30.0	30.0	28.3
26	24.4	21.6	16.7	18.7	17.3	23.2	---	24.8	27.5	30.1	30.2	28.2
27	22.6	21.9	15.7	18.3	16.9	23.7	27.3	24.9	27.7	30.3	29.9	28.2
28	20.8	22.0	14.8	18.6	15.6	23.7	27.4	25.4	28.2	30.3	29.8	28.4
29	19.7	22.3	15.4	19.4	---	23.8	27.4	26.1	28.8	30.6	29.8	28.8
30	19.5	22.4	15.4	20.0	---	24.4	27.5	26.7	28.7	30.8	29.9	28.9
31	19.6	---	15.2	20.3	---	24.8	---	26.8	---	30.9	29.4	---
MEAN	23.2	20.7	---	15.1	17.5	20.4	---	26.7	28.2	29.9	29.3	28.8
MAX	25.0	22.4	---	20.3	21.1	24.8	---	28.8	29.4	30.9	30.7	29.7
MIN	19.5	19.4	---	11.2	15.6	15.2	---	22.5	26.3	28.4	27.9	28.1

294213081345300 ST. JOHNS RIVER AT DANCY POINT NEAR SPUDS, FL--Continued

TEMPERATURE, WATER, BOTTOM (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.1	20.3	22.3	14.5	20.6	---	24.9	27.6	26.9	28.3	30.5	29.2
2	22.8	21.2	22.5	14.3	21.1	---	24.9	27.7	27.6	28.2	30.1	29.2
3	23.1	21.6	22.5	13.1	20.2	---	24.7	28.2	28.3	28.5	30.3	29.2
4	23.3	21.8	22.2	12.2	19.5	---	24.3	28.5	28.6	29.1	30.1	29.1
5	23.7	21.4	22.2	12.0	17.9	---	24.1	28.7	28.9	29.1	29.8	28.8
6	24.3	20.6	22.1	12.3	17.3	15.5	23.2	28.3	29.0	28.7	29.8	28.8
7	24.4	20.2	---	12.6	17.6	15.8	22.7	27.9	29.1	29.2	29.8	28.9
8	23.8	20.2	---	11.8	16.4	16.3	22.6	28.2	29.0	29.4	28.9	28.7
9	23.4	20.3	---	11.1	16.3	17.4	22.7	28.4	28.5	29.0	28.4	28.7
10	23.3	20.3	---	11.4	16.8	18.5	23.5	28.7	28.2	28.8	28.0	28.8
11	23.5	20.3	---	11.9	17.1	18.8	23.8	28.7	28.0	29.2	27.9	28.8
12	23.8	20.3	---	12.7	17.2	19.3	23.7	28.7	27.9	29.5	28.1	28.5
13	24.0	20.2	---	13.0	17.2	19.9	23.7	28.7	28.0	29.5	27.8	28.2
14	24.1	20.1	---	13.2	17.0	20.0	23.7	28.1	28.7	29.2	27.6	28.0
15	24.1	19.8	23.8	13.6	16.9	20.5	---	27.3	29.1	29.4	28.0	28.0
16	24.1	19.4	23.3	13.6	17.3	20.9	---	26.7	29.1	29.8	28.0	28.3
17	23.1	19.6	22.9	13.8	17.5	21.6	---	26.8	29.2	30.4	28.5	28.5
18	22.3	19.9	22.7	14.3	16.7	22.6	---	27.4	28.4	30.5	28.6	29.0
19	22.2	20.0	22.1	14.8	16.5	23.1	---	26.6	27.8	30.7	28.9	29.4
20	22.8	20.3	21.1	15.7	17.0	23.5	---	24.3	27.4	30.4	28.9	29.2
21	23.4	20.3	19.6	16.3	17.6	23.8	---	23.0	27.0	30.0	28.9	29.0
22	23.8	20.2	19.1	16.8	18.1	23.2	---	22.7	26.4	29.7	29.1	28.9
23	24.0	20.6	19.0	17.2	17.3	21.5	---	22.4	26.2	29.7	29.2	28.8
24	24.4	20.8	19.0	18.1	---	21.2	---	22.9	26.3	29.9	29.5	28.4
25	25.0	21.1	18.1	18.9	---	22.0	---	23.9	26.9	29.7	29.7	28.1
26	24.4	21.5	16.7	18.7	---	22.9	---	24.6	27.3	29.8	30.1	28.1
27	22.5	21.7	15.7	18.3	---	23.6	27.2	24.8	27.6	30.1	29.9	28.1
28	20.7	21.9	14.8	18.5	---	23.5	27.4	25.3	27.8	30.0	29.7	28.3
29	19.6	22.2	15.3	19.2	---	23.3	27.4	26.0	28.4	30.2	29.6	28.6
30	19.5	22.3	15.4	19.6	---	24.1	27.5	26.4	28.6	30.5	29.8	28.8
31	19.6	---	15.1	---	---	24.6	---	26.7	---	30.7	29.4	---
MEAN	23.1	20.7	---	---	---	---	---	26.6	28.0	29.6	29.1	28.7
MAX	25.0	22.3	---	---	---	---	---	28.7	29.2	30.7	30.5	29.4
MIN	19.5	19.4	---	---	---	---	---	22.4	26.2	28.2	27.6	28.0

OXYGEN DISSOLVED, TOP (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	7.6	5.0	7.9	7.2	9.6	7.6	8.5	---	6.6	6.1	5.9
2	4.3	6.8	4.8	8.0	7.2	9.8	7.4	8.8	---	6.6	5.4	5.9
3	2.0	6.7	4.8	9.1	7.3	9.7	7.2	9.8	---	6.9	4.3	5.9
4	2.0	6.9	5.5	---	7.7	9.6	7.2	9.7	---	7.0	4.7	6.4
5	2.2	7.5	5.5	---	8.2	9.8	7.5	9.0	---	---	5.6	6.7
6	2.5	7.8	5.7	---	8.5	10.2	7.9	8.7	---	---	6.6	5.7
7	3.6	7.5	---	---	8.5	10.6	8.0	8.9	---	---	7.0	5.3
8	4.7	6.5	---	---	8.7	10.9	8.1	8.8	---	---	6.8	5.6
9	6.0	5.4	---	---	8.8	10.8	8.3	9.3	---	---	6.8	6.0
10	6.5	5.6	---	---	8.8	10.6	8.2	8.0	---	---	6.8	5.9
11	5.8	5.8	---	---	8.8	10.2	7.9	7.2	---	---	7.0	5.2
12	4.4	5.9	---	---	8.8	9.8	7.7	7.7	5.6	7.3	7.0	5.0
13	4.0	6.6	---	---	8.7	9.4	7.7	8.1	5.7	7.1	6.5	5.3
14	4.5	7.5	---	---	8.6	9.1	7.8	8.3	6.7	7.2	6.3	5.2
15	5.0	8.2	5.2	---	8.9	8.8	---	8.3	6.8	7.8	6.2	5.0
16	5.3	8.3	5.3	9.3	9.0	8.7	---	8.3	7.2	8.5	6.5	4.3
17	6.1	8.0	5.9	9.2	8.9	8.4	---	8.9	6.8	8.5	6.7	4.0
18	6.4	7.7	6.1	9.2	9.0	8.1	---	8.7	6.0	8.3	6.6	4.4
19	6.8	6.4	5.8	9.0	9.0	7.8	---	8.3	6.0	8.5	6.4	4.6
20	6.7	5.5	6.2	8.8	9.0	7.5	---	8.9	6.5	8.5	6.3	4.8
21	5.7	5.6	6.5	8.6	9.1	7.3	---	9.7	7.1	8.1	5.9	5.0
22	4.9	5.8	6.4	8.5	8.8	7.4	---	10.0	7.7	8.8	5.5	5.1
23	4.7	5.8	6.5	8.4	8.8	7.9	---	10.2	7.8	8.7	5.7	5.3
24	4.5	5.6	6.8	8.2	9.2	7.9	---	10.9	8.2	8.2	5.5	4.9
25	4.4	5.4	6.9	8.0	9.2	7.7	---	11.1	---	7.4	5.6	5.0
26	5.1	5.3	7.5	8.1	9.2	7.7	---	---	---	7.1	5.6	5.4
27	6.0	5.3	7.8	8.1	9.2	7.7	8.1	---	---	7.2	5.7	5.3
28	7.1	5.2	8.0	7.9	9.5	7.7	8.0	---	6.9	7.0	5.8	4.8
29	8.2	5.2	7.7	7.8	---	7.8	8.3	---	7.0	7.0	5.6	4.8
30	8.4	5.2	7.6	7.6	---	7.9	8.4	---	6.6	7.1	5.7	5.2
31	8.3	---	7.7	7.4	---	7.6	---	---	---	7.0	5.6	---
MEAN	5.2	6.4	---	---	8.7	8.8	---	---	---	---	6.1	5.3
MAX	8.4	8.3	---	---	9.5	10.9	---	---	---	---	7.0	6.7
MIN	2.0	5.2	---	---	7.2	7.3	---	---	---	---	4.3	4.0

294213081345300 ST. JOHNS RIVER AT DANCY POINT NEAR SPUDS, FL--Continued

OXYGEN DISSOLVED, BOTTOM (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	7.6	5.0	8.1	7.2	---	7.5	---	7.6	6.4	6.0	5.4
2	4.3	6.7	---	8.2	7.1	---	7.4	---	7.9	6.1	5.8	5.2
3	1.7	6.6	4.9	---	7.3	---	7.1	---	7.8	6.3	5.6	5.3
4	1.8	6.8	5.6	---	7.7	---	7.2	---	6.8	6.8	5.0	5.8
5	2.1	7.5	5.5	---	8.3	---	7.5	---	6.8	6.2	4.6	5.8
6	2.4	7.9	5.8	---	8.5	10.3	7.8	---	6.2	6.5	5.5	5.1
7	3.5	7.5	---	---	8.6	10.6	8.0	---	5.5	7.0	6.6	4.8
8	4.7	6.5	---	---	8.8	10.6	8.1	---	5.3	7.1	6.7	5.1
9	6.0	5.3	---	---	8.9	10.6	8.1	---	5.6	7.7	6.5	5.5
10	6.5	5.6	---	---	8.8	10.4	8.0	---	6.9	7.8	6.5	5.1
11	5.7	5.7	---	---	8.8	10.0	7.8	---	6.9	7.9	6.7	4.8
12	4.2	5.9	---	---	8.7	9.7	7.6	---	6.0	7.7	6.8	4.4
13	3.9	6.6	---	---	8.8	9.4	7.6	---	5.6	7.8	6.3	4.6
14	4.5	7.5	---	---	8.7	8.9	7.6	---	6.1	8.1	5.9	4.7
15	5.0	8.2	5.2	---	8.9	8.7	---	---	6.2	8.9	5.6	4.7
16	5.3	8.4	5.3	9.3	8.9	8.5	---	---	6.1	9.0	5.4	4.3
17	6.1	8.1	6.0	9.2	8.9	8.2	---	---	6.0	9.3	5.5	4.1
18	6.6	7.8	6.2	9.2	9.1	7.9	---	---	5.0	9.3	5.3	4.1
19	7.0	6.4	5.9	9.0	9.0	7.5	---	---	4.8	9.7	4.6	4.3
20	6.7	5.4	6.3	8.8	9.0	7.4	---	---	5.2	9.7	4.6	4.5
21	5.6	5.6	6.8	8.6	9.1	7.3	---	---	5.7	---	4.8	4.7
22	4.9	5.8	6.5	8.5	8.8	7.5	---	---	6.3	---	4.9	5.0
23	4.6	5.7	6.6	8.4	---	7.8	---	8.9	6.3	---	4.9	5.1
24	4.4	5.5	6.8	8.1	---	7.8	---	9.1	6.2	---	4.7	5.2
25	4.4	5.3	7.0	8.0	---	7.5	---	9.4	5.9	---	4.9	5.2
26	5.1	5.3	7.6	8.1	---	7.6	---	9.5	5.4	7.2	5.1	5.2
27	6.2	5.2	7.9	8.2	---	7.6	---	9.1	5.9	7.4	5.2	5.0
28	7.4	5.2	8.1	7.9	---	7.6	---	9.0	6.4	7.2	5.3	4.4
29	8.4	5.2	7.8	7.7	---	7.4	---	8.9	6.4	7.1	5.0	4.2
30	8.5	5.1	7.8	7.5	---	7.6	---	8.3	6.2	7.2	5.1	4.6
31	8.3	---	7.9	---	---	7.6	---	7.6	---	6.8	5.1	---
MEAN	5.2	6.4	---	---	---	---	---	---	6.2	---	5.5	4.9
MAX	8.5	8.4	---	---	---	---	---	---	7.9	---	6.8	5.8
MIN	1.7	5.1	---	---	---	---	---	---	4.8	---	4.6	4.1

02245255 DEEP CREEK NEAR HASTINGS, FL

LOCATION.--Lat 29°40'52", long 81°26'56", in NW¼ sec.35, T.9 S., R.28 E., St. Johns County, Hydrologic Unit 03080103, near right bank at downstream side of bridge on County Road, 1.3 mi upstream from Sixteenmile Creek, and 4.2 mi southeast of Hastings.

DRAINAGE AREA.--20.7 mi^2.

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6.99 ft above NGVD of 1929.

REMARKS.-- Records fair except for period of estimated daily discharge, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	0.88	3.0	2.4	1.0	0.91	3.3	2.5	0.24	1.1	2.5	e15
2	42	1.4	2.5	2.9	1.1	0.87	3.7	2.3	0.21	1.4	3.0	e5.8
3	33	0.76	2.2	3.3	1.2	3.0	5.6	2.1	0.15	1.1	1.8	e2.8
4	21	0.62	2.1	3.0	1.1	17	5.6	2.4	0.13	0.77	1.5	e2.1
5	13	0.64	1.8	3.2	1.0	8.2	4.7	2.7	0.12	9.1	1.4	e1.7
6	8.1	0.63	1.6	3.6	0.75	4.8	3.7	2.7	0.13	15	1.1	e2.0
7	5.3	0.67	1.6	3.3	0.93	3.7	3.4	2.7	0.10	5.4	e1.0	e1.6
8	3.9	0.48	1.8	3.3	1.1	3.0	3.0	2.8	0.23	2.2	e15	e1.3
9	2.8	0.39	1.8	3.3	0.93	2.4	2.7	2.5	0.24	2.4	e18	e1.2
10	2.2	0.41	1.7	1.8	0.78	2.0	3.4	1.7	0.09	1.6	e8.0	e1.3
11	2.0	0.43	1.7	1.7	0.63	1.7	6.8	1.5	0.36	1.2	e5.0	e1.0
12	1.7	0.41	1.9	1.6	0.54	2.4	2.2	1.4	0.31	22	e4.0	e0.90
13	1.5	0.66	1.7	1.7	0.53	2.7	2.8	1.4	0.73	23	e4.7	e22
14	1.4	26	1.7	4.6	0.73	2.3	3.2	1.6	1.4	8.5	e4.5	e23
15	1.3	37	1.7	10	0.68	1.9	3.2	1.3	0.49	2.9	e6.0	e7.7
16	1.2	20	1.7	5.2	0.51	2.8	2.0	1.3	0.28	1.7	e10	e2.3
17	1.0	14	1.5	3.7	0.43	3.7	1.3	4.9	0.24	1.1	e13	e18
18	0.91	9.8	1.7	3.1	0.35	3.9	0.94	10	0.78	0.90	e5.0	e27
19	0.83	7.7	1.7	2.7	0.35	3.6	1.9	4.4	1.1	0.81	e5.4	e10
20	0.80	6.0	1.7	2.8	0.41	4.0	2.4	3.3	1.9	0.61	e4.9	e6.3
21	0.78	4.6	1.2	2.7	1.1	5.3	2.6	1.0	46	0.81	e13	e3.6
22	0.77	3.7	1.1	2.6	2.3	5.2	2.2	0.71	54	1.4	e16	e2.7
23	0.83	5.1	1.7	2.4	5.8	4.6	2.1	0.59	26	1.4	e4.8	e2.6
24	0.93	22	2.0	1.8	8.5	4.8	2.5	0.47	8.0	1.1	3.5	e2.4
25	0.82	15	2.0	1.7	3.3	4.4	2.7	0.32	3.6	1.1	e2.6	e13
26	0.64	10	2.0	2.2	1.9	3.9	2.8	0.58	5.4	3.2	e2.3	e25
27	0.59	7.5	1.7	2.0	1.5	3.5	3.1	0.77	3.2	9.6	e2.0	e30
28	0.63	5.5	1.9	1.8	1.1	2.7	2.9	0.64	1.9	17	e1.8	e15
29	0.68	4.3	2.0	1.6	---	2.6	2.7	0.41	1.3	19	e2.4	e5.4
30	0.73	3.6	2.0	1.4	---	2.9	2.7	0.31	1.1	8.3	e3.0	e4.2
31	0.74	---	2.4	1.2	---	3.1	---	0.22	---	3.8	e10	---
TOTAL	193.08	210.18	57.1	88.6	40.55	117.88	92.14	61.52	159.73	169.50	177.2	256.90
MEAN	6.23	7.01	1.84	2.86	1.45	3.80	3.07	1.98	5.32	5.47	5.72	8.56
MAX	42	37	3.0	10	8.5	17	6.8	10	54	23	18	30
MIN	0.59	0.39	1.1	1.2	0.35	0.87	0.94	0.22	0.09	0.61	1.0	0.90
CFSM	0.30	0.34	0.09	0.14	0.07	0.18	0.15	0.10	0.26	0.26	0.28	0.41
IN.	0.35	0.38	0.10	0.16	0.07	0.21	0.17	0.11	0.29	0.30	0.32	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

MEAN	13.5	6.63	9.18	8.48	11.1	11.6	7.22	3.09	7.31	5.79	9.58	22.6
MAX	61.3	43.2	80.2	28.3	78.4	36.6	25.7	8.42	53.7	23.6	51.9	122
(WY)	1996	1995	1998	1998	1998	1987	1997	1995	1982	1982	1985	2001
MIN	0.082	0.093	0.42	0.34	0.61	0.70	1.79	0.49	0.062	0.13	0.089	0.090
(WY)	1991	1991	1981	1981	1985	1985	1985	1990	1981	1990	1993	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1975 - 2002	
ANNUAL TOTAL	5050.34		1624.38			
ANNUAL MEAN	13.8		4.45		9.61	
HIGHEST ANNUAL MEAN					24.8	1995
LOWEST ANNUAL MEAN					1.22	1981
HIGHEST DAILY MEAN	845	Sep 15	54	Jun 22	845	Sep 15 2001
LOWEST DAILY MEAN	0.10	Jun 5	0.09	Jun 10	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.25	May 31	0.15	Jun 4	0.00	Many days
MAXIMUM PEAK FLOW			112	Jun 21	1290	Sep 14 2001
MAXIMUM PEAK STAGE			6.70	Jun 21	9.52	Sep 14 2001
ANNUAL RUNOFF (CFSM)	0.67		0.21		0.46	
ANNUAL RUNOFF (INCHES)	9.08		2.92		6.30	
10 PERCENT EXCEEDS	20		10		23	
50 PERCENT EXCEEDS	2.0		2.2		2.3	
90 PERCENT EXCEEDS	0.45		0.62		0.28	

e Estimated

02245260 DEEP CREEK AT SPUDS, FL

LOCATION.--Lat 29°43'46", long 81°29'13", in SW¼ sec.9, T.9 S, R.28 E., St. Johns County, Hydrologic Unit 03080103, on right bank at abandoned Florida East Coast Railway crossing, 0.5 mi east of Spuds, and 3.9 mi upstream from mouth.

DRAINAGE AREA.--60.5 mi².

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

REVISED RECORDS.--WDR FL-95-1A: Discharge.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records poor. Discharge represents net of much larger upstream and downstream discharges.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	16	12	14	5.7	7.8	12	8.3	1.4	7.1	38	248
2	77	17	9.0	1.7	0.23	3.1	13	9.1	-3.0	8.3	32	170
3	55	8.8	0.76	8.6	3.8	9.5	24	6.2	-10	4.6	20	96
4	41	-0.99	-4.3	22	6.2	50	18	2.2	-14	2.4	28	66
5	45	-43	1.5	12	0.83	45	-2.8	0.15	0.68	6.9	25	119
6	41	-6.2	5.4	17	10	28	10	3.7	0.44	45	13	95
7	4.8	40	11	15	12	17	20	10	1.6	33	0.92	33
8	-7.8	17	3.8	12	13	16	21	12	-8.1	13	14	2.0
9	4.1	6.5	10	13	9.5	19	18	10	-9.5	22	35	15
10	25	-0.38	0.62	17	11	20	16	9.9	-2.8	26	22	21
11	31	8.9	13	16	12	16	31	10	2.3	16	16	30
12	31	-2.1	14	17	10	16	23	8.5	2.2	22	15	19
13	27	-17	13	17	12	20	19	12	18	105	39	72
14	23	20	15	33	6.5	16	16	10	19	124	81	151
15	7.5	62	11	64	5.7	14	12	7.8	1.2	91	98	125
16	1.9	84	5.2	40	14	17	8.5	7.0	-4.5	58	94	92
17	-5.5	77	5.2	21	15	19	5.2	13	-7.5	25	90	51
18	-3.6	52	12	9.4	8.0	18	4.4	34	-3.5	8.9	86	22
19	-9.2	48	10	8.4	12	17	5.9	-9.2	-2.9	6.6	105	14
20	10	39	9.7	7.3	11	15	6.7	-12	14	33	120	14
21	22	2.8	6.3	7.3	13	22	5.3	0.01	77	26	100	2.2
22	13	3.0	2.7	6.7	13	12	6.2	-19	166	17	97	-16
23	4.8	33	7.1	5.8	19	14	3.7	0.26	178	20	66	-9.2
24	15	83	11	7.1	45	20	8.0	15	100	22	45	11
25	22	64	4.2	7.4	36	21	12	5.8	60	31	25	431
26	21	45	24	6.0	24	21	9.0	1.1	41	51	16	423
27	4.6	34	16	13	16	16	5.4	7.0	27	104	24	420
28	-4.3	25	16	10	14	14	15	2.5	16	163	25	299
29	-2.0	19	13	11	---	12	14	-8.3	12	156	27	168
30	17	13	14	7.0	---	14	10	-3.6	7.8	97	38	75
31	16	---	13	11	---	12	---	1.9	---	61	179	---
TOTAL	606.3	748.33	285.18	457.7	358.46	561.4	369.5	155.32	679.82	1405.8	1613.92	3259.0
MEAN	19.6	24.9	9.20	14.8	12.8	18.1	12.3	5.01	22.7	45.3	52.1	109
MAX	79	84	24	64	45	50	31	34	178	163	179	431
MIN	-9.2	-43	-4.3	1.7	0.23	3.1	-2.8	-19	-14	2.4	0.92	-16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

MEAN	86.3	53.3	59.3	43.0	46.1	46.8	35.4	16.7	40.6	31.1	43.1	130
MAX	217	139	206	87.8	203	128	98.2	38.4	80.3	56.1	104	294
(WY)	1996	1995	1998	1993	1998	1996	1997	1995	1997	1996	1995	2001
MIN	12.8	10.7	5.02	11.1	12.2	18.1	6.20	-11.2	4.12	2.78	1.47	21.3
(WY)	1998	2001	1999	2000	1997	2002	1994	1994	1998	1999	1999	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1992 - 2002	
ANNUAL TOTAL	15482.55		10500.73			
ANNUAL MEAN	42.4		28.8		57.2	
HIGHEST ANNUAL MEAN					88.1	1995
LOWEST ANNUAL MEAN					28.8	2002
HIGHEST DAILY MEAN	1390	Sep 15	431	Sep 25	1390	Sep 15 2001
LOWEST DAILY MEAN	-43	Nov 5	-43	Nov 5	-78	Jan 26 1993
ANNUAL SEVEN-DAY MINIMUM	-0.55	Aug 25	-5.6	Jun 3	-22	May 19 1994
MAXIMUM PEAK STAGE			4.28	Nov 15	7.58	Sep 15 2001
10 PERCENT EXCEEDS	84		78		127	
50 PERCENT EXCEEDS	13		14		28	
90 PERCENT EXCEEDS	1.6		0.55		3.8	

Note.--Negative figures indicate reverse flow

02245500 SOUTH FORK BLACK CREEK NEAR PENNEY FARMS, FL

LOCATION.--Lat 29°58'45", long 81°51'08", in NE¼ sec.13, T.6 S., R.24 E., Clay County, Hydrologic Unit 03080103, on right bank at upstream side of bridge on State Highway 16, 0.7 mi downstream from Greens Creek, 2.5 mi west of Penney Farms, 9.5 mi west of Green Cove Springs, and 24 mi upstream from mouth of Black Creek.

DRAINAGE AREA.--134 mi^2.

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

REVISED RECORDS.--WSP 1234: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 9.82 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 18, 1940, nonrecording gage at same site and datum.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e62	21	23	26	85	34	16	13	e12	316	127	982
2	e54	22	23	27	67	38	17	e12	e11	175	538	910
3	e50	24	23	34	58	98	47	e12	e10	116	914	589
4	e47	24	23	32	52	191	44	e12	e8.9	85	724	e300
5	e43	24	23	30	47	111	35	e12	e8.6	64	726	e230
6	e40	22	22	30	43	74	27	e12	e10	48	402	e170
7	e37	21	22	30	44	59	22	e12	14	37	e210	e120
8	e35	20	22	28	49	52	19	e11	25	31	e140	e85
9	e34	20	46	27	48	46	17	e11	26	43	e96	e70
10	e34	19	219	27	43	41	15	e11	19	59	e83	e62
11	34	19	199	29	41	37	27	e11	16	41	e72	e53
12	32	19	113	26	38	34	26	e10	21	49	e62	e46
13	31	19	77	28	35	64	71	e9.4	18	38	e65	e75
14	31	70	62	46	35	80	119	e9.1	14	35	77	e125
15	31	122	54	227	34	62	84	e8.9	12	31	91	e320
16	28	74	49	161	33	50	57	e8.6	12	25	139	e490
17	26	51	44	99	31	42	42	e10	12	21	172	e430
18	25	41	43	75	29	37	33	15	12	18	385	e290
19	25	36	42	63	28	33	27	17	15	18	362	e200
20	25	34	39	57	28	30	23	17	69	68	242	e210
21	25	32	35	59	28	28	20	13	101	356	190	e135
22	25	30	33	71	28	31	18	e12	194	231	124	e95
23	26	30	32	64	34	28	16	e12	323	139	85	e80
24	26	28	31	56	68	26	15	e11	234	99	63	e175
25	26	28	30	59	61	24	14	e11	163	131	48	e460
26	23	26	29	87	50	22	13	e10	237	281	38	e320
27	21	25	28	76	42	22	13	e10	247	318	46	e205
28	20	24	28	87	36	22	13	e28	216	578	70	e150
29	21	24	28	128	---	20	13	19	143	572	188	e125
30	21	23	27	120	---	18	13	13	254	288	299	e105
31	21	---	26	122	---	17	---	13	---	172	369	---
TOTAL	979	972	1495	2031	1215	1471	916	386.0	2457.5	4483	7147	7607
MEAN	31.6	32.4	48.2	65.5	43.4	47.5	30.5	12.5	81.9	145	231	254
MAX	62	122	219	227	85	191	119	28	323	578	914	982
MIN	20	19	22	26	28	17	13	8.6	8.6	18	38	46
CFSM	0.24	0.24	0.36	0.49	0.32	0.35	0.23	0.09	0.61	1.08	1.72	1.89
IN.	0.27	0.27	0.42	0.56	0.34	0.41	0.25	0.11	0.68	1.24	1.98	2.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	164	87.0	121	138	172	179	118	80.7	107	154	225	233
MAX	633	484	859	442	808	666	563	747	334	530	885	770
(WY)	1948	1948	1998	1970	1998	1948	1997	1959	1965	1960	1953	1988
MIN	21.1	18.1	23.9	30.5	34.0	34.5	22.7	11.4	16.2	21.5	15.9	14.0
(WY)	1978	1941	1991	1957	1957	1956	1968	2001	1955	1977	1993	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	22960.6		31159.5			
ANNUAL MEAN	62.9		85.4		148	
HIGHEST ANNUAL MEAN					302	1948
LOWEST ANNUAL MEAN					52.0	1990
HIGHEST DAILY MEAN	1930	Sep 15	982	Sep 1	10300	May 21 1959
LOWEST DAILY MEAN	8.8	Jun 1	b8.6		b8.6	
ANNUAL SEVEN-DAY MINIMUM	8.9	Jun 1	9.6	May 11	8.9	Jun 1 2001
MAXIMUM PEAK FLOW			1240	Sep 1	a13900	Oct 19 1944
MAXIMUM PEAK STAGE			12.32	Sep 1	a26.33	Oct 19 1944
ANNUAL RUNOFF (CFSM)	0.47		0.64		1.11	
ANNUAL RUNOFF (INCHES)	6.37		8.65		15.04	
10 PERCENT EXCEEDS	117		217		310	
50 PERCENT EXCEEDS	28		35		69	
90 PERCENT EXCEEDS	12		13		27	

e Estimated
a From floodmarks and rating curve extended above 11,000 ft^3/s
b May 16, Jun 5, 2002

02246000 NORTH FORK BLACK CREEK NEAR MIDDLEBURG, FL

LOCATION.--Lat 30°06'47", long 81°54'24", in NE¼ sec.33, T.4 S., R.24 E., Clay County, Hydrologic Unit 03080103, on left bank 0.3 mi upstream from Big Branch, 4 mi northwest of Middleburg, and 7.5 mi upstream from confluence with South Fork.

DRAINAGE AREA.--177 mi^2.

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

REVISED RECORDS.--WSP 852: 1933 (m). WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 0.62 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 31, 1933, nonrecording gage at site 0.4 mi downstream at different datum. Mar. 31, 1933 to Apr. 28, 1955, nonrecording gage at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1919 reached a stage of 25.3 ft, from information by local resident, discharge 15,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	43	31	33	124	49	37	23	20	52	217	944
2	122	47	31	35	106	53	37	22	17	38	523	621
3	106	50	32	43	90	214	65	22	15	33	638	428
4	97	47	36	43	80	497	124	22	17	28	418	296
5	90	58	37	41	71	500	89	21	15	25	548	218
6	77	66	34	38	63	469	71	20	11	23	488	171
7	74	46	35	38	60	321	58	20	13	22	291	141
8	85	35	36	37	62	212	48	19	21	23	191	120
9	89	30	38	35	60	156	41	18	34	31	138	110
10	80	32	100	36	61	136	44	18	34	36	116	97
11	73	33	197	38	59	115	172	17	31	31	98	78
12	66	34	128	37	54	92	235	17	25	25	85	71
13	65	56	101	37	50	95	345	e16	20	23	77	290
14	65	92	85	55	48	105	455	e16	15	25	75	515
15	62	177	70	391	50	94	388	e15	11	25	70	828
16	66	139	64	385	48	83	325	e15	10	23	71	1910
17	65	110	59	240	45	70	188	e14	10	20	74	1850
18	64	88	53	200	42	62	124	e14	12	17	94	987
19	71	72	52	155	40	56	91	17	18	17	88	524
20	66	58	48	116	38	51	71	24	31	23	77	307
21	55	54	47	105	40	50	59	23	40	95	101	204
22	49	55	45	156	43	67	50	28	58	91	113	158
23	50	49	43	142	47	62	42	37	56	93	74	127
24	50	47	40	114	79	51	38	28	41	97	56	115
25	44	42	41	108	79	46	34	20	40	68	45	233
26	39	40	40	170	65	43	31	17	52	73	40	350
27	36	40	39	187	58	42	31	16	53	343	37	329
28	40	41	37	155	53	44	29	17	47	570	56	273
29	45	36	37	169	---	49	26	21	41	856	199	198
30	45	33	35	205	---	45	24	24	49	792	688	154
31	43	---	34	152	---	41	---	21	---	386	1070	---
TOTAL	2119	1750	1705	3696	1715	3970	3372	622	857	4004	6856	12647
MEAN	68.4	58.3	55.0	119	61.2	128	112	20.1	28.6	129	221	422
MAX	140	177	197	391	124	500	455	37	58	856	1070	1910
MIN	36	30	31	33	38	41	24	14	10	17	37	71
CFSM	0.39	0.33	0.31	0.67	0.35	0.72	0.64	0.11	0.16	0.73	1.25	2.38
IN.	0.45	0.37	0.36	0.78	0.36	0.83	0.71	0.13	0.18	0.84	1.44	2.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2002, BY WATER YEAR (WY)

MEAN	242	95.9	135	165	236	235	139	91.7	128	187	287	330
MAX	1087	662	667	540	1288	1310	627	816	681	611	1038	1489
(WY)	1948	1948	1998	1964	1998	1959	1973	1964	1934	1991	1968	1964
MIN	15.0	8.69	13.7	13.1	14.3	21.0	8.98	7.14	6.50	14.8	7.25	15.1
(WY)	1932	1932	1932	1932	1932	1935	1935	1935	1935	1990	1954	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1932 - 2002	
ANNUAL TOTAL	43669.7		43313			
ANNUAL MEAN	120		119		189	
HIGHEST ANNUAL MEAN					440	1948
LOWEST ANNUAL MEAN					50.4	1955
HIGHEST DAILY MEAN	4720	Sep 16	1910	Sep 16	11200	Aug 30 1968
LOWEST DAILY MEAN	4.0	Jun 5	10	Jun 16,17	2.9	Jun 19 2000
ANNUAL SEVEN-DAY MINIMUM	4.8	Jun 1	14	Jun 13	3.8	Jun 14 2000
MAXIMUM PEAK FLOW			2620	Sep 16	12700	Oct 4 1992
MAXIMUM PEAK STAGE			15.46	Sep 16	24.69	Oct 4 1992
INSTANTANEOUS LOW FLOW			6.1	Jun 5,6	2.6	Jun 19,20 2000
ANNUAL RUNOFF (CFSM)	0.68		0.67		1.07	
ANNUAL RUNOFF (INCHES)	9.18		9.10		14.52	
10 PERCENT EXCEEDS	236		290		405	
50 PERCENT EXCEEDS	45		53		71	
90 PERCENT EXCEEDS	14		21		21	

e Estimated

02246010 NORTH FORK BLACK CREEK AT MIDDLEBURG, FL

LOCATION.--Lat 30°04'31", long 81°51'51", in SW¼ sec.12, T.5 S., R.24 E., Clay County, Hydrologic Unit 03080103, at downstream side of upstream bridge on State Highway 21, 0.5 mi north of Middleburg, 1.5 mi upstream from confluence with South Fork, and 14 mi upstream from mouth of Black Creek.

DRAINAGE AREA.--197 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 9.80 ft below NGVD of 1929. Prior to Feb. 28, 1986, at site 50 ft downstream at present datum.

REMARKS.--Stage affected by tide.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 22.37 ft, Oct. 4, 1992, from peak stage indicator; minimum, 9.34 ft, Dec. 23, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.14 ft, Nov. 16; minimum, 10.34 ft, Jan. 12.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.35	12.76	12.07	11.81	11.54	11.85	12.00	11.72	12.30	11.77	12.07	13.03
2	13.18	12.70	12.09	12.04	11.54	12.10	12.07	11.49	12.11	11.92	12.51	13.09
3	13.09	12.63	12.24	12.14	11.86	12.03	12.03	11.18	12.10	11.92	12.77	13.21
4	13.05	12.60	12.48	11.81	11.73	11.73	11.87	11.27	12.35	11.89	12.73	13.26
5	12.88	12.95	12.51	11.83	11.88	11.58	12.35	11.72	12.37	11.88	12.73	13.13
6	12.64	13.18	12.39	11.65	12.00	11.66	12.44	12.01	12.23	11.90	12.78	12.91
7	12.63	12.79	12.24	11.08	11.76	11.74	12.41	11.87	12.06	12.09	13.09	13.01
8	13.03	12.49	12.27	11.12	11.49	11.82	12.26	11.63	12.26	12.19	13.36	13.20
9	13.25	12.33	12.29	11.17	11.70	11.73	11.87	11.44	12.66	12.09	13.33	13.22
10	13.13	12.44	12.55	11.01	11.77	11.56	11.60	11.37	12.72	11.94	13.26	13.11
11	13.01	12.49	12.65	10.92	11.54	11.71	11.76	11.39	12.62	11.71	13.12	12.93
12	12.86	12.54	12.49	10.98	11.51	11.91	11.98	11.53	12.48	11.81	12.98	12.77
13	12.82	13.09	12.43	11.11	11.55	11.86	11.96	11.37	12.37	12.16	12.89	12.92
14	12.76	13.31	12.31	11.33	11.67	11.67	11.97	11.23	12.21	11.99	12.75	12.87
15	12.69	13.50	12.09	11.58	12.09	11.56	11.85	11.52	12.11	11.80	12.62	12.78
16	12.96	13.56	12.23	11.47	11.98	11.47	11.76	11.64	12.18	11.82	12.53	12.98
17	13.04	13.32	12.28	11.48	11.65	11.36	11.73	11.60	12.21	11.95	12.37	13.14
18	13.11	13.09	11.90	11.38	11.87	11.38	11.69	11.37	12.27	12.06	12.21	12.71
19	13.24	12.89	11.92	11.30	11.85	11.50	11.61	11.88	12.35	12.01	12.13	12.70
20	13.15	12.57	11.81	11.18	11.66	11.68	11.47	12.49	12.38	11.87	12.21	12.80
21	12.96	12.58	12.00	11.36	11.46	11.53	11.57	12.47	12.59	11.89	12.23	12.90
22	12.84	12.78	12.10	11.42	11.51	11.92	11.62	12.66	12.79	12.00	12.24	13.00
23	12.89	12.60	12.18	11.54	11.81	12.18	11.75	12.91	12.56	11.99	12.29	13.05
24	12.85	12.44	11.93	11.40	12.21	12.04	12.09	12.63	12.30	11.92	12.19	13.10
25	12.57	12.28	11.96	11.27	12.19	11.89	11.95	12.28	12.12	11.88	12.14	13.36
26	12.43	12.21	11.96	11.67	12.02	11.79	11.92	12.11	12.11	11.88	12.28	13.28
27	12.46	12.17	11.73	11.81	11.71	11.73	12.20	12.17	11.90	11.97	12.30	12.81
28	12.74	12.19	11.69	11.66	11.68	11.89	12.00	12.27	11.66	12.03	12.29	12.62
29	12.88	12.21	11.79	11.54	---	12.14	11.61	12.48	11.59	12.07	12.34	12.71
30	12.86	12.13	11.78	11.50	---	12.13	11.66	12.56	11.61	11.91	12.47	13.09
31	12.82	---	11.83	11.55	---	12.07	---	12.47	---	11.81	12.81	---
MEAN	12.91	12.69	12.14	11.46	11.76	11.78	11.90	11.89	12.25	11.94	12.58	12.99
MAX	13.35	13.56	12.65	12.14	12.21	12.18	12.44	12.91	12.79	12.19	13.36	13.36
MIN	12.43	12.13	11.69	10.92	11.46	11.36	11.47	11.18	11.59	11.71	12.07	12.62

CAL YR 2001 MEAN 12.03 MAX 16.59 MIN 10.72
WTR YR 2002 MEAN 12.19 MAX 13.56 MIN 10.92

02246150 BIG DAVIS CREEK AT BAYARD, FL

LOCATION.--Lat 30°09'05", long 81°31'35", in land grant 37, T.4 S., R.28 E., Duval County, Hydrologic Unit 03080103, at downstream end of culvert on U.S. Highway 1, 0.8 mi northwest of Bayard, 2.0 mi upstream from mouth, and 14.8 mi southeast of Union Station in Jacksonville.

DRAINAGE AREA.--13.6 mi^2.

PERIOD OF RECORD.--Water years 1964-66, 1970-74 (annual peak discharge), August 1966 to September 1969, June 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Feb. 18, 1965 to Aug. 21, 1966, crest-stage gage at same site and datum.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e2.7	6.9	5.6	10	5.7	e4.9	1.6	1.9	6.5	2.4	100
2	9.6	e3.0	6.7	6.4	9.6	6.4	e5.0	1.5	1.8	5.5	2.5	71
3	8.6	e3.5	6.4	7.5	8.9	18	e4.8	1.5	1.7	4.6	3.3	54
4	7.9	3.9	6.3	6.9	8.4	43	e4.5	1.5	1.6	4.0	7.1	40
5	7.2	3.8	6.2	6.5	7.7	32	e4.0	1.5	1.7	3.6	9.6	34
6	6.7	3.4	6.1	6.3	7.3	23	3.2	1.6	1.6	3.3	5.8	28
7	6.5	3.1	6.0	6.2	7.7	17	3.1	1.5	1.7	3.2	7.8	22
8	6.1	2.9	8.2	5.9	7.6	14	2.9	1.5	1.7	3.0	5.2	18
9	5.6	2.8	17	5.6	7.2	12	2.7	1.5	2.3	3.0	4.0	14
10	5.3	2.7	39	5.6	7.0	11	2.7	1.4	2.2	3.3	3.6	11
11	5.3	2.7	47	5.6	6.9	9.8	3.4	1.4	2.2	3.0	3.1	9.5
12	5.2	3.3	35	5.6	6.6	9.1	3.9	1.4	2.5	2.7	2.8	8.1
13	5.2	8.2	27	5.7	6.3	16	4.5	1.4	2.9	2.8	3.3	16
14	5.2	62	22	11	6.1	15	4.1	1.5	2.4	3.3	4.7	34
15	5.0	92	19	33	5.9	12	3.5	1.4	2.1	3.3	4.7	43
16	4.7	51	16	25	5.9	10	3.2	1.4	1.9	2.8	5.1	35
17	4.3	38	14	18	5.6	9.2	3.2	1.5	1.8	2.5	5.4	28
18	4.0	30	13	15	5.3	8.3	3.4	2.0	2.0	2.4	5.1	22
19	4.0	26	11	13	5.1	7.4	2.9	2.5	2.6	2.2	20	17
20	3.9	22	10	12	5.0	6.6	2.6	2.3	3.4	2.6	51	13
21	3.9	19	9.4	14	5.0	6.2	2.4	2.0	18	4.7	31	10
22	4.0	16	8.6	17	5.1	6.6	2.1	1.8	32	3.6	21	8.5
23	4.1	14	8.1	15	7.0	6.3	2.0	1.8	24	3.3	14	7.2
24	4.2	12	7.8	13	10	5.7	2.0	1.8	15	2.9	9.9	27
25	3.9	10	7.3	13	9.0	5.3	1.9	1.8	13	3.0	7.6	86
26	3.3	9.7	6.7	18	7.8	4.9	1.9	1.7	11	3.9	9.6	77
27	2.9	9.0	6.4	18	7.0	4.8	1.8	1.9	14	3.5	12	66
28	2.6	8.4	6.2	16	6.2	4.6	1.8	2.3	e10	4.0	9.0	51
29	2.6	7.8	6.0	14	---	e4.6	1.7	2.1	e8.0	4.0	7.6	38
30	2.6	7.3	5.8	12	---	e4.7	1.7	2.0	7.0	3.3	9.8	29
31	2.6	---	5.7	11	---	e4.8	---	2.0	---	2.7	61	---
TOTAL	158.0	480.2	400.8	367.4	197.2	344.0	91.8	53.1	194.0	106.5	349.0	1017.3
MEAN	5.10	16.0	12.9	11.9	7.04	11.1	3.06	1.71	6.47	3.44	11.3	33.9
MAX	11	92	47	33	10	43	5.0	2.5	32	6.5	61	100
MIN	2.6	2.7	5.7	5.6	5.0	4.6	1.7	1.4	1.6	2.2	2.4	7.2
CFSM	0.37	1.18	0.95	0.87	0.52	0.82	0.23	0.13	0.48	0.25	0.83	2.49
IN.	0.43	1.31	1.10	1.00	0.54	0.94	0.25	0.15	0.53	0.29	0.95	2.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

MEAN	19.3	8.67	9.55	10.6	12.4	11.7	6.70	5.08	8.73	8.95	14.1	22.4
MAX	74.3	44.9	57.3	30.8	48.6	31.0	21.3	37.5	47.7	40.5	69.6	68.9
(WY)	1992	1995	1998	1994	1998	1986	1997	1979	1991	1975	1968	1979
MIN	0.78	1.44	1.36	1.66	3.39	2.72	1.22	0.47	0.57	0.29	0.56	0.93
(WY)	1982	1991	1981	1981	1991	2000	1968	1981	1981	1977	1990	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	3903.6		3759.3			
ANNUAL MEAN	10.7		10.3		11.5	
HIGHEST ANNUAL MEAN					22.0	1995
LOWEST ANNUAL MEAN					2.33	1981
HIGHEST DAILY MEAN	336	Sep 15	100	Sep 1	735	Aug 31 1968
LOWEST DAILY MEAN	1.9	May 25	1.4	May 10-13,15,16	0.07	Jul 25 1977
ANNUAL SEVEN-DAY MINIMUM	2.0	May 21	1.4	May 10	0.13	Jul 21 1977
MAXIMUM PEAK FLOW			129	Nov 14	1170	Aug 29 1968
MAXIMUM PEAK STAGE			7.43	Nov 14	10.47	Aug 29 1968
INSTANTANEOUS LOW FLOW			1.3	May 11-13,15-17	*0.05	
ANNUAL RUNOFF (CFSM)	0.79		0.76		0.84	
ANNUAL RUNOFF (INCHES)	10.68		10.28		11.44	
10 PERCENT EXCEEDS	20		23		25	
50 PERCENT EXCEEDS	4.3		5.8		5.0	
90 PERCENT EXCEEDS	2.6		1.9		1.3	

e Estimated
* July 25, 1977, June 19, 1981

301124081395901 ST. JOHNS RIVER AT BUCKMAN BRIDGE AT JACKSONVILLE, FL

LOCATION.--Lat 30°11'24", long 81°39'59",T.3 S., R.27 E., Duval County, Hydrologic Unit 03080103, below Buckman Bridge, Interstate Highway I-295, one piling east of boat fenders, on the north side, 2.7 mi northeast of Orange Park, and 36 mi upstream from mouth.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (TOP, MIDDLE, BOTTOM): June 1995 to current year.
WATER TEMPERATURE (TOP, MIDDLE, BOTTOM): June 1995 to current year.
DISSOLVED OXYGEN (TOP, MIDDLE, BOTTOM): May 1996 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 33,200 µS/cm @ 25 °C, May 23, 2002; minimum daily mean, 318 µS/cm @ 25 °C, Mar. 9, 1998.
SPECIFIC CONDUCTANCE (MIDDLE): Maximum daily mean, 38,500 µS/cm @ 25 °C, May 3, 1999; minimum daily mean, 318 µS/cm @ 25 °C, Mar. 9, 1998.
SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 42,400 µS/cm @ 25 °C, May 3, 1999; minimum daily mean, 318 µS/cm @ 25 °C, Mar. 9, 1998.
WATER TEMPERATURE (TOP): Maximum daily mean, 32.2 °C, Aug. 1, 2, 1999; minimum daily mean, 8.7°C, Jan. 9, 1996.
WATER TEMPERATURE (MIDDLE): Maximum daily mean, 32.2 °C, Aug. 1, 2, 1999; minimum daily mean, 8.3 °C, Jan. 4, 2001.
WATER TEMPERATURE (BOTTOM): Maximum daily mean, 32.2 °C, Aug. 2, 1999; minimum daily mean, 8.4 °C, Jan. 4,5, 2001.
DISSOLVED OXYGEN (TOP): Maximum daily mean, 11.5 mg/L, Jan. 11, 2001; minimum daily mean, 2.9 mg/L, Sept. 8, 1998.
DISSOLVED OXYGEN (MIDDLE): Maximum daily mean, 11.6 mg/L, Jan. 11, 2001; minimum daily mean, 2.7 mg/L, Sept. 8, 1998.
DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 11.3 mg/L, Jan. 11, 2001; minimum daily mean, 2.7 mg/L, Sept. 8, 1998.

EXTREMES FOR CURRENT YEAR--
SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 33,200 µS/cm @ 25 °C, May 23; minimum daily mean, 626 µS/cm @ 25 °C, Jan. 12.
SPECIFIC CONDUCTANCE (MIDDLE): Maximum daily mean, 38,300 µS/cm @ 25 °C, May 24; minimum daily mean, 627 µS/cm @ 25 °C, Jan. 12.
SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 40,700 µS/cm @ 25 °C, May 24; minimum daily mean, 625 µS/cm @ 25 °C, Jan. 12.
WATER TEMPERATURE (TOP): Maximum daily mean, 31.2 °C, July 19; minimum daily mean, 11.8 °C, Jan. 12.
WATER TEMPERATURE (MIDDLE): Maximum daily mean, 31.1 °C, July 19; minimum daily mean, 11.8 °C, Jan. 12.
WATER TEMPERATURE (BOTTOM): Maximum daily mean, 31.1 °C, July 19; minimum daily mean, 11.8 °C, Jan. 12.
DISSOLVED OXYGEN (TOP): Maximum daily mean, 9.8 mg/L, Mar. 5-7; minimum daily mean, 5.6 mg/L, Sept. 20.
DISSOLVED OXYGEN (MIDDLE): Maximum daily mean, 10.2 mg/L, Jan. 12; minimum daily mean, 5.0 mg/L, Sept. 26-28.
DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 10.2 mg/L, Jan. 12; minimum daily mean, 4.8 mg/L, Sept. 26-28.

SPECIFIC CONDUCTANCE, TOP (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	911	856	e712	---	---	4990	7560	9940	25400	11100	1400	1810
2	896	859	e709	---	---	4950	8110	8820	23800	11000	1460	1680
3	882	862	e712	---	---	4030	7970	7320	23000	10600	1570	1680
4	877	861	e720	---	---	3150	7230	7220	23500	10100	1710	1730
5	868	865	---	---	---	2460	9630	8770	23300	9560	1780	1630
6	865	874	---	---	---	2140	11300	11200	22700	9090	1880	925
7	855	871	---	---	---	2040	12600	12500	21600	9090	2380	902
8	860	872	---	---	---	1980	12100	11500	22100	9080	3670	911
9	867	870	---	---	---	1730	---	10700	24000	8540	4890	912
10	866	870	---	---	---	1440	---	10200	24900	7760	5310	884
11	855	874	---	---	---	1480	---	10000	25100	6760	4500	832
12	842	873	---	626	---	1590	---	10200	24800	6320	3640	795
13	838	881	---	629	---	1500	---	9950	24400	6640	2490	789
14	835	908	---	631	---	1260	---	9470	23000	5960	1460	778
15	833	1400	---	630	---	1100	---	10400	e22500	5150	1160	764
16	840	2080	---	---	---	1030	---	11400	e22000	4730	1190	761
17	e844	1760	---	---	---	953	---	11800	21800	4600	1210	752
18	845	1330	---	---	---	910	---	10900	21600	4610	1180	749
19	845	968	---	---	---	931	6060	13000	22400	4440	1160	748
20	840	853	---	---	---	1010	5620	19400	23000	4000	1130	749
21	834	836	---	---	---	986	5740	22300	23200	3550	1110	747
22	828	847	---	---	---	1320	5960	27500	22700	3210	1070	742
23	832	794	---	---	---	3020	6330	33200	20800	2810	1050	741
24	833	770	---	---	---	5000	7960	29800	19200	2490	1040	721
25	830	746	---	---	---	5300	8520	25300	17700	2200	1020	711
26	833	e736	---	---	---	5210	9300	24600	16100	1940	1020	677
27	830	e733	---	---	---	5420	11200	24600	14400	1770	1000	649
28	841	e728	---	---	---	5930	11400	25300	12900	1630	984	635
29	836	e722	---	---	---	6750	10000	26200	12100	1530	1580	641
30	844	e716	---	---	---	7420	9590	26900	11400	1450	2010	654
31	849	---	---	---	---	7670	---	26500	---	1400	1990	---
MEAN	850	940	---	---	---	3050	---	16400	21200	5580	1900	923
MAX	911	2080	---	---	---	7670	---	33200	25400	11100	5310	1810
MIN	828	716	---	---	---	910	---	7220	11400	1400	984	635

e Estimated

301124081395901 ST. JOHNS RIVER AT BUCKMAN BRIDGE AT JACKSONVILLE, FL--Continued

SPECIFIC CONDUCTANCE, MIDDLE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	911	856	e712	---	766	5160	8140	10400	27400	11200	1400	1830
2	896	859	e709	---	777	5160	8610	9130	26300	11100	1460	1690
3	880	862	e713	---	969	4190	8900	7640	25200	10700	1610	1710
4	874	861	e721	---	1270	3170	7770	7510	24900	10200	1820	1760
5	864	864	---	---	1760	2470	9910	9120	24400	9640	1870	1630
6	863	873	---	---	3810	2160	13600	12700	24500	9180	1920	1530
7	855	870	---	---	4560	2080	15600	16000	22900	9150	2410	1590
8	860	872	---	---	2610	e1830	14700	14800	22600	9130	4160	1650
9	866	869	---	---	3080	e1600	---	12200	24300	8600	6640	1600
10	866	870	---	---	e3080	e1500	---	10800	25700	7830	6720	1450
11	856	873	---	---	2580	1510	---	10300	26300	6840	5250	1300
12	842	873	---	627	2400	1630	---	10400	25600	6390	3930	1280
13	838	881	---	629	2470	1510	---	10200	25200	6660	2620	1380
14	836	908	---	e631	2620	1280	---	9610	23800	5970	1480	1620
15	833	1410	---	e630	4020	1110	---	10700	22500	5170	1180	3720
16	840	2180	---	---	6430	1050	---	11800	22500	4740	1190	2630
17	845	2680	---	---	4930	974	---	13000	22100	4640	1210	1740
18	842	1510	---	---	4540	919	---	11600	21800	4630	1180	957
19	845	992	---	e636	5050	950	6230	13200	22600	4470	1160	918
20	841	861	---	633	---	1020	5810	19900	23200	---	1130	968
21	834	839	---	634	---	985	5880	26800	23400	---	1110	999
22	829	850	---	e635	---	1320	6020	29300	23000	---	1070	996
23	831	793	---	634	---	4760	6380	36000	21100	---	1050	969
24	832	769	---	632	---	8860	8450	38300	19400	e2490	1040	955
25	829	e743	---	e633	---	8120	10300	35800	17800	2230	1020	949
26	831	e736	---	e638	---	6400	10200	31100	16200	1950	1020	929
27	835	e732	---	720	---	5770	11800	26800	14500	1770	1000	912
28	841	e723	---	858	---	6190	12500	25800	13000	1630	983	889
29	844	e721	---	e835	---	7300	10800	26500	12100	1520	1650	891
30	844	e719	---	e818	---	8530	10100	27700	11400	1450	2070	928
31	849	---	---	781	---	8610	---	28300	---	1390	2020	---
MEAN	850	982	---	---	---	3490	---	18200	21900	---	2080	1410
MAX	911	2680	---	---	---	8860	---	38300	27400	---	6720	3720
MIN	829	719	---	---	---	919	---	7510	11400	---	983	889

e Estimated

SPECIFIC CONDUCTANCE, BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	911	856	e712	---	774	5290	8710	10800	29600	11200	1390	1850
2	897	858	e709	---	779	5330	8980	9480	28700	11200	1460	1710
3	878	861	e713	---	982	4430	9630	7830	26900	10800	1730	1730
4	873	861	e722	---	1350	3180	8480	7660	25800	10300	2030	1790
5	862	864	---	---	1770	2520	10200	9400	25200	9710	1950	1660
6	861	873	---	---	4930	2220	17100	14100	25400	9250	1980	1540
7	855	875	---	---	7840	2150	19600	21100	24000	9190	2440	1600
8	860	875	---	---	2820	2060	19400	18800	23100	9170	5290	1650
9	866	869	---	---	3180	1800	---	14900	24500	8640	8820	1610
10	866	870	---	---	3330	1490	---	11400	26300	7890	8910	1450
11	856	872	---	---	2640	1530	---	10400	27600	6910	5760	1300
12	842	873	---	625	2480	1660	---	10600	26500	6430	4110	1280
13	838	882	---	629	2530	1540	---	10300	25700	6700	2760	1380
14	835	913	---	631	2660	1290	---	9680	24400	5990	1560	1620
15	833	1410	---	630	4230	1130	---	10800	22800	5190	1210	3910
16	840	2550	---	---	8460	1070	---	12200	22700	4780	1200	2970
17	844	4200	---	---	6050	989	---	14200	22300	4670	1210	2310
18	846	1840	---	---	4760	923	---	12500	22000	4650	1180	985
19	845	1040	---	---	5640	955	6340	13300	22800	4490	1160	935
20	840	880	---	633	---	1020	5890	21100	23500	4020	1130	971
21	833	843	---	634	---	986	5960	32000	23500	3560	1100	997
22	828	857	---	633	---	1320	6030	32000	23200	3250	1070	995
23	829	795	---	634	---	7250	6410	38100	21200	2870	1050	968
24	831	768	---	632	---	13600	9070	40700	19600	2520	1040	955
25	828	e743	---	632	---	12000	13100	39100	17900	2250	1020	949
26	831	e731	---	635	---	7570	10900	33400	16400	1970	1020	928
27	834	e727	---	747	---	6000	12200	27900	14500	1780	1000	912
28	841	e720	---	946	---	6310	13700	26200	13100	1640	983	889
29	844	e720	---	952	---	7680	11700	26700	12200	1530	1720	892
30	844	e719	---	800	---	9540	10500	28300	11500	1440	2140	928
31	846	---	---	792	---	9490	---	30200	---	1390	2060	---
MEAN	850	1060	---	---	---	4010	---	19500	22400	5660	2310	1460
MAX	911	4200	---	---	---	13600	---	40700	29600	11200	8910	3910
MIN	828	719	---	---	---	923	---	7660	11500	1390	983	889

e Estimated

301124081395901 ST. JOHNS RIVER AT BUCKMAN BRIDGE AT JACKSONVILLE, FL--Continued

TEMPERATURE, WATER, TOP (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	19.2	e21.9	---	---	14.2	24.0	27.0	27.2	28.9	30.4	30.5
2	23.0	19.8	e22.0	---	---	14.7	24.0	27.1	27.9	29.1	30.0	30.1
3	23.1	20.3	e21.5	---	---	15.2	23.9	27.4	28.6	29.3	30.0	30.0
4	23.5	20.5	e21.0	---	---	14.8	23.8	27.9	29.3	29.5	29.8	29.9
5	23.7	20.3	---	---	---	13.8	23.5	27.6	29.4	29.6	29.8	30.2
6	24.3	19.6	---	---	---	13.8	23.1	27.0	29.4	29.9	29.9	29.9
7	24.3	19.6	---	---	---	14.5	22.6	27.2	29.3	30.0	29.8	30.1
8	23.5	19.7	---	---	---	15.1	22.4	27.7	29.1	30.0	29.1	29.8
9	23.1	19.5	---	---	---	16.1	---	27.8	28.8	29.9	28.4	29.6
10	23.0	19.7	---	---	---	17.0	---	28.1	28.5	29.8	28.3	29.4
11	23.1	19.8	---	---	---	17.3	---	28.1	28.4	30.0	28.3	29.2
12	23.4	19.8	---	11.8	---	18.0	---	28.2	28.5	30.2	28.2	28.8
13	23.5	19.7	---	12.1	---	18.5	---	28.2	28.9	29.9	28.1	28.2
14	23.7	19.4	---	12.2	---	19.1	---	27.9	29.2	29.6	28.1	27.2
15	23.6	19.0	---	12.5	---	19.6	---	27.2	e29.6	29.8	28.2	25.5
16	23.6	18.8	---	---	---	20.3	---	26.9	e29.1	30.3	28.5	24.4
17	e22.6	18.9	---	---	---	21.3	---	27.0	29.1	30.6	29.0	24.4
18	21.6	18.9	---	---	---	21.8	---	27.0	28.5	31.0	29.3	24.6
19	21.6	19.2	---	---	---	22.3	26.1	26.0	28.1	31.2	29.7	25.2
20	22.0	19.4	---	---	---	22.8	26.4	23.9	27.9	30.9	29.5	25.6
21	22.4	19.5	---	---	---	22.9	26.8	23.3	27.2	30.3	29.5	26.3
22	22.8	19.6	---	---	---	22.2	26.9	23.0	26.6	30.0	29.8	26.5
23	23.6	19.7	---	---	---	21.1	26.6	22.9	26.5	29.7	30.1	26.7
24	24.0	20.1	---	---	---	21.1	26.4	23.4	26.9	29.7	30.1	26.9
25	24.4	20.6	---	---	---	21.5	26.4	24.2	27.2	29.9	30.2	27.1
26	23.7	e21.1	---	---	---	22.2	26.5	24.8	27.5	29.8	30.1	26.5
27	21.9	e21.3	---	---	---	22.6	26.8	25.0	27.6	30.2	29.8	26.2
28	20.0	e21.5	---	---	---	22.4	26.8	25.4	28.1	30.3	29.7	26.0
29	18.9	e21.6	---	---	---	22.7	26.8	25.9	28.7	30.5	30.2	25.1
30	18.7	e21.7	---	---	---	23.2	26.9	26.4	28.8	30.5	30.9	23.7
31	18.8	---	---	---	---	23.7	---	26.8	---	30.6	30.9	---
MEAN	22.7	19.9	---	---	---	19.2	---	26.3	28.3	30.0	29.5	27.5
MAX	24.4	21.7	---	---	---	23.7	---	28.2	29.6	31.2	30.9	30.5
MIN	18.7	18.8	---	---	---	13.8	---	22.9	26.5	28.9	28.1	23.7

e Estimated

TEMPERATURE, WATER, MIDDLE (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	19.2	e21.9	---	19.3	14.3	23.8	27.0	27.0	28.9	30.3	30.4
2	22.7	19.7	e21.9	---	19.6	14.6	24.0	27.1	27.5	28.9	30.0	30.0
3	22.8	20.2	e21.5	---	19.0	15.1	24.0	27.4	28.2	29.2	30.0	29.9
4	23.1	20.5	e21.1	---	18.4	14.9	23.8	27.7	29.0	29.4	29.8	29.8
5	23.5	20.3	---	---	16.7	13.8	23.5	27.6	29.3	29.5	29.8	29.9
6	24.2	19.6	---	---	16.2	13.8	23.2	26.9	29.4	29.8	29.9	29.9
7	24.3	19.4	---	---	16.4	14.4	22.8	26.9	29.4	30.0	29.8	29.8
8	23.5	19.4	---	---	15.6	e15.4	22.5	27.3	29.2	30.0	29.2	29.8
9	23.1	19.5	---	---	15.7	e16.4	---	27.6	28.8	29.8	28.5	29.6
10	23.0	19.6	---	---	e16.5	e17.0	---	27.9	28.6	29.7	28.3	29.4
11	23.1	19.8	---	---	16.5	17.3	---	28.1	28.5	29.8	28.3	29.2
12	23.3	19.8	---	11.8	16.5	17.9	---	28.2	28.5	30.0	28.2	28.8
13	23.5	19.7	---	12.1	16.3	18.5	---	28.2	28.8	29.9	28.1	28.2
14	23.7	19.4	---	e12.2	16.1	18.9	---	27.8	29.1	29.6	28.1	27.2
15	23.6	19.0	---	e12.6	16.2	19.3	---	27.3	29.3	29.7	28.2	25.5
16	23.6	18.8	---	---	16.6	20.0	---	26.9	29.4	30.2	28.4	24.3
17	22.5	18.8	---	---	16.5	20.9	---	27.0	29.2	30.6	29.0	24.3
18	21.6	18.9	---	---	15.8	21.5	---	27.0	28.6	30.9	29.2	24.5
19	21.5	19.1	---	---	15.7	22.2	26.0	26.0	28.1	31.1	29.6	25.1
20	22.0	19.3	---	14.5	---	22.7	26.3	23.9	27.9	---	29.5	25.5
21	22.3	19.5	---	14.8	---	22.9	26.7	23.8	27.3	---	29.4	26.0
22	22.7	19.6	---	e15.1	---	22.3	26.9	23.2	26.7	---	29.5	26.4
23	23.3	19.7	---	15.6	---	21.1	26.7	23.0	26.5	---	29.8	26.7
24	23.9	20.1	---	16.3	---	20.9	26.4	23.3	26.8	e29.7	30.0	26.8
25	24.4	e20.6	---	e16.7	---	21.2	26.4	23.8	27.2	29.7	30.1	27.0
26	23.7	e21.2	---	e16.6	---	22.0	26.4	24.4	27.5	29.7	30.0	26.6
27	22.0	e21.3	---	16.7	---	22.5	26.6	24.9	27.6	29.9	29.8	26.2
28	20.0	e21.5	---	16.9	---	22.4	26.8	25.4	28.0	30.0	29.6	26.0
29	18.9	e21.6	---	e17.4	---	22.6	26.8	25.9	28.5	30.1	30.2	25.2
30	18.6	e21.9	---	e18.4	---	23.1	26.8	26.4	28.7	30.4	30.9	23.7
31	18.8	---	---	18.7	---	23.6	---	26.6	---	30.5	30.8	---
MEAN	22.6	19.9	---	---	---	19.1	---	26.3	28.3	---	29.4	27.4
MAX	24.4	21.9	---	---	---	23.6	---	28.2	29.4	---	30.9	30.4
MIN	18.6	18.8	---	---	---	13.8	---	23.0	26.5	---	28.1	23.7

e Estimated

301124081395901 ST. JOHNS RIVER AT BUCKMAN BRIDGE AT JACKSONVILLE, FL--Continued

TEMPERATURE, WATER, BOTTOM (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	19.2	e21.8	---	19.3	14.3	23.8	27.0	26.8	28.9	30.3	30.4
2	22.6	19.7	e21.9	---	19.6	14.6	24.0	27.1	27.3	28.9	30.0	30.0
3	22.7	20.2	e21.6	---	19.0	15.1	23.9	27.3	28.0	29.2	30.0	29.9
4	23.1	20.5	e21.0	---	18.4	14.9	23.8	27.7	28.8	29.4	29.8	29.8
5	23.4	20.3	---	---	16.8	13.7	23.6	27.6	29.2	29.5	29.8	29.8
6	24.1	19.6	---	---	16.2	13.8	23.2	26.9	29.3	29.7	29.9	29.8
7	24.3	19.4	---	---	16.4	14.4	22.9	26.7	29.4	29.9	29.9	29.7
8	23.5	19.4	---	---	15.6	15.1	22.6	27.0	29.2	30.0	29.2	29.8
9	23.1	19.5	---	---	15.7	16.0	---	27.5	28.8	29.8	28.8	29.6
10	23.0	19.6	---	---	16.2	17.0	---	27.8	28.6	29.7	28.4	29.4
11	23.1	19.7	---	---	16.5	17.3	---	28.0	28.5	29.8	28.3	29.2
12	23.3	19.8	---	11.8	16.5	17.9	---	28.2	28.5	30.0	28.3	28.8
13	23.5	19.7	---	12.1	16.3	18.5	---	28.2	28.7	29.9	28.1	28.2
14	23.7	19.4	---	12.2	16.1	18.8	---	27.7	29.0	29.6	28.1	27.2
15	23.6	19.0	---	12.5	16.2	19.3	---	27.3	29.2	29.7	28.2	25.5
16	23.6	18.8	---	---	16.5	20.0	---	26.9	29.4	30.1	28.4	24.3
17	22.5	18.8	---	---	16.4	20.8	---	27.0	29.2	30.5	28.9	24.3
18	21.6	18.9	---	---	15.8	21.5	---	27.0	28.6	30.9	29.2	24.5
19	21.5	19.0	---	---	15.6	22.2	25.9	26.1	28.1	31.1	29.6	25.0
20	22.0	19.3	---	14.4	---	22.6	26.2	24.1	27.9	30.9	29.4	25.5
21	22.3	19.4	---	14.8	---	22.9	26.6	24.3	27.3	30.2	29.4	26.0
22	22.7	19.5	---	15.1	---	22.2	26.8	23.5	26.7	29.8	29.5	26.4
23	23.3	19.7	---	15.6	---	21.2	26.6	23.1	26.5	29.7	29.7	26.7
24	23.8	20.1	---	16.3	---	20.7	26.4	23.3	26.8	29.6	29.9	26.8
25	24.3	e20.6	---	16.8	---	20.9	26.3	23.7	27.2	29.7	30.0	27.0
26	23.7	e21.3	---	16.7	---	21.8	26.4	24.2	27.5	29.7	30.0	26.5
27	22.0	e21.3	---	16.7	---	22.5	26.6	24.8	27.6	29.9	29.7	26.2
28	20.1	e21.5	---	16.9	---	22.4	26.7	25.3	28.0	29.9	29.5	26.0
29	18.9	e21.5	---	17.4	---	22.6	26.7	25.9	28.5	30.1	30.2	25.2
30	18.6	e21.9	---	18.0	---	23.0	26.8	26.3	28.7	30.3	30.8	23.7
31	18.8	---	---	18.7	---	23.5	---	26.5	---	30.5	30.8	---
MEAN	22.6	19.9	---	---	---	19.1	---	26.3	28.2	29.9	29.4	27.4
MAX	24.3	21.9	---	---	---	23.5	---	28.2	29.4	31.1	30.8	30.4
MIN	18.6	18.8	---	---	---	13.7	---	23.1	26.5	28.9	28.1	23.7

e Estimated

OXYGEN DISSOLVED, TOP (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	9.5	7.2	7.8	6.8	7.5	6.8	6.2
2	---	---	---	---	---	9.6	7.1	7.9	6.8	7.3	6.7	6.4
3	---	---	---	---	---	9.6	7.1	7.8	6.8	7.2	6.7	6.6
4	---	---	---	---	---	9.5	7.2	7.5	6.5	7.0	6.6	6.8
5	---	---	---	---	---	9.8	7.2	7.1	6.2	6.7	6.6	6.8
6	---	---	---	---	---	9.8	7.4	6.8	6.2	6.7	7.0	6.7
7	---	---	---	---	---	9.8	7.4	6.6	6.1	6.7	6.9	6.7
8	---	---	---	---	---	9.7	7.6	6.7	6.0	6.6	7.0	6.8
9	---	---	---	---	---	9.5	---	6.8	6.2	6.4	6.9	6.8
10	---	---	---	---	---	9.3	---	6.7	6.4	6.4	6.7	6.8
11	---	---	---	---	---	9.2	---	6.5	6.5	6.9	6.9	6.6
12	---	---	---	---	---	9.1	---	6.5	6.6	6.8	6.7	6.5
13	---	---	---	---	---	8.9	---	6.5	6.6	6.4	6.5	6.4
14	---	---	---	---	---	8.8	---	6.5	6.8	6.4	6.4	6.4
15	---	---	---	---	---	8.6	---	6.5	---	6.7	6.4	6.4
16	---	---	---	---	---	8.4	---	6.8	---	7.0	6.6	6.2
17	---	---	---	---	---	8.4	---	6.7	7.0	6.8	7.0	5.9
18	---	---	---	---	---	8.2	---	6.6	6.8	6.8	7.1	5.8
19	---	---	---	---	---	8.1	7.4	6.6	6.3	6.7	7.3	5.7
20	---	---	---	---	---	8.0	7.4	7.1	6.1	6.5	6.8	5.6
21	---	---	---	---	---	7.9	7.3	7.3	6.2	6.4	6.6	5.7
22	---	---	---	---	---	7.9	7.3	7.2	6.2	6.7	6.6	5.8
23	---	---	---	---	---	8.0	7.3	7.1	6.3	6.8	6.6	5.9
24	---	---	---	---	---	7.9	7.3	7.5	6.5	6.9	6.5	5.9
25	---	---	---	---	---	7.8	7.5	7.8	6.6	7.0	6.5	6.2
26	---	---	---	---	---	7.7	7.5	7.7	6.6	6.9	6.4	6.2
27	---	---	---	---	---	7.5	7.3	7.3	6.7	6.9	6.4	6.6
28	---	---	---	---	---	7.5	7.6	6.9	7.0	6.8	6.4	6.6
29	---	---	---	---	---	7.4	7.9	6.9	7.3	6.9	6.2	6.5
30	---	---	---	---	---	7.3	7.9	6.9	7.4	7.0	6.0	6.6
31	---	---	---	---	---	7.2	---	6.9	---	7.2	5.9	---
MEAN	---	---	---	---	---	8.6	---	7.0	---	6.8	6.6	6.3
MAX	---	---	---	---	---	9.8	---	7.9	---	7.5	7.3	6.8
MIN	---	---	---	---	---	7.2	---	6.5	---	6.4	5.9	5.6

301124081395901 ST. JOHNS RIVER AT BUCKMAN BRIDGE AT JACKSONVILLE, FL--Continued

OXYGEN DISSOLVED, MIDDLE (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	8.3	9.4	7.1	7.6	6.4	7.3	6.7	5.8
2	---	---	---	---	8.2	9.5	7.0	7.7	6.3	7.1	6.6	5.8
3	---	---	---	---	8.3	9.5	6.9	7.6	6.3	7.0	6.6	5.9
4	---	---	---	---	8.4	9.4	7.0	7.3	6.0	6.9	6.4	5.9
5	---	---	---	---	8.9	9.7	7.1	6.9	5.9	6.5	6.5	5.9
6	---	---	---	---	9.1	9.8	7.0	6.5	5.7	6.5	6.9	5.8
7	---	---	---	---	9.0	9.7	7.0	6.1	5.7	6.6	6.8	5.8
8	---	---	---	---	9.2	---	7.3	6.0	5.8	6.5	6.9	5.8
9	---	---	---	---	9.2	---	---	6.3	6.0	6.2	6.5	5.8
10	---	---	---	---	---	9.2	---	6.4	6.2	6.2	6.3	5.8
11	---	---	---	---	9.1	9.1	---	6.3	6.2	6.7	6.5	5.8
12	---	---	---	10.2	9.0	9.0	---	6.3	6.4	6.5	6.5	5.9
13	---	---	---	10.1	9.0	8.9	---	6.3	6.3	6.3	6.3	6.2
14	---	---	---	10.0	9.1	8.7	---	6.4	6.5	6.3	6.3	6.5
15	---	---	---	10.0	9.2	8.6	---	6.4	6.6	6.5	6.3	7.2
16	---	---	---	---	8.9	8.4	---	6.5	6.7	6.7	6.5	7.6
17	---	---	---	---	9.0	8.2	---	6.5	6.8	6.7	6.9	7.4
18	---	---	---	---	9.3	8.1	---	6.5	6.6	6.6	6.9	7.0
19	---	---	---	---	9.4	8.0	7.3	6.5	6.2	6.6	7.1	6.8
20	---	---	---	9.6	---	7.9	7.3	6.9	6.0	---	6.7	6.8
21	---	---	---	9.5	---	7.8	7.2	6.7	6.1	---	6.4	6.8
22	---	---	---	---	---	7.8	7.2	6.9	6.2	---	6.2	6.6
23	---	---	---	9.3	---	7.8	7.2	6.9	6.2	---	6.2	6.3
24	---	---	---	9.1	---	7.5	7.2	6.6	6.4	---	6.3	5.7
25	---	---	---	---	---	7.5	7.2	6.7	6.5	6.8	6.2	5.3
26	---	---	---	---	---	7.5	7.2	6.8	6.5	6.7	6.3	5.0
27	---	---	---	9.0	---	7.4	7.1	7.0	6.6	6.7	6.2	5.0
28	---	---	---	8.8	---	7.4	7.3	6.8	6.9	6.6	6.1	5.0
29	---	---	---	---	---	7.3	7.6	6.8	7.1	6.6	6.1	6.4
30	---	---	---	---	---	7.2	7.6	6.7	7.2	6.8	5.8	8.1
31	---	---	---	8.4	---	7.1	---	6.5	---	7.0	5.8	---
MEAN	---	---	---	---	---	---	---	6.7	6.3	---	6.4	6.2
MAX	---	---	---	---	---	---	---	7.7	7.2	---	7.1	8.1
MIN	---	---	---	---	---	---	---	6.0	5.7	---	5.8	5.0

OXYGEN DISSOLVED, BOTTOM (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	8.1	9.3	6.9	7.3	5.8	7.0	6.6	5.6
2	---	---	---	---	8.0	9.4	6.8	7.4	5.7	6.8	6.5	5.6
3	---	---	---	---	8.1	9.4	6.7	7.3	5.8	6.8	6.4	5.7
4	---	---	---	---	8.2	9.4	6.8	7.0	5.7	6.6	6.1	5.7
5	---	---	---	---	8.7	9.6	6.9	6.7	5.6	6.3	6.2	5.5
6	---	---	---	---	8.8	9.7	6.6	6.1	5.5	6.3	6.6	5.5
7	---	---	---	---	8.6	9.6	6.4	5.2	5.4	6.4	6.7	5.4
8	---	---	---	---	9.1	9.5	6.6	5.2	5.5	6.3	6.4	5.5
9	---	---	---	---	9.1	9.3	---	5.6	5.8	6.1	5.7	5.5
10	---	---	---	---	9.0	9.1	---	6.1	5.8	6.1	5.7	5.5
11	---	---	---	---	8.9	9.0	---	6.1	5.7	6.5	6.2	5.5
12	---	---	---	10.2	8.9	8.9	---	6.1	6.0	6.4	6.3	5.7
13	---	---	---	10.0	8.8	8.7	---	6.2	6.0	6.1	6.2	6.0
14	---	---	---	9.9	8.9	8.6	---	6.2	6.1	6.2	6.1	6.4
15	---	---	---	9.9	9.0	8.5	---	6.2	6.3	6.3	6.2	6.9
16	---	---	---	---	8.6	8.2	---	6.3	6.5	6.5	6.4	7.3
17	---	---	---	---	8.7	8.0	---	6.1	6.5	6.5	6.7	7.1
18	---	---	---	---	9.1	7.9	---	6.1	6.3	6.5	6.7	6.8
19	---	---	---	---	9.2	7.8	7.1	6.3	6.0	6.4	6.8	6.6
20	---	---	---	9.4	---	7.8	7.1	6.5	5.8	6.3	6.5	6.7
21	---	---	---	9.3	---	7.7	7.0	5.8	6.0	6.2	6.2	6.7
22	---	---	---	9.2	---	7.7	7.0	6.3	6.1	6.4	6.0	6.5
23	---	---	---	9.1	---	7.5	7.0	6.5	6.0	6.6	5.7	6.1
24	---	---	---	9.0	---	7.1	6.9	6.2	6.2	6.6	5.8	5.6
25	---	---	---	8.9	---	7.1	6.5	6.2	6.4	6.7	5.7	5.0
26	---	---	---	8.9	---	7.2	6.9	6.4	6.4	6.6	5.8	4.8
27	---	---	---	8.8	---	7.3	6.8	6.6	6.4	6.5	5.7	4.8
28	---	---	---	8.7	---	7.2	6.9	6.5	6.7	6.4	5.7	4.8
29	---	---	---	8.5	---	7.1	7.2	6.5	6.9	6.4	5.9	6.2
30	---	---	---	8.4	---	7.0	7.3	6.4	7.0	6.6	5.5	8.0
31	---	---	---	8.2	---	6.9	---	6.1	---	6.8	5.5	---
MEAN	---	---	---	---	---	8.3	---	6.3	6.1	6.5	6.1	6.0
MAX	---	---	---	---	---	9.7	---	7.4	7.0	7.0	6.8	8.0
MIN	---	---	---	---	---	6.9	---	5.2	5.4	6.1	5.5	4.8

02246300 ORTEGA RIVER AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'50", long 81°47'49", in NW¼ sec.15, T.3 S., R.25 E., Duval County, Hydrologic Unit 03080103, near center of span on downstream side of bridge on 103rd Street in Jacksonville, 15 mi upstream from mouth.

DRAINAGE AREA.--30.9 mi^2.

PERIOD OF RECORD.--Water years 1928, 1956, 1958-60 (low-flow measurements only); January 1965 to July 1983, July 1984 to current year. Prior to October 1971, published as "near Jacksonville".

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

GAGE.--Water-stage recorder. Datum of gage is 0.02 ft above NGVD of 1929. Prior to Jan. 21, 1965, nonrecording gage at same site and datum.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e30	e6.2	e5.0	9.2	24	12	e8.0	2.7	0.40	17	46	31
2	e23	e6.5	e5.0	11	24	16	e13	1.6	0.21	14	48	30
3	e20	e6.7	e5.0	13	22	55	21	1.3	0.10	11	72	31
4	e19	e7.0	e5.0	13	20	169	23	1.3	0.04	9.2	90	24
5	e17	e6.5	e6.8	12	18	159	19	1.2	0.09	9.1	60	19
6	e16	e6.8	6.4	12	17	119	15	1.3	0.30	11	34	16
7	e16	e6.6	5.9	12	16	78	14	1.1	5.2	8.3	25	14
8	e15	e6.0	5.9	11	18	48	11	0.99	13	7.5	21	11
9	e15	e6.0	7.6	10	19	33	10	1.0	5.7	12	17	10
10	e14	e6.0	49	12	18	28	9.4	0.90	2.2	22	15	9.2
11	e14	e5.6	92	12	18	24	11	0.89	1.9	18	13	7.6
12	e14	e5.5	59	10	17	22	12	0.51	1.4	13	11	13
13	e13	e6.0	36	11	16	24	14	0.16	1.1	13	16	47
14	e14	e30	28	27	15	24	15	0.32	1.5	12	21	105
15	e13	e33	25	115	15	23	16	0.32	0.54	9.6	22	229
16	11	e21	22	124	15	21	13	0.23	0.34	8.0	29	408
17	9.8	e19	19	91	14	19	12	0.26	1.4	6.2	26	336
18	9.3	e17	19	61	13	17	11	0.28	3.9	6.6	22	188
19	8.7	e15	19	40	13	18	9.4	0.58	3.0	10	30	114
20	8.5	e13	16	30	12	16	7.6	0.55	6.7	16	36	70
21	8.4	e12	14	32	11	17	6.3	0.37	23	19	37	41
22	8.3	e10	13	54	11	17	5.3	0.26	54	19	28	31
23	8.3	e9.5	12	70	12	15	4.6	0.21	54	30	19	22
24	8.0	e9.0	12	57	17	13	4.3	0.19	30	29	15	57
25	7.8	e8.0	13	43	18	12	4.0	0.20	19	98	12	277
26	6.9	e8.0	13	43	16	12	3.5	0.19	38	167	9.3	249
27	6.2	e7.0	11	40	14	e9.5	3.5	0.19	48	199	7.8	e200
28	5.9	e6.0	11	33	13	e8.5	3.4	0.20	27	235	9.7	e132
29	5.5	e6.0	10	31	---	e8.0	2.9	0.19	21	169	16	70
30	e5.6	e5.2	10	29	---	e8.0	2.9	0.22	21	e114	19	43
31	e6.0	---	9.6	27	---	e8.0	---	0.34	---	e67	24	---
TOTAL	377.2	310.1	565.2	1095.2	456	1053.0	305.1	20.05	384.02	1379.5	850.8	2834.8
MEAN	12.2	10.3	18.2	35.3	16.3	34.0	10.2	0.65	12.8	44.5	27.4	94.5
MAX	30	33	92	124	24	169	23	2.7	54	235	90	408
MIN	5.5	5.2	5.0	9.2	11	8.0	2.9	0.16	0.04	6.2	7.8	7.6
CFSM	0.39	0.33	0.59	1.14	0.53	1.10	0.33	0.02	0.41	1.44	0.89	3.06
IN.	0.45	0.37	0.68	1.32	0.55	1.27	0.37	0.02	0.46	1.66	1.02	3.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

MEAN	52.1	18.7	23.5	35.3	57.9	46.8	26.6	16.8	34.4	36.5	49.3	73.9
MAX	382	123	157	101	366	151	170	122	167	198	220	378
(WY)	1997	1970	1998	1994	1998	1970	1973	1979	1991	1991	1968	2001
MIN	1.52	1.45	2.36	2.31	6.35	7.97	1.96	0.65	0.89	0.98	3.41	1.22
(WY)	1981	1991	1981	1981	1981	1985	1977	2002	2000	1977	2000	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002	
ANNUAL TOTAL	16510.65		9630.97			
ANNUAL MEAN	45.2		26.4		39.0	
HIGHEST ANNUAL MEAN					69.8	1995
LOWEST ANNUAL MEAN					9.85	1981
HIGHEST DAILY MEAN	1800	Sep 15	408	Sep 16	3570	Oct 8 1996
LOWEST DAILY MEAN	0.33	May 27	0.04	Jun 4	0.00	Jun 8-11 1985
ANNUAL SEVEN-DAY MINIMUM	0.46	May 21	0.20	May 23	0.02	Jun 5 1985
MAXIMUM PEAK FLOW			442	Sep 16	4640	Oct 7 1996
MAXIMUM PEAK STAGE			36.03	Sep 16	40.37	Oct 7 1996
ANNUAL RUNOFF (CFSM)	1.46		0.85		1.26	
ANNUAL RUNOFF (INCHES)	19.88		11.59		17.16	
10 PERCENT EXCEEDS	51		54		89	
50 PERCENT EXCEEDS	13		13		12	
90 PERCENT EXCEEDS	5.5		1.3		2.2	

e Estimated

02246318 ORTEGA RIVER AT KIRWIN ROAD NEAR JACKSONVILLE, FL

LOCATION.--Lat 30°11'46", long 81°46'07", in SE¼ sec.35, T.3 S., R.25 E., Duval County, Hydrologic Unit 03080103, near left bank on upstream side of bridge on Kirwin Road (abandoned), 75 ft upstream from Argyle Forest Boulevard, 1.8 mi west of intersection of Interstate Highway 295 and State Highway 21, 11 mi upstream from mouth, and 11.5 mi southwest of Jacksonville.

DRAINAGE AREA.--45.5 mi^2.

PERIOD OF RECORD.--February 1982 to May 1985 (miscellaneous discharge measurements), March to September 2002.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by De Grove Surveyors, Inc., from St. Johns River Water Management District bench mark).

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD MARCH TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	19	8.5	8.6	43	94	69
2	---	---	---	---	---	---	18	8.1	6.0	33	112	68
3	---	---	---	---	---	---	30	7.5	4.2	26	98	67
4	---	---	---	---	---	---	50	7.1	3.5	26	123	62
5	---	---	---	---	---	---	40	7.0	3.3	21	136	54
6	---	---	---	---	---	---	30	7.1	3.9	20	90	44
7	---	---	---	---	---	---	25	6.7	14	18	67	37
8	---	---	---	---	---	---	22	6.4	30	16	55	30
9	---	---	---	---	---	---	19	6.1	23	32	45	30
10	---	---	---	---	---	---	30	6.3	17	52	40	26
11	---	---	---	---	---	---	49	5.8	19	43	34	22
12	---	---	---	---	---	---	35	5.3	14	30	30	29
13	---	---	---	---	---	---	40	5.2	18	22	32	126
14	---	---	---	---	---	---	44	5.8	25	24	67	126
15	---	---	---	---	---	---	97	5.5	12	25	61	274
16	---	---	---	---	---	---	50	5.3	8.3	17	75	414
17	---	---	---	---	---	---	38	5.3	6.7	13	67	399
18	---	---	---	---	---	---	31	6.6	12	12	55	278
19	---	---	---	---	---	---	27	8.7	11	18	61	177
20	---	---	---	---	---	---	23	8.3	16	62	68	128
21	---	---	---	---	---	40	19	6.6	32	74	75	94
22	---	---	---	---	---	47	17	5.5	74	52	67	72
23	---	---	---	---	---	37	15	5.0	88	87	52	58
24	---	---	---	---	---	31	13	4.7	72	70	39	71
25	---	---	---	---	---	28	13	4.6	54	78	32	273
26	---	---	---	---	---	26	11	4.4	57	186	27	318
27	---	---	---	---	---	31	11	4.3	101	403	23	247
28	---	---	---	---	---	26	10	4.4	78	295	23	173
29	---	---	---	---	---	23	9.7	4.8	56	325	36	125
30	---	---	---	---	---	21	9.0	4.2	55	187	51	95
31	---	---	---	---	---	20	---	3.8	---	127	59	---
TOTAL	---	---	---	---	---	330	844.7	184.9	922.5	2437	1894	3986
MEAN	---	---	---	---	---	30.0	28.2	5.96	30.8	78.6	61.1	133
MAX	---	---	---	---	---	47	97	8.7	101	403	136	414
MIN	---	---	---	---	---	20	9.0	3.8	3.3	12	23	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	28.2	5.96	30.8	78.6	61.1	133
MAX	---	---	---	---	---	---	28.2	5.96	30.8	78.6	61.1	133
(WY)	---	---	---	---	---	---	2002	2002	2002	2002	2002	2002
MIN	---	---	---	---	---	---	28.2	5.96	30.8	78.6	61.1	133
(WY)	---	---	---	---	---	---	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS	#FOR 2002 WATER YEAR	
HIGHEST DAILY MEAN	414	Sep 16
LOWEST DAILY MEAN	3.3	Jun 5
ANNUAL SEVEN-DAY MINIMUM	4.4	May 25
MAXIMUM PEAK FLOW	539	Jul 27
MAXIMUM PEAK STAGE	10.76	Jul 27
INSTANTANEOUS LOW FLOW	3.0	Jun 5,6

Includes partial year of record

02246435 FISHING CREEK AT WESCONNET BLVD. AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'10", long 81°44'22", in SE¼ sec.18, T.3 S., R.26 E., Duval County, Hydrologic Unit 03080103, at upstream side of culvert on Wesconnet Boulevard, 2.7 miles upstream from mouth.

DRAINAGE AREA.--0.76 mi², revised.

GAGE.--Non-recording gage. Datum of gage is undetermined.

PERIOD OF RECORD.--February 2000 to September 2002 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV													
06...	0900	.14	257	--	6.4	--	15.8	3.7	.07	<.010	E.80	<.02	E.13
FEB													
26...	0845	.29	281	286	7.6	7.4	14.1	5.5	.02	<.010	.90	<.02	.07
SEP													
25...	0815	12	131	--	7.0	--	24.0	5.0	.02	<.010	1.5	.11	.09

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 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)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV													
06...	.10	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
26...	.04	110	33.0	6.10	13.0	3.50	76	23.0	25.0	<.1	6.50	356	11
SEP													
25...	.05	--	--	--	--	--	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02246437 FISHING CREEK AT 110th STREET AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'27", long 81°43'54", in NE¼ sec.18, T.3 S., R.26 E., Duval County, Hydrologic Unit 03080103, at downstream side of bridge on 110th Street, 1.9 miles upstream from mouth.

DRAINAGE AREA.--1.27 mi^2, revised.

GAGE.--Non-recording gage. Datum of gage is undetermined.

PERIOD OF RECORD.--February 2000 to September 2002 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV													
06...	1030	.33	262	--	7.0	--	16.1	4.5	.05	<.010	E.70	.03	E.09
FEB													
26...	0945	.90	397	396	7.5	7.5	14.1	6.6	.13	.020	1.0	.18	.10
AUG													
12...	1000	.28	280	291	7.4	7.4	23.8	4.7	.06	.010	1.0	.14	.13
SEP													
25...	0915	15	152	--	7.0	--	24.2	5.8	.04	.010	1.6	.13	.10

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 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)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV													
06...	.03	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
26...	.02	150	49.0	6.00	19.0	3.20	123	26.0	32.0	.1	10.0	324	23
AUG													
12...	.04	120	38.0	5.70	12.0	3.50	105	11.0	20.0	.2	14.0	360	21
SEP													
25...	.06	--	--	--	--	--	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02246465 SOUTH BRANCH BIG FISHWEIR CREEK AT CASSAT AVE. AT JACKSONVILLE, FL

LOCATION.--Lat 30°17'35", long 81°43'51", in SW¼ sec.29, T.2 S., R.26 E., Duval County, Hydrologic Unit 03080103, at upstream side of culvert on Cassat Avenue, 0.7 miles upstream from North Branch Big Fishweir Creek, 1.8 miles upstream from mouth.

DRAINAGE AREA.--0.43 mi^2, revised.

GAGE.--Non-recording gage. Datum of gage is undetermined.

PERIOD OF RECORD.--February 2000 to September 2002 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV													
07...	1015	.07	559	--	6.8	--	15.3	3.7	.06	<.010	E.40	.05	E.16
FEB													
26...	1030	.20	603	610	7.2	7.6	15.5	6.5	.04	<.010	.60	.08	.15
MAY													
07...	0930	.08	584	--	6.9	--	21.7	2.1	.14	<.010	.60	.04	.16
AUG													
12...	1200	.11	604	598	7.1	7.6	24.8	4.9	.06	.010	.80	.11	.22

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 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)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV													
07...	E.02	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
26...	.04	240	79.0	10.0	31.0	2.80	185	71.0	42.0	.2	17.0	117	52
MAY													
07...	.08	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
12...	.05	250	84.0	9.40	27.0	3.30	204	56.0	37.0	.2	22.0	28	56

< -- Less than
E -- Estimated value

02246467 SOUTH BRANCH BIG FISHWEIR CREEK AT BLANDING BLVD. AT JACKSONVILLE, FL

LOCATION.--Lat 30°17'35", long 81°43'27", in SE¼ sec.29, T.2 S., R.26 E., Duval County, Hydrologic Unit 03080103, at upstream side of culvert on Blanding Blvd., 0.2 miles upstream from North Branch Big Fishweir Creek, 1.8 miles upstream from mouth.

DRAINAGE AREA.--0.67 mi^2, revised.

GAGE.--Non-recording gage. Datum of gage is undetermined.

PERIOD OF RECORD.--February 2000 to September 2002 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV													
07...	0915	.20	559	--	6.8	--	15.5	3.7	.13	.020	E.70	E1.00	E.17
FEB													
26...	1100	.76	574	580	7.5	7.6	15.1	6.0	.15	.030	.60	.70	.13
MAY													
07...	1045	.12	587	--	7.0	--	21.8	3.5	.15	.040	.90	.77	.16

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 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)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV													
07...	.12	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
26...	.06	230	75.0	10.0	27.0	3.00	182	67.0	35.0	.2	13.0	49	53
MAY													
07...	.16	--	--	--	--	--	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL

LOCATION.--Lat 30°19'20", long 81°39'56", in land grant 44, T.2 S., R.26 E., Duval County, Hydrologic Unit 03080103, near center of channel under the Acosta Bridge at Jacksonville, 2.6 mi upstream from Arlington River, and 23.0 mi upstream from mouth.

DRAINAGE AREA.--8,850 mi^2, includes Paynes Prairie, a diked sinkhole area of about 650 mi^2, which is noncontributing except for pumpage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1954 to September 1970 (volume of flow), October 1970 to September 1971 (gage heights only) October 1971 to September 1974, October 1974 to September 1980 (gage heights only), October 1980 to September 1981, October 1981 to June 1987 (gage heights only), July 1987 to September 1993, October 1993 to July 1996 (gage heights only), August 1996 to current year.

REVISED RECORDS.--WDR FL-92-1A: Drainage area.

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is 9.99 ft below NGVD of 1929. Apr. 13, 1966 to Sept. 30, 1971, at site 0.6 mi downstream at same datum. October 1971 to September 1986, water-stage and deflection meter recorder at site 200 ft upstream at same datum. October 1986 to July 1996, water-stage recorder 0.3 mi downstream at same datum. July 24, 1984 to Mar. 13, 1996, auxiliary water-stage recorder about 5.4 mi downstream.

REMARKS.--Records fair. Discharge not published for some days, due to missing gage height record. Discharge represents the net of much larger upstream and downstream discharges. The stage record published is the maximum and minimum tide event for each calendar day.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	10200	16300	7040	7230	11700	11100	-7730	-9900	-2470
2	---	---	---	-11700	3390	16400	3170	18600	7700	-1530	-10300	-3280
3	---	---	---	18000	-5000	30700	11400	14900	-5600	1880	-6370	-9110
4	5590	---	---	18500	7350	21700	-8460	-14000	-17300	4090	6220	-1590
5	---	---	15600	10100	-20700	7090	-33400	-35800	-5700	4260	970	26900
6	---	---	17200	37600	1310	486	-8630	-14500	2830	-3400	-4890	22900
7	---	---	15100	18200	20500	-1470	207	1070	5490	-6920	-23300	4090
8	---	---	6190	458	675	2130	10200	1670	-25900	2040	-7610	8280
9	4600	---	8970	9400	-7550	7210	17800	6070	-15300	14500	10300	17800
10	---	---	-11300	14500	7540	9770	10400	3750	-8270	22000	16400	26700
11	---	---	10000	12100	14000	-7980	-7040	-1800	7420	24000	23300	32700
12	---	---	8760	694	9830	-78	2310	-4160	12000	-3420	26800	20000
13	---	---	12500	1300	8570	16100	9060	18100	14900	10700	30800	11000
14	---	---	24000	355	-9270	18300	8900	-978	21300	22600	24600	26000
15	---	---	20900	14800	-5540	16700	14500	-7230	11100	16800	19200	32300
16	---	---	5550	14600	16300	18000	12600	3410	5510	-105	20100	26200
17	---	---	20400	11700	18400	18000	10400	14200	2280	-3180	20300	16700
18	---	---	28200	20400	-10900	8580	13300	16200	-4760	-6090	19500	3670
19	---	---	13900	18100	17200	840	11200	-58400	-9050	3800	16000	6410
20	---	---	9110	8200	14600	4820	7490	-35700	-6550	9790	16500	8250
21	---	---	639	3020	10600	7190	-11100	-20500	-14800	5740	18400	7520
22	---	---	310	-3470	-6680	-30900	-7290	-55100	18600	6530	14900	4270
23	---	---	4590	748	-27100	-10100	-25600	-17200	23600	16700	14800	9370
24	---	---	16000	8590	-15600	461	-16000	8100	27300	16700	23800	11200
25	17900	---	-7050	3890	4780	1630	2990	13900	24000	21000	12500	19700
26	2340	---	11100	-26000	11200	741	-11200	9770	31100	21600	14300	34700
27	-854	---	15400	4550	18300	1980	-5910	3530	33000	17000	19800	44000
28	---	---	2730	11300	9510	-6730	21800	-1740	27500	19900	15300	16100
29	---	---	5490	15300	---	-450	21900	-11600	14500	18400	14100	4430
30	---	---	5830	15500	---	11000	2390	-638	8980	15400	9830	-24500
31	---	---	7560	13700	---	11700	---	8830	---	8240	-2240	---
TOTAL	29576	---	267679	274635	102015	180860	64617	-125546	196980	271295	344110	400240
MEAN	5915	---	9914	8859	3643	5834	2154	-4050	6566	8751	11100	13340
MAX	17900	---	28200	37600	20500	30700	21900	18600	33000	24000	30800	44000
MIN	-854	---	-11300	-26000	-27100	-30900	-33400	-58400	-25900	-7730	-23300	-24500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

MEAN	10930	8457	8499	7366	7452	5835	6787	4337	8505	8503	8872	9257
MAX	20260	18700	19680	19960	24320	23660	16550	19210	22490	28730	25520	17800
(WY)	1992	1992	1998	1992	1998	1998	1992	1993	1993	1993	1974	1992
MIN	1667	266	-3475	-4023	-1814	-4920	-1826	-10430	-8294	1030	874	-1208
(WY)	1973	1974	1993	1974	1974	1974	1974	1973	1973	1997	2000	1981

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL	1851048		2006461			
ANNUAL MEAN	6069		6579		7879	
HIGHEST ANNUAL MEAN					15640	1992
LOWEST ANNUAL MEAN					4086	1973
HIGHEST DAILY MEAN	58200	Sep 17	44000	Sep 27	73500	Feb 18 1998
LOWEST DAILY MEAN	-55300	Mar 19	-58400	May 19	-63400	Oct 16 1999
ANNUAL SEVEN-DAY MINIMUM	-9780	Mar 5	-23600	May 19	-23600	May 19 2002
MAXIMUM PEAK STAGE					15.20	Sep 10 1964
10 PERCENT EXCEEDS	20400		21600		25400	
50 PERCENT EXCEEDS	6190		8250		8350	
90 PERCENT EXCEEDS	-10400		-9980		-9550	

Note.--Negative figures indicate reverse flow.

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	11.57	9.49	11.42	9.39	11.56	9.47
2	---	---	12.25	---	---	---	11.82	9.60	11.33	9.26	12.02	9.94
3	12.75	---	12.18	---	---	---	11.76	9.88	11.64	9.98	11.68	9.57
4	12.74	11.19	12.18	---	---	---	11.53	9.64	11.55	9.58	11.50	9.22
5	12.60	---	12.40	---	12.18	10.41	11.54	9.82	11.46	9.93	11.10	9.32
6	12.41	---	---	---	12.02	10.28	11.59	9.06	11.67	10.30	11.19	9.62
7	12.25	---	---	---	11.86	10.18	10.75	8.71	11.61	9.97	11.31	9.80
8	12.61	---	---	---	11.96	10.23	10.83	9.13	11.16	9.37	11.43	10.02
9	12.87	11.51	11.91	---	11.91	10.23	10.96	8.97	11.44	9.52	11.45	9.84
10	12.83	---	---	---	12.22	10.16	10.84	8.89	11.56	9.87	11.25	9.59
11	---	---	---	---	12.28	10.55	10.80	8.72	11.21	9.60	11.48	9.55
12	12.60	---	12.08	---	12.14	10.32	10.90	8.64	11.25	9.50	11.68	9.97
13	---	---	12.48	---	12.15	10.21	10.96	8.65	11.29	9.53	11.61	9.89
14	---	10.74	12.67	---	12.14	10.22	11.14	9.07	11.26	9.58	11.37	9.69
15	---	---	12.68	10.97	11.80	9.92	11.22	9.41	11.69	10.20	11.30	9.51
16	12.72	---	12.79	---	11.94	9.95	11.11	9.37	11.66	10.05	11.18	9.41
17	---	---	---	---	12.04	10.22	11.15	9.46	11.42	9.61	11.20	9.34
18	---	---	---	---	11.48	9.75	11.08	9.37	11.37	9.94	11.19	9.46
19	---	---	---	---	11.67	9.99	11.08	9.39	11.43	9.93	11.24	9.67
20	---	---	---	---	11.41	9.80	10.84	9.33	11.33	9.70	11.44	9.87
21	12.46	---	---	---	11.62	10.11	11.01	9.42	11.11	9.52	11.40	9.62
22	---	---	---	---	11.78	10.31	11.00	9.59	11.10	9.64	11.56	9.91
23	---	---	---	---	11.76	10.29	11.20	9.51	11.42	10.03	11.72	10.11
24	---	---	---	---	11.63	9.80	11.17	9.70	11.85	10.03	11.68	10.27
25	12.04	10.58	---	---	11.58	10.19	11.09	9.32	11.85	10.28	11.63	9.99
26	11.90	10.42	---	---	11.69	10.03	11.50	9.31	11.81	9.99	11.57	9.77
27	12.12	---	---	---	11.50	9.69	11.68	9.74	11.39	9.31	11.60	9.62
28	12.30	10.61	---	---	11.48	9.54	11.55	9.52	11.54	9.25	11.91	9.63
29	12.33	---	---	---	11.65	9.63	11.43	9.32	---	---	12.10	10.11
30	---	---	---	---	11.53	9.50	11.40	9.22	---	---	11.97	10.10
31	---	---	---	---	11.66	9.57	11.43	9.32	---	---	12.03	10.10
MAX	---	---	---	---	---	---	11.82	9.88	11.85	10.30	12.10	10.27
MIN	---	---	---	---	---	---	10.75	8.64	11.10	9.25	11.10	9.22

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.86	10.00	11.68	9.90	11.82	10.43	11.30	9.67	11.71	10.05	12.26	10.75
2	11.82	10.23	11.53	9.58	11.70	10.21	11.40	9.89	12.07	10.46	12.40	10.82
3	11.83	10.08	11.12	9.29	11.56	10.22	11.45	9.94	12.26	10.71	12.61	10.97
4	11.51	9.98	11.01	9.44	11.89	10.52	11.71	9.84	12.22	10.62	12.69	10.84
5	11.87	10.62	11.34	9.95	11.85	10.53	11.54	9.78	12.27	10.54	12.58	10.82
6	12.02	10.65	11.59	10.29	11.77	10.30	11.61	9.77	12.52	10.66	12.51	10.59
7	11.92	10.58	11.56	10.13	11.67	10.06	11.76	9.95	12.86	10.93	12.73	10.73
8	11.93	10.50	11.32	9.81	11.99	10.31	11.80	10.06	12.92	11.06	12.83	10.87
9	11.68	10.15	11.23	9.49	12.15	10.54	11.70	10.00	12.87	11.13	12.76	10.97
10	11.28	9.55	11.24	9.43	12.16	10.62	11.62	9.67	12.75	11.01	12.81	10.94
11	11.49	9.68	11.30	9.49	12.13	10.48	11.49	9.39	12.61	10.87	12.58	10.75
12	11.57	10.03	11.46	9.66	12.12	10.37	11.40	9.61	12.58	10.79	12.37	10.55
13	11.57	9.85	11.20	9.39	11.88	10.34	11.94	10.08	12.43	10.72	12.56	10.79
14	11.55	9.96	10.71	9.25	12.06	10.20	11.89	9.73	12.32	10.58	12.30	10.73
15	11.35	9.75	11.24	9.64	11.84	10.14	11.60	9.62	12.25	10.44	12.16	10.53
16	11.42	9.73	11.36	9.76	11.83	10.26	11.47	9.65	12.09	10.39	11.95	10.32
17	11.41	9.78	11.33	9.74	11.95	10.29	11.63	9.80	11.95	10.23	12.05	10.20
18	11.41	9.81	11.34	9.36	11.90	10.34	11.75	9.92	11.85	10.04	12.26	10.47
19	11.43	9.78	11.30	9.81	12.02	10.24	12.05	9.91	11.94	9.94	12.44	10.69
20	11.39	9.67	11.80	10.39	12.01	10.25	11.58	9.72	11.97	10.22	12.56	10.87
21	11.36	9.82	11.92	10.38	12.28	10.35	11.72	9.70	11.90	10.08	12.61	10.96
22	11.44	9.80	12.09	10.34	12.35	10.73	11.96	9.94	11.94	10.08	12.68	11.05
23	11.65	9.76	12.35	10.69	12.06	10.25	11.75	9.87	12.01	10.21	12.66	11.12
24	11.92	10.16	12.21	10.41	11.88	10.01	11.67	9.82	11.89	10.09	12.81	11.11
25	11.88	10.00	11.98	10.02	11.72	9.91	11.63	9.68	11.72	10.08	12.96	11.44
26	11.99	9.89	11.83	9.89	11.66	9.91	11.46	9.86	11.94	10.37	12.97	11.38
27	12.09	10.19	11.90	9.96	11.34	9.70	11.57	9.87	12.01	10.40	12.56	11.00
28	11.88	9.89	11.67	10.00	11.09	9.48	11.56	9.85	11.94	10.36	12.28	10.77
29	11.37	9.50	12.00	10.46	11.13	9.49	11.53	9.85	11.94	10.37	12.37	10.84
30	11.52	9.76	12.14	10.57	11.15	9.56	11.44	9.76	11.94	10.35	12.83	11.31
31	---	---	12.03	10.51	---	---	11.37	9.73	12.10	10.54	---	---
MAX	12.09	10.65	12.35	10.69	12.35	10.73	12.05	10.08	12.92	11.13	12.97	11.44
MIN	11.28	9.50	10.71	9.25	11.09	9.48	11.30	9.39	11.71	9.94	11.95	10.20

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (TOP, MIDDLE, BOTTOM): May 1995 to current year.
WATER TEMPERATURE (TOP, MIDDLE, BOTTOM): May 1995 to current year.
DISSOLVED OXYGEN (TOP, MIDDLE, BOTTOM): March 1996 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 51,100 µS/cm @ 25 °C, May 23, 2002; minimum daily mean, 308 µS/cm @ 25 °C, Mar. 10, 1998.
SPECIFIC CONDUCTANCE (MIDDLE): Maximum daily mean, 51,100 µS/cm @ 25 °C, May 23, 2002; minimum daily mean, 309 µS/cm @ 25 °C, Mar. 10, 1998.
SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 51,100 µS/cm @ 25 °C, May 23, 2002; minimum daily mean, 309 µS/cm @ 25 °C, Mar. 10, 1998.
WATER TEMPERATURE (TOP): Maximum daily mean, 32.3 °C, Aug. 1, 1999; minimum daily mean, 8.8 °C, Jan. 4,5, 2001.
WATER TEMPERATURE (MIDDLE): Maximum daily mean, 32.3 °C, Aug. 1, 1999; minimum daily mean, 9.1 °C, Jan. 10, 1996.
WATER TEMPERATURE (BOTTOM): Maximum daily mean, 32.3 °C, Aug. 1, 1999; minimum daily mean, 8.6 °C, Jan. 5, 2001.
DISSOLVED OXYGEN (TOP): Maximum daily mean, 13.5 mg/L, Mar. 7,8,9, 2002; minimum daily mean, 3.7 mg/L, July 16, 1998.
DISSOLVED OXYGEN (MIDDLE): Maximum daily mean, 13.5 mg/L, Mar. 9, 2002; minimum daily mean, 3.0 mg/L, July 14, 1998.
DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 13.4 mg/L, Mar. 7,8,9,10, 2002; minimum daily mean, 4.1 mg/L, Sept. 27,28, 2001.

EXTREMES FOR CURRENT YEAR--
SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 51,100 µS/cm @ 25 °C, May 23; minimum daily mean, 1,250 µS/cm @ 25 °C, Oct. 3, Aug. 25.
SPECIFIC CONDUCTANCE (MIDDLE): Maximum daily mean, 51,100 µS/cm @ 25 °C, May 23; minimum daily mean, 1,250 µS/cm @ 25 °C, Aug. 25.
SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 51,100 µS/cm @ 25 °C, May 23; minimum daily mean, 1,030 µS/cm @ 25 °C, Oct. 25.
WATER TEMPERATURE (TOP): Maximum daily mean, 31.0 °C, July 19,20; minimum daily mean, 13.8 °C, Mar. 5,6.
WATER TEMPERATURE (MIDDLE): Maximum daily mean, 31.0 °C, July 19,20; minimum daily mean, 13.8 °C, Mar. 5,6.
WATER TEMPERATURE (BOTTOM): Maximum daily mean, 31.0 °C, July 19,20; minimum daily mean, 13.7 °C, Mar. 5.
DISSOLVED OXYGEN (TOP): Maximum daily mean, 13.5 mg/L, Mar. 7,8,9; minimum daily mean, 5.3 mg/L, Aug. 7.
DISSOLVED OXYGEN (MIDDLE): Maximum daily mean, 13.5 mg/L, Mar. 9; minimum daily mean, 5.2 mg/L, Aug. 7.
DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 13.4 mg/L, Mar. 7,8,9,10; minimum daily mean, 5.1 mg/L, Aug. 8.

SPECIFIC CONDUCTANCE, TOP (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4950	4900	---	---	---	16600	20400	22900	37000	---	4530	4550
2	2130	3180	---	---	---	17600	21600	20200	34100	---	9230	5850
3	1250	2300	---	---	---	13400	20200	17000	33100	---	11500	8440
4	---	---	7530	---	---	10400	18600	17100	35200	---	10300	10300
5	---	7100	8570	---	---	8930	27400	23800	35000	---	10100	6420
6	---	11900	---	---	19800	8600	28700	29300	---	---	---	2840
7	---	5600	---	---	---	8840	27900	25100	---	---	16600	2490
8	---	3360	3350	---	---	9440	23700	22200	---	---	22300	3800
9	5160	2190	---	---	---	8300	19400	20500	---	---	20300	4180
10	---	2160	---	---	15200	6890	16800	19600	---	12900	17100	2940
11	---	2400	---	---	12400	8150	17400	19800	---	11100	14300	---
12	---	3460	---	---	---	9930	19200	21500	---	10700	11600	---
13	---	12000	---	---	12300	9430	18300	20800	---	12400	9140	---
14	---	16000	---	---	---	7410	18000	20300	---	11400	6550	---
15	---	22500	---	---	---	5980	16300	24300	---	9820	4620	---
16	---	23900	---	---	---	4910	15300	26400	---	9400	---	---
17	4840	15300	---	---	---	3860	15000	24900	---	10400	---	---
18	6290	9940	---	---	18800	3640	14700	22000	---	11500	---	---
19	7830	6440	---	---	---	4950	14000	30100	---	10900	---	---
20	5730	3630	---	---	13800	8030	13100	44300	---	9280	---	---
21	2950	2580	---	---	11400	8320	14500	46100	---	7940	---	---
22	---	2510	---	---	12000	18200	16600	48800	---	7640	---	---
23	---	1650	6460	---	---	23700	20500	51100	---	6810	1390	4230
24	---	---	---	---	---	19500	25600	47300	---	5950	1370	---
25	---	---	---	---	20900	16600	22700	39200	---	5220	1250	---
26	---	---	---	---	18400	16000	24100	36300	---	4430	1390	---
27	---	---	---	---	16700	16400	29300	36300	---	3820	1520	---
28	6370	---	3190	---	15800	19000	26100	36900	---	3290	1530	---
29	11200	---	---	---	---	22600	22400	40900	---	2760	1540	---
30	10100	---	---	---	---	21500	22000	41600	---	2350	1680	---
31	7520	---	---	---	---	20400	---	39700	---	2360	2850	---
MEAN	---	---	---	---	---	12200	20300	30200	---	---	---	---
MAX	---	---	---	---	---	23700	29300	51100	---	---	---	---
MIN	---	---	---	---	---	3640	13100	17000	---	---	---	---

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

SPECIFIC CONDUCTANCE, MIDDLE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5130	5000	---	---	---	16700	20600	---	37200	---	4670	4840
2	2200	3260	---	---	---	17800	21800	---	34200	---	9870	6290
3	1260	2220	---	---	---	13500	20500	---	33200	---	12800	8840
4	---	---	---	---	---	10500	18800	---	35300	---	11000	10900
5	---	7370	---	---	---	8960	27800	---	35200	---	10300	6580
6	---	12900	---	---	20400	8640	29500	---	---	---	---	2880
7	---	5970	---	---	---	8900	---	25700	---	---	17000	2540
8	---	3370	---	---	---	9520	---	22600	---	---	22900	3840
9	5350	2200	---	---	---	8360	19400	20700	---	---	20800	4300
10	---	2190	---	---	15400	6940	16900	19700	---	13000	17400	2990
11	---	2460	---	---	12800	8190	17500	19900	---	11100	14500	---
12	---	3520	---	---	---	10200	19300	21700	---	10700	11700	---
13	---	12300	---	---	---	9710	18500	20900	---	12500	9200	---
14	---	16400	---	---	---	7490	18100	20400	---	11500	6570	---
15	---	22900	---	---	---	6030	16400	24500	---	9850	4630	---
16	---	24300	---	---	---	4950	15300	26200	---	9430	2990	---
17	4950	15800	---	---	---	3910	15100	25100	---	10400	1960	---
18	6460	10000	---	---	19000	3700	14700	22100	---	11600	1440	---
19	8120	6470	---	---	---	5040	14100	30200	---	11100	1340	---
20	5970	3660	---	---	14000	8370	---	44400	---	9320	1330	---
21	3050	2590	---	---	11500	8770	14600	46400	---	---	1330	---
22	---	2570	---	---	12100	18700	16800	48900	---	---	1330	---
23	---	1670	---	---	---	25000	20600	51100	---	---	1390	4390
24	---	---	---	---	---	20500	26000	47600	---	---	1370	---
25	---	---	---	---	21300	17100	22900	39500	---	5270	1250	---
26	---	---	---	---	18600	16200	---	36400	---	4450	1400	---
27	---	---	---	---	16700	16500	---	36400	---	3840	1540	---
28	---	---	---	---	15900	19100	---	37000	---	3300	1560	---
29	---	---	---	---	---	22900	22500	41000	---	2760	1560	---
30	---	---	---	---	---	21800	22100	41900	---	2360	1710	---
31	7750	---	---	---	---	20700	---	40100	---	2390	2970	---
MEAN	---	---	---	---	---	12400	---	---	---	---	---	---
MAX	---	---	---	---	---	25000	---	---	---	---	---	---
MIN	---	---	---	---	---	3700	---	---	---	---	---	---

SPECIFIC CONDUCTANCE, BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5380	5090	---	---	---	16800	20800	23200	37300	---	4760	5150
2	2300	3320	---	---	---	18000	22100	20500	34300	---	10600	6620
3	---	2390	---	---	---	13600	20800	17200	33300	---	13900	9180
4	---	---	---	---	---	10600	19100	17200	35500	---	11800	11200
5	---	7640	---	---	---	8990	28000	24300	35400	---	10500	6690
6	---	13600	---	---	21200	8670	30300	30600	---	---	---	---
7	---	6450	---	---	---	9000	---	26600	---	---	---	2560
8	---	3400	---	---	---	9640	---	23000	---	---	23500	3880
9	5590	2220	---	---	---	8460	---	20800	---	---	21300	4370
10	---	2200	---	---	15700	6990	---	19800	---	---	17700	3070
11	---	2500	---	---	---	8280	---	20000	---	---	14600	---
12	---	3590	---	---	---	10500	---	21800	---	---	11800	---
13	---	12600	---	---	---	9930	---	21000	---	12500	9220	---
14	---	16800	---	---	---	7600	---	20400	---	11500	6590	---
15	---	23200	---	---	---	6120	---	24500	---	9850	4640	---
16	2610	24700	---	---	---	4990	---	26500	---	9440	3000	---
17	5070	16200	---	---	---	3940	---	25200	---	10500	1960	---
18	6650	10100	---	---	19200	3760	---	22300	---	11800	1440	---
19	8320	6510	---	---	---	5170	14200	30400	---	11200	1340	---
20	6140	3680	---	---	14400	8830	13200	44500	---	9360	1330	---
21	3130	2600	---	---	11700	9220	14700	46600	---	8020	1330	---
22	---	2630	---	---	---	19100	17000	48900	---	7760	1330	---
23	1700	1790	---	---	---	26100	20800	51100	---	6900	1400	4550
24	1500	---	---	---	---	21500	26300	47800	---	6020	1380	---
25	1030	---	---	---	21700	17600	23400	39800	---	5290	1260	---
26	---	---	---	---	18900	16500	24400	36500	---	4480	1410	---
27	1780	---	---	---	16900	16600	30000	36500	---	3860	1560	---
28	7030	---	---	---	16000	19300	26600	37200	---	3310	1570	---
29	12200	1210	---	---	---	23100	22600	41100	---	2770	1570	---
30	10800	---	---	---	---	22100	22200	42000	---	2360	1740	---
31	7960	---	---	---	---	20900	---	40200	---	2410	3050	---
MEAN	---	---	---	---	---	12600	---	30600	---	---	---	---
MAX	---	---	---	---	---	26100	---	51100	---	---	---	---
MIN	---	---	---	---	---	3760	---	17200	---	---	---	---

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

TEMPERATURE, WATER, TOP (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.4	19.6	---	---	---	14.9	23.5	26.6	27.0	---	30.2	28.8
2	22.8	20.0	---	---	---	15.2	23.5	26.8	27.9	---	29.8	28.8
3	22.9	20.3	---	---	---	15.4	23.6	27.2	28.5	---	29.7	28.8
4	---	---	21.0	---	---	14.8	23.6	27.5	28.8	---	29.7	28.7
5	---	20.4	20.8	---	---	13.8	23.1	27.0	29.0	---	29.8	28.7
6	---	19.7	---	---	16.5	13.8	22.7	26.5	---	---	30.0	29.0
7	---	19.3	---	---	---	14.3	22.3	27.1	---	---	29.7	29.1
8	---	19.4	21.4	---	---	15.1	22.1	27.6	---	---	28.9	29.0
9	23.3	19.4	---	---	---	16.2	22.5	27.9	---	---	28.1	29.0
10	---	19.4	---	---	16.5	17.3	22.9	28.1	---	29.9	27.9	28.9
11	---	19.6	---	---	16.7	17.4	22.9	28.2	---	30.2	28.0	---
12	---	19.7	---	---	---	18.0	22.8	28.3	---	30.4	28.1	---
13	---	19.6	---	---	16.5	18.5	23.1	28.1	---	30.0	28.1	---
14	---	19.4	---	---	---	19.0	23.3	27.9	---	29.7	28.3	---
15	---	19.2	---	---	---	19.6	23.8	27.3	---	29.8	28.6	---
16	---	19.1	---	---	---	20.2	24.4	26.9	---	30.1	---	---
17	22.9	18.9	---	---	---	20.9	25.0	27.1	---	30.4	---	---
18	22.1	18.9	---	---	16.1	21.6	25.5	27.1	---	30.7	---	---
19	22.1	19.0	---	---	---	21.9	25.9	26.3	---	31.0	---	---
20	22.2	19.3	---	---	16.1	22.1	26.3	24.7	---	31.0	---	---
21	22.3	19.3	---	---	16.5	22.3	26.5	24.1	---	30.4	---	---
22	---	19.2	---	---	16.7	21.3	26.5	23.5	---	30.2	---	---
23	---	19.5	18.5	---	---	20.4	26.3	22.9	---	30.0	30.3	29.3
24	---	---	---	---	---	20.7	25.8	23.7	---	30.0	30.3	---
25	---	---	---	---	16.2	21.3	26.0	24.6	---	30.1	30.4	---
26	---	---	---	---	16.7	22.1	26.0	25.1	---	30.1	30.3	---
27	---	---	---	---	16.4	22.5	25.9	25.2	---	30.2	30.0	---
28	21.2	---	14.7	---	15.2	22.3	26.2	25.5	---	30.1	29.7	---
29	20.3	---	---	---	---	22.4	26.4	25.6	---	30.2	29.5	---
30	19.7	---	---	---	---	22.9	26.6	26.0	---	30.4	29.2	---
31	19.5	---	---	---	---	23.3	---	26.4	---	30.5	28.9	---
MEAN	---	---	---	---	---	19.1	24.5	26.3	---	---	---	---
MAX	---	---	---	---	---	23.3	26.6	28.3	---	---	---	---
MIN	---	---	---	---	---	13.8	22.1	22.9	---	---	---	---

TEMPERATURE, WATER, MIDDLE (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.4	19.6	---	---	---	14.9	23.5	---	27.0	---	30.2	28.8
2	22.9	19.9	---	---	---	15.2	23.5	---	27.9	---	29.8	28.8
3	22.9	20.3	---	---	---	15.4	23.6	---	28.5	---	29.7	28.8
4	---	20.6	---	---	---	14.8	23.6	---	28.7	---	29.7	28.7
5	---	20.4	---	---	---	13.8	23.1	---	28.9	---	29.8	28.7
6	---	19.8	---	---	16.5	13.8	22.7	---	---	---	29.9	29.0
7	---	19.3	---	---	---	14.3	---	27.0	---	---	29.6	29.1
8	---	19.4	---	---	---	15.1	---	27.5	---	---	28.9	29.0
9	23.3	19.4	---	---	---	16.2	22.5	27.8	---	---	28.1	29.0
10	---	19.4	---	---	16.5	17.2	22.9	28.1	---	29.9	27.9	28.9
11	---	19.6	---	---	16.8	17.4	22.9	28.2	---	30.2	28.1	---
12	---	19.7	---	---	---	18.0	22.8	28.2	---	30.4	28.1	---
13	---	19.6	---	---	---	18.5	23.0	28.1	---	30.0	28.1	---
14	---	19.4	---	---	---	19.0	23.3	27.9	---	29.7	28.2	---
15	---	19.2	---	---	---	19.5	23.8	27.3	---	29.8	28.6	---
16	---	19.1	---	---	---	20.2	24.4	26.9	---	30.2	28.7	---
17	22.9	18.9	---	---	---	20.9	25.0	27.1	---	30.4	29.2	---
18	22.1	18.9	---	---	16.1	21.6	25.5	27.1	---	30.7	29.6	---
19	22.1	19.0	---	---	---	21.8	25.9	26.3	---	31.0	29.9	---
20	22.2	19.3	---	---	16.1	22.0	---	24.7	---	31.0	29.8	---
21	22.3	19.3	---	---	16.5	22.3	26.5	24.1	---	---	29.9	---
22	---	19.2	---	---	16.7	21.3	26.5	23.5	---	---	30.1	---
23	---	19.5	---	---	---	20.3	26.2	22.9	---	---	30.3	29.3
24	---	---	---	---	---	20.6	25.7	23.6	---	---	30.3	---
25	---	---	---	---	16.2	21.2	25.9	24.6	---	30.0	30.4	---
26	---	---	---	---	16.7	22.0	---	25.1	---	30.1	30.3	---
27	---	---	---	---	16.4	22.5	---	25.2	---	30.2	30.0	---
28	---	---	---	---	15.2	22.2	---	25.5	---	30.1	29.7	---
29	---	---	---	---	---	22.3	26.4	25.6	---	30.2	29.5	---
30	---	---	---	---	---	22.9	26.6	26.0	---	30.4	29.2	---
31	19.5	---	---	---	---	23.3	---	26.4	---	30.4	28.9	---
MEAN	---	---	---	---	---	19.0	---	---	---	---	29.4	---
MAX	---	---	---	---	---	23.3	---	---	---	---	30.4	---
MIN	---	---	---	---	---	13.8	---	---	---	---	27.9	---

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

TEMPERATURE, WATER, BOTTOM (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.4	19.7	---	---	---	14.9	23.4	26.6	27.0	---	30.2	28.8
2	22.8	20.0	---	---	---	15.2	23.5	26.8	27.9	---	29.8	28.8
3	22.9	20.4	---	---	---	15.4	23.6	27.2	28.4	---	29.7	28.8
4	23.3	---	---	---	---	14.7	23.6	27.4	28.7	---	29.6	28.7
5	23.8	20.4	---	---	---	13.7	23.1	27.0	28.9	---	29.8	28.7
6	24.2	19.8	---	---	16.5	13.8	22.7	26.5	---	---	29.9	---
7	24.1	19.3	---	---	---	14.4	---	26.9	---	---	---	29.1
8	23.6	19.4	---	---	---	15.1	---	27.5	---	---	28.9	29.0
9	23.3	19.4	---	---	---	16.2	---	27.8	---	---	28.1	29.0
10	22.8	19.4	---	---	16.5	17.2	---	28.1	---	---	27.9	28.9
11	---	19.6	---	---	---	17.4	---	28.2	---	---	28.1	---
12	---	19.7	---	---	---	17.9	---	28.2	---	---	28.1	---
13	---	19.6	---	---	---	18.5	---	28.1	---	30.0	28.1	---
14	---	19.4	---	---	---	19.0	---	27.9	---	29.7	28.3	---
15	---	19.3	---	---	---	19.5	---	27.3	---	29.8	28.6	---
16	23.7	19.1	---	---	---	20.2	---	26.9	---	30.1	28.7	---
17	22.9	18.9	---	---	---	20.9	---	27.1	---	30.5	29.2	---
18	22.1	18.9	---	---	16.0	21.5	---	27.1	---	30.7	29.6	---
19	22.1	19.0	---	---	---	21.8	25.9	26.3	---	31.0	29.9	---
20	22.2	19.3	---	---	16.1	22.0	26.3	24.7	---	31.0	29.8	---
21	22.3	19.3	---	---	16.5	22.2	26.5	24.1	---	30.4	29.9	---
22	22.6	19.2	---	---	---	21.3	26.5	23.5	---	30.2	30.1	---
23	23.0	19.5	---	---	---	20.3	26.2	22.9	---	30.0	30.3	29.2
24	23.6	---	---	---	---	20.5	25.7	23.6	---	30.0	30.3	---
25	24.2	---	---	---	16.2	21.2	25.9	24.6	---	30.1	30.4	---
26	23.6	---	---	---	16.7	22.0	26.0	25.0	---	30.1	30.3	---
27	22.2	---	---	---	16.3	22.4	25.8	25.2	---	30.2	30.0	---
28	21.3	---	---	---	15.2	22.2	26.2	25.5	---	30.1	29.7	---
29	20.4	---	---	---	---	22.3	26.4	25.6	---	30.2	29.5	---
30	19.7	---	---	---	---	22.8	26.5	26.0	---	30.4	29.2	---
31	19.5	---	---	---	---	23.3	---	26.4	---	30.4	28.9	---
MEAN	---	---	---	---	---	19.0	---	26.3	---	---	---	---
MAX	---	---	---	---	---	23.3	---	28.2	---	---	---	---
MIN	---	---	---	---	---	13.7	---	22.9	---	---	---	---

OXYGEN DISSOLVED, TOP (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	8.2	---	---	---	11.3	7.2	7.4	7.1	---	6.4	6.2
2	7.6	8.4	---	---	---	11.5	7.0	7.6	7.2	---	6.3	6.5
3	8.8	8.4	---	---	---	12.0	7.1	7.8	7.0	---	6.3	6.5
4	---	---	7.0	---	---	12.5	7.2	7.6	6.7	---	6.5	6.5
5	---	8.3	7.1	---	---	13.1	6.9	7.1	6.6	---	6.3	7.3
6	---	8.4	---	---	8.0	13.3	7.1	6.5	---	---	5.8	7.6
7	---	8.8	---	---	---	13.5	7.3	6.4	---	---	5.3	7.6
8	---	8.8	7.2	---	---	13.5	7.6	6.6	---	---	5.4	7.4
9	8.3	8.7	---	---	---	13.5	7.9	6.6	---	---	5.8	7.5
10	---	8.7	---	---	8.2	---	7.9	6.5	---	6.1	6.0	7.7
11	---	8.6	---	---	8.3	---	7.6	6.3	---	6.7	6.2	---
12	---	8.6	---	---	---	---	7.4	6.1	---	6.7	6.3	---
13	---	8.6	---	---	8.1	---	7.5	6.3	---	6.6	6.3	---
14	---	8.8	---	---	---	---	7.5	6.2	---	7.0	6.4	---
15	---	8.8	---	---	---	---	7.6	6.2	---	7.4	6.5	---
16	---	8.8	---	---	---	---	7.6	6.5	---	7.6	---	---
17	8.4	9.0	---	---	---	---	7.5	6.7	---	7.6	---	---
18	8.5	9.1	---	---	8.1	---	7.5	6.8	---	7.5	---	---
19	8.7	9.1	---	---	---	---	7.5	6.2	---	7.5	---	---
20	8.9	8.9	---	---	9.1	---	7.4	6.2	---	7.5	---	---
21	9.0	8.7	---	---	9.3	---	7.2	6.6	---	7.5	---	---
22	---	8.7	---	---	9.3	---	7.3	6.8	---	7.7	---	---
23	---	8.6	7.1	---	---	---	7.1	7.1	---	7.9	6.7	6.1
24	---	---	---	---	---	---	7.1	7.6	---	7.3	6.6	---
25	---	---	---	---	9.8	---	7.5	8.1	---	6.8	6.6	---
26	---	---	---	---	10.0	---	7.4	8.0	---	7.0	6.5	---
27	---	---	---	---	10.4	---	7.2	7.6	---	7.1	6.5	---
28	8.8	---	8.2	---	11.0	---	7.4	7.2	---	7.0	6.5	---
29	9.1	---	---	---	---	7.1	7.5	7.0	---	6.9	6.5	---
30	8.6	---	---	---	---	7.3	7.3	7.0	---	6.8	6.4	---
31	8.0	---	---	---	---	7.3	---	7.1	---	6.8	6.1	---
MEAN	---	---	---	---	---	---	7.4	6.9	---	---	---	---
MAX	---	---	---	---	---	---	7.9	8.1	---	---	---	---
MIN	---	---	---	---	---	---	6.9	6.1	---	---	---	---

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

OXYGEN DISSOLVED, MIDDLE (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	8.2	---	---	---	11.2	7.1	---	6.8	---	6.4	6.1
2	7.6	8.3	---	---	---	11.5	7.0	---	6.8	---	6.1	6.3
3	8.7	8.4	---	---	---	12.0	7.0	---	6.7	---	6.1	6.3
4	---	---	---	---	---	12.4	7.1	---	6.4	---	6.3	6.4
5	---	8.3	---	---	---	13.0	6.8	---	6.2	---	6.2	7.1
6	---	8.2	---	---	7.9	13.3	6.9	---	---	---	5.7	7.5
7	---	8.7	---	---	---	13.4	---	6.3	---	---	5.2	7.5
8	---	8.7	---	---	---	13.4	---	6.4	---	---	5.3	7.3
9	8.2	8.7	---	---	---	13.5	7.7	6.6	---	---	5.7	7.3
10	---	8.6	---	---	8.2	13.4	7.8	6.5	---	6.1	6.0	7.5
11	---	8.5	---	---	8.2	13.3	7.5	6.2	---	6.7	6.2	---
12	---	8.5	---	---	---	---	7.3	6.0	---	6.7	6.2	---
13	---	8.5	---	---	---	---	7.4	6.2	---	6.5	6.3	---
14	---	8.6	---	---	---	---	7.4	6.2	---	6.9	6.4	---
15	---	8.7	---	---	---	---	7.5	6.0	---	7.4	6.4	---
16	---	8.7	---	---	---	---	7.5	6.2	---	7.6	6.3	---
17	8.3	8.9	---	---	---	---	7.4	6.5	---	7.5	6.5	---
18	8.4	9.0	---	---	8.0	---	7.5	6.5	---	7.4	6.6	---
19	8.5	9.0	---	---	---	---	7.4	6.0	---	7.4	6.8	---
20	8.7	8.7	---	---	9.0	---	---	6.0	---	7.5	6.8	---
21	8.9	8.6	---	---	9.2	---	7.2	6.3	---	---	6.7	---
22	---	8.5	---	---	9.3	---	7.2	6.6	---	---	6.7	---
23	---	8.4	---	---	---	---	7.1	6.9	---	---	6.6	6.0
24	---	---	---	---	---	---	7.0	7.4	---	---	6.6	---
25	---	---	---	---	9.7	---	7.4	7.9	---	6.8	6.5	---
26	---	---	---	---	9.9	---	---	7.9	---	6.9	6.4	---
27	---	---	---	---	10.3	---	---	7.4	---	7.0	6.5	---
28	---	---	---	---	10.9	7.2	---	7.0	---	7.0	6.5	---
29	---	---	---	---	---	7.0	7.5	6.7	---	6.8	6.4	---
30	---	---	---	---	---	7.2	7.3	6.7	---	6.8	6.3	---
31	7.9	---	---	---	---	7.2	---	6.8	---	6.7	6.1	---
MEAN	---	---	---	---	---	---	---	---	---	---	6.3	---
MAX	---	---	---	---	---	---	---	---	---	---	6.8	---
MIN	---	---	---	---	---	---	---	---	---	---	5.2	---

OXYGEN DISSOLVED, BOTTOM (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	---	---	---	---	11.2	7.0	7.3	6.7	---	6.3	6.0
2	7.3	8.2	---	---	---	11.4	6.9	7.5	6.8	---	6.0	6.2
3	8.5	8.3	---	---	---	11.9	6.9	7.6	6.6	---	6.0	6.2
4	8.3	---	---	---	---	12.4	7.0	7.5	6.3	---	6.2	6.3
5	8.0	8.2	---	---	---	12.9	6.8	7.0	6.2	---	6.2	7.0
6	7.8	8.1	---	---	7.8	13.3	6.8	6.3	---	---	5.6	---
7	7.7	8.6	---	---	---	13.4	---	6.1	---	---	---	7.4
8	7.8	8.7	---	---	---	13.4	---	6.3	---	---	5.1	7.2
9	8.1	8.6	---	---	---	13.4	---	6.5	---	---	5.6	7.2
10	8.5	8.6	---	---	8.1	13.4	---	6.4	---	---	5.9	7.4
11	---	8.5	---	---	---	13.2	---	6.2	---	---	6.1	7.4
12	---	8.5	---	---	---	13.0	---	5.9	---	---	6.2	7.2
13	---	8.4	---	---	---	---	---	6.1	---	6.5	6.3	6.9
14	---	8.5	---	---	---	---	---	6.2	---	6.9	6.4	6.8
15	---	8.6	---	---	---	---	---	6.0	---	7.4	6.4	6.8
16	8.2	8.6	---	---	---	---	---	6.2	---	7.6	6.3	6.6
17	8.2	8.8	---	---	---	---	---	6.5	---	7.5	6.5	6.4
18	8.3	8.9	---	---	8.0	---	---	6.5	---	7.4	6.6	6.3
19	8.4	8.9	---	---	---	---	7.3	6.0	---	7.4	6.8	6.1
20	8.6	8.7	---	---	9.0	---	7.3	6.0	---	7.5	6.8	---
21	8.8	8.5	---	---	9.2	---	7.1	6.3	---	7.5	6.7	---
22	8.8	8.4	---	---	---	---	7.1	6.6	---	7.6	6.7	---
23	8.5	8.4	---	---	---	---	7.0	6.9	---	7.9	6.6	6.0
24	8.3	---	---	---	---	---	7.0	7.4	---	7.2	6.5	---
25	8.2	---	---	---	9.6	---	7.3	7.9	---	6.8	6.5	---
26	8.2	---	---	---	9.9	---	7.3	7.8	---	6.9	6.4	---
27	8.5	---	---	---	10.3	---	7.1	7.3	---	7.0	6.4	---
28	8.5	---	---	---	10.9	7.1	7.3	6.9	---	6.9	6.4	---
29	8.7	7.4	---	---	---	7.0	7.3	6.6	---	6.8	6.4	---
30	8.2	---	---	---	---	7.2	7.2	6.7	---	6.7	6.3	---
31	7.9	---	---	---	---	---	---	6.7	---	6.7	6.0	---
MEAN	---	---	---	---	---	---	---	6.7	---	---	---	---
MAX	---	---	---	---	---	---	---	7.9	---	---	---	---
MIN	---	---	---	---	---	---	---	5.9	---	---	---	---

02246828 PABLO CREEK AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'07", long 81°28'42", in land grant 39, T.3 S., R.28 E., Duval County, Hydrologic Unit 03080103, near right bank on upstream side of culvert pipes on private road, 0.5 mi upstream from Cedar Swamp Creek, 4.8 mi upstream from mouth, and 12.5 mi southeast of Main Street Bridge in Jacksonville.

DRAINAGE AREA.--25.8 mi^2.

PERIOD OF RECORD.--March 1974 to current year.

REVISED RECORDS.--WDR FL-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 0.14 ft above NGVD of 1929.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e22	17	40	e16	e16	21	22	6.5	6.6	e21	e5.5	e148
2	e20	19	38	e17	e15	26	21	5.9	5.8	e19	e6.0	e130
3	e19	22	37	e18	e14	87	20	5.6	5.1	e15	e6.5	e105
4	e18	30	36	e16	e13	268	21	5.4	4.7	e14	e9.0	e65
5	e17	41	36	e15	e13	229	20	5.6	4.7	e13	e19	e44
6	e16	37	35	e14	e14	159	18	6.0	4.6	e12	e13	e40
7	e15	30	35	e14	e13	116	16	5.5	4.7	e10	e15	e36
8	e15	25	36	e14	e13	93	15	5.3	5.0	e9.0	e12	e25
9	e15	22	53	e15	e12	79	14	5.1	5.2	e8.5	e8.0	e22
10	e16	20	e77	e15	e12	68	15	4.9	5.4	e8.0	e7.5	e19
11	e16	19	e125	e14	e12	58	23	4.8	6.2	e7.5	e7.2	e17
12	e17	19	e175	e14	e11	52	23	4.7	5.5	e7.0	e7.0	e16
13	e18	20	e220	e16	e11	61	22	4.8	5.2	e7.0	e12	e24
14	e21	142	e105	e28	e11	67	21	5.2	4.9	e7.5	e9.0	e36
15	e23	370	e50	e40	e11	61	18	4.8	4.5	e8.0	e35	e52
16	e26	293	e35	e34	e10	51	16	4.4	4.1	e7.8	e20	e47
17	27	205	e30	e28	e10	44	15	4.5	3.9	e6.0	e13	e38
18	24	151	e26	e24	e10	40	14	7.2	4.5	e5.5	e55	e29
19	25	122	e23	e21	e9.8	36	13	12	6.8	e5.5	e85	e25
20	24	104	e20	e20	e11	32	12	10	11	e6.8	e94	e20
21	23	90	e19	e22	18	34	11	7.9	35	e9.0	e65	e15
22	23	78	e18	e26	19	42	10	6.7	e59	e7.0	e40	e12
23	25	72	e18	e22	25	38	9.0	6.2	e65	e6.5	e30	e11
24	25	66	e17	e19	40	33	8.6	5.9	e50	e6.3	e20	e65
25	25	59	e17	e22	40	29	8.3	5.7	e33	e7.0	e15	e105
26	22	56	e16	e21	33	27	7.8	5.2	e40	e7.8	e14	e92
27	19	52	e15	e20	28	30	7.9	7.1	e38	e7.0	e35	e84
28	17	48	e15	e19	23	32	7.9	11	e30	e7.5	e20	e72
29	16	45	e14	e19	---	28	7.2	8.6	e25	e7.8	e13	e53
30	18	43	e14	e18	---	25	6.8	7.5	e23	e7.0	e50	e46
31	17	---	e13	e17	---	23	---	6.8	---	e6.0	e105	---
TOTAL	624	2317	1408	618	467.8	1989	443.5	196.8	506.4	277.0	845.7	1493
MEAN	20.1	77.2	45.4	19.9	16.7	64.2	14.8	6.35	16.9	8.94	27.3	49.8
MAX	27	370	220	40	40	268	23	12	65	21	105	148
MIN	15	17	13	14	9.8	21	6.8	4.4	3.9	5.5	5.5	11
CFSM	0.78	2.99	1.76	0.77	0.65	2.49	0.57	0.25	0.65	0.35	1.06	1.93
IN.	0.90	3.34	2.03	0.89	0.67	2.87	0.64	0.28	0.73	0.40	1.22	2.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002, BY WATER YEAR (WY)

MEAN	62.2	31.9	30.1	36.7	37.3	38.8	23.9	15.5	29.3	33.1	44.0	69.4
MAX	211	106	136	98.2	122	96.5	61.5	93.9	162	135	202	181
(WY)	1997	1995	1998	1994	1998	1983	1983	1979	1991	1991	1998	1979
MIN	4.78	6.77	6.13	6.11	11.4	7.16	5.26	1.96	2.62	2.92	4.03	5.33
(WY)	1982	1981	1981	1981	2001	2000	2000	2000	1981	1977	1999	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1974 - 2002	
ANNUAL TOTAL	10219.6		11186.2			
ANNUAL MEAN	28.0		30.6		37.2	
HIGHEST ANNUAL MEAN					69.6	1998
LOWEST ANNUAL MEAN					8.73	1981
HIGHEST DAILY MEAN	370	Nov 15	370	Nov 15	1670	Oct 8 1996
LOWEST DAILY MEAN	3.6	Jul 9	3.9	Jun 17	0.81	May 31 2000
ANNUAL SEVEN-DAY MINIMUM	3.9	Jul 7	4.7	Jun 12	0.90	Jun 4 2000
MAXIMUM PEAK FLOW			382	Nov 15	*2150	Oct 8 1996
MAXIMUM PEAK STAGE			7.29	Nov 15	9.53	Oct 8 1996
INSTANTANEOUS LOW FLOW			3.8	Jun 16-18	0.71	May 31 2000
ANNUAL RUNOFF (CFSM)	1.09		1.19		1.44	
ANNUAL RUNOFF (INCHES)	14.74		16.13		19.60	
10 PERCENT EXCEEDS	52		65		78	
50 PERCENT EXCEEDS	16		18		20	
90 PERCENT EXCEEDS	7.0		5.9		6.1	

e Estimated
* Result of levee failure.

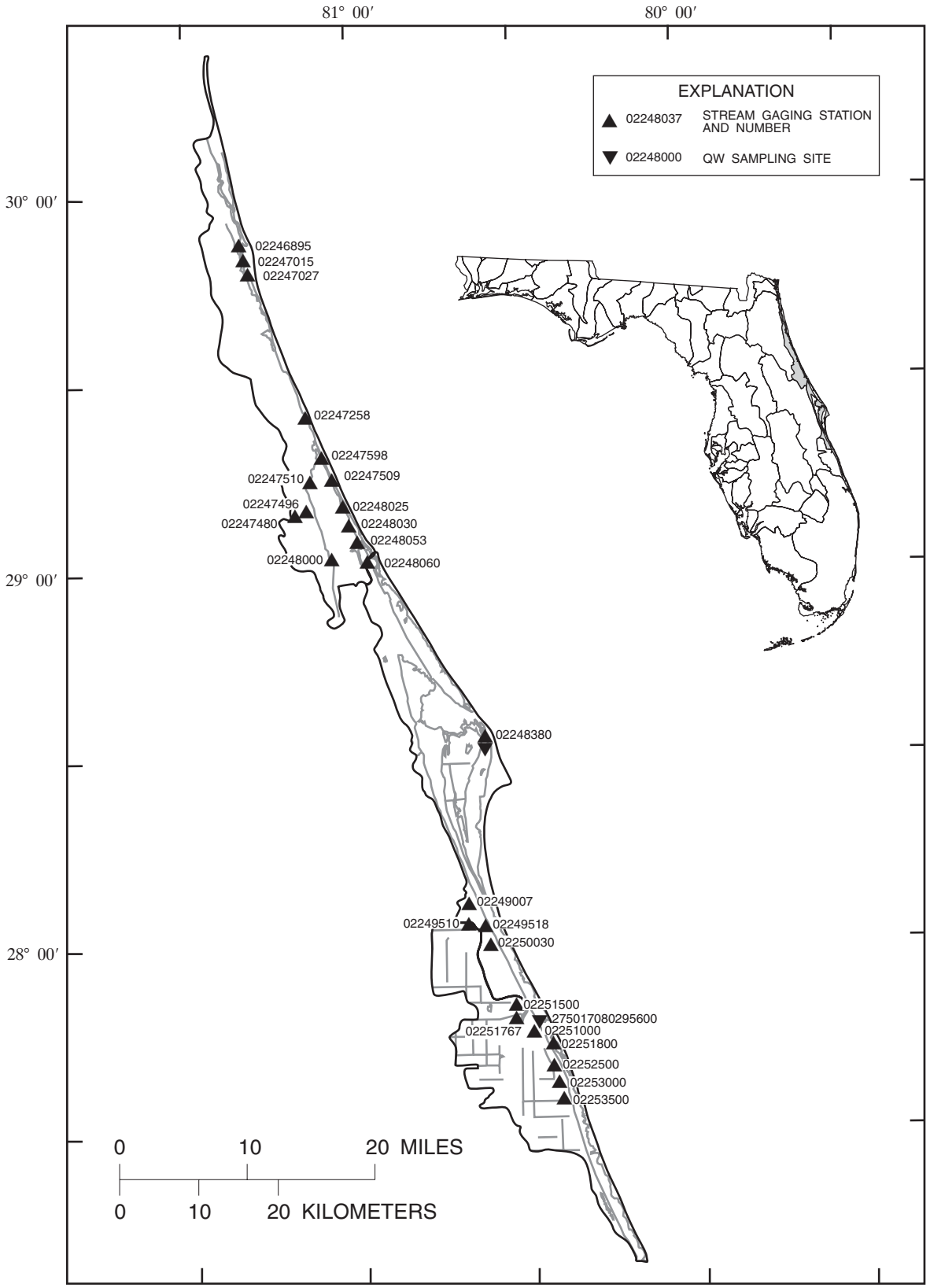

Figure 8.--Location of stream gaging stations in the coastal area between the St. Johns and St. Lucie Rivers.

02246895 SAN SEBASTIAN RIVER AT ST. AUGUSTINE, FL

LOCATION.--Lat 29°53'31", long 81°19'22", sec.4, T.7 S., R.30 E., St. Johns County, Hydrologic Unit 03080201, on upstream side of southbound bridge on U.S. Highway 1, 0.2 mi north of the intersection of King Street in St. Augustine, and 2.5 mi upstream from the mouth.

DRAINAGE AREA.--16.5 mi^2.

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

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929. Prior to Oct. 1, 2000 at datum 5.07 ft higher.

REMARKS.--Records poor. Discharge represents net of a much larger upstream and downstream discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	560	666	680	614	664	530	710	e260	382	317	230	393
2	579	564	589	e546	640	820	899	e320	353	369	252	361
3	509	487	586	1000	755	676	795	346	241	321	350	363
4	583	515	e542	532	736	665	568	213	278	316	327	422
5	514	421	e823	e640	680	630	627	233	305	319	208	302
6	550	804	755	670	780	695	757	323	258	230	114	91
7	438	716	666	640	570	354	656	283	210	166	-13	-33
8	676	739	702	557	654	555	521	168	-37	190	162	92
9	727	742	708	608	570	270	603	129	127	132	72	213
10	650	723	766	631	811	502	408	78	122	50	87	407
11	673	787	781	590	543	567	367	51	73	1.1	140	429
12	715	564	690	459	455	566	448	32	107	-218	375	382
13	451	829	585	545	508	509	363	166	128	309	491	487
14	483	811	528	763	256	542	390	-114	265	314	411	533
15	199	757	503	519	626	443	340	59	199	355	346	318
16	380	1100	585	550	605	499	428	189	354	282	301	299
17	263	881	533	579	570	468	457	321	431	328	281	250
18	273	768	449	583	403	487	488	285	373	330	249	201
19	569	735	e371	707	635	413	476	132	446	234	248	200
20	763	682	493	464	624	584	522	416	237	186	157	201
21	746	674	647	499	621	549	546	310	471	142	137	133
22	670	719	385	484	518	698	479	150	477	118	76	152
23	632	750	674	572	727	608	543	296	347	49	163	291
24	649	e767	662	624	902	793	484	139	186	92	195	220
25	628	e534	610	589	790	676	397	-29	164	93	108	494
26	507	e994	e580	752	795	875	141	-43	247	135	138	508
27	446	597	558	888	552	568	206	-52	291	141	250	418
28	566	597	644	658	624	603	455	-114	235	204	304	390
29	580	627	857	618	---	649	429	243	336	261	342	321
30	613	641	659	530	---	626	335	390	292	177	391	371
31	629	---	714	586	---	778	---	466	---	257	357	---
TOTAL	17221	21191	19325	18997	17614	18198	14838	5646	7898	6200.1	7249	9209
MEAN	556	706	623	613	629	587	495	182	263	200	234	307
MAX	763	1100	857	1000	902	875	899	466	477	369	491	533
MIN	199	421	371	459	256	270	141	-114	-37	-218	-13	-33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	431	424	453	454	398	405	344	198	183	200	245	414
MAX	556	706	623	613	629	587	495	492	263	335	347	608
(WY)	2002	2002	2002	2002	2002	2002	2002	2001	2002	2001	2001	2001
MIN	327	281	300	291	257	242	-163	-133	-111	-159	80.3	307
(WY)	2001	2000	2000	2000	2000	2000	1999	1999	1999	1999	1999	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	166805.6		163586.1			
ANNUAL MEAN	457		448		336	
HIGHEST ANNUAL MEAN					448	2002
LOWEST ANNUAL MEAN					31.0	1999
HIGHEST DAILY MEAN	1210	Sep 15	1100	Nov 16	1210	Sep 15 2001
LOWEST DAILY MEAN	-140	Jul 21	-218	Jul 12	-532	Sep 11 1999
ANNUAL SEVEN-DAY MINIMUM	129	Jun 18	50	May 22	-270	May 11 1999
MAXIMUM PEAK STAGE			15.66	Nov 15	*16.42	
10 PERCENT EXCEEDS	714		740		635	
50 PERCENT EXCEEDS	467		476		348	
90 PERCENT EXCEEDS	188		136		19	

e Estimated
* Sep 15, 1999, Sep 14, 2001
Note.--Negative figures indicate reverse flow

02247015 MOULTRIE CREEK AT MOULTRIE, FL

LOCATION.--Lat 29°49'17", long 81°19'22", in SW¼ sec.48, T.8 S., R.30 E., St. Johns County, Hydrologic Unit 03080201, on east side of span on downstream side of northbound bridge on U.S. Highway 1, 0.3 mi north of Moultrie and 1.4 mi upstream from mouth.

DRAINAGE AREA.--42.1 mi^2.

PERIOD OF RECORD.--April 1999 to September 2002 (discontinued).

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 10.00 ft below NGVD of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records poor. Discharge not published some days due to missing velocity record. Discharge represents net of much larger upstream and downstream discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	31	---	63	77	61	44	51	142	77	-13	137
2	---	31	---	27	---	86	70	---	133	39	40	148
3	---	50	---	71	52	83	81	---	73	41	64	164
4	---	---	---	94	61	57	41	---	148	42	46	74
5	---	---	---	145	9.4	---	21	---	91	65	1.5	129
6	---	---	---	127	51	---	44	---	99	38	-45	---
7	---	---	---	84	55	68	36	---	73	48	-129	---
8	---	---	---	107	41	59	27	---	37	67	-60	---
9	---	---	---	96	56	74	36	---	117	65	23	115
10	---	---	---	67	91	33	18	68	94	1.9	66	204
11	---	---	---	65	29	11	17	106	115	-8.0	146	64
12	---	---	50	44	43	32	38	88	101	-2.8	169	113
13	---	---	81	44	53	25	36	99	142	61	190	102
14	---	---	68	77	4.6	30	71	73	162	142	151	239
15	---	---	80	70	84	17	55	154	129	93	91	205
16	---	---	77	82	67	18	54	215	141	79	120	196
17	---	---	123	95	53	30	55	113	158	126	73	166
18	---	---	72	87	30	62	64	141	56	89	79	159
19	---	---	79	93	79	63	44	37	140	78	125	92
20	---	---	118	74	61	54	28	124	59	46	30	83
21	---	---	55	105	45	39	37	119	19	103	109	59
22	---	---	104	60	37	37	30	-113	148	-29	61	28
23	---	---	44	60	51	43	-16	17	112	94	110	13
24	---	---	42	91	55	77	-17	139	116	110	53	54
25	---	---	87	78	84	64	12	97	120	97	38	317
26	---	---	89	51	25	28	-17	97	88	105	-5.2	---
27	-30	---	125	81	34	13	27	174	101	24	118	---
28	-25	---	105	88	24	-21	50	93	143	47	27	291
29	3.1	---	106	79	---	54	50	74	59	77	138	340
30	6.6	---	96	93	---	60	54	84	75	67	104	256
31	18	---	73	87	---	52	---	72	---	90	216	---
TOTAL	-27.3	112	1674	2485	1352.0	1309	1090	2122	3191	1972.1	2136.3	3748
MEAN	-5.46	37.3	83.7	80.2	50.1	45.1	36.3	92.3	106	63.6	68.9	150
MAX	18	50	125	145	91	86	81	215	162	142	216	340
MIN	-30	31	42	27	4.6	-21	-17	-113	19	-29	-129	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	5.20	19.1	15.9	12.2	11.7	21.5	14.7	45.0	67.1	48.1	67.4	81.7
MAX	36.4	39.0	83.7	80.2	50.1	45.1	36.3	92.3	106	63.6	68.9	197
(WY)	2001	2001	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001
MIN	-24.3	-2.53	-41.3	-75.2	-26.9	-11.9	-59.9	21.6	32.0	-6.80	62.0	-23.3
(WY)	2000	2000	2000	2000	2000	2000	1999	2000	2000	1999	2000	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	12953.52		21164.1			
ANNUAL MEAN	46.4		74.3		33.6	
HIGHEST ANNUAL MEAN					74.3	2002
LOWEST ANNUAL MEAN					-26.7	1999
HIGHEST DAILY MEAN	1350	Sep 15	340	Sep 29	1350	Sep 15 2001
LOWEST DAILY MEAN	-33	May 23	-129	Aug 7	-328	Dec 18 1999
ANNUAL SEVEN-DAY MINIMUM	-10	Feb 17	-14	Aug 3	-130	Jan 8 2000
MAXIMUM PEAK STAGE			15.81	Nov 15	16.79	Sep 15 1999
10 PERCENT EXCEEDS	97		142		101	
50 PERCENT EXCEEDS	35		68		29	
90 PERCENT EXCEEDS	-5.9		18		-33	

* Sep 15, 1999, Sep 14, 2001
Note.--Negative figures indicate reverse flow

02247027 MOSES CREEK NEAR MOULTRIE, FL

LOCATION.--Lat 29°46'28", long 81°18'59", in NE¼ sec.45, T.8 S., R.30 E., St. Johns County, Hydrologic Unit 03080201, near center of span on downstream side of northbound bridge on U.S. Highway 1, 1.2 mi north of intersection with State Highway 206, 3.1 mi south of Moultrie, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--7.4 mi^2.

PERIOD OF RECORD.--April to June 1958 (discharge measurements only), April 1999 to September 2002 (discontinued).

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 0.99 ft below North American Vertical Datum of 1988.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	0.93	2.4	0.65	1.8	1.6	0.15	0.01	0.03	4.0	1.2	89
2	8.8	1.1	2.2	0.69	1.6	1.5	0.16	0.01	0.02	3.9	1.7	79
3	6.9	1.3	2.0	0.84	1.4	2.6	0.25	0.01	0.02	2.9	1.5	61
4	5.6	1.5	1.9	0.80	1.3	13	0.27	0.01	0.01	2.7	1.6	49
5	4.6	1.8	1.7	0.76	1.1	7.4	0.23	0.01	0.01	8.7	1.5	53
6	3.9	1.6	1.6	0.84	1.0	5.5	0.16	0.02	0.02	7.8	1.2	38
7	3.3	1.4	1.7	0.92	1.1	4.6	0.12	0.01	0.02	6.1	11	26
8	2.8	1.3	1.6	0.87	1.3	4.0	0.10	0.01	0.09	6.5	7.6	18
9	2.4	1.2	1.7	0.82	1.2	3.4	0.07	0.01	0.09	5.6	4.6	16
10	2.0	1.1	1.7	0.81	1.1	2.8	0.07	0.01	0.07	4.1	3.9	13
11	1.8	1.1	1.9	0.84	1.1	2.3	0.18	0.01	0.06	2.8	2.6	9.3
12	1.5	1.0	1.8	0.86	0.96	1.9	0.23	0.01	0.07	2.1	2.0	8.6
13	1.4	1.5	1.6	1.1	0.89	3.2	0.28	0.01	0.08	2.1	4.2	38
14	1.4	24	1.6	2.3	0.89	2.9	0.27	0.01	0.06	3.1	12	114
15	1.3	43	1.5	7.1	0.86	2.3	0.25	0.01	0.04	2.7	8.0	92
16	1.2	37	1.4	3.7	0.83	1.8	0.19	0.01	0.03	1.6	5.9	67
17	1.1	29	1.2	3.0	0.76	1.5	0.14	0.02	0.04	1.0	4.1	53
18	0.95	23	1.3	2.6	0.65	1.3	0.10	0.03	0.10	0.81	2.9	42
19	0.85	18	1.2	2.3	0.58	1.1	0.08	0.35	0.63	0.66	2.4	29
20	0.83	14	1.1	2.1	0.57	0.90	0.05	0.16	0.49	0.57	6.9	26
21	0.92	9.8	0.98	2.1	0.59	0.77	0.03	0.10	2.2	0.58	6.0	21
22	0.98	7.4	0.87	2.0	0.59	0.65	0.03	0.07	2.5	0.65	4.2	15
23	1.0	6.1	0.85	1.9	2.1	0.51	0.02	0.05	3.4	0.67	2.9	11
24	1.1	7.9	0.85	1.8	5.7	0.45	0.03	0.04	2.8	6.7	2.0	16
25	1.1	6.3	0.80	1.7	3.6	0.39	0.02	0.03	2.0	9.4	1.4	288
26	1.0	5.0	0.75	3.4	2.9	0.33	0.02	0.03	1.4	6.7	1.5	287
27	0.85	4.2	0.70	3.1	2.3	0.32	0.02	0.03	9.0	5.5	1.3	197
28	0.72	3.6	0.69	2.8	1.9	0.28	0.02	0.06	13	4.5	1.5	126
29	0.71	3.1	0.70	2.6	---	0.24	0.01	0.04	6.5	3.5	7.9	86
30	0.74	2.8	0.68	2.3	---	0.21	0.01	0.03	4.5	2.4	21	60
31	0.83	---	0.67	2.0	---	0.16	---	0.03	---	1.7	79	---
TOTAL	74.58	261.03	41.64	59.60	40.67	69.91	3.56	1.24	49.28	112.04	215.5	2027.9
MEAN	2.41	8.70	1.34	1.92	1.45	2.26	0.12	0.040	1.64	3.61	6.95	67.6
MAX	12	43	2.4	7.1	5.7	13	0.28	0.35	13	9.4	79	288
MIN	0.71	0.93	0.67	0.65	0.57	0.16	0.01	0.01	0.01	0.57	1.2	8.6
CFSM	0.33	1.18	0.18	0.26	0.20	0.30	0.02	0.01	0.22	0.49	0.94	9.13
IN.	0.37	1.31	0.21	0.30	0.20	0.35	0.02	0.01	0.25	0.56	1.08	10.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	12.9	3.68	0.77	1.05	1.19	4.25	0.84	0.15	1.77	2.56	7.26	49.4
MAX	24.2	8.70	1.34	1.92	1.67	10.0	1.29	0.42	4.46	4.70	21.9	108
(WY)	2000	2002	2002	2002	2001	2001	1999	1999	1999	2001	2001	2001
MIN	2.41	0.66	0.39	0.60	0.46	0.45	0.12	0.023	0.24	0.28	0.076	9.32
(WY)	2002	2001	2000	2000	2000	2000	2002	2000	2000	2000	1999	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	4884.59		2956.95			
ANNUAL MEAN	13.4		8.10		8.35	
HIGHEST ANNUAL MEAN					13.5	2001
LOWEST ANNUAL MEAN					3.49	2000
HIGHEST DAILY MEAN	861	Sep 15	288	Sep 25	861	Sep 15 2001
LOWEST DAILY MEAN	0.08	May 25-28	0.01	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.09	May 23	0.01	Apr 29	0.00	May 17 2000
MAXIMUM PEAK FLOW			339	Sep 25	a992	Sep 15 2001
MAXIMUM PEAK STAGE			17.76	Sep 25	19.58	Sep 15 2001
ANNUAL RUNOFF (CFSM)	1.81		1.09		1.13	
ANNUAL RUNOFF (INCHES)	24.55		14.86		15.33	
10 PERCENT EXCEEDS	21		13		14	
50 PERCENT EXCEEDS	1.1		1.4		0.66	
90 PERCENT EXCEEDS	0.15		0.03		0.04	

a From rating curve extended above 330 ft^3/s

02247258 LEHIGH CANAL NEAR FLAGLER BEACH, FL

LOCATION.--Lat 29°29'50", long 81°11'23", in NW$^{1}/_{4}$ sec.4, T.12 S., R.31 E., Flagler County, Hydrologic Unit 03080201, near center of channel on upstream side of bridge on Old Kings Road, 0.7 mi upstream from mouth (at Graham Swamp), and 2.6 mi northwest of Flagler Beach.

DRAINAGE AREA.--21 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 8.54 ft above NGVD of 1929 (Levitt & Sons Engineering Dept. bench mark).

REMARKS.--Records fair. Flow affected at times by operation of control structure 0.70 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	11	2.3	3.0	2.4	2.7	1.9	1.8	1.8	2.9	7.1	21
2	45	11	2.4	3.0	2.2	2.7	2.1	1.8	1.8	2.8	6.1	21
3	42	9.7	2.6	3.0	2.4	2.9	2.2	1.8	1.8	14	5.2	15
4	39	9.0	2.6	3.0	2.4	3.1	2.1	1.8	1.8	18	14	16
5	36	12	2.6	3.0	2.4	2.9	2.0	1.8	1.8	37	24	16
6	33	10	2.6	3.0	2.4	2.9	2.0	1.8	1.8	12	12	13
7	31	11	2.5	3.1	2.6	2.9	2.0	1.9	1.8	6.9	35	11
8	30	11	2.7	3.2	2.6	2.9	2.0	1.8	1.9	5.3	23	8.2
9	28	9.3	2.8	3.2	2.6	2.9	2.0	1.8	1.9	5.0	20	7.3
10	27	8.6	2.8	3.2	2.6	2.9	2.0	1.8	1.9	4.2	30	6.5
11	25	8.1	2.8	3.2	2.6	2.9	2.0	1.8	2.0	3.6	16	5.3
12	23	7.8	2.8	3.2	2.5	2.9	2.0	1.8	2.0	3.3	12	5.3
13	21	11	2.8	3.4	2.4	3.0	2.1	1.8	2.0	4.8	100	26
14	20	269	2.8	3.6	2.4	2.7	2.1	1.8	2.0	8.7	93	31
15	20	171	2.8	3.9	2.4	2.4	2.1	1.8	1.9	6.1	33	17
16	19	75	2.8	3.5	2.4	2.4	2.1	1.8	1.8	4.0	23	14
17	18	98	2.8	3.4	2.4	2.3	2.0	1.8	1.8	3.2	18	13
18	16	185	2.8	3.4	2.4	2.1	2.0	1.8	2.4	2.9	14	9.6
19	14	42	2.8	3.4	2.4	2.0	2.0	2.3	2.4	2.6	12	8.9
20	13	3.4	2.9	3.4	2.4	2.0	1.9	2.2	2.4	2.5	101	9.1
21	12	2.8	2.8	3.4	2.4	2.0	1.9	2.1	2.8	2.5	80	7.9
22	12	2.6	2.9	3.4	2.5	2.1	1.8	2.0	2.7	2.7	30	6.0
23	13	2.5	2.9	3.3	2.8	1.9	1.8	2.0	2.8	3.6	18	5.0
24	17	2.5	2.9	3.3	2.9	1.9	1.8	2.0	2.7	5.9	14	13
25	7.9	2.4	2.9	3.3	2.7	1.8	1.8	2.0	2.6	36	12	80
26	10	2.4	2.9	3.3	2.6	1.8	1.8	2.0	2.6	11	10	73
27	11	2.4	2.9	3.3	2.6	1.9	1.8	1.9	2.8	23	11	35
28	11	2.3	2.9	3.3	2.6	1.9	1.8	1.9	2.7	46	11	23
29	9.2	2.3	2.9	3.2	---	1.9	1.8	1.9	2.6	23	15	18
30	5.2	2.2	2.9	3.2	---	1.9	1.8	1.8	3.0	12	10	15
31	8.8	---	3.0	2.9	---	1.9	---	1.8	---	9.8	12	---
TOTAL	666.1	997.3	85.9	101.0	70.0	74.5	58.7	58.4	66.3	325.3	821.4	550.1
MEAN	21.5	33.2	2.77	3.26	2.50	2.40	1.96	1.88	2.21	10.5	26.5	18.3
MAX	49	269	3.0	3.9	2.9	3.1	2.2	2.3	3.0	46	101	80
MIN	5.2	2.2	2.3	2.9	2.2	1.8	1.8	1.8	1.8	2.5	5.2	5.0
CFSM	1.02	1.58	0.13	0.16	0.12	0.11	0.09	0.09	0.11	0.50	1.26	0.87
IN.	1.18	1.77	0.15	0.18	0.12	0.13	0.10	0.10	0.12	0.58	1.46	0.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

MEAN	28.3	13.9	5.65	5.15	5.19	4.99	3.05	1.54	1.85	8.38	13.0	64.3
MAX	55.3	33.2	13.6	14.5	14.3	11.5	5.38	3.84	4.85	24.6	26.5	156
(WY)	1999	2002	1999	1999	1999	2001	2001	1998	2001	2001	2002	2001
MIN	8.38	3.33	1.38	1.02	1.31	0.78	1.96	0.16	0.018	0.071	0.015	3.27
(WY)	2000	2000	2000	2000	2000	2000	2002	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1998 - 2002	
ANNUAL TOTAL	8736.8		3875.0			
ANNUAL MEAN	23.9		10.6		12.9	
HIGHEST ANNUAL MEAN					22.5	2001
LOWEST ANNUAL MEAN					7.98	2000
HIGHEST DAILY MEAN	897	Sep 15	269	Nov 14	897	Sep 15 2001
LOWEST DAILY MEAN	1.1	Jan 30	1.8	Many days	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	1.2	Jan 26	1.8	Apr 22	0.00	Some years
MAXIMUM PEAK FLOW			638	Nov 14	*1480	Sep 14 2001
MAXIMUM PEAK STAGE			7.66	Nov 14	9.46	Sep 14 2001
INSTANTANEOUS LOW FLOW			1.7	May 12,13,15,16		
ANNUAL RUNOFF (CFSM)	1.14		0.51		0.61	
ANNUAL RUNOFF (INCHES)	15.48		6.86		8.33	
10 PERCENT EXCEEDS	42		23		23	
50 PERCENT EXCEEDS	4.5		2.9		2.9	
90 PERCENT EXCEEDS	1.7		1.8		0.15	

* From rating curve extended above 574 ft^3/s

02247480 TIGER BAY CANAL NEAR DAYTONA BEACH, FL

LOCATION.--Lat 29°09'58", long 81°09'18", in SW¼ sec.25, T.15 S., R.31 E., Volusia County, Hydrologic Unit 03080201, on downstream side of wooden bridge on Indian Lake Road, 2.4 mi north of its intersection with U.S. Highway 92, and 8 mi west of Daytona Beach.

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

PERIOD OF RECORD.--January 1978 to September 2002 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair. Since 1988 some ground-water diversion out of the basin for municipal water supply.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	17	38	7.0	2.8	5.5	5.0	0.00	0.00	57	74	73
2	137	17	35	7.1	2.5	5.4	4.6	0.00	0.00	72	68	63
3	123	18	33	7.5	2.3	5.7	4.3	0.00	0.00	76	71	55
4	109	20	31	7.3	2.1	9.4	3.9	0.00	0.00	71	106	48
5	97	21	29	7.0	1.8	11	3.5	0.00	0.00	65	122	47
6	84	21	27	6.8	1.6	11	3.1	0.00	0.00	61	118	47
7	74	21	26	6.5	1.5	11	2.5	0.00	0.00	58	113	43
8	69	20	23	6.1	1.5	10	2.0	0.00	0.00	56	105	41
9	67	19	22	5.7	1.3	9.8	1.4	0.00	0.00	53	92	39
10	64	18	21	5.3	1.3	9.4	0.84	0.00	0.00	55	81	36
11	60	18	21	5.0	1.2	9.0	0.24	0.00	0.00	54	70	33
12	55	16	21	4.7	1.1	8.6	0.00	0.00	0.00	54	65	31
13	50	17	20	4.5	1.1	8.5	0.00	0.00	0.00	58	71	53
14	47	42	20	4.8	1.0	8.2	0.00	0.00	0.00	67	124	86
15	49	110	19	5.7	1.0	7.8	0.00	0.00	0.00	70	136	86
16	52	131	18	6.0	1.1	7.5	0.00	0.00	0.00	67	135	76
17	48	128	17	5.9	1.1	7.3	0.00	0.00	0.00	61	127	79
18	43	124	18	5.7	1.0	7.0	0.00	0.00	0.00	54	115	90
19	39	118	18	5.4	1.0	6.6	0.00	0.00	0.00	47	103	92
20	36	114	17	5.0	1.0	6.3	0.00	0.00	0.00	41	92	87
21	34	107	16	4.7	1.0	6.2	0.00	0.00	0.00	39	76	88
22	34	99	14	4.4	1.1	6.0	0.00	0.00	0.00	46	66	81
23	32	90	13	4.0	1.8	5.7	0.00	0.00	0.00	60	59	70
24	30	82	13	3.8	3.2	5.6	0.00	0.00	0.00	66	52	63
25	28	74	12	3.5	4.6	5.5	0.00	0.00	0.00	60	46	69
26	26	66	11	3.6	5.5	5.5	0.00	0.00	0.00	65	41	90
27	24	57	9.8	3.5	5.7	5.6	0.00	0.00	11	83	36	99
28	22	51	9.1	3.5	5.6	5.5	0.00	0.00	37	90	35	95
29	20	46	8.4	3.4	---	5.5	0.00	0.00	44	105	54	87
30	19	42	7.9	3.2	---	5.5	0.00	0.00	50	100	78	78
31	18	---	7.5	3.0	---	5.3	---	0.00	---	86	82	---
TOTAL	1744	1724	595.7	159.6	57.8	226.9	31.38	0.00	142.00	1997	2613	2025
MEAN	56.3	57.5	19.2	5.15	2.06	7.32	1.05	0.000	4.73	64.4	84.3	67.5
MAX	154	131	38	7.5	5.7	11	5.0	0.00	50	105	136	99
MIN	18	16	7.5	3.0	1.0	5.3	0.00	0.00	0.00	39	35	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

MEAN	34.8	18.0	13.8	19.5	18.7	19.8	12.4	2.98	5.20	11.2	19.8	33.6
MAX	92.0	71.1	78.2	89.2	74.2	80.7	90.1	39.1	67.6	64.4	92.5	162
(WY)	1980	1995	1998	1998	1978	1979	1983	1979	1991	2002	1978	2001
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1988	1987	1991	1991	1991	1985	1985	1980	1981	1981	1981	1987

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1978 - 2002	
ANNUAL TOTAL	9472.44		11316.38			
ANNUAL MEAN	26.0		31.0		17.0	
HIGHEST ANNUAL MEAN					37.1	1984
LOWEST ANNUAL MEAN					0.003	1994
HIGHEST DAILY MEAN	349	Sep 15	154	Oct 1	349	Sep 15 2001
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Apr 12	0.00	Many days
MAXIMUM PEAK FLOW			154	Oct 1	355	Sep 15 2001
MAXIMUM PEAK STAGE			32.17	Oct 1	32.94	Mar 7 1979
10 PERCENT EXCEEDS	87		87		57	
50 PERCENT EXCEEDS	0.00		11		1.4	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

02247496 THAYER CANAL NEAR DAYTONA BEACH, FL

LOCATION.--Lat 29°10'43", long 81°07'14", in NW¼ sec.29, T.15 S., R.31 E., Volusia County, Hydrologic Unit 03080201, on right bank 50 ft upstream from box culverts on 11th Street extension, 1.5 mi above mouth, and 2.2 mi northwest of the intersection of Interstate Highway 95 and U.S. Highway 92, and 4.3 mi west of Daytona Beach.

DRAINAGE AREA.--33 mi^2, approximately.

PERIOD OF RECORD.--December 1982 to September 1988 (gage heights and discharge measurements only). October 1988 to September 2002 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. (Savage Engineering Co. bench mark).

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	12	46	8.7	4.8	2.9	0.71	0.00	0.00	8.5	76	68
2	85	11	43	8.9	4.6	3.3	0.64	0.00	0.00	27	79	66
3	79	10	39	10	4.4	3.9	0.57	0.00	0.00	40	88	60
4	74	9.9	36	9.6	4.1	10	0.52	0.00	0.00	49	97	54
5	70	10	33	8.9	3.8	11	0.46	0.00	0.00	55	94	51
6	66	12	31	8.6	3.5	9.7	0.41	0.00	0.00	57	106	46
7	63	11	29	8.3	3.4	9.2	0.36	0.00	0.00	50	99	42
8	61	11	28	7.8	3.4	8.9	0.33	0.00	0.00	47	92	39
9	60	11	27	7.4	3.2	8.6	0.29	0.00	0.00	45	86	36
10	57	10	25	7.0	3.0	7.9	0.26	0.00	0.00	46	80	33
11	54	9.9	24	6.7	2.8	7.3	0.24	0.00	0.00	47	75	30
12	51	9.4	23	6.4	2.5	6.6	0.24	0.00	0.00	46	75	29
13	48	10	23	6.4	2.3	6.2	0.26	0.00	0.21	48	82	46
14	45	42	22	6.8	2.1	5.6	0.31	0.00	0.17	51	92	54
15	46	71	22	8.7	2.0	5.0	0.33	0.00	0.12	51	91	64
16	43	67	21	8.3	1.9	4.4	0.29	0.00	0.09	52	93	69
17	42	68	20	7.7	1.8	4.0	0.27	0.00	0.07	52	96	72
18	39	68	20	7.5	1.7	3.6	0.25	0.00	0.24	49	96	68
19	37	68	19	7.2	1.6	3.2	0.23	0.00	0.46	45	99	70
20	35	67	17	7.1	1.5	2.8	0.22	0.00	0.61	41	109	72
21	33	66	16	7.0	1.4	2.5	0.22	0.00	0.78	36	95	72
22	33	65	15	6.8	1.5	2.3	0.21	0.00	1.0	37	84	70
23	31	64	14	6.6	2.3	2.1	0.19	0.00	1.5	44	74	67
24	30	63	14	6.3	3.6	1.8	0.18	0.00	1.7	64	66	65
25	27	62	13	5.9	3.4	1.6	0.17	0.00	2.2	59	58	61
26	23	60	12	6.3	3.1	1.5	0.17	0.00	2.4	58	50	59
27	19	58	11	6.1	2.9	1.3	0.15	0.00	3.0	76	45	65
28	16	55	11	5.8	2.8	1.2	0.12	0.00	2.7	76	40	71
29	14	52	10	5.5	---	1.0	0.07	0.00	2.7	81	36	71
30	13	49	9.7	5.3	---	0.90	0.02	0.00	5.5	79	43	70
31	13	---	9.2	5.0	---	0.81	---	0.00	---	76	62	---
TOTAL	1400	1182.2	682.9	224.6	79.4	141.11	8.69	0.00	25.45	1592.5	2458	1740
MEAN	45.2	39.4	22.0	7.25	2.84	4.55	0.29	0.000	0.85	51.4	79.3	58.0
MAX	93	71	46	10	4.8	11	0.71	0.00	5.5	81	109	72
MIN	13	9.4	9.2	5.0	1.4	0.81	0.02	0.00	0.00	8.5	36	29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

MEAN	22.1	14.4	11.1	11.9	8.11	9.91	4.41	0.47	2.09	7.48	11.0	20.0
MAX	47.7	39.6	47.7	65.3	45.7	50.2	30.1	5.75	22.8	51.4	79.3	83.8
(WY)	1996	1995	1998	1998	1998	1998	1996	1996	1991	2002	2002	2001
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1994	1991	1989	1991	1991	1997	1997	1994	1989	1989	2000	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1989 - 2002	
ANNUAL TOTAL	6471.91		9534.85			
ANNUAL MEAN	17.7		26.1		10.3	
HIGHEST ANNUAL MEAN					26.1	2002
LOWEST ANNUAL MEAN					0.024	1994
HIGHEST DAILY MEAN	252	Sep 15	109	Aug 20	252	Sep 15 2001
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	May 1	0.00	Many days
MAXIMUM PEAK FLOW			118	Aug 20	290	Sep 14 2001
MAXIMUM PEAK STAGE			25.18	Aug 20	27.50	Sep 14 2001
10 PERCENT EXCEEDS	64		71		36	
50 PERCENT EXCEEDS	0.53		9.9		0.43	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

02247509 ELEVENTH STREET CANAL AT HOLLY HILL, FL

LOCATION.--Lat 29°14'44", long 81°02'30", in SE¼ sec.35, T.14 S., R.32 E., Volusia County, Hydrologic Unit 03080201, near center of span on upstream side of bridge on U.S. Highway 1, 50 ft south of the intersection with LPGA Boulevard in Holly Hill, 0.3 mi upstream from mouth.

DRAINAGE AREA.--12.7 mi^2.

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark). Acoustic velocity meter for Reed Canal at South Daytona (02248025) used as auxiliary gage for this station.

REMARKS.--Records poor. Discharge computed from gage-height record at 11th Street Canal and velocity record at Reed Canal. Flow is affected by tides in the Intracoastal Waterway.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	16	14	8.9	8.9	14	13	8.7	10	7.6	13	14
2	43	15	14	15	8.8	17	12	7.7	9.3	14	16	13
3	33	16	12	16	11	18	11	4.5	7.5	19	32	12
4	26	15	18	16	11	37	9.5	4.0	6.9	e23	21	23
5	23	23	19	9.8	10	15	9.6	5.7	7.7	e25	15	18
6	17	24	18	7.2	10	13	12	7.9	7.0	e30	15	16
7	11	23	17	5.5	10	13	9.9	7.5	6.6	e28	56	14
8	15	19	16	5.6	8.8	13	9.2	12	15	e25	26	16
9	22	16	15	5.4	8.5	11	8.8	7.8	11	e27	28	16
10	21	14	15	4.9	10	8.5	6.6	4.3	10	e26	23	19
11	14	15	16	4.8	8.8	9.6	5.8	3.9	14	e27	25	18
12	18	17	16	5.1	8.0	11	8.6	4.0	13	28	25	14
13	18	30	15	6.3	8.4	14	13	6.0	15	16	43	15
14	28	213	16	12	7.7	11	21	4.7	16	9.9	37	14
15	22	188	13	13	11	9.6	14	4.9	13	7.3	26	12
16	19	86	12	8.5	13	8.5	9.4	6.2	11	6.5	22	10
17	21	64	16	7.4	11	7.1	8.2	6.7	17	6.2	18	9.4
18	22	50	13	6.5	9.3	6.5	8.1	6.5	23	5.2	15	10
19	24	27	12	5.7	9.7	7.0	7.3	12	27	8.9	14	11
20	21	18	11	5.5	8.7	8.9	6.8	13	48	13	17	11
21	26	12	11	5.5	7.2	9.6	6.9	11	39	8.9	11	11
22	24	e11	11	5.7	10	10	8.4	7.9	45	9.8	7.8	13
23	16	e11	13	6.4	26	12	8.0	12	47	21	13	16
24	11	e10	12	6.3	31	11	9.7	13	30	23	9.9	18
25	7.2	e11	9.8	6.0	21	9.8	10	11	20	15	13	18
26	9.6	e12	6.0	11	18	9.8	8.0	9.2	12	13	13	17
27	10	13	10	11	16	10	9.0	8.6	17	11	14	14
28	15	17	8.7	9.5	13	9.0	12	10	13	8.3	13	10
29	16	17	9.1	8.8	---	11	10	12	9.2	4.6	11	11
30	17	16	9.2	8.1	---	13	7.4	13	11	3.6	12	4.2
31	11	---	9.7	9.2	---	13	---	12	---	5.6	14	---
TOTAL	628.8	1019	407.5	256.6	334.8	370.9	293.2	257.7	531.2	476.4	618.7	417.6
MEAN	20.3	34.0	13.1	8.28	12.0	12.0	9.77	8.31	17.7	15.4	20.0	13.9
MAX	48	213	19	16	31	37	21	13	48	30	56	23
MIN	7.2	10	6.0	4.8	7.2	6.5	5.8	3.9	6.6	3.6	7.8	4.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	20.3	34.0	10.1	5.50	7.43	11.2	7.79	6.57	12.1	12.5	14.6	26.7
MAX	20.3	34.0	13.1	8.28	12.0	12.0	9.77	8.31	17.7	15.4	20.0	39.5
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001
MIN	20.3	34.0	3.79	2.73	2.91	10.5	5.80	4.83	6.46	9.65	9.34	13.9
(WY)	2002	2002	2001	2001	2001	2001	2001	2001	2001	2001	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	4837.84		5612.4			
ANNUAL MEAN	13.3		15.4		12.9	
HIGHEST ANNUAL MEAN					15.4	2002
LOWEST ANNUAL MEAN					9.86	2001
HIGHEST DAILY MEAN	263	Sep 14	213	Nov 14	263	Sep 14 2001
LOWEST DAILY MEAN	0.81	Aug 13	3.6	Jul 30	0.81	Aug 13 2001
ANNUAL SEVEN-DAY MINIMUM	1.8	Jan 1	4.9	May 10	1.8	Jan 1 2001
MAXIMUM PEAK STAGE			3.75	Nov 14	4.35	Sep 15 2001
10 PERCENT EXCEEDS	23		25		23	
50 PERCENT EXCEEDS	7.4		12		9.5	
90 PERCENT EXCEEDS	2.6		6.6		3.1	

e Estimated

02247510 TOMOKA RIVER NEAR HOLLY HILL, FL

LOCATION.--Lat 29°13'02", long 81°06'32", in NW¼ sec.9, T.15 S., R.32 E., Volusia County, Hydrologic Unit 03080201, near center of span on downstream side of bridge on 11th Street extension, 0.3 mi southwest of Interstate Highway 95, 2 mi upstream from Priest Branch, 4.5 mi southwest of Holly Hill, and 12 mi upstream from mouth.

DRAINAGE AREA.--76.8 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 11, 1964, reached a stage of 12.65 ft, from floodmarks, discharge, 2,170 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	42	96	18	15	15	5.3	2.1	2.2	106	143	126
2	345	34	87	20	18	16	5.7	2.0	1.9	132	181	116
3	293	33	77	27	16	18	5.1	2.1	1.6	130	272	109
4	260	32	70	24	16	74	4.9	3.0	1.4	125	527	101
5	231	32	66	22	14	73	4.4	2.5	1.4	276	362	104
6	208	38	65	21	14	51	4.0	2.1	1.3	389	342	90
7	185	43	60	20	13	45	3.5	1.9	1.3	260	360	79
8	173	36	53	19	16	36	3.2	1.9	1.8	195	344	70
9	180	32	50	18	17	31	3.2	1.8	2.6	151	276	62
10	158	28	48	18	12	28	3.0	1.8	1.6	134	229	56
11	141	26	47	17	11	25	2.9	1.6	2.3	120	194	52
12	126	25	44	16	10	26	3.2	1.5	3.4	118	170	50
13	112	37	41	16	9.7	22	4.6	1.4	7.4	202	215	83
14	103	484	40	19	9.2	20	10	1.3	20	229	559	128
15	105	1010	38	36	8.6	18	37	1.2	21	179	398	119
16	112	596	35	39	8.5	17	18	1.2	13	144	314	120
17	100	403	34	27	8.1	15	11	1.3	12	121	288	129
18	88	326	32	23	7.5	14	8.1	1.3	21	106	404	133
19	79	300	31	21	6.9	13	6.8	3.9	30	93	345	125
20	73	265	29	20	6.7	12	5.8	6.2	41	82	395	119
21	76	248	28	20	6.4	11	5.2	3.0	54	73	343	114
22	118	222	26	18	8.0	11	4.4	2.3	71	67	283	109
23	96	198	25	17	23	9.4	3.8	2.2	105	100	229	105
24	87	178	25	16	56	8.7	3.4	2.1	121	202	182	103
25	77	166	24	15	44	8.0	3.2	1.7	117	166	145	115
26	68	153	24	18	33	7.4	2.8	1.6	98	130	120	111
27	57	140	28	19	23	7.0	2.8	2.3	91	134	106	101
28	49	130	22	17	17	6.5	2.5	2.5	71	146	91	100
29	41	118	20	17	---	6.1	2.3	2.6	53	148	79	98
30	38	107	19	17	---	5.6	2.2	2.5	48	144	79	96
31	39	---	18	16	---	5.3	---	2.2	---	139	109	---
TOTAL	4224	5482	1302	631	447.6	655.0	182.3	67.1	1017.2	4741	8084	3023
MEAN	136	183	42.0	20.4	16.0	21.1	6.08	2.16	33.9	153	261	101
MAX	406	1010	96	39	56	74	37	6.2	121	389	559	133
MIN	38	25	18	15	6.4	5.3	2.2	1.2	1.3	67	79	50
CFSM	1.77	2.38	0.55	0.27	0.21	0.28	0.08	0.03	0.44	1.99	3.40	1.31
IN.	2.05	2.66	0.63	0.31	0.22	0.32	0.09	0.03	0.49	2.30	3.92	1.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

MEAN	96.7	51.1	37.6	49.2	46.9	46.9	30.6	12.4	37.2	46.1	64.8	98.6
MAX	401	205	238	204	195	233	182	72.5	343	222	261	460
(WY)	1970	1995	1984	1979	1998	1996	1983	1966	1976	1966	2002	2001
MIN	2.35	2.63	1.97	2.05	2.50	2.65	0.47	0.52	0.30	0.94	1.43	3.65
(WY)	1981	1991	1991	1981	2001	1985	1968	1981	1981	1977	1988	1993

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002	
ANNUAL TOTAL	30258.81		29856.2			
ANNUAL MEAN	82.9		81.8		51.5	
HIGHEST ANNUAL MEAN					99.6	1970
LOWEST ANNUAL MEAN					5.11	1981
HIGHEST DAILY MEAN	2130	Sep 15	1010	Nov 15	2130	Sep 15 2001
LOWEST DAILY MEAN	0.70	Mar 12	1.2	May 15,16	*0.00	
ANNUAL SEVEN-DAY MINIMUM	1.1	Mar 6	1.3	May 12	0.00	Jun 26 1981
MAXIMUM PEAK FLOW			1160	Nov 14	2850	Sep 14 2001
MAXIMUM PEAK STAGE			11.44	Nov 14	13.27	Sep 14 2001
INSTANTANEOUS LOW FLOW			1.1	May 15		
ANNUAL RUNOFF (CFSM)	1.08		1.07		0.67	
ANNUAL RUNOFF (INCHES)	14.66		14.46		9.11	
10 PERCENT EXCEEDS	225		218		137	
50 PERCENT EXCEEDS	20		34		17	
90 PERCENT EXCEEDS	2.3		2.5		2.1	

*Feb. 24,25,1968, June 26 to July 8, 1981

02247598 TOMOKA RIVER NEAR ORMOND BEACH, FL

LOCATION.--Lat 29°20'26", long 81°05'11", in NW¼ sec.42, T.13 S., R.32 E., Volusia County, Hydrologic Unit 03080201, attached to pier on right bank in the south picnic area of Tomoka State Park, 1.0 mi upstream from mouth, and 4.8 mi north of the City Hall in Ormond Beach.

DRAINAGE AREA.--101 mi^2.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data collection platform. Datum of gage is undetermined.

REMARKS.--Records poor. Discharge not published some days, due to missing gage height record. Flow affected by tides in the Intracoastal Waterway.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	862	153	191	87	244	-33	146	170	-58	133	---	-23
2	520	160	141	-9.8	129	-19	25	160	-66	42	---	-140
3	424	140	76	64	-62	174	35	161	-149	2.0	---	-181
4	475	-6.3	71	11	24	125	-51	100	-217	340	---	-221
5	437	-371	-20	-126	-193	75	-111	-76	-121	251	---	338
6	379	-178	30	440	29	24	-135	-73	15	155	---	321
7	99	240	45	125	287	38	-80	-46	-19	122	---	187
8	-172	203	-137	45	-38	-49	22	77	-198	181	157	131
9	31	126	65	127	-42	78	4.7	132	-248	288	268	275
10	262	-284	-97	258	83	44	-5.5	184	-137	245	245	65
11	286	-194	77	297	182	-93	-37	133	74	227	322	207
12	174	-216	33	309	162	-27	120	115	122	161	219	25
13	88	-571	28	220	60	50	173	164	216	187	362	145
14	321	683	175	179	24	143	187	146	72	294	352	457
15	66	1410	252	257	-212	215	161	-36	13	169	346	333
16	84	699	80	273	48	216	107	49	-33	---	233	210
17	220	525	144	183	31	204	116	86	50	---	211	95
18	204	503	258	204	-117	217	154	244	-71	---	326	-31
19	149	290	117	332	76	178	151	-217	-53	---	300	133
20	202	202	-0.32	136	52	64	59	-372	-18	---	315	149
21	8.7	56	28	140	46	225	-53	-168	4.6	---	392	100
22	-109	53	-25	61	-83	-129	-2.6	-543	251	---	253	185
23	-175	211	-62	100	-90	-73	-95	-538	402	---	157	263
24	68	164	48	168	-145	-12	-329	90	394	---	186	425
25	165	171	-98	270	42	58	139	250	386	---	159	53
26	-3.0	153	121	-83	8.4	-56	16	77	358	---	195	356
27	-108	134	76	15	224	-6.9	6.8	47	237	---	212	303
28	-305	142	-31	129	-11	23	238	69	346	---	168	30
29	-191	158	55	157	---	-10	199	-117	221	---	134	23
30	-81	205	157	200	---	158	54	-55	211	---	86	-252
31	123	---	135	177	---	115	---	-43	---	---	17	---
TOTAL	4503.7	4960.7	1932.68	4745.2	758.4	1916.1	1214.4	170	1984.6	2797.0	5615	3961
MEAN	145	165	62.3	153	27.1	61.8	40.5	5.48	66.2	186	234	132
MAX	862	1410	258	440	287	225	238	250	402	340	392	457
MIN	-305	-571	-137	-126	-212	-129	-329	-543	-248	2.0	17	-252

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	58.3	165	50.4	137	84.3	131	91.2	18.6	99.9	122	129	365
MAX	145	165	62.3	153	142	201	142	31.7	134	122	129	597
(WY)	2002	2002	2002	2002	2001	2001	2001	2001	2001	2001	2001	2001
MIN	-28.6	165	38.5	121	27.1	61.8	40.5	5.48	66.2	122	129	132
(WY)	2001	2002	2001	2001	2002	2002	2002	2002	2002	2001	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		#FOR 2002 WATER YEAR		#WATER YEARS 2001 - 2002	
ANNUAL TOTAL	60280.08		34561.63			
ANNUAL MEAN	165		101		121	
HIGHEST ANNUAL MEAN					141	2001
LOWEST ANNUAL MEAN					101	2002
HIGHEST DAILY MEAN	2830	Sep 15	1410	Nov 15	2830	Sep 15 2001
LOWEST DAILY MEAN	-1000	Mar 19	-571	Nov 13	-1000	Mar 19 2001
ANNUAL SEVEN-DAY MINIMUM	-99	Nov 7	-215	May 17	-248	Oct 18 2000
MAXIMUM PEAK STAGE			4.22	Nov 15	5.05	Sep 15 2001
10 PERCENT EXCEEDS	337		307		309	
50 PERCENT EXCEEDS	140		104		116	
90 PERCENT EXCEEDS	-94		-117		-117	

Includes partial year(s) of record
Note.--Negative figures indicate reverse flow

02248000 SPRUCE CREEK NEAR SAMSULA, FL

(Former national stream-quality accounting network station)

LOCATION.--Lat 29°03'01", long 81°02'49", in SE¼ sec 1, T.17 S., R.32 E., Volusia County, Hydrologic Unit 03080201, on downstream side of bridge on State Highway 4118, 1.8 mi north of Samsula, 8 mi west of New Smyrna Beach, 10 mi upstream from Turnbull Bay, and 13 mi upstream from mouth.

DRAINAGE AREA.--33.4 mi^2.

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 1624: 1958. WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6.25 ft above NGVD of 1929 (Florida Department of Transportation bench mark). Prior to Nov. 13, 1971, at sites within 100 ft at same datum.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Some diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	467	23	28	e10	17	28	e3.3	e0.80	0.88	e128	4.0	e43
2	364	26	25	e9.0	e15	24	e3.1	e0.67	0.68	e97	5.2	e33
3	267	66	21	53	e13	22	e2.9	e0.63	0.59	e74	8.6	e27
4	195	70	20	51	e11	60	e2.7	e1.8	0.57	125	11	e23
5	136	93	17	41	e9.6	49	e2.4	e1.1	0.55	330	26	e32
6	98	89	16	35	e17	36	e2.2	e0.75	0.51	345	26	e25
7	73	65	15	32	e42	29	e2.1	e0.60	0.50	220	86	e19
8	207	50	14	28	e38	25	e2.0	e0.56	0.56	152	85	e14
9	256	39	14	23	e32	19	e1.9	e0.52	0.50	133	59	e9.8
10	176	31	24	19	e27	16	e1.7	e0.49	0.47	149	37	e7.6
11	134	27	40	17	e22	14	e1.5	e0.42	0.54	133	25	e6.2
12	102	23	36	16	e17	12	e1.5	e0.34	0.50	110	33	5.8
13	84	38	32	15	e13	12	e1.4	e0.32	0.53	109	63	5.5
14	126	585	30	16	e11	11	e2.8	e0.29	0.51	124	e175	5.2
15	285	622	27	42	e8.8	8.8	e30	e0.27	0.49	96	e152	5.0
16	183	485	23	41	e7.1	7.5	e15	e0.25	0.46	71	e137	4.7
17	133	372	20	33	e6.0	6.5	e6.8	e0.25	0.99	50	e127	4.6
18	101	288	18	30	e5.2	5.7	e5.1	e0.22	1.2	35	e118	5.7
19	80	229	16	26	e4.6	5.1	e4.2	e0.94	e1.0	26	e119	6.4
20	65	166	15	21	e4.4	4.6	e3.7	e3.5	e1.1	19	e142	7.6
21	55	125	13	18	4.2	4.4	e2.9	e1.1	e2.8	15	e172	16
22	54	100	13	17	4.9	4.3	e2.6	e0.75	e1.2	14	e113	12
23	49	86	e10	16	27	4.1	e2.1	e0.63	e76	18	e81	9.8
24	44	72	e31	14	109	3.9	e1.8	e0.59	e66	16	e56	13
25	96	63	e28	13	91	3.7	e1.7	0.55	e130	12	e37	17
26	78	56	e24	31	68	3.6	e1.4	0.52	e120	9.8	e26	17
27	58	47	e20	34	50	3.8	e1.2	0.53	e114	9.6	20	16
28	42	40	e17	31	35	4.2	e1.1	0.52	e110	7.7	e16	13
29	34	35	e14	28	---	4.0	e1.0	0.56	e108	6.2	e14	11
30	29	31	e12	23	---	3.6	e0.89	0.60	e107	5.2	e12	9.1
31	27	---	e11	19	---	e3.4	---	1.1	---	4.2	e12	---
TOTAL	4098	4042	644	802.0	709.8	438.2	112.99	22.17	848.13	2643.7	1997.8	424.0
MEAN	132	135	20.8	25.9	25.4	14.1	3.77	0.72	28.3	85.3	64.4	14.1
MAX	467	622	40	53	109	60	30	3.5	130	345	175	43
MIN	27	23	10	9.0	4.2	3.4	0.89	0.22	0.46	4.2	4.0	4.6
CFSM	3.96	4.03	0.62	0.77	0.76	0.42	0.11	0.02	0.85	2.55	1.93	0.42
IN.	4.56	4.50	0.72	0.89	0.79	0.49	0.13	0.02	0.94	2.94	2.23	0.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2002, BY WATER YEAR (WY)

MEAN	59.8	24.5	17.3	26.1	28.0	30.5	17.3	4.55	21.6	30.0	47.7	72.8
MAX	248	174	120	134	121	127	126	31.5	168	165	181	281
(WY)	1970	1995	1984	1964	1978	1996	1983	1979	1976	1974	1976	1953
MIN	0.57	0.77	0.48	0.44	0.49	0.40	0.21	0.24	0.15	0.72	0.44	0.48
(WY)	1981	1981	1991	1991	1962	1962	1962	1951	1951	1951	1956	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951 - 2002	
ANNUAL TOTAL	23241.09		16782.79			
ANNUAL MEAN	63.7		46.0		31.7	
HIGHEST ANNUAL MEAN					72.9	1964
LOWEST ANNUAL MEAN					2.90	1981
HIGHEST DAILY MEAN	883	Sep 14	622	Nov 15	1280	Sep 11 1964
LOWEST DAILY MEAN	0.92	May 18	e0.22	May 18	*0.00	
ANNUAL SEVEN-DAY MINIMUM	0.97	May 13	0.28	May 12	0.04	Apr 20 1962
MAXIMUM PEAK FLOW			791	Nov 14	1610	Sep 10 1964
MAXIMUM PEAK STAGE			12.81	Nov 14	15.49	Oct 8 1953
INSTANTANEOUS LOW FLOW					a0.89	
ANNUAL RUNOFF (CFSM)	1.91		1.38		0.95	
ANNUAL RUNOFF (INCHES)	25.89		18.69		12.90	
10 PERCENT EXCEEDS	196		125		83	
50 PERCENT EXCEEDS	13		17		6.3	
90 PERCENT EXCEEDS	1.1		0.68		0.90	

e Estimated
* April 23-26, May 17, 1962
a Jan 7,8,29, May 15, 2001

02248025 REED CANAL AT SOUTH DAYTONA, FL

LOCATION.--Lat 29°09'30", long 80°59'43", in NE¼ sec. 33, T. 15 S., R. 33 E., Volusia County, Hydrologic Unit 03080201, at center of span on upstream side of bridge on U.S. Highway 1, 50 ft south of the intersection with Reed Canal Road, in the town of South Daytona, and 0.15 mi upstream from mouth.

DRAINAGE AREA.--3.75 mi^2.

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929 (City of Daytona benchmark).

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Flow affected by tides in the Intracoastal Waterway.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	18	19	5.4	12	14	9.7	6.3	1.9	0.08	15	8.6
2	58	18	16	16	12	19	8.4	8.5	2.6	14	18	3.1
3	43	19	11	17	9.5	27	7.6	3.2	-1.5	27	40	-0.34
4	33	19	19	24	12	57	8.1	3.1	-5.8	e20	20	20
5	30	31	21	10	8.0	26	1.6	-0.03	-4.5	e45	11	11
6	23	28	21	6.2	7.3	21	3.7	0.86	-4.7	e40	6.7	11
7	11	30	22	7.8	14	22	-0.45	1.9	-4.0	e35	81	4.9
8	13	31	19	8.2	12	21	0.11	17	16	e32	19	4.2
9	22	27	18	7.5	8.7	17	4.1	9.7	-1.5	e20	19	4.6
10	22	20	13	6.9	11	12	3.2	-0.08	-5.2	e18	14	10
11	12	19	13	6.8	12	12	-0.55	-2.6	3.2	e28	20	12
12	20	23	14	7.6	9.4	12	2.5	-4.3	4.6	44	22	7.5
13	20	36	13	11	9.4	18	12	2.5	12	12	59	7.9
14	39	265	16	19	6.5	17	26	1.1	16	2.1	57	8.4
15	29	237	15	25	7.1	15	18	-2.8	11	-0.01	37	12
16	20	102	10	14	12	14	10	-0.33	5.5	-0.65	32	10
17	22	79	17	12	12	11	7.7	2.6	16	-2.4	26	8.4
18	25	65	19	10	5.7	9.9	7.9	6.0	29	-5.8	23	6.8
19	27	30	17	8.5	8.8	11	6.7	9.2	34	2.9	20	3.2
20	24	19	14	8.2	11	12	6.9	2.9	68	16	26	1.3
21	33	e20	11	7.8	11	16	4.3	-0.76	52	6.2	11	-0.52
22	33	e25	11	8.1	17	11	5.5	-11	61	7.7	2.2	-0.12
23	20	e25	13	8.5	47	8.7	0.65	-6.6	67	29	15	4.4
24	9.6	e22	16	9.4	45	8.8	-1.2	-0.49	45	33	7.0	9.4
25	4.0	e20	8.3	9.6	24	7.3	0.77	0.42	27	22	16	9.3
26	10	e18	8.1	17	18	7.5	-2.3	-1.9	11	21	15	8.9
27	10	15	11	12	18	7.0	-3.3	-2.5	21	16	17	11
28	17	25	7.6	11	16	0.99	4.3	-0.59	15	8.0	17	4.2
29	16	24	7.0	12	---	2.6	8.4	0.79	8.5	e10	11	3.7
30	19	23	7.3	10	---	5.7	3.8	4.1	10	e15	14	-2.6
31	8.1	---	6.7	12	---	7.0	---	3.3	---	e17	14	---
TOTAL	734.7	1333	434.0	348.5	396.4	450.49	164.13	49.49	510.1	532.12	704.9	202.22
MEAN	23.7	44.4	14.0	11.2	14.2	14.5	5.47	1.60	17.0	17.2	22.7	6.74
MAX	62	265	22	25	47	57	26	17	68	45	81	20
MIN	4.0	15	6.7	5.4	5.7	0.99	-3.3	-11	-5.8	-5.8	2.2	-2.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	23.7	44.4	12.7	10.1	12.0	19.9	11.1	6.35	17.5	21.3	23.0	37.5
MAX	23.7	44.4	14.0	11.2	14.2	25.2	16.6	11.1	18.1	25.4	23.3	68.2
(WY)	2002	2002	2002	2002	2002	2001	2001	2001	2001	2001	2001	2001
MIN	23.7	44.4	10.0	8.95	9.90	14.5	5.47	1.60	17.0	17.2	22.7	6.74
(WY)	2002	2002	2001	2001	2001	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	8777.87		5860.05			
ANNUAL MEAN	24.0		16.1		18.8	
HIGHEST ANNUAL MEAN					22.3	2001
LOWEST ANNUAL MEAN					16.1	2002
HIGHEST DAILY MEAN	364	Sep 14	265	Nov 14	364	Sep 14 2001
LOWEST DAILY MEAN	0.37	Mar 10	-11	May 22	-11	May 22 2002
ANNUAL SEVEN-DAY MINIMUM	7.2	Mar 6	-3.3	May 21	-3.3	May 21 2002
MAXIMUM PEAK STAGE			3.89	Nov 15	4.12	Sep 15 2001
10 PERCENT EXCEEDS	41		30		36	
50 PERCENT EXCEEDS	17		12		13	
90 PERCENT EXCEEDS	8.1		0.56		3.5	

e Estimated
Note.--Negative figures indicate reverse flow

02248030 HALIFAX CANAL NEAR HARBOR OAKS, FL

LOCATION.--Lat 29°06'56", long 80°59'15", in NW¼ sec. 15, T. 16 S., R. 33 E., Volusia County, Hydrologic Unit 03080201, near center of downstream side of box culverts on Nova Road, 1.0 mi west of the intersection of Nova Road and U.S. Highway 1, 1.0 mi northwest of Harbor Oaks, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--2.74 mi^2.

PERIOD OF RECORD.--October 2000 to November 2001 (discontinued).

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair except for period of estimated daily discharge, which is poor. Flow affected by tides in the Intracoastal Waterway.

EXTREMES FOR PERIOD OCTOBER TO NOVEMBER 2001.--Maximum daily discharge, 23 ft^3/s, Oct. 1, maximum gage height, 2.71 ft, Oct. 1; minimum daily discharge 2.1 ft^3/s, Oct. 13, minimum gage height, .44 ft, Nov. 4.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD OCTOBER 2001 TO NOVEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	4.9	---	---	---	---	---	---	---	---	---	---
2	17	4.3	---	---	---	---	---	---	---	---	---	---
3	16	6.0	---	---	---	---	---	---	---	---	---	---
4	14	5.3	---	---	---	---	---	---	---	---	---	---
5	16	---	---	---	---	---	---	---	---	---	---	---
6	14	---	---	---	---	---	---	---	---	---	---	---
7	9.1	---	---	---	---	---	---	---	---	---	---	---
8	9.2	---	---	---	---	---	---	---	---	---	---	---
9	8.1	---	---	---	---	---	---	---	---	---	---	---
10	12	---	---	---	---	---	---	---	---	---	---	---
11	8.5	---	---	---	---	---	---	---	---	---	---	---
12	e9.2	---	---	---	---	---	---	---	---	---	---	---
13	e2.1	---	---	---	---	---	---	---	---	---	---	---
14	e10	---	---	---	---	---	---	---	---	---	---	---
15	e11	---	---	---	---	---	---	---	---	---	---	---
16	e6.1	---	---	---	---	---	---	---	---	---	---	---
17	e4.4	---	---	---	---	---	---	---	---	---	---	---
18	e6.2	---	---	---	---	---	---	---	---	---	---	---
19	e3.7	---	---	---	---	---	---	---	---	---	---	---
20	e4.2	---	---	---	---	---	---	---	---	---	---	---
21	e6.7	---	---	---	---	---	---	---	---	---	---	---
22	e8.0	---	---	---	---	---	---	---	---	---	---	---
23	e5.4	---	---	---	---	---	---	---	---	---	---	---
24	7.0	---	---	---	---	---	---	---	---	---	---	---
25	6.3	---	---	---	---	---	---	---	---	---	---	---
26	6.0	---	---	---	---	---	---	---	---	---	---	---
27	5.2	---	---	---	---	---	---	---	---	---	---	---
28	2.6	---	---	---	---	---	---	---	---	---	---	---
29	5.2	---	---	---	---	---	---	---	---	---	---	---
30	4.9	---	---	---	---	---	---	---	---	---	---	---
31	4.2	---	---	---	---	---	---	---	---	---	---	---
TOTAL	265.3	---	---	---	---	---	---	---	---	---	---	---
MEAN	8.56	---	---	---	---	---	---	---	---	---	---	---
MAX	23	---	---	---	---	---	---	---	---	---	---	---
MIN	2.1	---	---	---	---	---	---	---	---	---	---	---

e Estimated

02248053 SPRUCE CREEK NEAR NEW SMYRNA BEACH, FL

LOCATION.--Lat 29°04'21", long 80°59'25", in NW¼ sec. 34, T. 16 S., R. 33 E., Volusia County, Hydrologic Unit 03080201, near left bank, 0.5 mi upstream from railroad crossing at Strickland Bay, 2.5 mi upstream from mouth, and 4.6 mi northwest of the City Hall in New Smyrna Beach.

DRAINAGE AREA.--60.7 mi^2.

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is undetermined.

REMARKS.--Records fair. Flow affected by tides in the Intracoastal Waterway.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	899	-13	23	33	246	-14	-33	130	-54	219	246	-17
2	600	-52	18	68	176	181	37	190	3.1	150	196	-10
3	402	26	-6.9	127	113	374	149	70	-14	96	215	-120
4	323	-47	20	170	207	416	20	-6.4	-110	306	224	-61
5	257	-66	-3.5	118	-59	51	-118	-132	-118	801	116	-2.7
6	172	186	-9.6	256	57	5.9	-156	-159	-123	1090	9.4	-135
7	-19	150	15	201	239	49	-179	-105	-90	448	77	-154
8	82	49	20	219	95	13	-104	-60	-194	262	191	-40
9	359	33	45	182	52	49	-28	-43	-207	214	141	21
10	260	-1.9	-28	178	138	-39	39	-47	-161	227	141	51
11	169	-49	-8.0	206	112	-48	-67	-59	-85	181	148	59
12	85	-132	-42	187	83	23	9.5	-115	-52	108	159	36
13	7.2	-191	-37	51	175	206	-75	155	0.43	242	292	23
14	104	1120	46	254	-18	139	78	-77	90	282	654	12
15	312	2180	45	136	21	85	102	-158	84	180	441	65
16	273	1460	-99	224	182	226	-18	-46	54	80	306	89
17	124	1050	59	205	216	191	30	39	28	46	222	62
18	97	698	227	281	-71	144	44	142	-13	3.8	207	-60
19	117	564	289	252	86	133	83	-17	-13	54	198	-123
20	121	345	238	127	168	274	157	-117	-18	157	608	-87
21	97	173	165	262	144	202	92	-152	-27	156	445	-116
22	41	166	65	-22	197	-59	98	-309	142	51	169	-87
23	22	98	141	114	45	-7.9	-113	-117	453	100	90	-52
24	33	75	234	207	89	-75	-162	-107	427	188	129	18
25	60	28	143	256	39	-72	-62	-98	392	181	36	-18
26	-42	-0.33	76	101	48	-17	-228	-181	273	216	49	60
27	-47	-31	100	108	157	-92	-94	-119	153	175	133	207
28	-166	-48	81	93	40	-159	114	-112	98	176	148	169
29	-73	-16	114	83	---	-71	154	-81	4.4	177	55	23
30	-26	14	47	147	---	39	38	-13	151	266	27	-125
31	-28	---	52	176	---	63	---	e94	---	229	-4.5	---
TOTAL	4615.2	7767.77	2029.0	5000	2977	2210.0	-192.5	-1610.4	1073.93	7061.8	6067.9	-312.7
MEAN	149	259	65.5	161	106	71.3	-6.42	-51.9	35.8	228	196	-10.4
MAX	899	2180	289	281	246	416	157	190	453	1090	654	207
MIN	-166	-191	-99	-22	-71	-159	-228	-309	-207	3.8	-4.5	-154

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	149	259	73.7	111	72.5	104	29.0	-44.2	71.8	187	188	290
MAX	149	259	125	161	106	137	64.4	-36.4	108	228	196	590
(WY)	2002	2002	2001	2002	2002	2001	2001	2001	2001	2002	2002	2001
MIN	149	259	65.5	61.6	38.7	71.3	-6.42	-51.9	35.8	146	180	-10.4
(WY)	2002	2002	2002	2001	2001	2002	2002	2002	2002	2001	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	53490.99		36687.00			
ANNUAL MEAN	147		101		119	
HIGHEST ANNUAL MEAN					143	2001
LOWEST ANNUAL MEAN					101	2002
HIGHEST DAILY MEAN	2770	Sep 15	2180	Nov 15	2770	Sep 15 2001
LOWEST DAILY MEAN	-342	Mar 19	-309	May 22	-342	Mar 19 2001
ANNUAL SEVEN-DAY MINIMUM	-182	May 1	-155	May 21	-182	May 1 2001
MAXIMUM PEAK STAGE			3.91	Nov 15	4.05	Sep 15 2001
10 PERCENT EXCEEDS	304		262		273	
50 PERCENT EXCEEDS	82		65		78	
90 PERCENT EXCEEDS	-70		-101		-89	

e Estimated
Note.--Negative figures indicate reverse flow.

02248060 TURNBULL CREEK NEAR NEW SMYRNA BEACH, FL

LOCATION.--Lat 29°03'03", long 80°57'35", in SW¼ sec. 40, T. 17 S., R. 33 E., Volusia County, Hydrologic Unit 03080201, near left bank, 75 ft upstream from Turnbull Bay Road, 1.9 mi northwest of the intersection of Turnbull Bay Road and U.S. Highway 1, 2.0 mi upstream from mouth, and 2.8 mi northwest of the City Hall in New Smyrna Beach.

DRAINAGE AREA.--11.3 mi^2.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is undetermined.

REMARKS.--Records fair except for period of estimated daily discharge, which is poor. Flow affected by tides in the Intracoastal Waterway.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	72	25	64	7.5	71	33	39	37	41	e33	92
2	274	56	23	76	-4.0	81	44	34	26	51	e27	69
3	167	87	7.6	154	0.17	25	30	21	13	43	e26	79
4	163	48	87	115	18	32	27	21	0.47	26	e19	181
5	152	13	80	102	31	44	22	41	1.2	175	e9.0	121
6	128	288	63	52	31	31	78	62	4.4	164	e5.2	2.4
7	48	157	45	27	-2.3	9.5	59	25	-9.7	84	15	-28
8	286	65	31	37	3.8	8.3	38	-5.5	-69	66	155	45
9	327	49	30	32	14	3.9	30	-9.6	-30	85	158	113
10	226	27	200	16	0.81	-7.8	11	-17	19	70	134	141
11	163	42	104	11	-11	-5.3	-8.3	-20	38	41	160	96
12	104	8.4	55	1.1	-11	-12	15	-27	55	23	144	43
13	76	6.1	50	3.4	-7.6	21	25	0.29	59	72	107	30
14	136	708	63	24	-16	4.8	28	-45	60	66	99	38
15	162	981	30	25	44	4.0	31	12	16	59	65	21
16	186	753	30	36	43	8.2	25	15	40	26	42	5.6
17	161	552	57	13	15	4.5	22	7.6	11	15	33	-3.5
18	164	352	37	7.1	22	0.08	26	-7.2	20	26	25	-22
19	183	277	32	4.0	43	-6.0	20	-57	16	19	5.9	-12
20	187	171	20	2.9	0.17	0.31	11	17	40	2.5	76	21
21	165	118	51	1.6	-8.1	0.30	10	13	23	22	83	3.5
22	106	132	45	-0.39	-12	-7.0	7.4	-64	72	13	24	48
23	104	95	33	5.1	40	29	-18	70	55	e12	65	103
24	101	74	20	-1.5	138	25	16	38	100	e16	96	107
25	104	53	43	-0.32	71	5.9	31	4.8	79	e24	61	101
26	62	45	75	-17	19	-4.0	-24	-24	65	e23	57	103
27	62	20	73	17	6.1	-16	40	-3.4	63	e28	67	54
28	71	34	39	7.5	73	-29	69	-3.3	56	e23	50	15
29	115	33	41	-2.4	---	6.6	50	29	35	e21	43	38
30	133	28	42	-5.7	---	46	37	74	21	e21	50	28
31	80	---	55	4.5	---	51	---	60	---	e35	65	---
TOTAL	4828	5344.5	1586.6	810.89	548.55	425.29	785.1	300.69	916.37	1392.5	1999.1	1633.0
MEAN	156	178	51.2	26.2	19.6	13.7	26.2	9.70	30.5	44.9	64.5	54.4
MAX	432	981	200	154	138	81	78	74	100	175	160	181
MIN	48	6.1	7.6	-17	-16	-29	-24	-64	-69	2.5	5.2	-28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	113	99.7	26.6	4.92	-1.09	22.1	10.7	8.47	17.3	36.1	52.4	150
MAX	156	178	51.2	26.2	19.6	35.7	26.2	9.70	30.5	44.9	64.5	246
(WY)	2002	2002	2002	2002	2002	2001	2002	2002	2002	2002	2002	2001
MIN	69.4	21.3	1.96	-16.3	-21.8	13.7	-4.82	7.23	-4.80	14.9	36.8	54.4
(WY)	2001	2001	2001	2001	2001	2002	2001	2001	2001	2001	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	19759.64		20570.59			
ANNUAL MEAN	62.5		56.4		46.1	
HIGHEST ANNUAL MEAN					56.4	2002
LOWEST ANNUAL MEAN					34.3	2001
HIGHEST DAILY MEAN	981	Nov 15	981	Nov 15	981	Nov 15 2001
LOWEST DAILY MEAN	-65	Feb 23	-69	Jun 8	-69	Jun 8 2002
ANNUAL SEVEN-DAY MINIMUM	-34	Feb 3	-18	May 8	-34	Feb 3 2001
MAXIMUM PEAK STAGE			14.70	Nov 15	14.70	Nov 15 2001
10 PERCENT EXCEEDS	164		137		115	
50 PERCENT EXCEEDS	14		32		22	
90 PERCENT EXCEEDS	-22		-3.7		-18	

e Estimated
Note.--Negative figures indicate reverse flow

02248380 HAULOVER CANAL NEAR MIMS, FL

LOCATION.--Lat 28°44'10", long 80°45'18", in SE¼ sec. 19, T. 20 S., R. 36 E., Brevard County, Hydrologic Unit 03080202, under the bridge on Kennedy Parkway, 8.7 mi south of the intersection of U.S. Highway 1 and Kennedy Parkway, and 7.3 mi northeast of Mims.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1995 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-4050	890	-1890	-2590	-1130	1200	-1300	1050	-1140	1620	-865	-2370
2	-1650	1040	-1450	-77	-2100	7460	-204	1310	1270	-361	-588	-1650
3	-131	-168	-2840	-2580	-2380	5390	805	2430	1180	1580	-512	-2700
4	-839	-1730	-2950	-3160	-1790	-3280	-1660	2730	1340	583	351	312
5	254	-4020	-1310	-1380	-2970	1190	-3000	-557	330	-660	-1290	2600
6	1950	-4140	-308	3840	3560	785	-3640	-2190	1850	557	-1590	246
7	-2340	-1360	1020	-1030	4740	-1270	-198	1060	1130	792	-3570	-890
8	-3530	732	2280	-922	-3320	-397	5000	2240	-1390	1260	-4000	-2360
9	-2250	-196	-356	-21	-624	178	5760	2710	-2070	1820	-2380	-1980
10	2120	-474	1820	1280	2510	-1970	3800	2180	-935	2700	-1580	527
11	2330	-1020	-531	197	-2070	-904	1590	2200	98	2990	-315	963
12	1770	-1720	555	944	240	2460	2000	2640	1330	2080	3180	1800
13	4250	-2850	730	-729	-2080	88	2480	2630	3030	3960	1300	3650
14	4820	-3390	2580	996	-2630	-933	1230	-1220	1360	-339	2020	3540
15	-3480	-5160	-792	-1170	-208	208	190	-1750	3010	962	3600	2240
16	-2580	-5000	-110	-1260	-1570	2520	1680	2030	508	1080	3660	1710
17	-4370	-4440	3890	376	-1580	647	1400	2380	1100	516	4010	1010
18	-3170	-2330	246	-573	-2890	2140	963	2620	364	-333	1720	18
19	-273	-931	72	2010	2750	1310	991	-1810	790	1650	1810	332
20	-2200	597	-1850	-157	4530	4210	2040	e-2000	1460	560	-18	610
21	682	-1210	-2690	984	3410	927	1710	e-2250	3100	1070	1190	-811
22	414	1100	390	-1910	-748	-3730	428	e-2750	3710	255	76	-83
23	659	2910	3040	2830	-2830	-3490	-2160	-3090	2220	2730	-591	-21
24	1980	3330	387	2940	-3830	-453	-635	-73	2270	2050	644	2230
25	1110	1620	-2320	931	-1390	821	4440	-225	3000	2300	2420	4390
26	-3570	444	-2520	-2440	1530	1410	68	-1150	3430	2780	1050	8890
27	-3540	1780	-495	-2490	-1640	-1090	1690	1460	1700	1370	2220	4520
28	-3740	1720	1630	-1310	-3310	-2000	1500	-2570	3350	1440	2100	-488
29	-2250	2470	892	139	---	1340	-915	-2830	1960	1060	421	-1500
30	-1180	1800	-1510	1670	---	3610	-328	-789	1210	139	450	-1100
31	294	---	-2170	1720	---	1570	---	525	---	41	-1420	---
TOTAL	-22510	-19706	-6560	-2942	-17820	19947	25725	6941	40565	38252	13503	23635
MEAN	-726	-657	-212	-94.9	-636	643	858	224	1352	1234	436	788
MAX	4820	3330	3890	3840	4740	7460	5760	2730	3710	3960	4010	8890
MIN	-4370	-5160	-2950	-3160	-3830	-3730	-3640	-3090	-2070	-660	-4000	-2700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

MEAN	-673	-547	-742	-367	-397	-71.0	383	180	579	679	180	668
MAX	939	571	506	144	416	643	858	622	1352	1234	864	2139
(WY)	2000	1999	1996	1998	1998	2002	2002	2000	2002	2002	2001	1996
MIN	-1621	-1250	-1176	-901	-824	-568	-67.7	-616	-1352	147	-576	-275
(WY)	2001	2000	1997	1997	1996	1996	1999	1998	1996	1998	1998	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	32575.2		99030			
ANNUAL MEAN	89.2		271		10.4	
HIGHEST ANNUAL MEAN					271	2002
LOWEST ANNUAL MEAN					-247	1997
HIGHEST DAILY MEAN	5910	Jul 23	8890	Sep 26	9420	Sep 8 1996
LOWEST DAILY MEAN	-5160	Nov 15	-5160	Nov 15	-7260	Mar 12 1996
ANNUAL SEVEN-DAY MINIMUM	-3560	Nov 12	-3560	Nov 12	-4530	Mar 8 1996
MAXIMUM PEAK STAGE			1.71	Oct 14	2.32	Oct 17 1999
10 PERCENT EXCEEDS	2420		2960		2580	
50 PERCENT EXCEEDS	297		376		179	
90 PERCENT EXCEEDS	-2650		-2650		-2850	

e Estimated
Note.--Negative figures indicate reverse flow

02248380 HAULOVER CANAL NEAR MIMS, FL

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1998 to current year.
WATER TEMPERATURE: April 1998 to current year.

INSTRUMENTATION.--Water-quality monitor (YSI-600R).

REMARKS.--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 63,500 µS/cm @ 25 °C, June 9, 2001; minimum daily mean, 30,400 µS/cm @ 25 °C, Apr. 9, 1998.
WATER TEMPERATURE: Maximum daily mean, 32.3 °C, July 31, 1999; minimum daily mean, 8.9 °C, Jan. 5, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 53,700 µS/cm @ 25 °C, June 10; minimum daily mean, 34,200 µS/cm @ 25 °C, Sept. 27.
WATER TEMPERATURE: Maximum daily mean, 32.1 °C, July 18; minimum daily mean, 13.1 °C, Dec. 27.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46200	---	36600	39900	37300	42100	43800	43100	53300	42600	40000	38600
2	45700	---	37400	39900	38200	---	45100	43300	53500	43400	40000	39200
3	45800	---	38100	39400	39600	---	44700	42700	53300	43200	39500	39900
4	45800	---	38700	---	40300	---	45400	42200	53000	42400	39200	38900
5	45800	---	39000	---	40900	---	46800	42600	52700	43200	39700	36300
6	45200	---	39100	---	40600	---	48200	44300	51900	43300	---	37300
7	45700	---	38800	---	37900	---	47300	44400	50600	42600	---	38600
8	45500	---	37900	---	38900	---	46600	43200	51500	42200	---	39900
9	45200	---	37400	---	39800	---	43700	42200	52500	42000	---	40700
10	45100	---	37800	---	38100	42200	42800	41600	53700	41500	---	39900
11	43800	---	37500	---	38600	42500	42800	41400	53600	40600	---	38400
12	43600	---	37900	---	38600	41700	42400	41300	52100	39800	---	37600
13	43100	---	37500	---	39200	41200	41400	41200	50600	39300	---	36800
14	42600	---	36300	---	40800	42200	41000	42000	50900	40000	---	36000
15	43100	41700	36600	---	40500	42000	41900	44500	48900	40500	---	35800
16	44100	41700	37700	---	42000	41500	41000	43500	49400	39800	---	---
17	44700	40200	36200	35800	41400	41300	40900	42900	48700	39300	---	36200
18	44700	39400	36200	36100	43400	40800	41300	42500	48900	40300	---	36900
19	43900	39600	37000	35400	42900	40400	41300	43600	47500	39200	---	37700
20	43200	38800	37700	35200	39800	39400	40500	46400	47600	39400	---	37000
21	43500	39200	38900	35300	39300	39000	40700	48500	46900	39500	38700	37900
22	43500	39600	39300	36300	39400	41300	41200	50100	45000	39600	38800	39300
23	43700	37400	37400	36100	40300	43800	42200	52100	44400	38900	39100	38300
24	43500	36700	36800	35400	41000	44200	43500	52800	---	38800	39400	36500
25	42600	36200	38300	35100	41500	44500	42000	52200	43600	38600	38400	35200
26	43600	36700	39200	36400	38300	43600	42100	51600	43400	38700	38100	34700
27	43800	36300	38700	37200	39000	43100	42800	51500	43500	39000	37300	34200
28	43300	36200	36400	38100	41100	45100	42500	51800	42700	39100	36800	35600
29	---	35900	37100	38300	---	45000	43600	53000	42700	39000	36400	36400
30	---	35900	38200	37700	---	43100	44400	53500	42600	39800	36600	37400
31	---	---	39200	36400	---	43400	---	53600	---	40100	37300	---
MEAN	---	---	37800	---	40000	---	43100	46100	---	40500	---	---
MAX	---	---	39300	---	43400	---	48200	53600	---	43400	---	---
MIN	---	---	36200	---	37300	---	40500	41200	---	38600	---	---

02248380 HAULOVER CANAL NEAR MIMS, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.8	---	23.3	15.1	24.0	15.0	25.3	28.1	28.6	27.8	30.7	30.1
2	22.9	---	23.5	15.2	23.5	---	25.6	28.7	29.7	28.2	29.8	30.3
3	23.9	---	23.3	14.2	22.1	---	25.4	29.3	30.4	28.8	29.2	30.0
4	24.9	---	22.9	---	20.3	---	25.3	29.3	30.3	28.5	29.9	28.7
5	26.0	---	22.4	---	17.1	---	24.5	28.9	30.2	28.5	30.5	27.9
6	27.0	---	22.7	---	17.5	---	22.4	28.2	29.9	29.1	30.8	28.6
7	27.4	---	23.4	---	18.4	---	21.9	28.2	29.5	29.8	30.0	28.8
8	26.0	---	23.8	---	16.8	---	21.5	27.8	29.1	29.7	28.1	28.9
9	23.9	---	24.2	---	17.4	---	22.2	27.6	28.4	28.8	27.9	29.1
10	23.6	---	24.2	---	19.0	22.1	23.3	27.8	28.3	28.2	27.7	29.4
11	24.1	---	24.1	---	19.1	21.2	24.0	27.9	28.2	28.3	27.1	29.1
12	24.8	---	24.5	---	19.0	22.0	23.4	28.0	28.7	27.9	27.6	27.8
13	25.1	---	24.3	---	18.2	22.4	23.6	27.8	29.2	27.8	27.4	28.0
14	25.4	---	24.3	---	17.0	21.9	24.0	27.2	29.5	28.6	28.0	28.4
15	25.7	20.4	24.5	---	17.7	22.5	24.8	24.6	28.5	30.0	28.6	29.0
16	25.6	20.3	24.3	---	18.7	23.8	25.7	24.9	28.6	31.0	29.0	29.6
17	23.3	20.8	23.4	17.2	17.6	24.8	26.3	26.0	27.6	31.5	29.5	30.1
18	22.2	21.6	22.8	18.2	16.6	24.9	27.1	26.9	27.0	32.1	30.4	30.4
19	23.2	21.6	22.0	18.9	17.2	25.3	27.4	26.6	26.8	31.8	30.6	30.6
20	24.4	21.8	20.1	19.7	18.2	25.2	27.4	24.2	26.5	31.4	30.4	30.0
21	24.8	21.9	18.4	20.6	19.8	24.8	27.3	23.2	26.0	29.5	30.2	29.6
22	24.9	22.0	18.4	21.4	20.4	23.5	28.0	22.6	25.5	29.2	30.5	28.9
23	25.5	22.2	18.5	22.2	19.0	21.0	27.5	23.3	25.7	29.7	30.7	28.9
24	26.4	22.6	19.2	22.5	17.3	21.9	26.4	24.3	26.0	29.9	31.0	28.7
25	26.7	22.8	17.8	22.5	17.3	23.0	26.5	25.6	26.5	30.5	30.3	28.7
26	24.3	23.5	16.0	22.5	18.8	24.0	27.0	26.2	27.0	30.9	29.9	28.6
27	20.1	23.6	13.1	21.5	18.3	24.2	27.5	26.8	27.4	31.0	29.7	28.7
28	17.9	23.4	13.2	21.8	14.8	24.6	27.3	26.9	27.9	31.3	29.3	29.3
29	---	23.3	15.1	22.5	---	24.9	27.6	27.3	28.2	31.4	28.8	29.2
30	---	23.1	16.0	23.2	---	24.9	27.7	28.3	28.0	31.6	29.3	29.1
31	---	---	16.1	23.6	---	25.4	---	28.3	---	31.4	29.7	---
MEAN	---	---	21.0	---	18.6	---	25.5	26.8	28.1	29.8	29.4	29.1
MAX	---	---	24.5	---	24.0	---	28.0	29.3	30.4	32.1	31.0	30.6
MIN	---	---	13.1	---	14.8	---	21.5	22.6	25.5	27.8	27.1	27.8

02249007 EAU GALLIE RIVER AT HEATHER GLEN CIRCLE AT MELBOURNE, FL

LOCATION.--Lat 28°07'36", long 80°38'49", in NW¼ sec.20, T.27 S., R.37 E., Brevard County, Hydrologic Unit 03080202, on right bank, 0.2 mi upstream from concrete spillway, 0.7 mi north of Sarno Road, 1.7 mi upstream from mouth, and 3.8 mi northwest of Melbourne.

DRAINAGE AREA.--3.8 mi^2.

PERIOD OF RECORD.--January 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below NGVD of 1929.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	7.4	10	4.6	4.6	8.1	2.4	2.8	2.3	18	11	9.3
2	23	10	10	6.5	4.4	7.1	3.1	2.8	2.1	15	34	9.4
3	19	12	10	5.1	4.1	6.3	5.0	2.7	2.1	13	44	11
4	16	12	10	4.1	3.7	5.5	5.4	2.7	2.1	11	40	14
5	15	12	9.0	4.1	3.2	4.9	4.4	2.4	2.1	7.8	45	15
6	15	8.8	8.3	4.4	3.2	4.6	2.1	2.4	2.1	8.3	45	13
7	15	8.5	8.8	4.5	8.0	4.6	2.0	2.4	7.6	8.3	26	11
8	15	7.3	8.5	4.1	5.0	4.6	1.8	2.4	14	7.8	19	6.4
9	14	6.8	8.3	4.1	5.4	4.6	1.8	2.4	4.8	9.2	26	5.8
10	14	8.3	8.7	5.1	11	4.6	1.8	2.4	3.0	39	18	5.8
11	14	8.3	7.9	6.1	12	4.0	1.9	2.4	3.4	27	20	5.9
12	14	8.3	7.4	6.5	5.6	3.6	42	2.4	3.3	55	66	7.0
13	17	18	7.4	6.5	5.0	4.0	19	2.4	3.2	36	39	6.5
14	17	103	7.4	13	4.8	4.1	12	2.3	4.4	23	41	6.7
15	15	67	6.5	40	4.3	4.8	16	2.1	11	19	37	6.4
16	17	30	7.4	16	4.1	5.7	7.1	2.1	6.1	16	27	5.8
17	14	21	7.4	14	4.7	4.8	3.4	2.4	16	e15	24	5.8
18	13	19	7.4	13	6.0	3.4	3.2	2.6	15	e10	21	6.4
19	19	16	7.4	11	5.8	3.2	3.2	9.6	19	e11	19	6.6
20	14	14	4.6	9.3	4.6	3.2	3.2	2.3	20	e10	17	7.3
21	18	12	4.6	6.9	3.4	3.2	3.2	2.0	17	e14	16	7.4
22	18	13	5.4	4.6	7.2	4.7	3.2	2.4	30	e16	19	7.0
23	15	12	5.5	4.4	21	4.5	3.6	2.5	39	e15	17	6.0
24	30	12	5.2	4.3	19	4.1	3.6	2.1	26	e14	15	9.9
25	82	11	5.0	4.6	11	3.8	3.4	2.1	18	e12	11	9.2
26	55	13	4.6	4.6	10	5.6	3.4	2.0	15	e12	8.5	7.3
27	21	11	4.6	4.6	9.7	8.2	3.4	1.8	12	e11	10	6.7
28	14	12	4.6	4.6	8.9	4.0	2.9	2.0	12	e10	12	6.1
29	11	12	4.6	4.6	---	3.0	2.8	1.8	11	e9.5	11	4.9
30	8.7	12	4.6	4.6	---	2.4	3.5	2.1	19	e8.8	11	6.7
31	8.0	---	4.6	4.6	---	2.4	---	4.0	---	e8.5	15	---
TOTAL	612.7	517.7	215.7	234.4	199.7	141.6	173.8	80.8	342.6	490.2	764.5	236.3
MEAN	19.8	17.3	6.96	7.56	7.13	4.57	5.79	2.61	11.4	15.8	24.7	7.88
MAX	82	103	10	40	21	8.2	42	9.6	39	55	66	15
MIN	8.0	6.8	4.6	4.1	3.2	2.4	1.8	1.8	2.1	7.8	8.5	4.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2002, BY WATER YEAR (WY)

MEAN	21.6	12.4	7.47	8.65	8.33	9.55	7.19	6.59	11.9	15.4	19.7	22.3
MAX	45.0	33.5	20.6	24.8	27.6	19.7	10.6	14.8	23.6	30.5	52.5	41.8
(WY)	2000	1995	1998	1998	1998	1998	1991	1991	1994	2001	1995	1999
MIN	8.15	4.72	3.19	2.83	2.90	4.57	3.53	2.61	3.34	3.35	4.24	7.69
(WY)	1994	1996	2001	2001	2001	2002	1999	2002	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1991 - 2002	
ANNUAL TOTAL	4960.0		4010.0			
ANNUAL MEAN	13.6		11.0		12.6	
HIGHEST ANNUAL MEAN					17.7	1998
LOWEST ANNUAL MEAN					7.88	1993
HIGHEST DAILY MEAN	156	Sep 14	103	Nov 14	a501	Aug 2 1995
LOWEST DAILY MEAN	1.5	Feb 19-21	b1.8		0.00	Aug 19 1996
ANNUAL SEVEN-DAY MINIMUM	1.6	Feb 16	2.0	May 24	1.6	Feb 16 2001
MAXIMUM PEAK FLOW			258	Nov 14		
MAXIMUM PEAK STAGE			14.67	Nov 14	16.70	Aug 2 1995
10 PERCENT EXCEEDS	31		20		24	
50 PERCENT EXCEEDS	7.4		7.4		7.8	
90 PERCENT EXCEEDS	2.4		2.4		3.3	

e Estimated
a From rating curve extended above 298 ft^3/s.
b April 8-10, May 27,29

02249510 CRANE CREEK AT BABCOCK STREET AT MELBOURNE, FL

LOCATION.--Lat 28°04'06", long 80°37'17", in NW¼ sec. 10, T. 28 S., R. 37 E., Brevard County, Hydrologic Unit 03080202, on downstream side of bridge on Babcock Street, 0.9 mi southwest of Melbourne City Hall, and 1.7 mi upstream from mouth.

DRAINAGE AREA.--15.5 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below NGVD of 1929 (U.S. Army Corps of Engineers benchmark).

REMARKS.--Stage affected by tides in the Indian River.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 18.78 ft, Aug. 2, 1995; minimum, 9.73 ft, June 16, 1989.

EXTREMES FOR CURRENT YEAR--Maximum gage height, 15.39 ft, Nov. 14; minimum, 9.93 ft, May 17.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.05	11.47	10.97	10.74	10.27	10.84	10.62	10.51	11.05	10.95	10.54	10.90
2	11.76	11.52	10.91	10.68	10.38	10.58	10.69	10.48	10.96	10.90	11.77	10.96
3	11.65	11.55	10.91	10.78	10.39	10.58	10.66	10.38	10.91	10.82	11.68	11.14
4	11.62	11.60	10.95	10.78	10.42	10.86	10.72	10.27	10.86	10.80	11.35	11.20
5	11.57	11.83	10.93	10.67	10.48	10.94	10.86	10.34	10.92	10.83	11.19	11.27
6	11.43	11.72	10.95	10.50	10.24	10.59	10.89	10.50	10.92	10.76	11.14	11.31
7	11.49	11.48	10.93	10.55	10.27	10.58	10.72	10.38	11.03	10.74	11.30	11.33
8	11.57	11.31	10.88	10.46	10.59	10.50	10.57	10.33	11.30	10.79	11.48	11.39
9	11.60	11.23	10.90	10.35	10.43	10.46	10.56	10.27	11.16	10.87	11.44	11.41
10	11.52	11.16	10.89	10.23	10.39	10.50	10.64	10.28	11.15	10.98	11.44	11.34
11	11.51	11.16	10.94	10.19	10.55	10.46	10.70	10.25	11.21	10.91	11.68	11.26
12	11.48	11.19	10.97	10.11	10.46	10.34	11.07	10.20	11.12	11.18	12.42	11.20
13	11.43	11.46	10.98	10.12	10.53	10.34	10.78	10.15	11.02	10.99	11.86	11.11
14	11.38	12.72	10.93	10.28	10.53	10.43	10.78	10.33	11.08	10.96	11.68	11.12
15	11.65	12.50	10.97	10.76	10.43	10.43	10.80	10.43	11.02	10.92	11.52	11.09
16	11.62	12.16	11.02	10.33	10.55	10.34	10.72	10.24	11.09	10.85	11.41	11.02
17	11.81	11.97	10.89	10.23	10.57	10.34	10.64	10.19	11.25	11.01	11.29	10.94
18	11.64	11.80	10.88	10.30	10.66	10.24	10.60	10.14	11.23	10.90	11.17	10.90
19	11.64	11.68	10.86	10.19	10.52	10.22	10.56	10.52	11.50	10.79	11.05	10.91
20	11.62	11.53	10.86	10.11	10.48	10.16	10.47	10.89	11.59	10.79	11.03	10.96
21	11.76	11.46	10.88	10.07	10.47	10.17	10.42	10.93	11.64	---	10.94	11.06
22	11.84	11.33	10.78	10.14	10.60	10.53	10.45	10.95	11.64	---	10.96	11.14
23	11.56	11.22	10.71	10.06	11.07	10.51	10.61	10.74	11.57	---	10.94	11.24
24	11.78	11.16	10.78	10.05	11.11	10.38	10.58	10.65	11.46	---	10.86	11.33
25	12.27	11.12	10.86	10.11	10.90	10.38	10.41	10.72	11.39	---	10.74	11.38
26	12.34	11.10	10.88	10.18	10.83	10.42	10.54	10.82	11.36	---	10.80	11.00
27	11.72	11.01	10.73	10.23	10.92	10.57	10.48	10.79	11.21	---	10.73	11.16
28	11.59	10.98	10.66	10.25	10.98	10.61	10.54	10.93	11.03	---	10.84	11.23
29	11.50	10.96	10.59	10.23	---	10.52	10.64	10.94	10.92	---	10.83	11.20
30	11.47	10.93	10.66	10.19	---	10.45	10.60	10.91	11.03	---	10.82	11.19
31	11.47	---	10.72	10.16	---	10.54	---	11.10	---	10.51	10.91	---
MEAN	11.66	11.48	10.86	10.32	10.57	10.48	10.64	10.53	11.19	---	11.22	11.16
MAX	12.34	12.72	11.02	10.78	11.11	10.94	11.07	11.10	11.64	---	12.42	11.41
MIN	11.38	10.93	10.59	10.05	10.24	10.16	10.41	10.14	10.86	---	10.54	10.90

CAL YR 2001 MEAN 10.89 MAX 14.21 MIN 10.00

02249518 CRANE CREEK AT U.S. HIGHWAY 1 AT MELBOURNE, FL

LOCATION.--Lat 28°04'37", long 80°36'09", in SW¼ sec. 2, T.28 S., R.37 E., Brevard County, Hydrologic Unit 03080202, near center of channel on downstream side of bridge, 0.25 mi above mouth and 0.6 mi southeast of the City Hall in Melbourne.

DRAINAGE AREA.--18.1 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below NGVD of 1929. Auxiliary water-stage recorder at site 1.4 mi upstream.

REMARKS.--Records poor. Stage and discharge affected by tides in the Indian River. Discharge computed by one-dimensional streamflow model and daily figures represent the net of larger upstream and downstream discharges.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	46	22	-1.3	15	22	-8.1	-12	-11	63	e65	e21
2	102	54	22	16	17	22	-1.0	-7.9	-13	48	e86	e21
3	81	53	20	6.0	8.9	5.5	-6.8	-2.8	-14	44	e66	e21
4	68	54	32	1.8	-1.0	1.0	-6.3	-3.9	-15	42	e38	e20
5	68	51	27	3.6	8.0	10	-6.7	-11	-16	52	e39	e19
6	56	48	21	2.5	13	21	0.80	-3.6	-15	38	e34	e18
7	49	39	22	2.9	28	26	6.1	-6.5	25	30	e32	e20
8	52	33	21	6.5	29	18	3.5	-6.5	38	24	e67	e14
9	52	31	15	13	12	13	3.2	-5.0	e29	35	e63	e14
10	39	28	22	16	12	11	-3.0	-6.0	e18	67	e106	e13
11	32	25	15	16	19	16	1.8	-2.2	e17	54	e152	e14
12	17	19	11	18	6.9	14	65	-3.1	e22	86	e117	e13
13	33	71	7.3	17	2.8	4.0	19	-3.5	e22	67	e74	e12
14	10	392	8.3	37	6.2	11	-2.6	-12	e23	44	e63	e14
15	5.5	199	0.80	81	6.3	14	8.0	2.1	e28	40	e51	e11
16	26	105	19	36	-1.1	20	3.0	-1.9	e35	33	e45	e11
17	34	92	6.7	31	-3.1	13	-4.3	5.7	e31	66	e63	e10
18	38	68	-2.8	36	-1.2	19	-5.8	-9.0	36	48	e42	e9.5
19	64	55	0.10	33	4.1	16	-5.2	14	65	37	e35	e9.6
20	48	54	3.2	26	15	25	-4.7	-6.3	105	e75	e35	e9.6
21	110	54	6.8	24	16	6.8	-6.7	-7.0	108	e119	e30	e12
22	135	51	26	23	12	3.4	-6.9	-8.4	103	e105	e26	e9.5
23	83	42	24	25	61	6.8	-2.9	-2.4	78	e82	e24	e9.7
24	154	36	18	22	58	5.5	-5.0	-11	60	e66	e28	e12
25	287	29	-1.3	26	29	4.3	-4.8	-15	74	e50	e24	e11
26	253	35	-1.6	18	19	14	-6.8	-14	90	e42	e29	e11
27	117	29	-0.70	18	2.2	22	-5.8	-11	70	e52	e30	e11
28	84	26	1.9	16	15	5.4	-4.1	-17	55	e38	e35	e13
29	72	27	-0.30	17	---	2.2	-13	-14	45	e37	e27	e11
30	60	22	-1.2	17	---	1.6	-6.9	-13	65	e39	e24	e11
31	54	---	-2.2	16	---	-1.0	---	26	---	e35	e37	---
TOTAL	2432.5	1868	362.00	620.0	409.0	372.5	-7.00	-168.2	1158	1658	1587	405.9
MEAN	78.5	62.3	11.7	20.0	14.6	12.0	-0.23	-5.43	38.6	53.5	51.2	13.5
MAX	287	392	32	81	61	26	65	26	108	119	152	21
MIN	5.5	19	-2.8	-1.3	-3.1	-1.0	-13	-17	-16	24	24	9.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	78.4	51.2	28.3	30.7	30.4	35.4	24.5	21.2	35.3	56.4	68.1	70.7
MAX	248	169	74.4	67.5	66.0	89.5	40.6	82.1	74.5	123	224	137
(WY)	2000	1988	1998	1998	1998	1993	1987	1987	1992	2001	1995	2001
MIN	21.3	-3.10	1.92	2.87	4.22	0.80	-0.23	-5.43	1.42	7.46	14.0	10.8
(WY)	1997	2001	2001	2001	2001	2001	2002	2002	1998	1999	2000	1996

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	16946.23		10697.70			
ANNUAL MEAN	46.4		29.3		42.2	
HIGHEST ANNUAL MEAN					60.2	1988
LOWEST ANNUAL MEAN					29.3	2002
HIGHEST DAILY MEAN	868	Sep 14	392	Nov 14	2150	Aug 2 1995
LOWEST DAILY MEAN	-14	Mar 13	-17	May 28	*-20	Apr 5 1995
ANNUAL SEVEN-DAY MINIMUM	-8.1	Mar 10	-14	May 24	-14	May 24 2002
MAXIMUM PEAK STAGE			12.47	Nov 15	13.85	Oct 16 1999
10 PERCENT EXCEEDS	118		68		81	
50 PERCENT EXCEEDS	18		20		30	
90 PERCENT EXCEEDS	-1.9		-5.1		3.2	

e Estimated
* May have been lower during period of no gage-height record, Apr. 6-21, 1995
Note.--Negative figures indicate reverse flow

02250030 TURKEY CREEK AT PALM BAY, FL

LOCATION.--Lat 28°01'00", long 80°35'46", in SE¼ sec.26, T.28 S., R.37 E., Brevard County, Hydrologic Unit 03080202, near right bank on downstream side of bridge on Port Malabar Boulevard, 1.6 mi southwest of the intersection of U.S. Highway 1 and State Highway 516 in Palm Bay, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--105 mi^2, approximately.

PERIOD OF RECORD.--February 1981 to September 1983, October 1983 to December 1986 (gage heights only), January 1987 to September 1988 (fragmentary), October 1988 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 5.00 ft below NGVD of 1929. Prior to Oct. 1, 1986 at datum 5.00 ft higher.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Stage and discharge are affected by tides in the Indian River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	514	316	116	60	38	e65	48	63	81	737	173	209
2	479	278	103	54	36	e75	46	73	97	808	282	196
3	351	268	92	61	39	e72	42	73	84	657	576	303
4	e303	260	98	87	36	e61	43	62	83	558	561	280
5	e415	242	96	81	19	e62	39	55	86	748	838	251
6	e415	249	130	71	19	e69	37	53	100	521	618	226
7	e371	234	135	62	24	62	36	44	105	407	468	210
8	e430	223	142	65	16	62	34	46	119	571	364	200
9	e434	210	137	58	27	62	36	47	112	715	359	178
10	e322	201	131	59	29	57	33	50	95	612	321	173
11	e269	188	112	55	43	57	43	41	62	545	389	159
12	e242	177	93	54	52	59	51	30	91	506	563	156
13	e226	171	96	53	48	59	51	34	106	651	487	148
14	e225	217	95	53	43	55	64	54	117	495	544	144
15	e222	285	95	87	40	51	75	43	118	396	516	139
16	e214	251	110	143	36	53	75	46	117	333	438	133
17	e191	217	116	123	34	52	53	47	115	396	377	124
18	e242	198	109	114	36	52	44	56	132	381	318	118
19	e329	181	99	107	39	48	43	63	148	374	273	119
20	e361	168	84	100	40	48	41	48	673	307	242	115
21	e365	175	66	84	38	45	38	43	641	300	275	109
22	e430	160	65	67	35	38	37	44	687	293	274	106
23	447	145	67	68	84	41	33	36	587	330	251	101
24	378	145	73	63	148	42	31	30	578	251	230	122
25	579	145	74	65	133	41	35	42	626	237	209	e204
26	1080	132	65	58	97	47	31	62	710	222	198	e117
27	774	130	61	60	87	132	29	58	848	205	197	e105
28	624	130	56	57	e66	76	33	57	893	195	186	e90
29	466	115	42	58	---	59	47	67	655	199	211	e76
30	392	112	72	40	---	58	66	75	447	184	212	e74
31	398	---	70	38	---	51	---	73	---	206	224	---
TOTAL	12488	5923	2900	2205	1382	1811	1314	1615	9313	13340	11174	4685
MEAN	403	197	93.5	71.1	49.4	58.4	43.8	52.1	310	430	360	156
MAX	1080	316	142	143	148	132	75	75	893	808	838	303
MIN	191	112	42	38	16	38	29	30	62	184	173	74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

MEAN	310	181	103	114	102	136	89.2	74.4	146	235	260	271
MAX	877	544	474	481	426	369	188	125	473	642	725	639
(WY)	2000	1995	1998	1998	1998	1998	1993	1987	1994	2001	1995	1998
MIN	68.2	41.1	25.1	33.0	31.5	14.1	13.7	32.3	31.0	50.8	56.9	78.4
(WY)	1982	2001	2001	2001	2001	2001	1999	2000	2000	1993	1993	1993

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1981 - 2002	
ANNUAL TOTAL	79299.06		68150			
ANNUAL MEAN	217		187		168	
HIGHEST ANNUAL MEAN					303	1998
LOWEST ANNUAL MEAN					75.7	1981
HIGHEST DAILY MEAN	1900	Jul 20	1080	Oct 26	3530	Aug 3 1995
LOWEST DAILY MEAN	-8.2	Mar 25	16	Feb 8	-8.8	Nov 20 1994
ANNUAL SEVEN-DAY MINIMUM	-4.2	Mar 21	24	Feb 4	-4.2	Mar 21 2001
MAXIMUM PEAK STAGE			8.01	Oct 26	12.29	Aug 2 1995
10 PERCENT EXCEEDS	510		482		376	
50 PERCENT EXCEEDS	130		107		97	
90 PERCENT EXCEEDS	17		40		40	

e Estimated
Note.--Negative figures indicate reverse flow

02250030 TURKEY CREEK AT PALM BAY, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.42	6.54	5.95	5.69	5.20	---	5.57	5.49	6.03	6.68	5.50	5.92
2	7.06	6.53	5.88	5.66	5.33	---	5.63	5.45	5.94	6.80	5.74	5.96
3	6.81	6.56	5.89	5.86	5.35	---	5.61	5.32	5.89	6.47	6.30	6.25
4	6.71	6.60	5.90	5.80	5.42	---	5.68	5.20	5.86	6.31	6.30	6.25
5	6.64	6.88	5.88	5.66	5.46	---	5.88	5.31	5.91	6.70	6.89	6.27
6	6.48	6.78	5.91	5.45	5.14	---	5.90	5.46	5.91	6.24	6.58	6.32
7	6.54	6.52	5.89	5.53	5.07	5.50	5.66	5.31	5.93	6.02	6.48	6.34
8	6.62	6.33	5.84	5.44	5.51	5.45	5.46	5.26	6.03	6.32	6.54	6.39
9	6.62	6.25	5.88	5.31	5.36	5.40	5.43	5.19	6.14	6.58	6.50	6.41
10	6.51	6.17	5.84	5.17	5.31	5.47	5.56	5.20	6.13	6.40	6.49	6.33
11	6.49	6.17	5.90	5.12	5.49	5.42	5.61	5.17	6.14	6.30	6.66	6.26
12	6.47	6.20	5.92	5.04	5.42	5.26	5.68	5.11	6.09	6.26	6.95	6.17
13	6.39	6.31	5.93	5.05	5.53	5.29	5.66	5.06	5.99	6.45	6.79	6.06
14	6.35	6.69	5.88	5.05	5.52	5.38	5.71	5.33	6.08	6.28	6.79	6.07
15	6.66	7.34	5.94	5.22	5.39	5.36	5.72	5.40	6.01	6.12	6.67	6.06
16	6.61	7.16	5.98	5.25	5.52	5.24	5.65	5.16	6.08	5.98	6.51	5.98
17	6.85	6.93	5.85	5.14	5.55	5.27	5.58	5.09	6.07	6.07	6.34	5.92
18	6.65	6.76	5.87	5.16	5.65	5.15	5.55	5.09	6.17	6.04	6.22	5.86
19	6.56	6.65	5.84	5.04	5.45	5.13	5.51	5.40	6.36	5.96	6.07	5.86
20	6.59	6.49	5.85	5.01	5.37	4.98	5.42	5.95	6.93	5.92	6.01	5.90
21	6.58	6.41	5.87	4.95	5.37	5.10	5.36	5.98	6.95	5.89	5.97	6.03
22	6.68	6.28	5.71	5.05	5.52	5.54	5.40	6.01	7.04	5.85	6.02	6.10
23	6.65	6.14	5.61	4.92	5.93	5.50	5.59	5.72	6.91	5.80	5.98	6.20
24	6.61	6.10	5.71	4.92	6.04	5.32	5.54	5.60	6.83	5.73	5.89	6.29
25	6.89	6.08	5.84	4.96	5.88	5.31	5.31	5.67	6.79	5.67	5.75	---
26	7.80	6.05	5.89	5.11	5.77	5.31	5.48	5.80	6.87	5.59	5.73	---
27	7.27	5.96	5.71	5.17	5.90	5.51	5.41	5.74	7.07	5.58	5.71	---
28	6.99	5.93	5.62	5.19	---	5.59	5.47	5.93	7.05	5.54	5.70	---
29	6.72	5.90	5.54	5.16	---	5.45	5.61	5.94	6.55	5.52	5.80	---
30	6.61	5.87	5.65	5.10	---	5.35	5.57	5.90	6.22	5.50	5.80	---
31	6.63	---	5.72	5.06	---	5.46	---	5.96	---	5.49	5.88	---
MEAN	6.72	6.42	5.83	5.23	---	---	5.57	5.49	6.33	6.07	6.21	---
MAX	7.80	7.34	5.98	5.86	---	---	5.90	6.01	7.07	6.80	6.95	---
MIN	6.35	5.87	5.54	4.92	---	---	5.31	5.06	5.86	5.49	5.50	---

CAL YR 2001 MEAN 5.91 MAX 8.98 MIN 4.92

02251000 SOUTH PRONG SAINT SEBASTIAN RIVER NEAR SEBASTIAN, FL

LOCATION.--Lat 27°46'09", long 80°30'22", in SW¼, sec.23, T.31 S., R.38 E., Indian River County, Hydrologic Unit 03080203, on upstream side of bridge on State Highway 512, 2.5 mi east of Interstate Highway 95, 4 mi southwest of Sebastian, and 8.3 mi upstream from mouth.

DRAINAGE AREA.--35 mi^2, approximately.

PERIOD OF RECORD.--October 1954 to May 1965 (discharge measurements only), May 1968 to August 1972 (annual peak discharge), August 1993 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 10.00 ft below NGVD of 1929. Auxiliary water-stage recorder at site 6.6 mi downstream.

REMARKS.--Records fair except those below 100 ft^3/s and periods of estimated daily discharge, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	524	123	36	31	53	43	27	18	33	1000	84	70
2	315	156	34	34	61	51	27	18	31	910	213	70
3	159	101	34	36	55	52	27	19	27	690	337	72
4	131	90	35	39	49	44	38	22	24	620	163	70
5	116	86	34	42	45	40	36	21	20	630	106	62
6	106	96	33	44	46	42	36	18	e19	500	113	58
7	99	89	33	42	44	43	33	19	e35	420	88	50
8	101	83	48	42	42	40	33	17	e40	390	85	46
9	124	68	63	46	43	36	30	19	e25	510	243	42
10	113	50	87	46	47	34	25	21	e23	620	238	39
11	108	47	78	42	81	32	24	20	e25	615	295	38
12	100	44	70	40	84	36	23	20	e26	657	605	40
13	90	45	62	39	70	41	31	23	e37	514	498	38
14	90	74	49	39	62	36	31	17	e50	452	303	35
15	72	96	45	61	62	34	37	19	e70	364	247	33
16	59	105	43	73	59	36	38	18	e50	289	203	33
17	59	96	41	64	54	35	35	17	e360	237	179	32
18	61	87	34	61	48	36	34	22	770	204	167	30
19	56	78	60	56	49	34	30	49	850	176	132	28
20	58	62	66	52	47	32	26	53	1180	154	99	28
21	64	58	32	50	46	33	25	47	1440	227	81	28
22	91	55	33	52	43	28	23	41	1150	528	66	28
23	116	52	33	48	60	28	21	35	800	423	60	28
24	105	51	31	46	82	28	19	29	650	308	56	29
25	130	49	30	45	89	28	21	26	750	229	55	37
26	518	46	28	44	81	29	21	23	800	163	63	35
27	588	44	31	44	57	27	25	23	700	135	83	37
28	417	41	32	43	43	25	27	21	590	116	92	36
29	251	39	34	41	---	25	25	19	520	100	121	34
30	151	39	31	40	---	29	21	18	500	97	87	38
31	112	---	30	39	---	28	---	27	---	94	79	---
TOTAL	5084	2150	1330	1421	1602	1085	849	759	11595	12372	5241	1244
MEAN	164	71.7	42.9	45.8	57.2	35.0	28.3	24.5	386	399	169	41.5
MAX	588	156	87	73	89	52	38	53	1440	1000	605	72
MIN	56	39	28	31	42	25	19	17	19	94	55	28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

MEAN	210	112	72.8	58.8	69.1	68.7	53.2	38.4	117	145	170	197
MAX	469	428	221	122	206	188	126	66.5	386	399	319	463
(WY)	2000	1995	1995	1998	1998	1998	1996	1994	2002	2002	1997	1994
MIN	33.8	21.3	28.5	33.8	29.2	19.8	27.1	23.4	18.4	33.4	45.0	38.0
(WY)	1998	2001	2001	2001	2001	1999	1999	2000	1998	1998	1996	1996

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	40119.0		44732			
ANNUAL MEAN	110		123		110	
HIGHEST ANNUAL MEAN					158	1995
LOWEST ANNUAL MEAN					77.2	1999
HIGHEST DAILY MEAN	925	Sep 14	1440	Jun 21	2300	Nov 16 1994
LOWEST DAILY MEAN	9.0	May 20	17	May 8,14,17	4.2	Nov 23 1993
ANNUAL SEVEN-DAY MINIMUM	13	May 16	19	May 2	8.2	Sep 10 2000
MAXIMUM PEAK FLOW			1730	Jun 21	2560	Nov 16 1994
MAXIMUM PEAK STAGE			18.92	Jun 21	19.96	Nov 16 1994
10 PERCENT EXCEEDS	299		362		248	
50 PERCENT EXCEEDS	42		47		49	
90 PERCENT EXCEEDS	23		25		23	

e Estimated

02251500 NORTH PRONG SAINT SEBASTIAN RIVER NEAR MICCO, FL

LOCATION.--Lat 27°51'21", long 80°31'28", in Fleming Land Grant, T.30 S., R.38 E., Brevard County, Hydrologic Unit 03080203, on right bank 15 ft downstream from bridge on Wildon Road, 1.9 mi upstream from mouth, and 2.2 mi southwest of Micco.

DRAINAGE AREA.--28.5 mi^2.

PERIOD OF RECORD.--October 1954 to October 1958 (discharge measurements only), January 1987 to current year.

REVISED RECORDS.--WDR FL-90-1: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	47	28	23	30	24	14	7.5	9.4	270	40	28
2	162	50	27	23	35	19	12	7.2	10	431	51	35
3	134	49	27	27	25	19	12	6.9	10	320	98	53
4	115	54	26	24	24	18	11	6.8	7.4	243	95	52
5	95	88	26	23	23	18	11	6.9	7.2	232	153	46
6	86	85	26	23	22	17	9.8	6.8	7.0	199	193	36
7	77	65	26	23	22	16	9.5	7.0	9.5	164	128	33
8	73	56	26	23	23	18	9.2	7.0	9.8	164	106	31
9	71	51	26	23	22	16	9.4	6.9	7.8	174	150	30
10	63	47	31	23	22	15	9.7	6.7	7.4	198	120	29
11	60	45	27	23	24	14	9.3	6.6	7.7	219	149	28
12	56	42	26	23	23	14	18	6.4	7.7	284	276	27
13	53	43	26	22	22	14	14	6.4	9.6	299	240	27
14	50	52	26	23	26	13	10	6.4	16	251	198	27
15	48	54	26	40	22	14	11	6.3	21	194	177	26
16	46	50	28	38	21	15	11	6.4	16	152	133	25
17	43	44	27	33	18	14	12	6.4	30	112	112	25
18	42	41	28	32	15	14	11	6.3	105	90	94	24
19	42	42	27	33	14	13	11	14	237	100	76	24
20	45	41	25	29	14	12	9.5	15	202	97	62	24
21	44	39	25	28	13	12	9.1	12	404	100	57	24
22	74	37	24	26	14	12	8.9	11	397	139	52	24
23	159	35	24	27	28	11	8.8	12	283	117	46	23
24	108	34	24	26	35	10	8.6	14	224	90	41	26
25	101	32	23	25	31	10	8.5	9.6	255	69	36	28
26	119	34	23	24	29	11	8.6	9.1	343	58	32	30
27	102	34	22	24	26	14	8.4	8.2	357	52	29	31
28	73	33	22	23	28	14	8.0	7.8	253	48	29	26
29	59	31	22	23	---	12	7.7	7.5	202	47	30	24
30	53	29	23	23	---	12	7.6	7.3	191	47	28	24
31	49	---	23	27	---	11	---	12	---	44	30	---
TOTAL	2512	1384	790	807	651	446	308.6	260.4	3646.5	5004	3061	890
MEAN	81.0	46.1	25.5	26.0	23.2	14.4	10.3	8.40	122	161	98.7	29.7
MAX	210	88	31	40	35	24	18	15	404	431	276	53
MIN	42	29	22	22	13	10	7.6	6.3	7.0	44	28	23
CFSM	2.84	1.62	0.89	0.91	0.82	0.50	0.36	0.29	4.26	5.66	3.46	1.04
IN.	3.28	1.81	1.03	1.05	0.85	0.58	0.40	0.34	4.76	6.53	4.00	1.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	98.9	67.2	34.1	32.5	34.2	42.4	26.5	17.2	37.3	56.0	59.3	74.0
MAX	250	251	125	80.2	150	105	77.8	32.8	122	216	152	209
(WY)	2000	1998	1998	1998	1998	1988	1996	1997	2002	2001	1994	2001
MIN	14.3	14.6	11.2	11.4	10.7	10.1	8.45	7.11	7.46	9.22	10.3	13.8
(WY)	1989	1989	2001	2001	2001	2001	1999	1990	1989	1989	1993	1989

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	24228.8		19532.5			
ANNUAL MEAN	66.4		54.7		48.1	
HIGHEST ANNUAL MEAN					87.2	1995
LOWEST ANNUAL MEAN					15.6	1989
HIGHEST DAILY MEAN	770	Sep 14	431	Jul 2	1740	Nov 16 1994
LOWEST DAILY MEAN	6.6	Apr 28	6.3	May 15,18	a6.3	
ANNUAL SEVEN-DAY MINIMUM	6.8	Apr 23	6.4	May 12	6.4	May 12 2002
MAXIMUM PEAK FLOW			590	Jun 21	2060	Nov 14 1997
MAXIMUM PEAK STAGE			8.61	Jun 21	10.24	Nov 14 1997
INSTANTANEOUS LOW FLOW			5.7	May 18	3.8	Apr 1 1994
ANNUAL RUNOFF (CFSM)	2.33		1.92		1.69	
ANNUAL RUNOFF (INCHES)	31.62		25.50		22.94	
10 PERCENT EXCEEDS	172		154		103	
50 PERCENT EXCEEDS	26		26		25	
90 PERCENT EXCEEDS	9.1		8.6		11	

a Jun 20,21 1989, May 15,18, 2002

02251767 FELLSMERE CANAL NEAR MICCO, FL

LOCATION.--Lat 27°49'49", long 80°32'04", in Fleming Land Grant, T.29 S., R.38 E., Brevard County, Hydrologic Unit 03080203, on left bank 156 ft upstream from fixed crest steel sheet pile weir, 500 ft upstream from Canal 54, 4.5 mi south of Micco, and 6 mi northeast of Fellsmere.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1991 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (levels by St. Johns River Water Management District).

REMARKS.--Records fair except for period of estimated daily discharge, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	546	88	46	69	61	104	37	31	49	318	75	75
2	290	99	46	69	70	87	39	31	45	497	83	69
3	188	101	45	75	57	56	38	28	43	309	112	81
4	156	64	49	95	51	50	33	26	46	211	93	82
5	138	78	59	91	46	43	35	27	36	180	100	89
6	117	85	57	88	45	41	31	31	37	157	87	78
7	107	73	58	84	43	41	30	28	47	154	85	66
8	101	68	57	75	44	41	58	41	62	159	71	60
9	102	65	57	53	44	41	40	42	56	190	175	57
10	99	62	59	54	44	44	35	41	50	261	138	52
11	93	62	57	58	52	46	35	36	52	270	167	51
12	95	61	50	60	60	46	44	37	53	215	351	56
13	84	55	49	72	47	45	51	31	78	176	267	65
14	81	88	46	70	47	38	44	29	259	142	186	54
15	78	121	48	130	53	38	44	26	304	119	137	54
16	77	112	53	132	42	39	44	26	248	90	111	53
17	95	67	57	96	38	42	44	29	230	86	119	49
18	96	62	57	76	38	44	44	60	416	89	109	52
19	89	61	60	67	36	41	38	128	654	108	96	54
20	75	62	64	63	40	39	36	232	831	e105	85	54
21	73	58	59	65	37	45	40	121	1130	e125	76	56
22	117	57	89	76	40	48	41	73	998	e155	80	62
23	86	57	93	69	54	45	39	58	756	e145	83	60
24	93	55	89	59	86	44	36	50	554	e125	81	55
25	127	52	84	46	59	43	40	45	595	e105	75	73
26	166	54	78	44	50	39	37	34	811	e92	68	77
27	148	54	54	44	44	35	32	33	522	e84	76	83
28	89	49	57	46	73	34	35	35	330	e82	83	66
29	75	46	62	52	---	34	37	37	242	e80	74	54
30	71	46	64	47	---	34	36	38	182	e79	77	50
31	72	---	66	49	---	36	---	46	---	77	86	---
TOTAL	3824	2062	1869	2174	1401	1403	1173	1530	9716	4985	3506	1887
MEAN	123	68.7	60.3	70.1	50.0	45.3	39.1	49.4	324	161	113	62.9
MAX	546	121	93	132	86	104	58	232	1130	497	351	89
MIN	71	46	45	44	36	34	30	26	36	77	68	49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

MEAN	147	90.7	61.1	61.8	57.0	71.2	58.4	47.7	110	121	128	145
MAX	380	260	147	112	150	193	102	62.9	324	251	207	273
(WY)	2000	1995	1998	1998	1998	1993	1993	1994	2002	2001	2001	2001
MIN	33.2	38.0	31.8	29.3	29.5	27.0	31.9	30.2	40.1	51.1	39.0	62.9
(WY)	1998	1992	1992	1992	1996	1997	1992	1995	1998	1993	1993	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1992 - 2002	
ANNUAL TOTAL	38993.0		35530			
ANNUAL MEAN	107		97.3		91.3	
HIGHEST ANNUAL MEAN					112	1995
LOWEST ANNUAL MEAN					61.7	1992
HIGHEST DAILY MEAN	887	Jul 16	1130	Jun 21	1780	Nov 16 1994
LOWEST DAILY MEAN	9.5	Jun 20	26	May 4,15,16	9.5	Jun 20 2001
ANNUAL SEVEN-DAY MINIMUM	11	Jun 15	29	May 1	11	Jun 15 2001
MAXIMUM PEAK FLOW			1180	Jun 21	1900	Nov 16 1994
MAXIMUM PEAK STAGE			5.22	Jun 21	6.52	Nov 16 1994
INSTANTANEOUS LOW FLOW			23	May 4	*9.0	
10 PERCENT EXCEEDS	211		166		173	
50 PERCENT EXCEEDS	57		60		56	
90 PERCENT EXCEEDS	33		37		31	

e Estimated
* June 19,20,21, 2001

275017080295600 ST. SEBASTIAN RIVER NEAR RAILROAD BRIDGE AT ROSELAND, FL

LOCATION.--Lat 27°50'17", long 80°29'56", in Fleming Land Grant, T.30 S., R.38 E., Indian River County, Hydrologic Unit 03080203, near center of channel, 100 ft downstream from Florida East Coast Railroad bridge, 0.1 mi north of Roseland, and 1.2 mi upstream from mouth.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (TOP, BOTTOM): May 1992 to current year.
WATER TEMPERATURE (TOP, BOTTOM): May 1992 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 53,800 µS/cm @ 25 °C, Sept. 4, 1993; minimum daily mean, 173 µS/cm @ 25 °C, Nov. 17, 1994.
SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 58,400 µS/cm @ 25 °C, June 21, 1992; minimum daily mean, 340 µS/cm @ 25 °C, Mar. 27, 1993.
WATER TEMPERATURE (TOP) : Maximum daily mean, 33.4 °C, July 8, 1997; minimum daily mean, 7.3 °C, Jan. 5, 1999.
WATER TEMPERATURE (BOTTOM) : Maximum daily mean, 34.5 °C, July 25, 1998; minimum daily mean, 7.5 °C, Dec. 20, 1996, Jan. 5, 1999.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 42,500 µS/cm @ 25 °C, Apr. 27; minimum daily mean, 319 uS/cm @ 25 °C, June 22.
SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 51,300 µS/cm @ 25 °C, June 7; minimum daily mean, 352 µS/cm @ 25 °C, June 22.
WATER TEMPERATURE (TOP): Maximum daily mean, 31.9 °C, June 5; minimum daily mean, 10.9 °C, Jan. 4.
WATER TEMPERATURE (BOTTOM): Maximum daily mean, 32.9 °C, Sept. 18; minimum daily mean, 12.0 °C, Jan. 4.

SPECIFIC CONDUCTANCE, TOP (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	14300	---	16800	18600	---	36300	27500	493	---	---
2	---	---	12900	---	15900	17700	---	38500	29700	453	---	---
3	---	---	11700	---	13600	17400	---	41600	30100	533	---	---
4	---	---	11800	---	12300	18200	---	39900	33800	555	---	---
5	---	---	11600	---	20800	19000	---	39200	37100	455	---	---
6	7360	---	---	---	24400	18400	---	40300	35600	563	---	---
7	11300	---	---	---	23400	14800	---	38000	36300	791	---	---
8	11000	---	---	---	27400	12500	---	36200	37400	995	---	---
9	7250	---	15500	---	27600	12200	---	35400	36400	1420	---	---
10	3680	---	17500	---	28200	12700	---	35200	34600	1420	---	---
11	2630	---	17500	---	20800	12700	---	37000	30600	1060	---	---
12	10500	---	19300	---	23100	11500	---	37100	33800	816	---	---
13	29300	---	18200	---	24600	14700	40900	33000	36000	2080	---	---
14	32800	---	19500	---	18900	19000	41300	---	32500	---	---	---
15	---	---	21800	---	23900	18800	40000	40400	22700	---	---	---
16	27100	---	21900	---	25600	19300	38400	38500	22800	---	---	---
17	23500	---	---	---	23100	17200	35600	33100	21500	---	---	---
18	18200	---	---	---	26200	17500	32200	30700	11800	---	---	---
19	13400	---	---	---	28200	19500	29400	27900	1760	---	---	---
20	10300	---	---	---	25400	21100	29300	30200	682	---	---	---
21	9480	---	---	---	21200	19000	31200	21500	344	---	---	---
22	6980	---	---	---	23900	24400	33900	21700	319	---	---	---
23	11000	13300	---	16900	23400	23800	37000	19900	428	---	---	---
24	---	14800	---	20400	17600	19500	39400	18800	515	---	---	---
25	---	13600	---	22900	16500	---	37100	17600	521	---	---	---
26	---	11500	---	28400	16700	---	35800	22200	476	---	---	---
27	---	12100	---	25200	19800	---	42500	24500	522	---	---	24800
28	---	15500	---	19200	20300	---	42000	25000	568	---	---	27900
29	---	17000	---	19400	---	---	37100	24500	698	---	---	26500
30	---	16500	---	23500	---	---	38500	30400	761	---	---	25000
31	---	---	---	26700	---	---	---	29300	---	---	---	---
MEAN	---	---	---	---	21800	---	---	---	18600	---	---	---
MAX	---	---	---	---	28200	---	---	---	37400	---	---	---
MIN	---	---	---	---	12300	---	---	---	319	---	---	---

275017080295600 ST. SEBASTIAN RIVER NEAR RAILROAD BRIDGE AT ROSELAND, FL--Continued

SPECIFIC CONDUCTANCE, BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	29000	33000	38000	34400	48900	46200	38400	536	32400	28200
2	---	---	24300	32900	28500	34900	51000	46900	41100	499	33500	40500
3	---	---	22400	35200	29900	40300	50200	46700	44400	587	20100	44200
4	---	---	18700	29100	41500	33400	49900	44600	45500	720	23800	46800
5	5760	---	17500	35800	37400	30500	46400	41600	48300	485	25600	49000
6	22100	---	15900	34600	36900	28600	43000	41300	47600	1060	25400	47400
7	24000	---	21800	35900	37200	24700	38500	40000	51300	3020	36800	40100
8	11800	---	36200	31100	36700	23000	38000	39100	48300	7290	33800	36000
9	7690	---	42500	31100	37500	23000	43700	39700	41400	11800	26600	41300
10	3740	---	40900	32000	41300	21800	46700	38300	42100	6680	10400	44900
11	5290	---	44300	29500	39700	18900	47900	37600	40900	2160	24200	48600
12	31600	---	41200	29000	40300	23800	47000	38000	48900	2910	15400	49600
13	38700	---	41000	26500	37300	39000	48700	40600	51200	9370	12400	48500
14	40700	---	43600	31200	32500	43200	48200	39300	48200	19200	25600	47200
15	38600	---	44900	23400	37400	41500	47500	40100	44600	24000	30400	45500
16	33000	---	37400	16400	37600	39600	45700	38600	48300	26700	33000	44200
17	24500	---	37400	20600	37900	36200	43900	39400	46500	31500	29700	41700
18	18600	---	47600	23200	36800	37200	41900	36100	29500	32300	28800	37100
19	14200	---	45100	25800	36200	38000	40900	36200	2470	36600	31600	35300
20	16500	---	40800	28500	41000	39000	41700	31300	770	38600	34200	36500
21	16900	---	37000	29800	43900	40300	44300	22900	384	32100	33200	37300
22	15200	---	33400	28400	46800	41200	46500	22400	352	23800	26600	40200
23	30200	31900	32300	29800	41900	36700	42500	20100	457	25700	19800	41600
24	---	33600	40300	33800	32900	32200	41600	21900	550	31900	26400	41600
25	---	34800	43300	38000	32600	35200	45200	25200	548	33300	32700	40700
26	---	32400	36900	36600	39400	41300	48800	28100	505	36200	40500	35600
27	---	30200	36900	30700	46500	40800	50800	28600	554	36800	42200	34300
28	---	33000	41200	31300	39800	36600	49800	27500	603	32800	41800	38000
29	---	35500	43900	28000	---	40500	49000	33200	934	28900	38800	34100
30	---	36600	41800	32400	---	44500	47100	40500	1140	27800	36800	30000
31	---	---	35700	39500	---	47200	---	39500	---	29700	30400	---
MEAN	---	---	36000	30400	38000	35100	45800	35900	27200	19200	29100	40900
MAX	---	---	47600	39500	46800	47200	51000	46900	51300	38600	42200	49600
MIN	---	---	15900	16400	28500	18900	38000	20100	352	485	10400	28200

TEMPERATURE, WATER, TOP (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.2	---	23.6	16.6	24.3	17.8	---	29.7	29.9	26.1	---	---
2	24.1	---	23.4	17.4	23.4	20.0	---	30.3	31.2	26.4	---	---
3	24.5	---	23.4	15.4	23.0	22.2	---	30.6	31.5	27.2	---	---
4	25.2	---	23.5	10.9	21.0	19.0	---	29.8	31.7	27.6	---	---
5	26.0	---	23.0	12.7	18.9	16.4	---	29.6	31.9	27.7	---	---
6	27.1	---	23.3	---	20.5	18.8	---	29.6	31.7	28.3	---	---
7	27.5	---	24.1	---	20.6	19.9	---	29.8	31.4	28.9	---	---
8	26.7	---	24.4	---	18.9	21.6	---	29.2	30.2	27.8	---	---
9	25.1	---	24.7	---	20.3	23.7	---	29.2	29.0	26.9	---	---
10	24.6	---	25.0	---	21.5	23.7	---	29.3	29.8	26.8	---	---
11	24.7	---	25.3	---	20.5	23.5	---	29.0	30.2	26.8	---	---
12	25.0	---	25.6	---	21.7	23.9	---	28.9	30.7	27.2	---	---
13	25.9	---	25.4	---	20.7	23.8	25.7	28.9	29.8	27.6	---	---
14	26.4	---	25.2	---	18.5	23.0	26.6	28.7	29.4	---	---	---
15	26.7	---	25.3	---	20.2	25.1	26.9	26.8	28.2	---	---	---
16	27.3	---	24.9	---	21.3	26.2	27.9	26.5	28.2	---	---	---
17	25.2	---	24.1	---	19.8	25.9	28.5	27.7	27.9	---	---	---
18	23.9	---	---	---	18.3	26.1	28.5	28.5	27.3	---	---	---
19	24.7	---	---	---	19.5	26.0	28.7	26.9	25.9	---	---	---
20	26.1	---	---	---	20.6	25.6	28.7	25.9	25.0	---	---	---
21	26.2	---	---	---	21.4	25.3	28.9	25.2	24.6	---	---	---
22	26.1	23.1	---	---	21.7	24.0	29.0	24.8	24.9	---	---	---
23	26.3	23.3	---	23.4	20.1	22.9	28.7	25.7	25.8	---	---	---
24	---	23.3	---	23.5	18.7	23.8	27.9	26.0	26.5	---	---	---
25	---	23.8	---	23.4	19.9	---	28.3	26.4	26.0	---	---	---
26	---	24.6	---	23.7	21.4	---	28.1	26.6	25.9	---	---	---
27	---	24.4	---	23.4	19.9	---	28.9	27.9	26.3	---	---	29.7
28	---	24.2	---	24.1	16.2	---	28.3	27.8	27.1	---	---	30.4
29	---	24.1	---	24.4	---	---	28.2	28.8	28.2	---	---	30.8
30	---	24.3	---	25.1	---	---	28.8	30.1	27.8	---	---	29.9
31	---	---	---	25.2	---	---	---	29.3	---	---	---	---
MEAN	---	---	---	---	20.5	---	---	28.2	28.5	---	---	---
MAX	---	---	---	---	24.3	---	---	30.6	31.9	---	---	---
MIN	---	---	---	---	16.2	---	---	24.8	24.6	---	---	---

275017080295600 ST. SEBASTIAN RIVER NEAR RAILROAD BRIDGE AT ROSELAND, FL--Continued

TEMPERATURE, WATER, BOTTOM (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.2	---	24.2	18.9	25.5	18.6	26.8	30.0	30.0	26.1	32.1	31.5
2	24.0	---	24.0	18.6	24.2	19.4	26.9	30.4	30.8	26.3	31.4	30.5
3	24.4	---	23.8	16.5	23.7	21.7	26.9	30.9	31.4	27.0	30.3	30.2
4	25.1	---	23.6	12.0	23.3	20.3	27.0	30.1	32.0	27.3	30.4	29.9
5	25.9	---	23.0	15.1	21.4	17.1	25.9	29.9	32.4	27.6	30.8	29.7
6	26.6	---	23.3	16.8	21.6	19.0	23.9	29.6	32.5	27.9	30.7	30.1
7	27.6	---	24.0	16.2	20.8	20.1	23.1	30.2	31.5	28.6	30.3	30.9
8	26.7	---	24.4	15.3	20.0	21.7	23.6	29.8	30.5	28.0	30.0	31.1
9	25.1	---	24.8	15.5	20.3	23.6	24.3	29.6	29.5	27.4	30.1	30.9
10	24.6	---	25.1	16.4	21.2	24.2	25.3	29.7	30.0	27.0	29.0	30.9
11	24.6	---	25.4	17.3	21.4	23.6	26.4	29.3	30.8	26.8	28.1	30.2
12	24.9	---	25.5	18.2	21.9	24.0	25.7	29.1	30.5	27.0	27.3	30.0
13	25.6	---	25.6	18.1	21.5	23.5	25.8	29.6	30.0	27.6	27.6	29.9
14	26.1	---	25.2	18.3	20.2	23.9	26.4	28.9	29.8	28.1	28.0	30.0
15	26.4	---	25.3	18.9	20.7	25.3	27.0	26.8	29.0	28.8	28.6	30.2
16	27.1	---	25.1	18.6	21.3	26.4	28.2	26.7	28.7	29.4	29.1	31.2
17	25.3	---	24.4	19.7	21.2	27.1	29.2	27.8	28.9	30.2	29.7	32.3
18	24.0	---	24.3	20.3	20.1	27.6	29.7	28.8	28.1	30.4	30.5	32.9
19	24.5	---	24.2	20.7	20.2	27.5	30.1	27.9	25.9	30.3	30.8	32.6
20	25.8	---	22.9	21.6	20.3	26.8	30.3	26.0	25.0	30.2	31.7	31.9
21	26.1	---	21.2	22.8	20.9	25.9	29.6	25.2	24.6	29.6	31.9	31.9
22	26.2	23.1	20.8	23.4	21.3	24.5	29.3	24.8	24.9	28.9	32.3	31.4
23	26.2	23.4	20.9	24.1	20.7	23.1	29.1	25.7	25.8	29.1	32.3	30.8
24	---	23.6	20.7	24.1	19.5	24.3	28.2	26.1	26.4	29.7	31.8	30.4
25	---	23.8	21.0	23.9	20.4	25.6	28.7	26.7	26.0	30.4	31.5	30.1
26	---	24.3	19.5	24.1	20.9	26.6	28.2	26.9	25.9	30.7	31.0	29.9
27	---	24.5	18.1	23.6	20.9	27.1	29.1	27.9	26.3	31.0	30.5	29.4
28	---	24.2	18.2	24.3	18.7	27.1	28.8	28.1	27.0	31.5	29.9	30.0
29	---	24.2	19.6	24.7	---	27.4	28.4	28.7	27.9	32.0	30.5	30.8
30	---	24.3	20.1	25.3	---	27.2	29.2	29.6	27.7	31.7	31.3	30.4
31	---	---	19.7	25.8	---	27.0	---	29.5	---	31.9	31.8	---
MEAN	---	---	22.8	20.0	21.2	24.1	27.4	28.4	28.7	29.0	30.4	30.7
MAX	---	---	25.6	25.8	25.5	27.6	30.3	30.9	32.5	32.0	32.3	32.9
MIN	---	---	18.1	12.0	18.7	17.1	23.1	24.8	24.6	26.1	27.3	29.4

02251800 INDIAN RIVER AT WABASSO, FL

LOCATION.--Lat 27°45'15", long 80°25'40", in SW¼ sec.27, T.31 S., R.39 E., Indian River County, Hydrologic Unit 03080203, near the southwest end of bridge on State Highway 510 , and 0.5 mi east of Wabasso.

PERIOD OF RECORD.--November 1940 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark). Prior to June 26, 1970, at site 0.9 mi northeast at same datum.

REMARKS.--Stage affected by tide. The stage record published is the maximum and minimum tide event for each calendar day.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 4.76 ft, Sept. 22, 1948; minimum, -1.36 ft, Jan. 20, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.69 ft, Nov. 15; minimum, -.59 ft, Jan. 24.

GAGE HEIGHT, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.45	1.76	1.54	1.01	1.27	0.50	1.13	0.53	0.46	-0.19	0.92	0.23
2	1.93	1.37	1.50	0.83	1.17	0.53	1.03	0.14	0.57	0.02	0.61	-0.18
3	1.75	1.23	1.57	0.97	1.33	0.52	1.24	0.52	0.77	0.18	0.39	-0.14
4	1.69	1.10	1.62	1.08	1.27	0.47	1.22	0.66	0.82	0.35	0.95	0.59
5	1.68	1.13	2.46	1.45	1.16	0.56	1.05	0.27	0.95	0.44	1.18	0.57
6	1.45	0.90	2.42	1.61	1.13	0.55	0.70	-0.05	0.50	-0.04	0.80	0.08
7	1.55	1.04	1.96	1.08	0.95	0.47	0.71	0.30	0.20	-0.38	0.61	0.29
8	1.90	1.09	1.50	0.90	0.93	0.33	0.83	0.23	0.80	0.02	0.75	0.25
9	1.77	1.13	1.42	0.94	1.03	0.55	0.63	0.08	0.75	0.11	0.65	0.13
10	1.52	0.97	1.34	0.84	1.07	0.40	0.38	-0.16	0.47	-0.14	0.76	0.12
11	1.50	0.92	1.38	0.78	1.10	0.35	0.31	-0.20	0.77	0.14	0.79	0.21
12	1.49	1.02	1.58	0.82	1.12	0.54	0.29	-0.28	0.69	0.09	0.39	-0.05
13	1.42	0.78	1.64	1.06	1.10	0.49	0.39	-0.41	0.86	0.23	0.51	-0.06
14	1.39	0.66	2.43	1.06	1.12	0.42	0.28	-0.25	0.90	0.36	0.66	0.07
15	1.89	1.04	2.69	2.08	1.15	0.38	0.55	-0.36	0.88	0.16	0.52	0.01
16	1.99	1.26	2.63	1.98	1.12	0.50	0.56	0.02	0.92	0.27	0.26	-0.26
17	2.39	1.57	2.29	1.64	0.96	0.31	0.26	-0.28	1.00	0.40	0.35	-0.04
18	2.07	1.50	1.95	1.41	1.17	0.36	0.32	-0.14	1.02	0.50	0.28	-0.39
19	1.84	1.24	1.85	1.21	1.09	0.55	0.19	-0.37	0.77	-0.05	0.09	-0.36
20	1.84	1.22	1.63	1.13	1.21	0.59	0.02	-0.35	0.39	-0.16	0.11	-0.51
21	1.91	1.15	1.56	1.07	1.19	0.73	0.01	-0.38	0.35	0.04	0.10	-0.20
22	1.81	1.11	1.40	0.85	0.98	0.30	0.17	-0.10	0.72	0.28	0.92	0.49
23	1.61	1.08	1.20	0.77	0.61	0.24	0.12	-0.37	1.53	0.35	1.09	0.54
24	1.57	1.02	1.04	0.59	0.90	0.32	0.08	-0.59	1.50	0.86	0.66	0.14
25	1.50	1.02	1.08	0.55	1.18	0.60	0.08	-0.58	1.32	0.79	0.55	-0.01
26	2.05	1.58	1.15	0.76	1.30	0.71	0.29	-0.47	1.10	0.45	0.59	0.00
27	1.98	1.47	1.09	0.52	1.26	0.54	0.55	-0.02	1.23	0.43	0.74	0.01
28	1.93	1.48	1.00	0.40	0.90	0.28	0.51	-0.11	1.49	0.86	1.00	0.32
29	1.71	1.30	1.10	0.42	0.70	0.06	0.45	-0.20	---	---	0.74	0.08
30	1.66	1.08	1.01	0.37	0.98	0.25	0.32	-0.33	---	---	0.59	-0.10
31	1.61	1.09	---	---	1.08	0.38	0.14	-0.36	---	---	0.57	-0.04
MAX	2.45	1.76	2.69	2.08	1.33	0.73	1.24	0.66	1.53	0.86	1.18	0.59
MIN	1.39	0.66	1.00	0.37	0.61	0.06	0.01	-0.59	0.20	-0.38	0.09	-0.51

02251800 INDIAN RIVER AT WABASSO, FL--Continued

GAGE HEIGHT, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	0.66	0.13	0.56	0.07	1.16	0.72	---	---	0.58	0.12	1.05	0.51
2	0.83	0.14	0.67	-0.08	1.14	0.47	---	---	0.93	0.22	1.22	0.46
3	0.70	0.24	0.45	-0.44	0.98	0.50	---	---	1.01	0.28	1.60	0.80
4	0.83	0.26	0.09	-0.45	---	---	---	---	0.97	0.31	1.53	0.72
5	1.21	0.70	0.38	-0.16	---	---	---	---	1.36	0.52	1.30	0.63
6	1.33	0.94	0.63	0.24	---	---	---	---	1.39	0.68	1.37	0.66
7	0.96	0.48	0.49	0.05	---	---	---	---	1.90	0.89	1.46	0.85
8	0.55	0.07	0.28	-0.14	---	---	---	---	1.86	1.12	1.61	0.97
9	0.38	-0.06	0.24	-0.24	---	---	---	---	1.60	0.85	1.57	1.00
10	0.57	0.01	0.17	-0.33	---	---	---	---	1.50	0.86	1.64	0.82
11	0.62	0.08	0.15	-0.34	---	---	---	---	1.69	1.03	1.44	0.83
12	0.70	0.19	0.15	-0.39	---	---	---	---	1.67	0.78	1.17	0.56
13	0.58	0.14	0.11	-0.38	---	---	---	---	1.47	0.98	0.92	0.37
14	0.72	0.16	0.15	-0.20	---	---	---	---	1.47	0.81	0.92	0.40
15	0.82	0.20	0.78	0.02	---	---	---	---	1.25	0.62	0.96	0.52
16	0.68	0.09	0.49	-0.27	---	---	---	---	1.04	0.53	0.90	0.47
17	0.58	0.06	0.28	-0.44	---	---	---	---	0.98	0.49	0.89	0.46
18	0.55	0.04	0.13	-0.26	---	---	---	---	0.98	0.53	0.92	0.43
19	---	0.05	0.44	0.04	---	---	---	---	0.89	0.34	0.94	0.44
20	0.56	-0.07	1.51	0.92	---	---	---	---	0.99	0.28	0.97	0.42
21	0.50	0.11	1.61	1.10	---	---	---	---	0.82	0.25	1.20	0.56
22	0.52	-0.08	1.67	1.02	---	---	---	---	0.92	0.39	1.19	0.73
23	0.93	0.07	1.39	0.73	---	---	---	---	0.98	0.46	1.34	0.76
24	0.93	0.34	1.00	0.40	---	---	---	---	0.91	0.41	1.37	0.89
25	0.59	-0.03	0.99	0.33	---	---	---	---	0.74	0.21	1.25	0.57
26	0.60	0.04	1.13	0.46	---	---	---	---	0.76	0.19	0.81	0.43
27	0.59	-0.04	0.81	0.27	---	---	---	---	0.67	0.17	1.13	0.52
28	0.55	-0.11	0.98	0.51	---	---	---	---	0.60	0.16	1.28	0.73
29	0.62	0.12	1.40	0.70	---	---	---	---	0.82	0.27	1.31	0.74
30	0.77	0.03	1.31	0.49	---	---	---	---	0.73	0.26	1.42	0.77
31	---	---	1.13	0.64	---	---	0.48	0.07	0.93	0.37	---	---
MAX	1.33	0.94	1.67	1.10	1.16	0.72	0.48	0.07	1.90	1.12	1.64	1.00
MIN	0.38	-0.11	0.09	-0.45	0.98	0.47	0.48	0.07	0.58	0.12	0.81	0.37

YEAR			
	HIGH	MAXIMUM 2.69	MINIMUM 0.01
	LOW	MAXIMUM 2.08	MINIMUM -0.59

02252500 NORTH CANAL NEAR VERO BEACH, FL

LOCATION.--Lat 27°41'35", long 80°25'46", in SW¼ sec.15, T.32 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on downstream side of concrete piling for sewer main, approximately 0.9 mi upstream from County Road 605, and 4.2 mi north of Vero Beach.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to Feb. 27, 1952, water-stage recorder located 550 ft upstream from County Road 605 at datum 0.81 ft lower. Feb. 27, 1952 to Nov. 5, 1957, water-stage recorder located at bridge on U.S. Highway 1 at present datum. Nov. 6, 1957 to Dec. 28, 1994, water-stage located 600 ft upstream from County Road 605 at present datum. Dec. 29, 1994 to Aug. 8, 1995, water-stage recorder located on County Road 605 bridge at present datum.

REMARKS.--Records fair. Considerable pumping into canal for drainage above station. Since Sept. 7, 1954, flow regulated by control structure 1.1 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	133	27	24	34	34	17	13	31	504	39	52
2	35	51	26	25	41	33	17	14	27	406	41	55
3	44	43	26	28	37	31	66	13	25	173	57	45
4	49	41	26	28	33	29	65	13	23	136	57	41
5	49	49	25	27	30	26	38	13	22	157	38	41
6	48	25	24	27	28	26	31	14	21	97	46	29
7	44	28	25	27	28	25	27	15	20	74	48	20
8	57	31	34	26	26	25	25	15	23	118	45	20
9	87	34	127	24	25	24	23	14	23	256	42	24
10	63	35	20	24	112	23	22	12	22	241	37	26
11	52	34	29	24	116	22	20	12	21	282	277	25
12	48	32	30	23	31	22	21	12	22	341	299	27
13	44	33	30	23	37	24	23	11	23	165	137	25
14	40	58	29	23	39	22	22	12	116	139	98	24
15	38	61	29	35	38	20	22	11	89	93	72	23
16	36	52	29	36	36	19	22	11	75	56	55	23
17	35	49	28	33	33	18	21	13	149	32	85	23
18	33	44	27	33	31	17	19	13	258	34	55	24
19	32	41	26	31	29	16	18	21	279	37	40	24
20	35	40	25	29	29	16	17	28	433	37	23	24
21	37	38	24	28	28	16	16	25	650	211	22	24
22	61	35	24	27	28	16	15	21	361	267	25	23
23	47	34	23	26	107	16	15	19	229	119	32	23
24	38	34	23	25	28	16	14	18	172	74	33	24
25	204	33	23	24	35	16	14	17	261	40	33	29
26	480	33	24	24	37	17	14	16	312	25	156	24
27	96	32	23	23	34	18	15	15	322	28	75	23
28	55	30	22	23	33	18	15	15	152	31	29	23
29	51	29	23	22	---	18	15	14	114	33	151	23
30	51	28	22	22	---	18	14	15	119	37	68	24
31	49	---	23	21	---	16	---	29	---	38	57	---
TOTAL	2105	1240	896	815	1143	657	683	484	4394	4281	2272	835
MEAN	67.9	41.3	28.9	26.3	40.8	21.2	22.8	15.6	146	138	73.3	27.8
MAX	480	133	127	36	116	34	66	29	650	504	299	55
MIN	32	25	20	21	25	16	14	11	20	25	22	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2002, BY WATER YEAR (WY)

MEAN	60.2	30.7	20.1	22.4	24.8	27.9	19.1	20.6	41.9	35.3	40.0	55.3
MAX	220	133	71.1	54.3	100	136	65.9	68.3	226	138	119	280
(WY)	2000	1985	1995	1970	1991	1993	1951	1979	1968	2002	1981	1960
MIN	8.18	7.00	6.24	4.52	4.83	3.97	4.78	5.23	4.98	8.12	9.26	7.61
(WY)	1959	1956	1962	1956	1956	1956	1963	1956	1964	1981	1958	1961

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951 - 2002	
ANNUAL TOTAL	14876		19805			
ANNUAL MEAN	40.8		54.3		33.2	
HIGHEST ANNUAL MEAN					57.7	1991
LOWEST ANNUAL MEAN					13.1	1961
HIGHEST DAILY MEAN	522	Sep 14	650	Jun 21	1580	Sep 24 1960
LOWEST DAILY MEAN	13	Many days	11	May 13,15,16	0.60	Jun 27 1967
ANNUAL SEVEN-DAY MINIMUM	14	Jun 17	12	May 10	2.3	May 13 1981
MAXIMUM PEAK STAGE			9.42	Jul 1	11.94	Oct 4 2000
10 PERCENT EXCEEDS	66		118		61	
50 PERCENT EXCEEDS	23		29		18	
90 PERCENT EXCEEDS	15		16		7.6	

02253000 MAIN CANAL AT VERO BEACH, FL

LOCATION.--Lat 27°38'54", long 80°24'10", in SE¼ sec.35, T.32 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on right bank 8 ft upstream from dam, 700 ft upstream from U.S. Highway 1, and 0.6 mi northwest of Vero Beach.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1949 to current year. Monthly discharge only for some periods, published in WSP 1724.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is at NGVD of 1929. Prior to Mar. 20, 1952, at datum 0.74 ft lower. Mar. 20, 1952 to Sept. 30, 1956, at datum 0.02 ft lower.

REMARKS.--Records good. Considerable pumping into canal for drainage upstream from station. Since Aug. 6, 1954, flow regulated by control structure 1.5 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	212	33	26	54	39	28	18	28	410	54	52
2	12	103	33	28	61	39	29	17	31	496	53	70
3	37	76	32	36	46	36	48	13	27	323	64	62
4	52	73	32	34	38	31	62	11	24	261	39	61
5	54	81	28	37	33	28	47	14	21	277	28	66
6	53	7.1	27	40	30	27	38	15	15	170	68	35
7	50	9.5	30	40	29	27	33	15	15	141	67	4.8
8	58	28	37	37	25	26	30	15	37	143	89	4.2
9	82	38	43	34	23	27	29	14	33	287	222	4.2
10	74	39	40	33	129	27	27	10	26	502	53	4.2
11	65	39	39	32	163	26	26	9.4	24	508	479	4.6
12	61	37	37	31	11	26	32	10	26	498	735	4.9
13	57	135	36	30	29	28	40	11	21	275	289	4.7
14	53	199	35	31	35	26	37	13	191	213	185	4.7
15	50	7.1	33	49	38	27	37	14	282	156	142	10
16	48	29	33	50	38	26	35	15	267	124	115	24
17	44	44	32	45	36	25	33	16	254	133	169	28
18	42	46	30	41	32	22	30	15	329	233	138	31
19	48	45	29	39	29	18	27	26	432	183	88	33
20	52	44	27	35	27	20	26	34	421	226	10	33
21	52	42	25	34	26	22	24	31	697	303	6.7	31
22	240	40	24	32	26	20	21	26	606	495	21	30
23	69	39	24	30	172	19	19	22	363	319	36	30
24	9.5	39	24	29	8.2	20	15	20	258	198	40	37
25	112	38	24	27	29	19	11	19	326	144	41	24
26	448	37	26	25	37	20	10	18	499	135	174	8.2
27	111	37	25	25	32	31	20	17	603	73	127	21
28	13	35	23	24	28	32	19	16	381	11	12	29
29	44	34	25	22	---	28	18	14	250	35	298	32
30	53	34	25	22	---	24	17	14	209	49	118	32
31	54	---	26	24	---	25	---	22	---	53	53	---
TOTAL	2270.5	1666.7	937	1022	1264.2	811	868	524.4	6696	7374	4013.7	815.5
MEAN	73.2	55.6	30.2	33.0	45.1	26.2	28.9	16.9	223	238	129	27.2
MAX	448	212	43	50	172	39	62	34	697	508	735	70
MIN	9.5	7.1	23	22	8.2	18	10	9.4	15	11	6.7	4.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)

MEAN	110	66.9	46.8	52.1	58.2	64.1	46.8	53.4	94.7	87.3	94.6	116
MAX	274	258	110	117	206	247	106	179	437	249	252	440
(WY)	1967	1985	1995	1970	1983	1993	1960	1979	1968	1968	1981	1960
MIN	23.4	5.69	5.39	21.3	16.0	20.7	16.3	9.14	24.4	14.7	28.9	27.2
(WY)	1998	1956	1956	1990	2001	1990	1990	2000	2000	1997	1980	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002	
ANNUAL TOTAL	22555.1		28263.0			
ANNUAL MEAN	61.8		77.4		74.3	
HIGHEST ANNUAL MEAN					137	1960
LOWEST ANNUAL MEAN					41.8	1950
HIGHEST DAILY MEAN	585	Sep 14	735	Aug 12	1830	Sep 25 1963
LOWEST DAILY MEAN	4.4	Jul 27	4.2	Sep 8,9,10	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	10	Mar 6	4.5	Sep 8	1.9	Jan 2 1990
MAXIMUM PEAK STAGE			12.70	Aug 11	14.38	Sep 24 1963
10 PERCENT EXCEEDS	175		224		163	
50 PERCENT EXCEEDS	32		33		38	
90 PERCENT EXCEEDS	14		15		14	

02253500 SOUTH CANAL NEAR VERO BEACH, FL

LOCATION.--Lat 27°36'11", long 80°23'24", in SW¼ sec.13, T.33 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on right bank 1,000 ft upstream from bridge on State Highway 605, and 2.5 mi south of Vero Beach.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to Feb. 28, 1952, at downstream side of bridge 1,000 ft downstream at datum 1.26 ft lower. Feb. 28, 1952 to Nov. 6, 1957, 20 ft upstream from bridge at datum 0.46 ft lower. Since Oct. 1, 1997 water-stage recorder for Indian River at Wabasso (02251800) used as auxiliary gage for this station.

REMARKS.--Records fair. Considerable pumping into canal for drainage above station. Since Jan. 6, 1956, flow regulated by control structure upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	131	15	13	52	28	14	15	20	187	38	76
2	7.9	39	15	21	50	34	12	14	21	182	38	75
3	11	30	14	23	36	31	15	15	18	174	167	54
4	15	26	15	17	29	20	29	16	18	107	328	48
5	15	14	14	21	26	15	19	15	17	95	27	127
6	17	5.6	14	29	31	23	12	13	15	70	37	129
7	12	8.6	16	26	32	22	15	15	14	59	29	82
8	20	14	19	24	23	21	19	16	33	126	24	92
9	29	18	21	26	23	22	19	16	27	283	24	87
10	26	18	22	27	144	20	17	16	23	378	24	85
11	22	18	19	26	119	18	15	16	22	261	e450	81
12	20	15	18	25	31	22	17	16	24	236	e700	90
13	20	107	18	24	34	20	20	16	19	122	e390	64
14	19	87	19	26	36	19	17	15	142	94	e130	22
15	8.8	1.1	15	43	36	20	16	14	101	73	115	20
16	7.9	1.8	16	42	33	19	18	17	93	44	94	22
17	1.8	9.4	18	40	30	19	18	18	96	22	165	23
18	6.0	13	16	39	25	18	17	18	74	21	103	25
19	11	14	14	37	29	16	18	27	78	20	72	30
20	10	15	13	34	31	16	16	14	130	19	28	31
21	11	14	11	33	30	16	16	8.7	431	211	27	27
22	149	16	15	32	26	11	15	7.2	282	290	26	26
23	25	19	19	30	118	9.6	12	11	158	208	28	22
24	9.2	21	16	29	14	13	11	12	134	109	29	111
25	106	20	10	27	22	14	14	12	231	46	32	127
26	113	18	8.9	26	29	14	14	11	202	23	148	22
27	19	20	12	25	23	15	14	11	175	24	56	18
28	5.8	21	15	25	18	13	16	8.7	115	22	35	17
29	14	20	18	24	---	13	15	7.7	89	26	167	17
30	18	20	15	24	---	12	14	8.9	86	31	96	16
31	19	---	13	25	---	12	---	28	---	32	68	---
TOTAL	791.4	774.5	483.9	863	1130	565.6	484	448.2	2888	3595	3695	1666
MEAN	25.5	25.8	15.6	27.8	40.4	18.2	16.1	14.5	96.3	116	119	55.5
MAX	149	131	22	43	144	34	29	28	431	378	700	129
MIN	1.8	1.1	8.9	13	14	9.6	11	7.2	14	19	24	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2002, BY WATER YEAR (WY)

MEAN	69.5	36.0	22.7	25.2	25.8	30.3	21.7	27.7	54.6	42.8	51.8	68.3
MAX	200	177	91.2	74.5	90.6	138	86.8	118	267	143	208	280
(WY)	1984	1985	1995	1993	1966	1993	1951	1979	1992	1968	1981	1960
MIN	6.01	7.18	5.43	4.21	4.52	4.90	4.87	5.23	4.93	8.29	5.00	7.85
(WY)	1982	1962	1963	1962	1962	1956	1956	1956	1956	1977	1956	1961

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951 - 2002	
ANNUAL TOTAL	13087.9		17384.6			
ANNUAL MEAN	35.9		47.6		39.8	
HIGHEST ANNUAL MEAN					61.6	1960
LOWEST ANNUAL MEAN					15.2	1962
HIGHEST DAILY MEAN	453	Sep 14	e700	Aug 12	1780	Sep 4 1979
LOWEST DAILY MEAN	1.1	Nov 15	1.1	Nov 15	0.54	May 18 1978
ANNUAL SEVEN-DAY MINIMUM	5.3	Mar 7	8.1	Oct 15	b1.1	
MAXIMUM PEAK STAGE					a11.80	Oct 16 1999
10 PERCENT EXCEEDS	88		120		83	
50 PERCENT EXCEEDS	18		22		17	
90 PERCENT EXCEEDS	8.1		12		6.4	

e Estimated
a Observed
b May 21, 1978, Nov 15, 2001

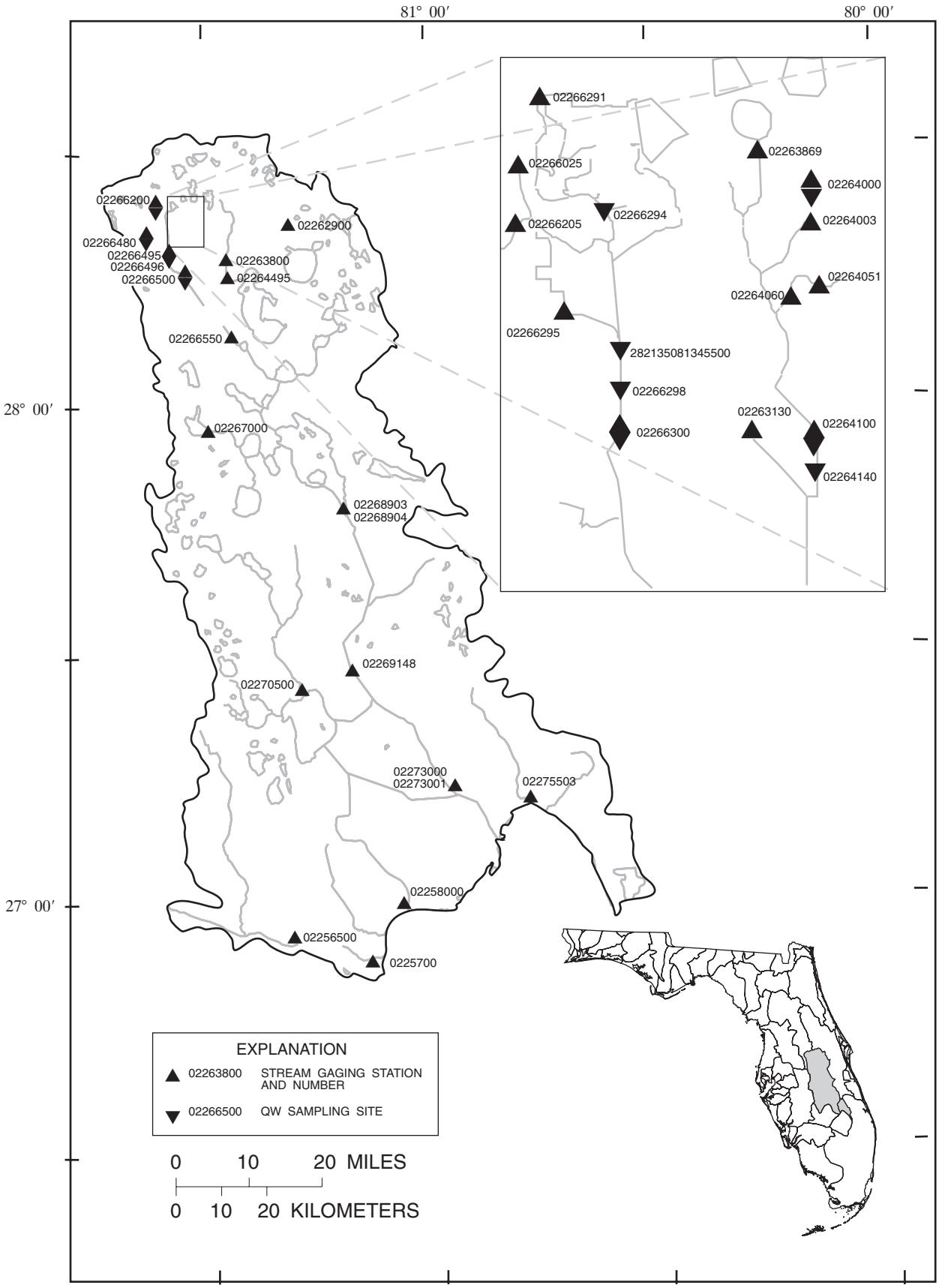

Figure 9.--Location of stream gaging stations in the Kissimmee River basin, the Taylor Creek basin and inflow to Lake Okeechobee from the north, and Fisheating Creek basin and inflow to Lake Okeechobee from the northwest.

02256500 FISHEATING CREEK AT PALMDALE, FL

LOCATION.--Lat 26°55'56", long 81°18'54" in SW¼ sec.3, T.41 S., R.30 E., Glades County, Hydrologic Unit 03090103, near right bank on downstream side of southbound bridge on U.S. Highway 27, 1.0 mi south of Palmdale, and 16 mi upstream from Lake Okeechobee.

DRAINAGE AREA.--311 mi^2.

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

REVISED RECORDS.--WRD FL-66-2: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 27.19 ft above NGVD of 1929. Prior to Mar. 16, 1949, nonrecording gage and Mar. 16, 1949, to Jan. 23, 1956, water-stage recorder, at site 450 ft upstream at same datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	789	558	27	14	15	47	4.0	0.00	0.00	1440	662	490
2	895	506	26	14	14	47	3.7	0.00	0.00	1420	616	554
3	914	510	25	15	14	43	3.4	0.00	0.00	1680	623	667
4	805	496	24	15	14	39	3.2	0.00	0.00	1960	613	821
5	686	494	23	15	13	38	3.0	0.00	0.00	1740	585	808
6	593	406	22	15	13	29	2.6	0.00	0.00	1500	527	706
7	523	317	21	16	13	27	2.3	0.00	0.00	1390	533	717
8	474	258	22	16	13	26	2.1	0.00	0.24	1360	580	817
9	428	229	24	16	12	24	1.8	0.00	0.66	1300	522	881
10	381	217	26	16	12	21	1.6	0.00	0.69	1240	501	837
11	338	201	28	16	13	19	1.5	0.00	0.63	1280	474	775
12	295	175	29	16	13	18	1.7	0.00	0.87	1310	459	726
13	255	148	28	15	e13	16	2.5	0.00	1.4	1250	422	647
14	224	125	28	15	e25	15	3.1	0.00	1.5	1170	375	576
15	193	107	28	21	40	14	3.8	0.00	1.9	1030	339	536
16	163	93	27	26	62	13	4.4	0.00	2.5	948	337	503
17	135	82	25	23	67	12	4.1	0.00	6.9	974	409	493
18	110	72	24	22	63	11	3.9	0.00	16	1050	494	526
19	92	65	22	22	55	10	3.7	0.00	29	993	485	528
20	79	59	21	21	46	9.6	3.4	0.00	40	994	485	478
21	72	54	20	22	38	9.2	3.0	0.00	58	919	482	419
22	77	49	19	22	32	8.5	2.6	0.00	81	1140	451	359
23	89	45	18	21	30	7.8	2.2	0.00	133	1130	396	323
24	99	42	17	21	30	7.1	1.8	0.00	171	1310	360	348
25	97	38	16	20	30	6.6	1.5	0.00	257	1620	394	308
26	118	36	16	18	33	6.3	1.2	0.00	471	1530	567	249
27	168	33	15	18	37	5.9	0.87	0.00	951	1310	617	241
28	305	31	15	17	58	5.5	0.62	0.00	1230	1050	648	363
29	600	29	14	16	---	5.1	0.39	0.00	1360	888	675	412
30	713	28	14	16	---	4.8	0.15	0.00	1400	840	620	387
31	639	---	14	15	---	4.3	---	0.00	---	774	515	---
TOTAL	11349	5503	678	555	818	549.7	74.13	0.00	6214.29	38540	15766	16495
MEAN	366	183	21.9	17.9	29.2	17.7	2.47	0.000	207	1243	509	550
MAX	914	558	29	26	67	47	4.4	0.00	1400	1960	675	881
MIN	72	28	14	14	12	4.3	0.15	0.00	0.00	774	337	241
MED	295	100	22	16	28	13	2.6	0.00	2.2	1250	501	527
CFSM	1.18	0.59	0.07	0.06	0.09	0.06	0.01	0.00	0.67	4.00	1.64	1.77
IN.	1.36	0.66	0.08	0.07	0.10	0.07	0.01	0.00	0.74	4.61	1.89	1.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2002, BY WATER YEAR (WY)

MEAN	506	122	63.9	89.6	118	159	53.6	19.3	238	414	471	755
MAX	3822	750	770	939	1596	1234	505	362	1995	2525	1475	3253
(WY)	1952	1988	1998	1998	1970	1941	1958	1982	1974	1953	1947
MIN	8.05	1.11	0.24	0.26	0.082	0.000	0.000	0.000	0.000	0.000	0.34	16.1
(WY)	1973	1962	2001	1992	1962	1956	1935	1935	1935	1935	1950	1996

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1931 - 2002	
ANNUAL TOTAL	132217.94		96542.12			
ANNUAL MEAN	362		264		252	
HIGHEST ANNUAL MEAN					671	1960
LOWEST ANNUAL MEAN					13.6	1956
HIGHEST DAILY MEAN	5150	Sep 16	1960	Jul 4	30500	Oct 3 1951
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Most years
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 19	0.00	May 1	0.00	Most years
MAXIMUM PEAK FLOW			1980	Jul 4	*31400	Oct 3 1951
MAXIMUM PEAK STAGE			6.63	Jul 4	12.44	Oct 3 1951
ANNUAL RUNOFF (CFSM)	1.16		0.85		0.81	
ANNUAL RUNOFF (INCHES)	15.82		11.55		11.02	
10 PERCENT EXCEEDS	1280		856		704	
50 PERCENT EXCEEDS	16		29		40	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated
* From rating curve extended above 21,000 ft^3/s

02257000 FISHEATING CREEK NEAR LAKEPORT, FL

LOCATION.--Lat 26°57'44", long 81°07'05" in SE¼ sec.28, T.40 S., R.32 E., Glades County, Hydrologic Unit 03090103, on right bank, 50 ft upstream from bridge on State Highway 78, 0.8 mi southeast of Lakeport, and 2 mi upstream from Lake Okeechobee.

DRAINAGE AREA.-- Indeterminate.

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929 (South Florida Water Management District bench mark). Nonrecording gage 1949-50, 1971-76 at same site.

REMARKS.--Records poor. Discharge not published for some periods due to missing velocity or gage height data.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	29	33	41	57	19	21	52	2500	809
2	---	---	---	17	12	28	33	22	20	46	2290	650
3	---	---	---	6.9	0.32	19	44	7.2	18	41	2160	e550
4	---	---	---	52	15	29	31	11	31	37	2060	e460
5	---	---	---	34	32	86	35	2.7	32	25	2050	e380
6	---	---	---	31	32	77	32	15	36	29	2030	347
7	---	---	---	26	30	50	41	16	35	48	1970	340
8	---	---	---	8.8	24	29	51	6.2	36	36	1980	661
9	---	---	30	55	32	17	47	28	40	20	2060	916
10	---	---	30	16	35	32	49	26	29	21	2080	784
11	---	---	39	39	28	29	47	18	25	22	1920	740
12	---	---	20	30	28	39	40	25	19	24	1790	929
13	---	---	40	36	31	8.3	36	23	24	9.5	1620	1910
14	---	---	40	28	32	29	36	33	29	21	1550	3020
15	---	---	41	37	44	21	27	29	51	30	1410	2870
16	---	---	48	43	32	8.1	52	37	35	e63	1270	2940
17	---	---	49	31	45	28	38	26	35	e66	1140	3340
18	---	---	34	31	-11	-7.7	5.9	26	43	e84	1090	3540
19	---	---	44	27	36	33	22	19	40	e230	982	3350
20	---	---	20	48	32	48	27	21	19	e515	829	3200
21	---	---	28	25	43	66	20	26	36	e790	762	2950
22	---	---	23	57	32	46	20	21	35	e1100	758	2670
23	---	---	16	70	28	31	34	18	28	e1600	811	2530
24	---	---	-9.4	40	32	45	36	32	30	1680	915	2320
25	---	---	-29	41	39	36	23	16	30	1590	1260	2090
26	---	---	22	29	35	33	3.9	23	42	1600	1670	1870
27	---	---	30	34	36	18	10	25	26	2310	1640	1740
28	---	---	29	31	28	28	13	31	34	2750	1510	1830
29	---	---	49	44	---	12	5.1	13	43	2800	1280	1990
30	---	---	56	38	---	21	24	32	45	2650	1090	1960
31	---	---	24	17	---	10	---	17	---	2490	919	---
TOTAL	---	---	673.6	1051.7	815.32	989.7	939.9	664.1	967	22779.5	47396	53686
MEAN	---	---	29.3	33.9	29.1	31.9	31.3	21.4	32.2	735	1529	1790
MAX	---	---	56	70	45	86	57	37	51	2800	2500	3540
MIN	---	---	-29	6.9	-11	-7.7	3.9	2.7	18	9.5	758	340

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

MEAN	1013	386	249	396	666	411	131	33.0	51.9	418	556	784
MAX	1200	848	721	1420	2528	1508	409	73.8	151	955	1529	1790
(WY)	1998	1999	1998	1998	1998	1998	1998	1998	1999	1999	2001	2001
MIN	710	47.1	29.3	33.9	29.1	30.2	27.0	4.82	5.37	6.49	8.30	45.3
(WY)	2000	1998	2001	2001	2001	2000	2000	1997	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1993 - 2001	
ANNUAL TOTAL	7626.8		129962.82			
ANNUAL MEAN	25.7		439		406	
HIGHEST ANNUAL MEAN					697	1998
LOWEST ANNUAL MEAN					106	2000
HIGHEST DAILY MEAN	123	Sep 23	3540	Sep 18	4620	Mar 26 1998
LOWEST DAILY MEAN	-29	Dec 25	-29	Dec 25	-29	Dec 25 2000
ANNUAL SEVEN-DAY MINIMUM	4.0	Jun 8	10	Dec 20	1.6	May 26 1997
MAXIMUM PEAK STAGE			18.24	Sep 18	19.14	Mar 24 1998
10 PERCENT EXCEEDS	55		1930		1300	
50 PERCENT EXCEEDS	20		35		65	
90 PERCENT EXCEEDS	5.4		17		9.8	

e Estimated
Note.--Negative figures indicate reverse flow

02257000 FISHEATING CREEK NEAR LAKEPORT, FL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1760	331	119	e92	89	89	35	30	43	1100	1400	1740
2	1540	487	113	e105	80	71	43	27	42	1640	1240	1530
3	1420	575	108	e82	85	33	42	34	44	1950	1080	1300
4	1260	567	127	e62	68	80	42	61	44	1960	971	1200
5	1220	678	116	e91	32	1.8	47	55	46	2030	853	1240
6	1220	638	76	e90	120	54	32	30	50	2260	753	1880
7	1120	626	113	e75	83	65	-7.5	45	36	2370	739	2300
8	958	619	102	e61	43	85	88	60	56	2130	780	2050
9	849	556	105	e62	89	64	117	64	15	2080	733	1780
10	804	477	126	e62	93	51	87	55	34	2110	712	1610
11	686	421	126	e53	62	85	60	39	45	2380	705	1550
12	580	367	133	e41	51	81	73	35	39	2180	667	1580
13	514	323	134	e53	52	64	78	54	43	2100	637	1690
14	498	312	108	e53	42	48	65	23	27	2010	571	2140
15	390	280	118	e41	64	59	47	6.5	38	2100	547	1760
16	358	260	74	77	54	62	75	22	25	2060	520	1400
17	368	215	118	81	66	94	69	39	19	1910	492	1200
18	306	236	88	58	38	77	78	36	54	1760	498	1070
19	320	238	93	55	93	82	71	40	35	1540	444	924
20	277	175	59	51	72	86	55	27	64	1490	428	907
21	262	187	98	40	38	68	63	9.8	102	1550	447	886
22	262	198	122	62	51	17	44	13	112	2360	464	821
23	246	196	111	100	92	68	43	1.0	175	2490	456	826
24	219	183	79	57	57	77	26	7.5	195	2490	482	766
25	331	152	60	70	109	100	56	31	293	2190	483	818
26	444	151	93	66	70	58	61	36	378	2130	463	920
27	419	145	65	68	117	48	55	29	415	2400	557	869
28	288	163	82	69	66	65	57	15	406	2480	737	807
29	258	135	47	89	---	80	26	34	522	2260	901	733
30	250	137	83	118	---	72	37	58	748	1970	1090	707
31	242	---	e62	110	---	53	---	34	---	1690	1550	---
TOTAL	19669	10028	3058	2194	1976	2037.8	1664.5	1050.8	4145	63170	22400	39004
MEAN	634	334	98.6	70.8	70.6	65.7	55.5	33.9	138	2038	723	1300
MAX	1760	678	134	118	120	100	117	64	748	2490	1550	2300
MIN	219	135	47	40	32	1.8	-7.5	1.0	15	1100	428	707

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2002, BY WATER YEAR (WY)

MEAN	919	373	217	331	548	342	116	33.1	66.3	688	585	877
MAX	1200	848	721	1420	2528	1508	409	73.8	151	2038	1529	1790
(WY)	1998	1999	1998	1998	1998	1998	1998	1998	1999	2002	2001	2001
MIN	634	47.1	29.3	33.9	29.1	30.2	27.0	4.82	5.37	6.49	8.30	45.3
(WY)	2002	1998	2001	2001	2001	2000	2000	1997	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1993 - 2002	
ANNUAL TOTAL	162044.22		170397.1			
ANNUAL MEAN	444		467		418	
HIGHEST ANNUAL MEAN					697	1998
LOWEST ANNUAL MEAN					106	2000
HIGHEST DAILY MEAN	3540	Sep 18	2490	Jul 23,24	4620	Mar 26 1998
LOWEST DAILY MEAN	-11	Feb 18	-7.5	Apr 7	-29	Dec 25 2000
ANNUAL SEVEN-DAY MINIMUM	11	May 2	18	May 20	1.6	May 26 1997
MAXIMUM PEAK STAGE			16.59	Sep 14	19.14	Mar 24 1998
10 PERCENT EXCEEDS	1700		1620		1370	
50 PERCENT EXCEEDS	48		108		72	
90 PERCENT EXCEEDS	19		37		14	

e Estimated
Note.--Negative figures indicate reverse flow

02258000 HARNEY POND CANAL NEAR LAKEPORT, FL

LOCATION.--Lat 27°00'58", long 81°04'13" in NE1/4 sec.12, T.40 S., R.32 E., Glades County, Hydrologic Unit 03090103, near right bank of canal, 0.1 mi west of State Highway 721, 3.0 mi upstream from mouth and 3.8 mi northeast of Lakeport.

DRAINAGE AREA.-- Indeterminate.

PERIOD OF RECORD.--September 1948 to November 1950 (discharge measurements only); October 1993 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929 (South Florida Water Management District bench mark).

REMARKS.--Records fair. Discharge not published for some periods due to missing velocity or stage record.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	190	---	33	-122	99	231	840	-66	-166	191	16
2	234	164	---	86	116	-24	347	793	-122	-85	691	101
3	120	201	---	-14	224	60	-179	842	-63	-7.9	769	78
4	370	188	---	-135	19	25	-126	858	-108	57	480	103
5	200	139	838	-56	7.8	12	169	863	-132	-53	111	849
6	229	-51	80	56	-52	47	-24	864	-105	80	255	71
7	352	23	145	-145	89	63	-126	716	-157	103	548	219
8	228	---	-53	-101	122	53	-101	850	1.4	59	108	337
9	199	---	48	-32	-45	11	-189	697	145	203	-34	1190
10	282	---	-24	29	-20	164	-179	698	-45	337	-90	1520
11	294	---	-93	-135	34	-79	-126	730	-103	1400	198	1570
12	270	---	76	-67	-81	-143	-159	-80	-50	1050	-75	1660
13	254	---	-144	68	-9.3	-78	-214	-62	-42	615	792	2260
14	287	---	-28	9.2	-93	-34	250	-53	-52	948	-59	4130
15	273	---	-57	-104	-1.7	677	-98	-118	-14	1040	810	3660
16	225	---	-177	-119	-43	780	630	165	125	510	46	2640
17	196	---	66	8.6	80	121	e670	-91	11	767	433	2080
18	274	---	0.96	-30	231	280	707	-73	-104	617	905	1390
19	127	---	28	-236	-22	73	710	-95	187	693	-46	1300
20	71	---	11	8.7	-34	-7.7	686	-154	171	218	36	1270
21	265	---	162	27	-39	713	178	-105	201	460	369	1320
22	196	---	93	-18	55	695	122	-38	106	686	468	1260
23	163	---	82	-65	134	631	-105	-40	114	1010	650	1130
24	176	---	99	51	-98	-44	-135	163	286	991	1250	827
25	171	---	84	-14	-126	-11	688	-113	177	483	608	497
26	208	---	61	-41	-35	219	725	-8.3	186	234	530	695
27	198	---	-201	-3.1	-51	79	58	-31	104	74	662	1270
28	36	---	-22	-36	83	-60	736	-85	88	142	185	1070
29	82	---	3.6	-205	---	-147	772	-135	-189	-34	-74	1100
30	212	---	-77	-6.6	---	74	188	-59	-124	166	182	933
31	136	---	-30	-171	---	1.9	---	31	---	-171	-123	---
TOTAL	6615	854	971.56	-1357.2	322.8	4250.2	6106	7769.7	426.4	12426.1	10776	36546
MEAN	213	122	36.0	-43.8	11.5	137	204	251	14.2	401	348	1218
MAX	370	201	838	86	231	780	772	864	286	1400	1250	4130
MIN	36	-51	-201	-236	-126	-147	-214	-154	-189	-171	-123	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

MEAN	436	307	283	228	217	253	246	264	299	369	401	563
MAX	1131	654	463	527	753	782	631	545	679	791	629	1218
(WY)	1996	1999	1998	1998	1998	1998	1996	1994	1994	1994	1998	2001
MIN	-73.0	122	36.0	-43.8	11.5	94.5	104	63.5	14.2	110	98.7	138
(WY)	1995	2001	2001	2001	2001	1997	1997	2000	2001	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	41233.01		85706.56			
ANNUAL MEAN	125		254		329	
HIGHEST ANNUAL MEAN					445	1998
LOWEST ANNUAL MEAN					171	2000
HIGHEST DAILY MEAN	838	Dec 5	4130	Sep 14	4130	Sep 14 2001
LOWEST DAILY MEAN	-201	Dec 27	-236	Jan 19	-257	Sep 29 1994
ANNUAL SEVEN-DAY MINIMUM	-64	Dec 10	-156	Apr 7	-156	Apr 7 2001
MAXIMUM PEAK STAGE			14.98	Sep 29	18.89	Oct 15 1999
10 PERCENT EXCEEDS	271		840		744	
50 PERCENT EXCEEDS	125		82		233	
90 PERCENT EXCEEDS	-14		-118		8.2	

e Estimated
Note.--Negative figures indicate reverse flow

02258000 HARNEY POND CANAL NEAR LAKEPORT, FL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	1020	160	18	105	112	209	74	107	1670	123	1680
2	477	989	40	-6.0	116	-254	-3.3	-26	22	1420	440	1480
3	123	966	139	-33	-145	20	104	-104	32	1440	167	1260
4	254	562	179	-9.5	28	-14	-0.42	-48	-66	1210	302	1490
5	468	623	52	84	17	132	133	43	-154	1100	1290	1550
6	727	627	148	40	-174	238	137	52	-33	789	1160	2290
7	913	304	266	18	3.4	122	-7.3	65	-93	1030	840	1950
8	792	590	327	77	75	99	-117	-15	56	800	918	1510
9	981	324	245	81	80	89	-124	-58	228	1010	415	1360
10	645	522	193	82	64	60	66	-66	-15	1220	143	889
11	158	370	331	136	691	-106	39	45	-54	1370	44	839
12	323	433	409	148	235	-54	42	3.6	169	2110	281	828
13	71	132	447	19	139	87	59	21	-121	1990	1380	677
14	135	661	130	45	303	131	-16	236	121	1520	597	1190
15	443	549	215	304	172	72	147	274	121	1530	568	612
16	452	419	86	471	57	-24	38	-34	175	1470	72	634
17	847	339	107	428	-14	54	128	0.46	454	1310	248	581
18	912	88	82	434	101	105	74	-10	207	1240	541	419
19	596	59	16	319	-75	69	112	201	843	1050	555	669
20	146	-49	-20	270	-99	-65	-21	213	423	887	614	321
21	130	-41	132	272	-42	78	96	248	782	1310	861	386
22	305	76	110	307	131	282	25	252	1430	1410	924	425
23	714	29	21	100	-0.26	1.3	36	253	1400	1320	952	190
24	586	99	55	-93	146	112	-42	129	1450	993	603	319
25	709	81	18	86	170	91	-124	93	2270	978	614	449
26	1270	158	-34	118	167	141	-14	139	2310	724	633	375
27	1000	131	34	169	45	-46	-73	89	1790	390	863	495
28	797	70	113	16	152	25	-38	323	1500	410	903	237
29	969	94	-1.3	36	---	98	168	-183	1370	244	1120	584
30	846	86	157	-58	---	-42	-62	-28	1120	545	1100	405
31	844	---	113	43	---	-59	---	93	---	442	1850	---
TOTAL	17811	10311	4269.7	3921.5	2448.14	1554.3	970.98	2275.06	17844	34932	21121	26094
MEAN	575	344	138	126	87.4	50.1	32.4	73.4	595	1127	681	870
MAX	1270	1020	447	471	691	282	209	323	2310	2110	1850	2290
MIN	71	-49	-34	-93	-174	-254	-124	-183	-154	244	44	190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

MEAN	454	312	263	216	201	227	216	236	343	459	433	598
MAX	1131	654	463	527	753	782	631	545	679	1127	681	1218
(WY)	1996	1999	1998	1998	1998	1998	1996	1994	1994	2002	2002	2001
MIN	-73.0	122	36.0	-43.8	11.5	50.1	32.4	63.5	14.2	110	98.7	138
(WY)	1995	2001	2001	2001	2001	2002	2002	2000	2001	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	108987.7		143552.68			
ANNUAL MEAN	299		393		337	
HIGHEST ANNUAL MEAN					445	1998
LOWEST ANNUAL MEAN					171	2000
HIGHEST DAILY MEAN	4130	Sep 14	2310	Jun 26	4130	Sep 14 2001
LOWEST DAILY MEAN	-236	Jan 19	-254	Mar 2	-257	Sep 29 1994
ANNUAL SEVEN-DAY MINIMUM	-156	Apr 7	-34	Jun 2	-156	Apr 7 2001
MAXIMUM PEAK STAGE			16.49	Sep 25	18.89	Oct 15 1999
10 PERCENT EXCEEDS	884		1210		794	
50 PERCENT EXCEEDS	112		160		229	
90 PERCENT EXCEEDS	-104		-33		0.73	

Note.--Negative figures indicate reverse flow.

02262900 BOGGY CREEK NEAR TAFT, FL

LOCATION.--Lat 28°22'16", long 81°18'39", in NE¼ sec.28, T.24 S., R.30 E., Orange County, Hydrologic Unit 03090101, on left bank 450 ft downstream from Boggy Creek Swamp, 0.2 mi upstream from bridge on Central Florida Greenway, 3.5 mi upstream from mouth, and 5.5 mi southeast of Taft.

DRAINAGE AREA.--83.6 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 56.08 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Nonrecording gage, Feb. 18, 1991 to Jan. 22, 1993. Auxiliary water-stage recorder on the south side of East Lake Tohopekaliga since Oct.1, 1973, and prior to July 19, 1968. From July 19, 1968, to Sept. 30, 1973, auxiliary water-stage recorder at St. Cloud Canal above S-59.

REMARKS.--Records good. Some diversion to ground water through drainage wells in lakes upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	30	21	12	12	44	5.5	8.8	30	361	275	601
2	128	30	20	15	12	39	e5.6	8.8	35	385	223	663
3	113	32	19	19	12	35	5.7	7.4	30	455	203	630
4	97	31	20	21	12	32	6.4	5.8	24	359	215	514
5	82	30	19	21	12	29	6.2	4.6	20	328	218	471
6	68	28	18	20	11	28	5.4	3.8	17	290	195	485
7	60	27	17	18	16	26	4.5	3.3	24	249	200	389
8	56	26	17	17	20	24	4.2	2.7	34	211	212	296
9	52	25	16	16	17	21	e4.0	2.2	35	190	201	239
10	49	24	16	15	16	20	e3.9	1.7	29	180	178	209
11	46	24	16	15	17	18	e3.8	1.4	27	164	157	182
12	43	23	15	14	16	17	4.1	1.1	31	162	143	164
13	41	23	15	14	15	20	4.8	0.80	27	178	176	149
14	43	25	15	15	15	19	7.2	0.66	23	221	227	138
15	51	30	14	23	14	17	8.7	0.64	23	222	410	129
16	44	34	14	21	13	16	9.9	0.56	37	192	579	116
17	40	32	14	21	12	15	8.3	0.52	77	199	511	122
18	37	30	15	20	11	13	7.5	0.68	89	241	447	171
19	37	29	15	18	11	12	7.2	2.3	98	198	338	175
20	38	28	14	17	11	11	7.0	4.4	135	190	253	172
21	40	27	14	17	10	10	6.6	3.3	364	339	215	164
22	45	26	13	16	14	9.7	6.1	2.9	540	734	199	176
23	47	28	12	16	40	8.8	5.9	2.4	657	696	178	176
24	48	31	14	15	86	8.1	5.7	1.7	636	574	157	178
25	47	27	13	15	109	7.6	5.4	1.3	680	474	140	183
26	42	26	15	14	90	8.1	5.1	0.92	668	379	126	181
27	39	24	14	14	68	14	5.6	0.64	600	288	112	163
28	36	23	13	14	53	10	6.6	0.55	517	239	108	143
29	34	22	12	13	---	8.3	9.8	0.43	463	226	149	123
30	33	22	12	13	---	7.0	8.9	2.2	375	228	282	106
31	31	---	12	12	---	6.0	---	16	---	306	562	---
TOTAL	1716	817	474	511	745	553.6	185.6	94.50	6345	9458	7589	7608
MEAN	55.4	27.2	15.3	16.5	26.6	17.9	6.19	3.05	212	305	245	254
MAX	149	34	21	23	109	44	9.9	16	680	734	579	663
MIN	31	22	12	12	10	6.0	3.8	0.43	17	162	108	106
CFSM	0.66	0.33	0.18	0.20	0.32	0.21	0.07	0.04	2.53	3.65	2.93	3.03
IN.	0.76	0.36	0.21	0.23	0.33	0.25	0.08	0.04	2.82	4.21	3.38	3.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2002, BY WATER YEAR (WY)

MEAN	63.6	39.6	35.1	40.1	47.2	55.7	35.1	15.4	51.6	94.9	99.5	118
MAX	257	305	386	185	299	484	180	143	264	527	298	467
(WY)	1993	1995	1998	1998	1998	1960	1987	1991	1968	2001	1967	1960
MIN	3.84	3.12	2.60	3.50	4.30	3.75	1.61	0.38	3.19	5.81	5.96	7.34
(WY)	1971	1971	1971	1971	1985	1975	1975	2000	1971	1969	1980	1970

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1959 - 2002	
ANNUAL TOTAL	40400.0		36096.70			
ANNUAL MEAN	111		98.9		58.1	
HIGHEST ANNUAL MEAN					232	1959
LOWEST ANNUAL MEAN					15.4	1977
HIGHEST DAILY MEAN	1790	Jul 19	734	Jul 22	3400	Mar 17 1960
LOWEST DAILY MEAN	3.5	Mar 3	0.43	May 29	*0.00	
ANNUAL SEVEN-DAY MINIMUM	3.9	Feb 25	0.71	May 12	0.00	May 1 2000
MAXIMUM PEAK FLOW			774	Jul 22	a3680	Mar 18 1960
MAXIMUM PEAK STAGE			9.97	Jul 22	13.64	Mar 18 1960
INSTANTANEOUS LOW FLOW			1.9	May 15-18		
ANNUAL RUNOFF (CFSM)	1.32		1.18		0.70	
ANNUAL RUNOFF (INCHES)	17.98		16.06		9.45	
10 PERCENT EXCEEDS	329		292		139	
50 PERCENT EXCEEDS	27		24		25	
90 PERCENT EXCEEDS	6.4		5.5		4.9	

e Estimated
* Many days 1981, 1985, 2000 water years
a From floodmarks

02263130 C-2 CANAL NEAR VINELAND, FL

LOCATION.--Lat 28°19'54", long 81°32'28", in NW¼ sec.8, T.25 S., R.28 E., Osceola County, Hydrologic Unit 03090101, on downstream side of culverts on Exit Ramp 25A, 0.45 mi east of Ramp entrance from eastbound lane of Interstate Highway 4 to eastbound lane of U.S. Highway 192, 1.5 mi west of Bonnet Creek, and 4.5 mi south of Vineland.

DRAINAGE AREA.--1.28 mi^2.

PERIOD OF RECORD.--September 1993 to September 2002 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	0.97	0.83	0.66	0.75	1.1	0.89	0.70	0.55	15	3.7	3.7
2	2.2	1.1	0.83	1.1	0.74	1.1	0.89	0.67	0.53	11	3.4	3.3
3	2.2	1.0	0.83	0.83	0.73	1.0	0.91	0.64	0.50	8.6	3.3	3.0
4	2.1	0.99	0.82	0.76	0.73	1.1	0.92	0.63	0.48	7.1	3.0	3.0
5	2.1	0.97	0.80	0.75	0.74	1.0	0.91	0.62	0.45	6.7	2.8	3.1
6	2.0	0.95	0.79	0.77	0.74	1.0	0.90	0.63	0.44	5.9	2.6	2.8
7	1.8	0.95	0.79	0.75	0.83	1.0	0.89	0.63	0.54	6.5	3.2	2.7
8	1.8	0.94	0.80	0.71	0.79	0.99	0.87	0.63	0.75	6.6	3.2	2.5
9	1.8	0.94	0.79	0.71	0.77	0.99	0.87	0.61	0.61	6.0	3.0	2.3
10	1.8	0.92	0.78	0.70	0.84	1.00	0.89	0.59	0.59	5.7	2.8	2.2
11	1.8	0.92	0.75	0.70	0.84	0.99	0.86	0.58	1.2	5.0	2.6	2.1
12	1.6	0.92	0.76	0.68	0.82	0.97	0.92	0.58	0.74	4.6	5.3	2.1
13	1.6	0.96	0.76	0.69	0.80	1.1	0.91	0.55	0.69	4.8	7.9	2.0
14	1.7	0.94	0.76	0.77	0.80	0.99	0.94	0.62	2.2	4.8	9.8	2.2
15	1.5	0.94	0.76	0.81	0.81	0.98	0.96	0.61	1.7	4.2	9.2	2.1
16	1.4	0.92	0.75	0.72	0.82	0.97	0.92	0.59	2.8	3.8	7.0	2.3
17	1.2	0.91	0.74	0.72	0.82	0.95	0.88	0.58	2.8	3.4	5.6	2.9
18	1.2	0.91	0.76	0.71	0.82	0.95	0.84	0.73	2.1	3.3	4.8	3.3
19	1.1	0.92	0.75	0.70	0.82	0.94	0.83	1.0	2.0	3.4	4.3	3.5
20	1.1	0.90	0.75	0.71	0.82	0.93	0.81	0.71	5.8	3.5	4.4	3.8
21	1.2	0.92	0.73	0.70	0.81	0.96	0.79	0.66	3.1	4.9	4.2	4.0
22	1.1	0.91	0.72	0.69	2.3	0.93	0.78	0.62	5.7	5.3	4.3	3.5
23	1.1	0.90	0.70	0.69	2.1	0.91	0.77	0.60	9.4	4.8	4.5	4.1
24	1.1	0.88	0.72	0.69	1.5	0.92	0.78	0.59	14	4.2	4.2	5.7
25	1.1	0.86	0.71	0.71	1.2	0.91	0.75	0.57	11	5.6	3.8	5.6
26	1.0	0.86	0.74	0.72	1.1	0.95	0.78	0.54	13	6.6	3.7	4.7
27	1.0	0.86	0.70	0.72	1.1	0.95	0.76	0.55	12	5.8	3.6	3.9
28	1.0	0.86	0.68	0.74	1.1	0.90	0.71	0.55	10	5.7	3.5	3.5
29	0.99	0.86	0.68	0.72	---	0.90	0.71	0.54	9.1	5.6	3.9	3.1
30	0.99	0.83	0.67	0.75	---	0.91	0.69	0.56	14	4.5	4.4	2.9
31	0.98	---	0.67	0.76	---	0.90	---	0.60	---	4.0	4.3	---
TOTAL	45.86	27.71	23.32	22.84	27.04	30.19	25.33	19.28	128.77	176.9	136.3	95.9
MEAN	1.48	0.92	0.75	0.74	0.97	0.97	0.84	0.62	4.29	5.71	4.40	3.20
MAX	2.3	1.1	0.83	1.1	2.3	1.1	0.96	1.0	14	15	9.8	5.7
MIN	0.98	0.83	0.67	0.66	0.73	0.90	0.69	0.54	0.44	3.3	2.6	2.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

MEAN	1.87	1.31	2.39	1.50	1.37	1.28	0.94	0.62	1.57	2.02	2.45	2.84
MAX	4.09	4.38	8.26	3.26	4.13	3.99	2.18	1.03	4.29	5.71	7.49	6.09
(WY)	1996	1995	2000	2000	1998	1998	1996	1998	2002	2002	1995	1994
MIN	0.34	0.12	0.13	0.19	0.11	0.17	0.17	0.040	0.10	0.29	0.40	0.66
(WY)	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	344.53		759.44			
ANNUAL MEAN	0.94		2.08		1.68	
HIGHEST ANNUAL MEAN					2.62	1995
LOWEST ANNUAL MEAN					0.73	2001
HIGHEST DAILY MEAN	22	Sep 14	15	Jul 1	36	Nov 16 1994
LOWEST DAILY MEAN	0.00	Many years	0.44	Jun 6	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	May 8	0.50	Jun 1	0.00	Many days
MAXIMUM PEAK STAGE			82.05	Jun 26	83.03	Sep 28 1995
INSTANTANEOUS LOW FLOW			0.41	Jun 6	0.00	May 19 2000
10 PERCENT EXCEEDS	2.4		4.8		3.6	
50 PERCENT EXCEEDS	0.49		0.94		0.98	
90 PERCENT EXCEEDS	0.04		0.67		0.26	

02263800 SHINGLE CREEK AT AIRPORT, NEAR KISSIMMEE, FL

LOCATION.--Lat 28°18'14", long 81°27'04", in NW¼ sec.19, T.25 S., R.29 E., Osceola County, Hydrologic Unit 03090101, near center of span on downstream side of bridge on U.S. Highway 192, 1.0 mi northwest of Kissimmee Airport, 3 mi west of Kissimmee, and 5.6 mi upstream from mouth.

DRAINAGE AREA.--89.2 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 60.66 ft above NGVD of 1929.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	35	22	18	27	158	12	26	70	568	167	298
2	123	33	22	20	25	130	11	23	73	529	149	334
3	108	33	21	24	24	103	11	20	82	559	136	342
4	95	32	20	29	23	84	11	15	97	514	126	342
5	85	31	20	40	22	72	10	13	106	455	110	452
6	78	31	19	44	21	65	9.8	11	95	402	103	413
7	73	30	19	43	25	60	9.6	9.8	75	347	111	370
8	68	29	20	41	28	56	9.1	8.3	64	312	128	350
9	64	28	21	39	27	51	8.1	7.0	68	262	133	333
10	59	26	22	37	31	47	7.6	6.0	68	223	135	304
11	55	24	22	35	33	44	7.1	5.2	68	203	133	271
12	52	23	22	33	33	40	7.4	4.5	66	186	132	238
13	51	22	23	33	35	40	7.7	4.0	64	196	148	202
14	51	23	22	33	36	40	8.1	3.8	59	219	181	173
15	54	26	22	40	35	37	13	4.0	62	201	230	154
16	50	34	21	40	33	36	31	5.2	90	184	291	138
17	48	38	21	45	30	35	29	12	145	171	342	152
18	46	37	21	48	28	32	30	13	185	156	374	144
19	44	35	20	47	26	29	29	14	203	136	386	133
20	43	33	19	45	24	27	25	15	314	116	383	148
21	41	31	18	43	23	25	21	14	625	127	358	167
22	45	31	18	41	32	23	18	14	1070	147	342	173
23	49	31	17	39	57	21	15	14	1410	208	346	186
24	54	29	18	38	93	21	13	12	1460	296	331	215
25	57	28	18	36	117	19	10	10	1390	355	299	247
26	56	26	20	34	155	19	9.2	8.4	1280	396	263	262
27	52	25	19	33	181	19	7.7	7.1	1120	339	234	270
28	48	24	18	32	178	17	9.6	6.1	873	270	200	269
29	45	24	18	30	---	15	25	5.2	688	232	177	256
30	41	23	18	29	---	14	29	17	612	205	184	236
31	38	---	18	29	---	13	---	67	---	185	242	---
TOTAL	1917	875	619	1118	1402	1392	444.0	394.6	12582	8699	6874	7572
MEAN	61.8	29.2	20.0	36.1	50.1	44.9	14.8	12.7	419	281	222	252
MAX	144	38	23	48	181	158	31	67	1460	568	386	452
MIN	38	22	17	18	21	13	7.1	3.8	59	116	103	133
CFSM	0.69	0.33	0.22	0.40	0.56	0.50	0.17	0.14	4.70	3.15	2.49	2.83
IN.	0.80	0.36	0.26	0.47	0.58	0.58	0.19	0.16	5.25	3.63	2.87	3.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2002, BY WATER YEAR (WY)

MEAN	85.5	52.2	50.0	58.1	63.2	80.6	47.9	25.7	74.2	112	138	155
MAX	268	323	451	228	308	506	259	150	419	369	354	564
(WY)	1970	1988	1998	1986	1998	1960	1987	1991	2002	1991	1966	1960
MIN	1.36	2.90	3.12	6.23	10.3	8.73	1.63	0.000	0.000	5.65	9.31	16.0
(WY)	1959	1968	1962	1962	1968	2000	1963	1962	1961	1962	1961	1965

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1959 - 2002	
ANNUAL TOTAL	39302.5		43888.6			
ANNUAL MEAN	108		120		78.6	
HIGHEST ANNUAL MEAN					151	1960
LOWEST ANNUAL MEAN					16.4	1962
HIGHEST DAILY MEAN	1100	Sep 15	1460	Jun 24	3160	Mar 18 1960
LOWEST DAILY MEAN	5.1	May 24	3.8	May 14	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	6.3	Feb 25	4.7	May 10	0.00	Many days
MAXIMUM PEAK FLOW			1460	Jun 24	3320	Mar 18 1960
MAXIMUM PEAK STAGE			9.52	Jun 24	11.00	Mar 18 1960
INSTANTANEOUS LOW FLOW			3.6	May 14		
ANNUAL RUNOFF (CFSM)	1.21		1.35		0.88	
ANNUAL RUNOFF (INCHES)	16.39		18.30		11.98	
10 PERCENT EXCEEDS	301		321		193	
50 PERCENT EXCEEDS	34		40		40	
90 PERCENT EXCEEDS	10		13		7.6	

02263869 SOUTH LAKE OUTLET AT S-15 NEAR VINELAND, FL

LOCATION.--Lat 28°24'45", long 81°32'17", in SW¼ sec.8, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on right bank at upstream wingwall of control structure S-15, 300 ft south of natural lake shoreline, 1,600 ft west of State Highway 535, and 2.4 mi northwest of Vineland.

DRAINAGE AREA.--2.56 mi^2.

PERIOD OF RECORD.--June 1972 to September 1982, October 1986 to current year.

REVISED RECORDS.--WDR FL-97-1: Drainage area.

GAGE.--Water-stage and gate-opening recorder. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark). Auxiliary water-stage recorder at downstream side of control structure since May 1970.

REMARKS.--Records fair except those below 1.0 ft^3/s, which are poor. Flow from South Lake into South Lake outlet regulated by automatic gates in control structure 15. Discharge computed from relation between discharge and gate openings and does not include leakage, which is less than 1.0 ft^3/s, around structure or gates. Gage heights are published as elevations for South Lake (station 02263868) in the section of this report entitled ELEVATION OF LAKES.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.5
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.5
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.5
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.5
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.5
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.5
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.5
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	14
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	12
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	126.50
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.22
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

MEAN	0.76	0.21	0.27	0.31	0.48	0.51	0.34	0.047	0.015	0.019	0.29	1.20
MAX	7.84	2.61	2.90	2.87	10.4	6.28	7.12	0.64	0.12	0.30	5.58	9.43
(WY)	1976	1989	1989	1998	1998	1998	1987	1987	1995	1995	1974	1994
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1973	1973	1973	1973	1973	1973	1973	1973	1973	1972	1972	1972

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL	0.00		126.50			
ANNUAL MEAN	0.000		0.35		0.37	
HIGHEST ANNUAL MEAN					1.57	1998
LOWEST ANNUAL MEAN					0.000	1977
HIGHEST DAILY MEAN	0.00	Many days	17	Sep 26	48	Sep 10 1974
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Many days
MAXIMUM PEAK STAGE			94.31	Sep 24	94.85	Apr 6 1987
10 PERCENT EXCEEDS	0.00		0.00		0.27	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

* 1977,1978,1981,1999-2001

02264000 CYPRESS CREEK AT VINELAND, FL

LOCATION.--Lat 28°23'25", long 81°31'11", in NW¼ sec.21, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, at upstream side of culverts on State Highway 535, 1.0 mi west of Vineland.

DRAINAGE AREA.--29.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1945 to current year.

REVISED RECORDS.--WDR FL-89-1: 1960(M), WDR FL-96-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 96.20 ft above NGVD of 1929. Prior to June 13, 1946, nonrecording gage at same site and datum.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Some diversions by pumping above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	0.32	e0.03	0.00	0.00	0.57	0.00	0.00	0.00	e9.4	1.7	5.8
2	2.2	0.31	e0.02	0.00	0.00	0.55	0.00	0.00	0.00	e9.0	1.6	4.9
3	1.9	0.31	e0.02	0.00	0.00	0.50	0.00	0.00	0.00	e7.6	1.7	4.4
4	1.7	0.29	e0.00	0.00	0.00	0.66	0.00	0.00	0.00	e7.3	1.8	4.2
5	1.5	0.30	e0.00	0.00	0.00	0.59	0.00	0.00	0.00	e7.1	1.5	8.1
6	1.5	0.26	e0.00	0.01	0.00	0.55	0.00	0.00	0.00	e6.6	1.2	11
7	1.3	0.23	e0.00	0.02	0.00	0.51	0.00	0.00	0.00	e5.8	1.9	8.2
8	1.2	0.21	e0.00	0.01	0.00	0.48	0.00	0.00	0.00	e6.1	2.3	6.7
9	1.2	0.19	e0.00	0.00	0.00	0.44	0.00	0.00	0.00	e6.1	1.9	5.6
10	1.1	0.18	e0.00	0.00	0.00	0.39	0.00	0.00	0.00	e5.6	1.6	4.8
11	0.95	0.16	e0.00	0.00	0.00	0.34	0.00	0.00	0.00	e5.2	1.4	e3.4
12	0.84	0.15	e0.00	0.00	0.00	0.30	0.00	0.00	0.00	3.4	1.6	e2.7
13	0.75	0.19	e0.00	0.00	0.00	0.30	0.00	0.00	0.00	3.9	3.1	e2.7
14	0.72	0.29	e0.00	0.01	0.00	0.29	0.00	0.00	0.00	4.7	5.2	e3.2
15	0.74	0.27	e0.00	0.06	0.00	0.26	0.00	0.00	0.00	3.7	8.8	e2.4
16	0.64	0.24	e0.00	0.06	0.00	0.23	0.00	0.00	0.00	3.0	7.8	e3.7
17	0.58	0.20	e0.00	0.06	0.00	0.20	0.00	0.00	0.00	2.6	6.3	e7.6
18	0.53	0.20	e0.00	0.06	0.00	0.16	0.00	0.00	0.00	2.3	5.2	e8.1
19	0.50	0.19	0.00	0.05	0.00	0.15	0.00	0.00	0.00	2.2	4.8	e6.9
20	0.52	e0.17	0.00	0.04	0.00	0.12	0.00	0.00	0.32	2.4	5.4	e4.6
21	0.64	e0.17	0.00	0.04	0.00	0.11	0.00	0.00	0.96	3.1	7.8	e2.6
22	0.87	e0.15	0.00	0.03	0.00	0.09	0.00	0.00	3.0	3.6	12	e2.9
23	0.80	e0.13	0.00	0.03	0.38	0.08	0.00	0.00	4.7	3.3	8.8	e5.0
24	0.71	e0.12	0.00	0.02	0.76	0.08	0.00	0.00	6.4	2.8	6.9	6.0
25	0.67	e0.10	0.00	0.01	0.69	0.06	0.00	0.00	7.3	3.1	5.6	5.5
26	0.59	e0.07	0.00	0.00	0.71	0.05	0.00	0.00	7.6	4.2	4.6	4.8
27	0.51	e0.07	0.00	0.00	0.67	0.04	0.00	0.00	8.0	3.5	4.0	4.2
28	0.44	e0.05	0.00	0.00	0.61	0.03	0.00	0.00	6.3	3.0	3.6	3.6
29	0.41	e0.05	0.00	0.00	---	0.01	0.00	0.00	e6.4	2.7	4.1	3.2
30	0.38	e0.04	0.00	0.00	---	0.00	0.00	0.00	e7.0	2.3	5.4	2.9
31	0.35	---	0.00	0.00	---	0.00	---	0.00	---	1.9	6.2	---
TOTAL	29.34	5.61	0.07	0.51	3.82	8.14	0.00	0.00	57.98	137.5	135.8	149.7
MEAN	0.95	0.19	0.002	0.016	0.14	0.26	0.000	0.000	1.93	4.44	4.38	4.99
MAX	2.6	0.32	0.03	0.06	0.76	0.66	0.00	0.00	8.0	9.4	12	11
MIN	0.35	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.9	1.2	2.4
CFSM	0.03	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.15	0.15	0.17
IN.	0.04	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.17	0.17	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2002, BY WATER YEAR (WY)

MEAN	11.6	5.47	4.74	5.44	5.20	7.13	4.82	1.66	1.88	4.40	9.02	13.4
MAX	82.2	37.0	46.5	101	82.0	83.4	51.9	19.5	24.4	48.4	74.4	109
(WY)	1954	1954	1998	1998	1998	1960	1960	1947	1959	1959	1959	1960
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1979	1973	1981	1968	1974	1974	1956	1962	1973	1973	1977	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1945 - 2002	
ANNUAL TOTAL	323.40		528.47			
ANNUAL MEAN	0.89		1.45		6.12	
HIGHEST ANNUAL MEAN					40.6	1960
LOWEST ANNUAL MEAN					0.017	1981
HIGHEST DAILY MEAN	19	Sep 15	12	Aug 22	276	Sep 11 1960
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Dec 4	0.00	Many days
MAXIMUM PEAK FLOW			16	Aug 21	309	Sep 11 1960
MAXIMUM PEAK STAGE			2.61	Aug 21	4.66	Sep 11 1960
ANNUAL RUNOFF (CFSM)	0.030		0.049		0.21	
ANNUAL RUNOFF (INCHES)	0.41		0.67		2.84	
10 PERCENT EXCEEDS	3.0		5.5		17	
50 PERCENT EXCEEDS	0.00		0.12		0.80	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02264000 CYPRESS CREEK AT VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1966, 1968-73, 1975-94, 1996-98, 2000 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 2001 to current year.
WATER TEMPERATURE: July 2001 to current year.
DISSOLVED OXYGEN: July 2001 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 527 µS/cm @ 25 °C, July 13, 2001; minimum daily mean, 88 µS/cm @ 25 °C, Sept. 6, 2002.
WATER TEMPERATURE: Maximum daily mean, 26.2 °C, July 17, 2002; minimum daily mean, 9.9 °C, Jan. 9, 2002.
DISSOLVED OXYGEN: Maximum daily mean, 6.0 mg/L, July 15,16, 2002; minimum daily mean, 0.2 mg/L, Jan. 23,24,26-28,31, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 226 µS/cm @ 25 °C, Mar. 28,29; minimum daily mean, 88 µS/cm @ 25 °C, Sept. 6.
WATER TEMPERATURE: Maximum daily mean, 26.2 °C, July 17; minimum daily mean, 9.9 °C, Jan. 9.
DISSOLVED OXYGEN: Maximum daily mean, 6.0 mg/L, July 15,16; minimum daily mean, 0.2 mg/L, Jan. 23,24,26-28,31.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	155	---	---	191	222	216	---	---	---	125	97
2	120	155	---	---	---	223	---	---	---	---	126	98
3	124	156	---	---	---	223	---	---	---	---	125	99
4	127	157	---	174	---	220	---	---	---	---	125	99
5	129	159	---	168	---	222	---	---	---	---	129	93
6	131	160	---	158	---	222	---	---	---	---	132	88
7	132	160	---	171	---	222	---	---	---	---	125	89
8	133	160	---	178	---	221	---	---	---	---	123	90
9	135	161	---	174	---	220	---	---	---	---	124	92
10	136	161	---	170	---	220	---	---	---	---	126	94
11	138	161	---	170	---	220	---	---	---	---	127	---
12	139	161	---	165	199	220	---	---	---	124	125	---
13	140	163	---	183	---	219	---	---	---	122	118	---
14	142	169	---	175	---	223	---	---	---	120	111	---
15	143	169	---	192	---	224	---	---	---	120	103	---
16	143	168	---	183	---	224	---	---	---	123	102	---
17	145	168	---	176	---	224	---	---	---	126	103	---
18	146	169	---	188	---	219	---	---	---	126	105	---
19	146	169	162	198	---	222	---	---	---	127	106	---
20	146	169	165	193	---	223	---	---	---	125	105	---
21	147	170	160	191	---	223	---	---	---	123	100	---
22	149	168	---	190	---	222	---	---	---	121	92	---
23	150	175	---	188	204	222	---	---	---	121	94	---
24	150	168	---	186	210	222	---	---	---	122	97	89
25	151	170	---	190	212	221	---	---	---	121	99	89
26	152	170	---	189	213	220	---	---	207	117	100	90
27	152	---	---	190	217	222	---	---	190	118	102	91
28	153	---	---	189	220	226	---	---	185	118	103	92
29	153	---	---	188	---	226	---	---	---	120	101	93
30	155	---	---	190	---	223	---	---	---	121	99	94
31	156	---	---	190	---	219	---	---	---	123	97	---
MEAN	141	---	---	---	---	222	---	---	---	---	111	---
MAX	156	---	---	---	---	226	---	---	---	---	132	---
MIN	118	---	---	---	---	219	---	---	---	---	92	---

02264000 CYPRESS CREEK AT VINELAND, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	20.7	---	---	19.8	14.6	21.0	---	---	---	25.1	25.3
2	20.4	21.2	---	---	---	17.0	---	---	---	---	24.9	25.7
3	20.8	21.5	---	---	---	18.4	---	---	---	---	24.4	25.8
4	21.4	21.7	---	11.0	---	16.6	---	---	---	---	24.6	25.6
5	21.9	21.1	---	10.7	---	14.8	---	---	---	---	24.8	25.3
6	22.7	20.0	---	12.7	---	15.5	---	---	---	---	25.2	25.0
7	23.1	19.2	---	13.3	---	16.4	---	---	---	---	25.1	25.2
8	23.1	19.0	---	11.1	---	17.5	---	---	---	---	24.6	25.2
9	22.4	18.9	---	9.9	---	18.1	---	---	---	---	24.3	25.3
10	22.4	18.5	---	10.7	---	18.6	---	---	---	---	24.3	25.0
11	22.5	18.4	---	11.5	---	18.2	---	---	---	---	24.2	---
12	22.6	18.6	---	12.8	17.0	18.7	---	---	---	24.2	24.3	---
13	22.7	19.1	---	13.8	---	19.0	---	---	---	24.2	24.0	---
14	23.2	19.7	---	14.1	---	18.5	---	---	---	24.9	24.0	---
15	23.2	19.8	---	14.9	---	18.5	---	---	---	25.3	24.0	---
16	22.9	19.5	---	14.0	---	19.4	---	---	---	25.8	24.5	---
17	21.2	19.5	---	14.9	---	20.0	---	---	---	26.2	25.2	---
18	20.7	20.0	---	15.8	---	19.9	---	---	---	26.0	25.0	---
19	21.5	20.1	18.2	15.3	---	20.1	---	---	---	25.7	25.0	---
20	22.4	19.7	17.4	16.3	---	20.1	---	---	---	25.5	24.5	---
21	22.6	19.1	16.0	17.3	---	20.1	---	---	---	24.5	24.3	---
22	22.9	19.1	---	17.9	---	19.7	---	---	---	24.3	24.2	---
23	22.9	19.5	---	18.5	17.6	18.0	---	---	---	24.7	24.4	---
24	23.3	19.9	---	18.8	16.6	18.2	---	---	---	25.3	24.7	25.0
25	23.6	20.1	---	18.7	16.6	18.9	---	---	---	25.3	24.9	25.2
26	22.0	19.9	---	19.2	17.2	19.6	---	---	23.6	25.0	24.8	25.4
27	19.3	---	---	19.2	16.4	19.8	---	---	23.8	25.4	24.8	25.6
28	18.4	---	---	19.5	14.1	19.3	---	---	24.0	25.5	24.9	25.3
29	19.0	---	---	19.7	---	19.4	---	---	---	25.3	24.9	25.2
30	19.7	---	---	19.6	---	20.3	---	---	---	25.1	24.7	25.3
31	20.1	---	---	19.9	---	20.8	---	---	---	25.1	24.8	---
MEAN	21.8	---	---	---	---	18.5	---	---	---	---	24.6	---
MAX	23.6	---	---	---	---	20.8	---	---	---	---	25.2	---
MIN	18.4	---	---	---	---	14.6	---	---	---	---	24.0	---

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.1	---	---	0.3	2.7	0.4	---	---	---	2.5	3.1
2	2.5	2.0	---	---	---	2.8	---	---	---	---	2.6	2.8
3	2.6	2.2	---	---	---	2.4	---	---	---	---	2.4	3.0
4	2.4	2.3	---	---	---	3.1	---	---	---	---	2.5	2.7
5	2.4	2.4	---	---	---	3.1	---	---	---	---	2.2	3.7
6	2.4	2.4	---	---	---	2.9	---	---	---	---	2.0	3.4
7	2.3	2.4	---	---	---	2.8	---	---	---	---	2.7	3.2
8	2.3	2.4	---	---	---	2.9	---	---	---	---	2.6	3.5
9	2.2	2.3	---	---	---	2.9	---	---	---	---	2.6	3.2
10	2.3	2.4	---	---	---	2.9	---	---	---	---	2.4	2.7
11	2.3	2.4	---	---	---	3.1	---	---	---	---	2.3	---
12	2.3	2.3	---	---	1.9	3.0	---	---	---	2.4	2.7	---
13	2.3	2.3	---	---	---	2.8	---	---	---	2.3	3.0	---
14	2.2	2.5	---	---	---	3.1	---	---	---	2.1	3.7	---
15	2.3	2.4	---	---	---	2.5	---	---	---	6.0	4.1	---
16	2.1	2.4	---	---	---	2.5	---	---	---	6.0	4.8	---
17	2.2	2.4	---	---	---	2.5	---	---	---	4.3	4.2	---
18	2.4	2.4	---	2.9	---	2.2	---	---	---	2.6	3.2	---
19	2.4	2.4	2.2	2.9	---	1.8	---	---	---	2.6	2.9	---
20	2.4	2.3	3.1	2.4	---	2.2	---	---	---	2.4	2.8	---
21	2.4	2.4	3.8	1.5	---	2.5	---	---	---	2.8	3.6	---
22	2.5	2.3	---	0.3	---	3.3	---	---	---	4.1	3.7	---
23	2.5	2.3	---	0.2	2.2	3.5	---	---	---	3.4	3.9	---
24	2.4	2.1	---	0.2	2.2	3.2	---	---	---	3.0	3.7	---
25	2.2	2.2	---	0.4	2.2	2.7	---	---	---	2.8	3.6	---
26	2.5	2.1	---	0.2	2.3	2.2	---	---	2.8	3.1	3.4	4.1
27	2.8	---	---	0.2	2.6	2.1	---	---	2.5	2.8	3.2	4.0
28	3.0	---	---	0.2	3.0	1.5	---	---	2.2	2.9	3.0	3.4
29	2.9	---	---	0.3	---	1.3	---	---	---	2.6	3.2	3.2
30	2.7	---	---	0.3	---	0.8	---	---	---	2.7	3.2	2.9
31	2.5	---	---	0.2	---	0.7	---	---	---	2.6	2.9	---
MEAN	2.4	---	---	---	---	2.5	---	---	---	---	3.1	---
MAX	3.0	---	---	---	---	3.5	---	---	---	---	4.8	---
MIN	2.1	---	---	---	---	0.7	---	---	---	---	2.0	---

02264000 CYPRESS CREEK AT VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)
OCT													
23...	1200	.83	1.77	149	4.1	23.1	--	--	2.5	.04	--	.010	--
NOV													
20...	0900	.19	1.52	172	4.0	19.5	--	--	2.2	.03	--	.010	--
DEC													
18...	1045	.0	1.25	173	4.0	20.5	--	--	2.2	.05	--	.010	--
JAN													
15...	1115	.06	1.39	202	4.1	15.5	--	--	2.1	<.01	--	<.010	--
MAR													
11...	1100	.31	1.63	225	3.6	18.9	--	--	3.3	.02	--	<.010	--
JUN													
25...	1300	7.3	2.33	230	3.8	23.6	.36	560	2.2	<.01	<.01	.010	.02
JUL													
30...	1000	2.3	2.03	121	4.0	24.8	--	--	2.1	.10	--	.030	--
AUG													
27...	0700	4.2	2.23	103	4.2	24.5	--	--	2.0	.04	--	.020	--

Date	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
OCT													
23...	E1.7	--	<.02	E.03	.03	85.0	--	--	--	--	--	--	--
NOV													
20...	E2.0	--	<.02	E.03	E.02	77.0	--	--	--	--	--	--	--
DEC													
18...	2.0	--	<.02	.03	.02	76.0	--	--	--	--	--	--	--
JAN													
15...	1.6	--	<.02	.02	<.01	70.0	--	--	--	--	--	--	--
MAR													
11...	1.6	--	<.02	<.02	<.01	50.0	--	--	--	--	--	--	--
JUN													
25...	1.7	<.020	<.02	<.02	.02	81.0	.010	37	4.60	6.20	15.0	4.00	<1
JUL													
30...	2.4	--	<.02	<.02	.03	87.0	--	--	--	--	--	--	--
AUG													
27...	1.6	--	<.02	<.02	.02	63.0	--	--	--	--	--	--	--

Date	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)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT													
23...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
NOV													
20...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
DEC													
18...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
JAN													
15...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
MAR													
11...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
JUN													
25...	32.0	23.0	<.1	<.1	2	<1	342	<1.0	<1.0	<1.0	196	1	20
JUL													
30...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
AUG													
27...	--	--	--	<.1	--	--	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02264000 CYPRESS CREEK AT VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	DEF TOTAL (UG/L) (39040)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)
JUN 25...	<1.0	6	<1	<.1	<.01	<.10	<.02	<.02	<.01	<.006	<.2	<.2	<.1

Date	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN TOTAL (UG/L) (39380)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL (UG/L) (39388)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)
JUN 25...	<3	<.007	<.5	<.006	E.2	<.009	<.5	<.006	<.2	<.02	<.2	<.01	<.2

Date	ETHION, TOTAL (UG/L) (39398)	TOX-APHENE, TOTAL (UG/L) (39400)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)
JUN 25...	<.01	<1	<50	<.01	<.2	<.009	<.2	<.020	<2.5	<.1	<5	<.10	<.01

Date	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BI-PHENYL, NONA-CHLORO-SUR SCD 1325 PERCENT (90575)
JUN 25...	<.02	<.02	<.006	--	<.02	<.01	54

< -- Less than
E -- Estimated value

02264003 CYPRESS CREEK CANAL AT S-103A NEAR VINELAND, FL

LOCATION.--Lat 28°23'21", long 81°31'31", in SW¼ sec.20, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on upstream side of control structure S-103A, 200 ft northeast of Buena Vista Drive, 1,800 ft downstream from State Highway 535, and 1.3 mi west of Vineland.

DRAINAGE AREA.--29.5 mi^2.

PERIOD OF RECORD.--October 1986 to current year (gage heights and discharge measurements only).

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark). Auxilliary gage at downstream side of control structure 103A.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 93.45 ft, Sept. 21, 1994; minimum daily recorded, 89.14 ft, May 9, 1990. Maximum discharge measured, 107 ft^3/s, Sept. 22, 1994; unknown amount of leakage many days each year.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92.56	90.56	89.87	89.62	89.94	91.17	89.70	89.62	89.54	93.16	92.28	92.95
2	92.46	90.54	89.84	89.82	89.91	91.10	89.68	89.60	89.53	93.14	92.22	---
3	92.35	90.60	89.82	90.25	89.88	91.05	89.68	89.59	89.52	93.12	92.26	---
4	92.17	90.59	89.82	90.18	89.83	91.53	89.68	89.58	89.51	93.10	92.43	---
5	92.01	90.62	89.81	90.12	89.79	91.41	89.67	89.58	89.50	93.09	92.09	---
6	91.90	90.50	89.79	90.11	89.77	91.20	89.65	89.57	89.48	93.02	91.76	---
7	91.84	90.41	89.81	90.11	89.90	91.10	89.63	89.57	89.48	92.89	92.44	---
8	91.70	90.33	89.81	90.02	90.12	91.02	89.61	89.56	89.58	92.84	92.76	---
9	91.53	90.26	89.85	89.95	90.06	90.92	89.60	89.55	89.71	92.78	92.46	---
10	91.43	90.24	89.85	89.95	90.04	90.82	89.60	89.54	89.70	92.84	92.35	---
11	91.42	90.20	89.83	89.95	90.13	90.72	89.60	89.52	89.72	92.74	92.08	---
12	91.30	90.17	89.79	89.95	90.11	90.61	89.59	89.50	89.76	92.84	92.26	---
13	91.24	90.27	89.78	89.99	90.04	90.62	89.60	89.49	89.74	92.95	93.02	92.80
14	91.22	90.76	89.79	90.09	89.98	90.56	89.62	89.50	89.75	93.03	93.07	93.11
15	91.46	90.80	89.74	90.54	89.93	90.44	89.67	89.53	89.95	92.91	93.10	93.12
16	91.25	90.69	89.73	90.48	89.92	90.38	89.69	89.58	89.91	92.80	93.09	93.10
17	91.17	90.55	89.72	90.34	89.91	90.32	89.69	89.59	89.91	92.62	93.07	93.12
18	91.03	90.48	89.71	90.27	89.80	90.26	89.68	89.60	89.85	92.65	93.06	93.16
19	91.01	90.47	89.66	90.24	89.73	90.24	89.67	89.64	89.94	92.68	93.05	93.15
20	91.10	90.50	89.61	90.21	89.72	90.15	89.65	89.64	90.95	92.86	93.08	93.14
21	91.32	90.45	89.55	90.20	89.71	90.06	89.64	89.62	92.96	92.95	93.05	93.13
22	91.91	90.38	89.54	90.19	90.33	90.01	89.63	89.59	93.03	93.02	93.09	93.12
23	91.78	90.30	89.53	90.18	91.65	89.95	89.62	89.57	93.08	92.97	93.07	93.14
24	91.64	90.21	89.59	90.15	92.76	89.90	89.60	89.55	93.08	92.81	93.06	93.14
25	91.47	90.13	89.59	90.11	92.44	89.87	89.59	89.54	93.04	92.92	---	93.13
26	91.24	90.09	89.63	90.09	92.33	89.86	89.62	89.52	93.05	93.04	---	93.12
27	90.95	90.04	89.60	90.07	91.76	89.84	89.68	89.51	93.11	93.03	---	93.11
28	90.69	89.99	89.61	90.06	91.19	89.81	89.67	89.50	93.05	92.92	---	93.10
29	90.58	89.94	89.62	90.04	---	89.78	89.65	89.49	93.03	92.81	---	93.09
30	90.57	89.89	89.62	90.00	---	89.75	89.64	89.48	93.13	92.60	---	93.08
31	90.56	---	89.62	89.97	---	89.72	---	89.52	---	92.43	93.02	---
MEAN	91.45	90.37	89.71	90.10	90.38	90.46	89.64	89.56	90.85	92.89	---	---
MAX	92.56	90.80	89.87	90.54	92.76	91.53	89.70	89.64	93.13	93.16	---	---
MIN	90.56	89.89	89.53	89.62	89.71	89.72	89.59	89.48	89.48	92.43	---	---

02264051 BLACK LAKE OUTLET AT S-101A, AT LAKE BUENA VISTA, FL

LOCATION.--Lat 28°22'28", long 81°31'01", in NE¼ sec.28, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on right upstream wingwall of drop culvert at Buena Vista Drive at Lake Buena Vista, and 1.7 mi upstream from Bonnet Creek.

DRAINAGE AREA.--0.69 mi^2.

PERIOD OF RECORD.--October 1986 to current year.

REVISED RECORDS.--WDR FL-97-1: Drainage area.

GAGE.--Water-stage recorder, sharp-crested weir, and sluice gate. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark).

REMARKS.--Records good except for periods of estimated daily discharge and those below 5.0 ft^3/s, which are poor. Flow can be regulated by manipulation of sluice gate.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.90	0.57	0.64	0.64	0.38	0.61	0.39	0.30	0.45	41	e1.3	e2.2
2	0.64	0.51	0.64	2.1	0.38	0.56	0.41	0.23	0.28	30	e0.26	e2.2
3	0.64	0.46	0.63	1.2	0.38	0.58	0.48	0.25	0.23	26	e0.89	e2.2
4	0.64	0.42	0.64	0.62	0.32	0.97	0.46	0.27	0.17	25	e1.7	e3.6
5	0.64	0.47	0.63	0.52	0.28	0.63	0.39	0.29	0.16	24	e0.72	e18
6	0.64	0.36	0.62	0.57	0.28	0.56	0.31	0.27	0.16	22	e0.26	e15
7	0.64	0.38	0.64	0.47	0.81	0.57	0.25	0.26	0.23	20	e5.3	e5.8
8	0.64	0.38	0.65	0.27	0.65	0.56	0.24	0.23	1.7	20	e2.2	e2.2
9	0.61	0.45	0.72	0.27	0.45	0.56	0.24	0.18	0.82	19	e2.2	e2.2
10	0.63	0.50	0.64	0.29	0.46	0.56	0.28	0.18	0.46	20	e2.2	e2.2
11	0.64	0.50	0.64	0.33	0.56	0.54	0.28	0.18	0.77	20	e2.2	e2.2
12	0.64	0.51	0.63	0.32	0.47	0.52	0.35	0.16	0.63	20	e6.5	e2.2
13	0.65	0.91	0.64	0.40	0.39	0.69	0.38	0.16	0.41	22	e12	e2.2
14	0.77	0.89	0.63	0.63	0.41	0.59	0.79	0.38	1.7	24	e16	e4.9
15	0.76	0.63	0.64	0.92	0.46	0.51	0.71	e1.8	7.6	21	e20	e4.7
16	0.64	0.51	0.61	0.53	0.50	0.50	0.59	e1.8	6.4	19	e11	e2.2
17	0.62	0.44	0.51	0.45	0.46	0.49	0.51	0.00	4.1	19	e7.2	e4.3
18	0.63	0.55	0.59	0.38	0.42	0.49	0.51	0.00	2.9	19	e2.2	e6.1
19	0.75	0.64	0.50	0.35	0.39	0.50	0.48	0.00	14	19	e4.9	e5.0
20	0.72	0.64	0.50	0.38	0.38	0.46	0.47	0.16	36	21	e8.3	e4.5
21	0.91	0.59	0.49	0.37	0.33	0.54	0.42	0.19	29	24	e12	e2.2
22	1.2	0.54	0.51	0.38	6.0	0.52	0.41	0.15	33	24	e18	e5.2
23	0.86	0.54	0.60	0.37	11	0.38	0.41	0.14	30	21	e7.8	e13
24	0.77	0.52	0.72	0.34	6.3	0.39	0.37	0.15	30	19	e2.2	e14
25	0.67	0.54	0.63	0.32	1.6	0.41	0.40	0.16	24	23	e2.2	e11
26	0.61	0.58	0.69	0.37	1.00	0.48	0.63	0.16	30	26	e2.2	e7.4
27	0.51	0.64	0.54	0.38	0.71	0.46	0.72	0.20	30	19	e2.2	e2.2
28	0.49	0.63	0.50	0.38	0.64	0.46	0.43	0.23	24	18	e3.0	e2.2
29	0.54	0.64	0.50	0.39	---	0.43	0.34	0.16	26	18	e4.5	e2.2
30	0.59	0.64	0.63	0.40	---	0.43	0.30	0.30	45	7.2	e11	e2.2
31	0.63	---	0.64	0.39	---	0.38	---	0.72	---	e2.2	e4.7	---
TOTAL	21.22	16.58	18.79	15.73	36.41	16.33	12.95	9.66	380.17	652.4	177.13	155.5
MEAN	0.68	0.55	0.61	0.51	1.30	0.53	0.43	0.31	12.7	21.0	5.71	5.18
MAX	1.2	0.91	0.72	2.1	11	0.97	0.79	1.8	45	41	20	18
MIN	0.49	0.36	0.49	0.27	0.28	0.38	0.24	0.00	0.16	2.2	0.26	2.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	2.35	1.61	1.37	1.13	1.08	1.78	1.22	1.13	2.92	5.46	4.55	4.06
MAX	11.7	7.02	7.71	3.25	3.85	6.86	3.23	4.44	12.7	21.0	8.30	11.7
(WY)	2000	1988	1998	1996	1998	1987	1992	1991	2002	2002	1995	1998
MIN	0.12	0.39	0.46	0.37	0.33	0.25	0.080	0.24	0.22	0.61	0.44	0.82
(WY)	2001	2001	2001	2000	2000	2000	2000	2000	1998	1989	1989	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	852.46		1512.87			
ANNUAL MEAN	2.34		4.14		2.40	
HIGHEST ANNUAL MEAN					4.14	2002
LOWEST ANNUAL MEAN					1.11	1989
HIGHEST DAILY MEAN	35	Aug 11	45	Jun 30	67	Nov 23 1988
LOWEST DAILY MEAN	0.15	May 21	0.00	May 17-19	*0.00	
ANNUAL SEVEN-DAY MINIMUM	0.26	May 7	0.09	May 17	0.00	Jun 29 1998
MAXIMUM PEAK FLOW					127	Nov 23 1988
MAXIMUM PEAK STAGE			95.41	Jun 20	95.84	Nov 23 1988
10 PERCENT EXCEEDS	6.9		19		5.7	
50 PERCENT EXCEEDS	0.64		0.63		0.82	
90 PERCENT EXCEEDS	0.33		0.28		0.28	

e Estimated
* Many days in water years 1995,1996,1998-2000

02264060 LATERAL 101 AT S-101, NEAR LAKE BUENA VISTA, FL

LOCATION.--Lat 28°22'15", long 81°31'45", in NE¼ sec.29, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on right bank at upstream side of control structure S-101, 0.1 mi north of Buena Vista Drive, 0.5 mi upstream from mouth, and 0.9 mi west of Lake Buena Vista.

DRAINAGE AREA.--32.5 mi^2.

PERIOD OF RECORD.--October 1986 to current year.

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage and gate-opening recorder. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark). Auxiliary gage at downstream side of control structure 101.

REMARKS.--Records poor. Flow regulated by operation of structure 101. Discharge computed from relation between discharge and gate openings and does not include leakage, which is less than 5.0 ft^3/s, around structure or gates.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70	0.00	4.9
2	1.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35	0.00	6.8
3	3.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19	0.00	2.7
4	3.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20	0.00	2.6
5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15	0.00	56
6	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.7	0.00	45
7	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.5	14	23
8	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.7	5.3	18
9	1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.5	1.3	8.6
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.5	0.74	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.6	0.00	6.7
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.7	15	3.8
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.0	39	2.0
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15	46	1.7
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24	1.8	68	4.7
16	0.04	0.00	0.00	1.2	0.00	0.00	0.00	0.00	14	1.3	30	0.87
17	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	9.4	0.73	14	18
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.4	0.67	8.7	20
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38	0.00	6.1	22
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	105	1.3	16	19
21	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49	12	43	7.2
22	1.7	0.00	0.00	0.00	10	0.00	0.00	0.00	63	11	55	14
23	1.7	0.00	0.00	0.00	30	0.00	0.00	0.00	46	4.8	20	20
24	1.7	0.00	0.00	0.00	14	0.00	0.00	0.00	54	3.6	9.8	23
25	1.0	0.00	0.00	0.00	1.7	0.00	0.00	0.00	32	10	7.4	15
26	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	43	17	4.1	9.0
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30	3.6	4.0	4.9
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	3.2	3.0	4.5
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	20	3.6	8.0	1.1
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	99	0.00	20	1.0
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	15	---
TOTAL	22.01	0.00	0.00	1.61	55.84	0.00	0.00	0.00	647.80	292.80	453.44	366.07
MEAN	0.71	0.000	0.000	0.052	1.99	0.000	0.000	0.000	21.6	9.45	14.6	12.2
MAX	3.4	0.00	0.00	1.2	30	0.00	0.00	0.00	105	70	68	56
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	12.7	9.77	10.5	13.1	11.0	15.2	10.3	4.66	8.19	12.5	16.9	18.4
MAX	35.3	39.7	66.5	98.0	91.1	103	35.9	17.2	21.6	30.1	39.4	44.5
(WY)	1992	1988	1998	1998	1998	1998	1998	1991	2002	1991	1991	1995
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.61	0.000	3.17
(WY)	2001	2001	2001	2000	2000	2000	2000	2000	1989	1989	1989	1989

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	1323.07		1839.57			
ANNUAL MEAN	3.62		5.04		12.0	
HIGHEST ANNUAL MEAN					40.7	1998
LOWEST ANNUAL MEAN					3.56	2001
HIGHEST DAILY MEAN	142	Sep 14	105	Jun 20	290	Nov 23 1988
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 26	0.00	Many days
MAXIMUM PEAK STAGE			90.26	Jun 20	90.59	Nov 23 1988
10 PERCENT EXCEEDS	11		16		31	
50 PERCENT EXCEEDS	0.00		0.00		5.1	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

02264100 BONNET CREEK NEAR VINELAND, FL

LOCATION.--Lat 28°19'30", long 81°31'15", in SW¼ sec.9, T.25 S., R.28 E., Osceola County, Hydrologic Unit 03090101, on upstream side of sheet-pile weir, about 0.5 mi upstream from Reedy Creek Swamp, and 5.0 mi south of Vineland.

DRAINAGE AREA.--44.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Water years 1943, 1960, 1961, 1966 (miscellaneous discharge measurements), May 1966 to current year.

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage recorder and steel sheet-pile weir with sluice gate. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark). Prior to June 1, 1999, at site 0.5 mi upstream at same datum; prior to Oct. 1, 1968, at datum 37.96 ft higher.

REMARKS.--Records poor. Since October 1968, flow regulated by automatic gates upstream and since December 1970, by control structure S-11. Natural flow of stream affected by canals and control structures above station which divert an undetermined amount of water into the Reedy Creek basin. From Oct. 13, 1983 to Feb. 1, 1985 structure S-11 did not regulate the stream because of a washout of the bank around the structure.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 11, 1960, reached a stage of 42.5 ft, datum then in use, from floodmarks, discharge, 1,200 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	6.6	1.8	3.0	2.9	6.2	2.9	1.7	e0.14	204	23	80
2	14	6.9	1.8	5.3	3.4	5.4	2.6	1.5	e0.08	130	22	72
3	17	7.7	1.8	5.6	4.1	4.8	2.6	1.5	e0.05	96	20	62
4	21	7.0	1.8	3.7	4.4	4.0	2.6	1.5	e0.00	69	24	67
5	19	6.5	1.7	4.2	4.1	2.2	2.8	1.4	e0.00	56	29	127
6	18	6.5	1.7	4.0	4.5	1.9	4.0	1.4	0.00	56	26	120
7	18	6.5	1.6	3.7	51	1.6	5.2	1.3	0.08	56	60	85
8	18	6.2	1.6	3.8	17	1.8	3.8	1.3	0.83	52	64	76
9	17	5.2	1.7	3.4	0.62	2.7	2.9	e1.1	0.52	49	24	54
10	13	4.7	2.1	3.1	0.76	2.4	2.4	e1.0	0.45	51	19	28
11	11	4.7	2.1	2.9	1.1	2.2	2.4	e1.0	2.9	58	21	43
12	11	4.7	2.4	3.1	1.4	e2.2	2.4	e1.0	2.4	50	51	44
13	12	4.7	2.4	3.2	1.4	2.5	2.4	e1.0	1.1	49	142	53
14	14	5.7	2.4	3.6	1.2	e2.4	2.5	e1.2	2.2	85	173	55
15	14	6.3	2.6	3.5	1.3	1.9	3.1	e1.3	45	58	228	69
16	14	5.5	2.5	2.9	1.3	1.8	2.7	e1.2	47	52	256	59
17	12	4.7	2.5	10	1.3	1.8	2.5	e1.0	31	45	241	78
18	11	4.4	2.8	2.9	1.6	1.9	2.2	e1.9	31	35	79	103
19	10	4.0	3.1	2.1	1.6	1.7	2.0	e2.1	53	32	77	104
20	10	4.0	2.8	1.7	1.8	1.6	2.0	e2.0	204	29	86	115
21	13	3.8	2.4	1.6	1.8	1.6	1.7	e1.6	140	59	137	86
22	14	3.4	2.6	1.5	27	1.7	1.6	e1.5	167	64	195	93
23	15	3.4	2.9	1.3	83	1.9	1.7	e1.3	156	48	133	115
24	18	3.4	3.2	1.2	62	2.0	1.8	e1.2	182	44	101	139
25	15	3.2	3.8	1.5	19	2.0	1.6	e1.0	147	59	83	121
26	12	2.8	3.0	1.8	15	2.5	1.6	e1.0	105	87	73	95
27	8.6	2.4	2.9	2.0	8.9	2.6	1.6	e0.84	133	49	63	80
28	7.3	2.0	3.0	2.5	7.7	3.6	1.5	e0.69	48	37	58	73
29	6.6	2.0	3.4	2.8	---	3.1	1.7	e0.53	60	49	71	66
30	6.6	1.8	2.9	2.6	---	2.8	1.9	e0.37	212	32	98	62
31	6.7	---	3.1	2.8	---	2.9	---	e0.21	---	26	98	---
TOTAL	410.8	140.7	76.4	97.3	331.18	79.7	72.7	37.64	1771.75	1866	2775	2424
MEAN	13.3	4.69	2.46	3.14	11.8	2.57	2.42	1.21	59.1	60.2	89.5	80.8
MAX	21	7.7	3.8	10	83	6.2	5.2	2.1	212	204	256	139
MIN	6.6	1.8	1.6	1.2	0.62	1.6	1.5	0.21	0.00	26	19	28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

MEAN	29.7	19.6	17.9	20.8	21.9	23.4	16.6	11.5	22.8	32.0	39.6	43.6
MAX	100	102	101	129	143	143	56.1	37.8	78.9	77.8	111	194
(WY)	1995	1988	1998	1998	1998	1998	1987	1979	1994	1984	1995	1994
MIN	4.92	1.13	2.19	0.96	1.27	1.40	0.30	0.000	0.42	4.12	2.71	6.34
(WY)	1968	1968	1967	1967	1968	1968	2000	2000	1967	1989	1989	1984

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	6427.25		10083.17			
ANNUAL MEAN	17.6		27.6		24.8	
HIGHEST ANNUAL MEAN					62.2	1998
LOWEST ANNUAL MEAN					10.1	2000
HIGHEST DAILY MEAN	428	Sep 14	256	Aug 16	610	Nov 4 1987
LOWEST DAILY MEAN	0.00	May 18-21,24	0.00	Jun 4-6	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	0.03	May 18	0.05	Jun 1	0.00	Some years
MAXIMUM PEAK FLOW			631	Jun 20	1230	Nov 23 1988
MAXIMUM PEAK STAGE			74.76	Jun 20	78.58	Nov 1 1969
10 PERCENT EXCEEDS	51		85		53	
50 PERCENT EXCEEDS	3.4		4.0		15	
90 PERCENT EXCEEDS	1.1		1.3		3.3	

e Estimated

02264100 BONNET CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961, 1963, 1966, 1968-94, 1996 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 5, 2001 to current year.
WATER TEMPERATURE: July 5, 2001 to current year.
DISSOLVED OXYGEN: July 5, 2001 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Extremes for current year and extremes for period of of daily record are based on recorded values and may have been exceeded during period of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 293 µS/cm @ 25 °C, June 12, 2001; minimum daily mean, 131 µS/cm @ 25 °C, Sept. 21, 23, 2002.
WATER TEMPERATURE: Maximum daily mean, 30.5 °C, May 5, 2002; minimum daily mean, 12.9 °C, Jan. 10, 2002.
DISSOLVED OXYGEN: Maximum daily mean, 10.4 mg/L, March 8, 9, 2002; minimum daily mean, 0.3 mg/L, Dec. 8, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 293 µS/cm @ 25 °C, June 12; minimum daily mean, 131 µS/cm @ 25 °C, Sept. 21,23.
WATER TEMPERATURE: Maximum daily mean, 30.5 °C, May 5; minimum daily mean, 12.9 °C, Jan. 10.
DISSOLVED OXYGEN: Maximum daily mean, 10.4 mg/L, Mar. 8,9; minimum daily mean 0.3 mg/L, Dec. 8.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	176	219	208	216	243	237	261	---	157	176	136
2	156	192	217	208	217	247	241	265	---	151	177	139
3	156	209	215	209	216	251	244	268	---	152	179	139
4	145	212	210	206	214	253	243	270	---	157	183	140
5	157	207	211	203	213	257	242	272	---	157	182	138
6	161	204	212	202	215	258	241	272	---	164	183	143
7	166	195	215	204	212	263	241	272	---	163	183	145
8	166	196	218	205	207	265	244	273	---	163	184	143
9	167	197	217	205	207	263	246	272	---	164	184	145
10	174	199	215	206	208	221	247	274	---	166	184	148
11	176	200	211	205	210	204	247	277	---	171	191	151
12	173	202	206	204	212	219	247	280	293	173	186	148
13	176	213	208	206	214	223	247	283	291	171	171	148
14	176	218	207	207	219	224	247	285	283	173	173	145
15	174	218	211	206	224	224	249	289	246	177	156	145
16	174	220	206	207	229	225	250	282	246	177	148	145
17	178	219	207	208	232	227	250	274	250	185	191	139
18	180	214	207	207	235	231	250	284	236	195	217	143
19	186	210	207	208	238	231	250	285	232	194	211	147
20	189	208	212	208	243	230	252	288	211	195	194	134
21	197	222	209	209	245	231	250	285	188	190	172	131
22	196	217	208	212	238	236	252	283	182	184	137	133
23	188	214	209	210	224	240	252	283	182	186	133	131
24	185	213	210	210	228	239	254	281	174	182	---	136
25	184	212	210	213	230	236	250	282	177	182	---	140
26	190	210	208	218	231	237	250	---	175	171	---	136
27	191	210	210	221	234	240	248	---	168	173	---	138
28	188	212	210	219	238	240	251	---	167	176	132	140
29	182	211	209	216	---	240	254	---	171	173	137	142
30	178	218	208	214	---	239	261	---	164	174	132	143
31	169	---	207	215	---	237	---	---	---	175	133	---
MEAN	175	208	211	209	223	238	248	---	---	173	171	141
MAX	197	222	219	221	245	265	261	---	---	195	217	151
MIN	145	176	206	202	207	204	237	---	---	151	132	131

02264100 BONNET CREEK NEAR VINELAND, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.2	21.0	21.1	16.5	22.4	16.7	25.4	28.5	---	27.2	29.5	29.0
2	23.7	21.6	21.4	16.2	23.1	17.7	25.7	28.4	---	27.1	28.7	29.1
3	23.7	22.2	21.9	15.5	23.1	19.4	25.0	28.9	---	27.4	28.2	29.7
4	24.0	22.6	22.2	13.5	21.7	18.6	25.1	29.4	---	27.6	28.2	29.3
5	24.2	22.2	22.1	13.3	19.5	16.5	25.5	30.5	---	27.5	28.9	28.6
6	24.5	20.7	21.8	13.9	19.2	17.8	24.7	30.0	---	27.5	29.5	29.1
7	25.2	20.7	21.9	14.3	19.4	17.7	24.0	29.4	---	27.7	29.0	28.9
8	25.3	20.5	22.0	13.5	18.9	19.4	23.2	29.0	---	27.6	29.0	28.7
9	24.6	20.5	22.3	13.6	19.1	20.0	23.6	28.7	---	27.5	28.4	28.9
10	24.1	20.6	22.6	12.9	19.1	21.7	24.1	28.8	---	27.2	28.6	28.2
11	24.2	20.6	22.5	13.5	19.9	21.7	24.5	28.8	---	27.5	28.2	28.0
12	24.4	20.7	22.5	14.2	19.9	19.9	24.5	28.8	28.4	27.6	27.9	27.4
13	24.5	20.7	22.5	15.3	18.9	21.5	24.4	28.6	28.5	27.4	27.8	27.6
14	24.7	21.0	22.8	15.4	18.3	21.9	24.3	28.6	28.6	28.1	27.9	27.9
15	25.3	20.5	23.4	16.2	18.3	21.6	24.4	28.0	28.5	28.7	27.5	28.0
16	25.2	20.2	23.6	16.7	18.7	22.1	25.4	27.7	28.8	28.9	27.5	28.3
17	23.9	20.3	22.9	16.8	18.7	22.9	25.9	28.3	28.5	29.5	28.6	28.3
18	22.7	20.9	22.9	17.4	18.9	22.8	25.7	28.6	28.0	29.2	28.8	28.6
19	23.1	21.2	21.8	17.2	18.3	23.5	25.9	27.7	28.1	29.1	28.8	28.9
20	23.5	21.3	20.9	17.6	18.6	23.5	26.7	26.3	27.6	29.3	28.5	28.6
21	24.1	21.4	19.9	18.2	19.8	23.9	26.6	25.7	26.8	28.6	28.2	28.5
22	24.1	21.2	19.3	20.3	20.2	24.4	28.1	25.3	26.4	28.7	28.2	28.3
23	24.3	21.0	18.8	19.5	19.1	23.6	29.1	25.4	26.5	29.0	27.8	27.9
24	24.4	21.2	19.8	20.2	18.4	22.7	28.7	25.8	26.5	29.1	---	27.8
25	24.7	21.5	18.3	20.9	18.4	22.5	27.5	26.2	26.7	29.5	---	27.8
26	24.1	21.6	16.8	22.0	19.2	23.4	28.0	---	26.7	29.3	---	27.6
27	21.8	21.4	15.7	22.0	19.1	25.6	27.8	---	27.2	29.7	---	27.8
28	20.2	21.0	15.7	21.9	17.3	25.1	27.4	---	27.4	29.8	27.8	27.9
29	19.9	21.2	17.2	21.4	---	24.2	27.8	---	27.6	29.6	28.1	28.1
30	20.2	21.1	17.8	21.4	---	24.4	28.4	---	27.5	29.4	28.4	27.9
31	20.8	---	17.2	22.2	---	24.9	---	---	---	29.4	28.4	---
MEAN	23.7	21.1	20.7	17.2	19.5	21.7	25.9	---	---	28.4	28.4	28.4
MAX	25.3	22.6	23.6	22.2	23.1	25.6	29.1	---	---	29.8	29.5	29.7
MIN	19.9	20.2	15.7	12.9	17.3	16.5	23.2	---	---	27.1	27.5	27.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	0.9	1.7	6.1	4.8	9.5	7.1	6.7	---	6.0	---	3.9
2	1.3	0.6	1.4	6.2	6.2	8.8	7.5	6.4	---	5.1	---	3.5
3	1.2	0.4	1.6	5.9	6.4	8.8	6.5	6.7	---	4.7	---	3.2
4	1.0	0.4	2.9	7.5	6.4	8.4	5.9	7.1	---	4.0	---	3.0
5	0.9	1.4	3.0	7.4	6.7	9.4	7.5	7.1	---	3.9	---	3.7
6	0.7	2.0	2.5	7.5	6.4	9.9	7.7	6.9	---	3.6	---	5.1
7	0.7	1.6	1.0	7.7	6.2	9.6	7.3	6.3	---	3.8	---	5.5
8	1.0	1.3	0.3	8.0	6.8	10.4	6.6	6.5	---	4.0	---	4.7
9	1.1	1.2	0.9	6.3	6.4	10.4	6.4	6.3	---	3.7	---	3.9
10	0.7	1.2	0.8	7.7	5.4	8.9	6.4	7.2	---	3.9	---	2.6
11	0.5	1.0	1.0	7.2	5.9	8.2	6.1	7.9	---	4.0	---	2.4
12	0.6	1.1	1.2	7.6	5.6	6.5	6.1	8.1	4.1	3.6	---	2.3
13	0.6	1.3	1.4	7.7	6.1	8.4	5.3	7.9	3.8	3.5	---	2.4
14	0.6	1.6	1.4	7.3	6.3	8.5	5.3	8.2	3.6	4.1	---	2.7
15	0.6	2.4	2.0	7.1	5.9	7.2	5.2	7.6	3.2	---	---	3.0
16	0.5	3.6	2.2	6.6	6.3	5.6	5.7	7.6	5.0	---	4.6	2.7
17	0.8	3.9	1.2	6.6	6.5	4.9	5.9	8.6	5.1	---	5.5	3.2
18	0.7	3.7	2.7	7.7	6.9	3.9	6.1	8.0	5.7	---	5.1	3.7
19	0.6	3.1	2.9	7.1	6.3	3.6	5.9	7.0	5.2	---	4.4	3.9
20	0.4	2.6	3.7	6.1	7.3	2.9	6.6	6.7	5.7	---	3.8	4.2
21	0.5	2.1	4.6	5.8	7.1	3.9	7.0	8.1	6.5	---	3.3	4.1
22	0.5	1.4	4.1	7.2	6.7	5.3	7.8	8.8	5.9	---	4.8	3.7
23	0.9	1.0	4.0	5.0	6.8	5.7	7.3	8.7	5.8	---	4.4	4.2
24	1.2	1.2	4.6	5.4	6.8	5.2	6.7	9.8	5.6	---	---	4.4
25	1.7	1.1	4.3	5.8	6.7	4.7	6.6	10.1	5.2	---	---	5.0
26	1.8	1.5	5.7	6.0	7.7	5.5	6.0	---	4.5	---	---	5.1
27	2.4	1.6	5.8	5.5	9.0	6.9	7.1	---	5.2	---	---	4.3
28	2.3	1.3	5.8	4.5	9.3	7.6	6.0	---	3.5	---	2.9	3.7
29	2.7	1.7	6.1	3.9	---	6.2	5.7	---	3.6	---	3.2	3.5
30	2.8	1.6	6.0	3.8	---	5.4	6.4	---	4.8	---	3.6	3.1
31	1.8	---	5.4	4.3	---	5.5	---	---	---	---	4.1	---
MEAN	1.1	1.7	3.0	6.4	6.6	7.0	6.5	---	---	---	---	3.7
MAX	2.8	3.9	6.1	8.0	9.3	10.4	7.8	---	---	---	---	5.5
MIN	0.4	0.4	0.3	3.8	4.8	2.9	5.2	---	---	---	---	2.3

02264100 BONNET CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)
OCT													
24...	0930	18	72.97	191	6.3	24.2	--	--	.5	.27	--	.020	--
NOV													
20...	1000	4.0	72.86	208	6.6	21.0	--	--	2.4	.10	--	.020	--
DEC													
19...	1430	2.9	72.78	208	6.7	21.8	--	--	3.8	.08	--	<.010	--
JAN													
15...	1640	3.4	72.81	207	7.0	16.9	--	--	7.0	.04	--	<.010	--
FEB													
13...	1030	1.5	72.74	214	6.8	18.6	--	--	5.8	.05	--	.010	--
MAR													
12...	0900	2.0	72.80	220	6.8	19.8	--	--	6.5	.07	--	<.010	--
APR													
10...	1000	2.4	72.79	247	7.0	23.6	--	--	6.3	.02	--	<.010	--
MAY													
07...	1200	1.3	72.76	272	7.3	29.3	--	--	7.9	<.01	--	<.010	--
JUN													
26...	1100	85	73.27	179	6.4	27.1	3.6	200	4.6	.17	.19	.010	.02
JUL													
29...	1200	52	73.11	175	6.2	29.9	--	--	3.0	.34	--	.020	--
AUG													
27...	1400	77	73.16	133	5.6	28.2	--	--	3.5	.43	--	.020	--
SEP													
24...	0800	140	73.30	139	5.8	27.5	--	--	4.2	.36	--	.020	--

Date	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
OCT													
24...	E1.5	--	.21	E.07	.05	43.0	--	--	--	--	--	--	--
NOV													
20...	E1.2	--	.42	E.06	.05	29.0	--	--	--	--	--	--	--
DEC													
19...	.90	--	.24	.06	.02	20.0	--	--	--	--	--	--	--
JAN													
15...	.80	--	.21	.03	.01	16.0	--	--	--	--	--	--	--
FEB													
13...	1.0	--	.11	.03	<.01	4.6	--	--	--	--	--	--	--
MAR													
12...	1.0	--	.08	.03	<.01	11.0	--	--	--	--	--	--	--
APR													
10...	.70	--	<.02	.05	<.01	10.0	--	--	--	--	--	--	--
MAY													
07...	.90	--	<.02	<.02	<.01	14.0	--	--	--	--	--	--	--
JUN													
26...	1.2	.110	.11	.12	.10	24.0	.100	52	16.0	3.00	13.0	3.80	31
JUL													
29...	1.7	--	.09	.06	.04	32.0	--	--	--	--	--	--	--
AUG													
27...	2.2	--	.17	.13	.10	50.0	--	--	--	--	--	--	--
SEP													
24...	1.9	--	.11	.10	.09	43.0	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02264100 BONNET CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 24...	--	--	--	4.7	--	--	--	--	--	--	--	--	--
NOV 20...	--	--	--	3.4	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	9.8	--	--	--	--	--	--	--	--	--
JAN 15...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
FEB 13...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
MAR 12...	--	--	--	13.0	--	--	--	--	--	--	--	--	--
APR 10...	--	--	--	22.0	--	--	--	--	--	--	--	--	--
MAY 07...	--	--	--	3.6	--	--	--	--	--	--	--	--	--
JUN 26...	12.0	22.0	<.1	7.3	5	<1	302	<1.0	<1.0	4.0	420	<1	19
JUL 29...	--	--	--	13.0	--	--	--	--	--	--	--	--	--
AUG 27...	--	--	--	4.9	--	--	--	--	--	--	--	--	--
SEP 24...	--	--	--	<.1	--	--	--	--	--	--	--	--	--

Date	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	DEF TOTAL (UG/L) (39040)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)
JUN 26...	<1.0	10	<1	<.1	<.01	<.10	<.02	<.02	<.01	<.006	<.2	<.2	<.1

Date	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN TOTAL (UG/L) (39380)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL (UG/L) (39388)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)
JUN 26...	<3	<.007	<.5	<.006	<.2	<.009	<.5	<.006	<.2	<.02	<.2	<.01	<.2

Date	ETHION, TOTAL (UG/L) (39398)	TOX-APHENE, TOTAL (UG/L) (39400)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)
JUN 26...	<.01	<1	<50	<.01	<.2	<.009	<.2	<.020	<2.5	<.1	<5	E.04	<.01

Date	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BI-PHENYL, NONA-CHLORO-SUR SCD 1325 PERCENT (90575)
JUN 26...	<.02	<.02	<.006	<.2	<.02	<.01	62

< -- Less than
E -- Estimated value

02264140 BONNET CREEK NEAR KISSIMMEE, FL

LOCATION.--Lat 28°18'28", long 81°31'29", in NE¼ sec.17, T. 25 S., R. 28 E., Osceola County, Hydrologic Unit 03090101, at culverts on east bank, 1.3 mi south of U.S. Highway 192, and 10 mi west of Kissimmee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Water years 1986-88, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	GAGE HEIGHT (FEET) (00065)	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)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
23...	1350	--	190	6.2	23.9	--	--	.4	.04	--	<.010	--	E1.8
NOV													
20...	1200	67.23	217	6.5	20.6	--	--	3.4	.09	--	.010	--	E1.5
DEC													
19...	1400	66.95	224	6.5	21.9	--	--	2.7	.10	--	<.010	--	1.5
JAN													
15...	1400	67.14	242	6.6	13.8	--	--	6.7	.04	--	<.010	--	1.2
FEB													
13...	1330	67.05	227	6.5	17.9	--	--	4.8	.05	--	<.010	--	1.3
MAR													
12...	1200	67.77	203	6.1	20.7	--	--	3.5	.06	--	<.010	--	1.6
APR													
10...	1200	66.70	231	6.6	23.9	--	--	4.2	.07	--	<.010	--	1.2
JUN													
26...	1000	69.29	227	5.9	25.1	1.2	320	1.6	.07	.08	.010	.02	1.9
JUL													
29...	1100	69.21	161	6.0	27.0	--	--	.3	.06	--	.020	--	1.8
AUG													
27...	1300	69.08	145	5.9	26.9	--	--	.9	.08	--	.010	--	1.7
SEP													
24...	1000	69.76	134	5.8	27.1	--	--	1.9	.12	--	.020	--	1.3

Date	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT													
23...	--	.05	E.06	.06	54.0	--	--	--	--	--	--	--	--
NOV													
20...	--	.17	E.07	.05	42.0	--	--	--	--	--	--	--	--
DEC													
19...	--	.13	.07	.06	38.0	--	--	--	--	--	--	--	--
JAN													
15...	--	.18	.03	.02	34.0	--	--	--	--	--	--	--	--
FEB													
13...	--	.10	.04	.03	5.3	--	--	--	--	--	--	--	--
MAR													
12...	--	.02	.03	<.01	37.0	--	--	--	--	--	--	--	--
APR													
10...	--	<.02	.06	.02	25.0	--	--	--	--	--	--	--	--
JUN													
26...	.030	.03	.05	.05	47.0	.040	73	21.0	5.00	15.0	3.20	20	34.0
JUL													
29...	--	<.02	.07	.07	43.0	--	--	--	--	--	--	--	--
AUG													
27...	--	.07	.07	.05	41.0	--	--	--	--	--	--	--	--
SEP													
24...	--	.07	.10	.11	46.0	--	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02264140 BONNET CREEK NEAR KISSIMMEE, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
OCT 23...	--	--	2.8	--	--	--	--	--	--	--	--	--	--
NOV 20...	--	--	<.1	--	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	<.1	--	--	--	--	--	--	--	--	--	--
JAN 15...	--	--	<.1	--	--	--	--	--	--	--	--	--	--
FEB 13...	--	--	8.5	--	--	--	--	--	--	--	--	--	--
MAR 12...	--	--	9.8	--	--	--	--	--	--	--	--	--	--
APR 10...	--	--	12.0	--	--	--	--	--	--	--	--	--	--
JUN 26...	27.0	<.1	<.1	3	<1	302	<1.0	<1.0	2.4	277	<1	21	<1.0
JUL 29...	--	--	<.1	--	--	--	--	--	--	--	--	--	--
AUG 27...	--	--	<.1	--	--	--	--	--	--	--	--	--	--
SEP 24...	--	--	<.1	--	--	--	--	--	--	--	--	--	--

Date	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	SELENIUM, TOTAL (UG/L AS SE) (01147)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	CHLORPYRIFOS TOTAL RECOVER (UG/L) (38932)	DISULFOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	DEF TOTAL (UG/L) (39040)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)	CHLORDANE, TECHNICAL TOTAL (UG/L) (39350)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)
JUN 26...	8	<1	<.1	<.01	<.10	<.02	<.02	<.01	<.006	<.2	<.2	<.1	<3

Date	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDD, RECOVER IN BOTTOM MATERIAL (UG/KG) (39363)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDE, RECOVER IN BOTTOM MATERIAL (UG/KG) (39368)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	P,P'-DDT, RECOVER IN BOTTOM MATERIAL (UG/KG) (39373)	DIELDRIN TOTAL (UG/L) (39380)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)	ENDOSULFAN I TOTAL (UG/L) (39388)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (UG/KG) (39389)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	ETHION, TOTAL (UG/L) (39398)
JUN 26...	<.007	<.5	<.006	<.2	<.009	<.5	<.006	<.2	<.02	<.2	<.01	<.2	<.01

Date	TOXAPHENE, TOTAL (UG/L) (39400)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39403)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METHOXYCHLOR, TOTAL (UG/L) (39480)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) (39519)	MALATHION, TOTAL (UG/L) (39530)	PARATHION, TOTAL (UG/L) (39540)	DIAZINON, TOTAL (UG/L) (39570)
JUN 26...	<1	<50	<.01	<.2	<.009	<.2	<.020	<2.5	<.1	<5	E.01	<.01	<.02

Date	METHYL PARATHION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) (39758)	CARBOPHENOTHION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DYFONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BIPHENYL, NONACHLOROSUR SCD 1325 PERCENT (90575)
JUN 26...	<.02	<.006	<.2	<.02	<.01	62

< -- Less than
E -- Estimated value

02264495 SHINGLE CREEK AT CAMPBELL, FL

LOCATION.--Lat 28°16'01", long 81°26'53", in SE¼ sec.31, T.25 S., R.29 E., Osceola County, Hydrologic Unit 03090101, near left bank on downstream side of bridge on County Road, 100 ft downstream from CSX railroad bridge, 0.8 mi northeast of Campbell, and 2.5 mi upstream from Lake Tohopekaliga.

DRAINAGE AREA.--180 mi^2, approximately, includes part of watershed in Reedy Creek Swamp.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Water-stage recorder on Lake Tohopekaliga at Kissimmee used as auxiliary gage for this station.

REMARKS.--Records fair except for period of estimated daily discharge, which is poor. Natural flow of stream affected by several canals, levees, and control structures which divert an undetermined amount of water into Shingle Creek above station or into the Reedy Creek basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	327	71	59	54	62	412	44	23	93	1020	e370	577
2	273	71	59	55	65	345	42	24	80	982	e320	627
3	234	73	61	61	64	283	42	23	77	1000	e290	722
4	208	73	60	60	65	257	44	21	84	931	e262	666
5	182	75	59	61	69	225	60	24	104	871	e240	923
6	162	69	57	61	56	190	59	23	108	821	e280	958
7	155	66	55	66	59	172	48	17	102	733	e330	827
8	146	65	54	64	77	160	42	16	84	694	e362	711
9	133	65	55	64	74	142	49	15	69	638	e405	644
10	118	63	54	62	70	135	52	15	65	586	e350	613
11	109	63	57	61	76	124	50	14	65	543	e325	595
12	102	61	56	59	73	105	49	14	62	507	e364	539
13	95	64	55	62	75	104	47	13	65	522	e400	499
14	95	66	54	60	76	101	43	15	62	595	e440	472
15	109	66	56	69	72	94	41	14	63	542	e480	479
16	101	68	59	67	70	89	44	9.3	105	487	e540	434
17	98	69	53	66	69	86	44	7.1	205	445	e615	515
18	91	68	55	69	70	81	46	7.1	258	400	e675	518
19	86	68	53	68	60	77	45	7.7	261	377	e740	475
20	84	67	53	68	54	71	43	13	455	313	e695	483
21	81	66	55	67	55	63	41	12	928	e279	e652	539
22	85	65	52	69	72	72	46	16	1180	e330	e635	512
23	84	64	48	66	177	67	40	4.0	1370	e390	e615	522
24	84	63	51	63	308	61	35	3.1	1420	e490	e635	585
25	95	63	53	61	314	55	31	5.0	1410	e580	e580	681
26	102	62	55	66	349	57	31	18	1390	e720	e540	693
27	86	61	49	66	421	67	24	32	1370	e645	e498	674
28	83	60	49	65	437	60	28	35	1240	e575	e460	659
29	76	59	47	63	---	53	28	30	1110	e525	e480	643
30	74	58	50	63	---	48	24	55	1040	e470	e505	629
31	72	---	51	64	---	42	---	130	---	e410	526	---
TOTAL	3830	1972	1684	1970	3489	3898	1262	655.3	14925	18421	14609	18414
MEAN	124	65.7	54.3	63.5	125	126	42.1	21.1	498	594	471	614
MAX	327	75	61	69	437	412	60	130	1420	1020	740	958
MIN	72	58	47	54	54	42	24	3.1	62	279	240	434

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002, BY WATER YEAR (WY)

MEAN	190	124	126	143	145	141	107	56.5	128	210	242	292
MAX	564	665	889	543	634	577	469	238	498	659	640	809
(WY)	1970	1988	1998	1998	1998	1998	1987	1991	2002	1991	1995	2001
MIN	18.4	10.5	8.39	14.0	24.4	19.7	4.89	11.7	14.5	13.7	54.5	36.9
(WY)	1971	1971	1971	1971	2001	2000	2000	2000	1971	1969	1980	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1969 - 2002	
ANNUAL TOTAL	68092		85129.3			
ANNUAL MEAN	187		233		159	
HIGHEST ANNUAL MEAN					306	1998
LOWEST ANNUAL MEAN					47.0	1971
HIGHEST DAILY MEAN	1370	Sep 15	1420	Jun 24	1980	Apr 1 1987
LOWEST DAILY MEAN	16	Jan 5,6	3.1	May 24	3.1	May 9 1971
ANNUAL SEVEN-DAY MINIMUM	17	Jan 1	8.7	May 19	3.4	May 7 1971
MAXIMUM PEAK FLOW			1420	Jun 24	2070	Apr 1 1987
MAXIMUM PEAK STAGE			59.93	Jun 26	60.78	Apr 1 1987
10 PERCENT EXCEEDS	543		640		387	
50 PERCENT EXCEEDS	65		72		87	
90 PERCENT EXCEEDS	21		38		30	

e Estimated
* Maximum stage observed and discharge measured.

02266025 REEDY CREEK AT S-46 NEAR VINELAND, FL

LOCATION.--Lat 28°24'18", long 81°36'42", in NE¼ sec.16, T.24 S., R.27 E., Orange County, Hydrologic Unit 03090101, on right upstream wingwall of control structure 46, 6.6 mi west of Vineland.

DRAINAGE AREA.--25.4 mi^2.

PERIOD OF RECORD.--June 1969 to September 1972 (gage heights only). October 1986 to current year.

REVISED RECORDS.--WDR FL-97-1: Drainage area.

GAGE.--Water-stage and gate-opening recorder. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark). Auxiliary gage at downstream side of control structure 46.

REMARKS.--Records fair. Flow regulated by operation of structure 46. At high stages interconnection exists between Reedy Creek, Whittenhorse Creek, and Boggy Creek.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	0.87	2.3	1.6	1.9	1.9	2.0	0.00	0.00	0.00	20	34
2	3.6	1.2	2.3	2.3	1.8	1.9	1.9	0.00	0.00	0.00	9.8	31
3	3.6	1.1	2.3	2.3	1.7	1.9	2.0	0.00	0.00	0.00	1.7	29
4	3.7	1.2	2.3	2.0	1.6	1.9	1.6	0.00	0.00	0.00	2.7	29
5	3.9	1.1	2.2	1.9	1.4	1.9	1.7	0.00	0.00	0.00	3.2	23
6	4.4	1.2	1.9	2.1	1.5	1.4	1.6	0.00	0.00	0.00	4.1	17
7	4.1	1.2	1.9	1.9	1.7	1.7	1.7	0.00	0.00	0.00	5.6	15
8	3.6	1.2	1.9	1.9	1.6	1.9	1.5	0.00	0.00	0.00	6.6	14
9	4.4	1.3	1.9	1.9	1.8	2.3	1.2	0.00	0.00	0.00	6.9	14
10	6.7	1.5	1.9	1.9	1.8	2.1	0.81	0.00	0.00	0.00	7.1	14
11	7.3	1.6	1.9	1.9	1.8	2.0	0.26	0.00	0.00	0.00	7.3	13
12	7.4	1.6	1.9	2.2	1.7	2.3	0.00	0.00	0.00	0.00	22	13
13	6.9	1.7	1.9	2.1	1.6	2.0	0.00	0.00	0.00	0.00	38	13
14	6.8	1.9	1.9	2.6	1.6	2.5	0.07	0.00	0.00	0.00	39	14
15	6.4	1.8	1.8	2.7	1.6	2.7	0.00	0.00	0.00	0.00	40	14
16	6.0	1.8	1.7	2.7	1.4	2.7	0.00	0.00	0.00	0.00	40	16
17	5.8	1.7	1.8	2.7	1.1	2.7	0.00	0.00	0.00	0.00	40	22
18	4.6	1.6	1.9	2.5	0.96	2.5	0.00	0.00	0.00	0.00	39	21
19	4.2	1.3	1.7	2.3	0.93	2.3	0.00	0.00	0.00	0.00	39	21
20	3.7	1.2	1.6	2.3	0.52	2.2	0.00	0.00	0.00	0.00	38	21
21	3.5	1.3	1.6	2.1	0.61	2.2	0.00	0.00	0.00	0.00	21	21
22	2.5	1.4	1.7	1.9	1.7	2.3	0.00	0.00	0.00	0.00	7.6	21
23	2.5	1.6	1.6	1.9	2.3	2.5	0.00	0.00	0.00	0.00	12	21
24	1.3	1.7	1.8	1.9	2.0	2.5	0.00	0.00	0.00	0.00	14	26
25	0.05	1.8	1.9	1.9	1.7	2.3	0.00	0.00	0.00	0.00	13	32
26	0.68	1.9	1.7	1.9	1.7	2.3	0.00	0.00	0.00	0.00	12	31
27	1.0	2.1	1.6	1.9	1.8	2.3	0.00	0.00	0.00	0.00	12	29
28	0.74	2.3	1.6	1.9	1.9	2.4	0.00	0.00	0.00	0.00	12	28
29	0.41	2.3	1.6	1.9	---	2.4	0.00	0.00	0.00	0.00	17	26
30	0.57	2.3	1.6	1.9	---	2.4	0.00	0.00	0.00	0.00	27	25
31	0.92	---	1.6	1.9	---	2.2	---	0.00	---	9.0	38	---
TOTAL	114.77	46.77	57.3	64.9	43.72	68.6	16.34	0.00	0.00	9.00	595.6	648
MEAN	3.70	1.56	1.85	2.09	1.56	2.21	0.54	0.000	0.000	0.29	19.2	21.6
MAX	7.4	2.3	2.3	2.7	2.3	2.7	2.0	0.00	0.00	9.0	40	34
MIN	0.05	0.87	1.6	1.6	0.52	1.4	0.00	0.00	0.00	0.00	1.7	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	2.85	2.85	2.55	3.97	4.33	4.85	2.30	0.91	0.68	1.77	4.05	4.39
MAX	10.2	10.8	20.6	49.2	54.0	52.8	17.8	8.04	4.19	9.12	19.2	21.6
(WY)	1997	1995	1998	1998	1998	1998	1998	1998	1998	1997	2002	2002
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1987	1987	1987	1987	1987	1990	1989	1989	1989	1990	1989	1989

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	386.80		1665.00			
ANNUAL MEAN	1.06		4.56		2.95	
HIGHEST ANNUAL MEAN					19.0	1998
LOWEST ANNUAL MEAN					0.091	1990
HIGHEST DAILY MEAN	7.4	Oct 12	40	Aug 15-17	e115	Feb 17 1998
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Apr 15	0.00	Many days
MAXIMUM PEAK STAGE			96.55	Aug 30,31	96.55	Aug 30,31 2002
10 PERCENT EXCEEDS	3.3		14		6.0	
50 PERCENT EXCEEDS	0.00		1.8		0.18	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL

LOCATION.--Lat 28°23'05", long 81°37'00", in NW¼ sec.21, T.24 S., R.27 E., Orange County, Hydrologic Unit 03090101, near center of channel, 12 ft downstream from culverts on Hartzog Road, and 7 mi west of Vineland.

DRAINAGE AREA.--12.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.23 ft above NGVD of 1929.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	3.6	2.3	e1.2	0.60	3.5	0.35	0.04	0.00	e2.8	30	68
2	11	3.6	2.3	e1.2	0.66	3.4	0.36	0.01	0.00	e2.9	29	68
3	9.8	3.6	2.2	e0.96	0.69	3.3	0.38	0.00	0.00	e3.0	31	69
4	9.3	3.4	2.1	e0.71	0.70	3.2	0.38	0.00	0.00	e3.6	31	66
5	9.0	3.3	2.0	e0.74	0.72	3.2	0.36	0.00	0.00	e4.2	30	66
6	8.4	3.2	1.9	e0.74	0.70	3.2	0.35	0.00	0.00	e4.8	27	61
7	7.7	3.2	1.8	e0.76	0.79	3.3	0.37	0.00	0.00	e5.3	29	57
8	7.4	3.2	1.8	e0.79	0.83	3.2	0.35	0.00	0.00	e6.2	33	52
9	7.0	3.1	1.8	e0.79	1.1	2.9	0.31	0.00	0.00	7.0	31	47
10	6.2	3.0	1.8	e0.82	1.4	2.7	0.26	0.00	0.00	7.8	29	43
11	5.9	2.9	1.7	e0.84	1.4	2.4	0.21	0.00	0.00	8.3	25	40
12	5.6	2.7	1.7	e0.84	1.4	2.2	0.19	0.00	0.00	8.2	23	38
13	5.3	2.7	1.7	e0.88	1.4	2.1	0.17	0.00	0.00	9.0	23	37
14	5.0	2.9	1.7	e0.89	1.4	2.0	0.21	0.00	0.00	11	24	36
15	4.6	2.9	1.7	e0.89	1.4	1.8	0.26	0.00	0.00	12	28	38
16	4.2	2.8	1.8	e0.94	1.4	1.6	0.23	0.00	0.00	12	30	40
17	4.0	2.8	1.8	e0.94	1.4	1.4	0.20	0.00	e0.01	11	28	56
18	4.0	3.0	1.8	e0.94	1.3	1.3	0.15	0.00	0.06	9.9	26	57
19	3.7	3.0	e1.7	e0.94	1.2	1.2	0.12	0.00	e0.25	9.6	25	54
20	3.5	3.0	e1.6	e0.94	1.2	1.1	0.09	0.00	e0.45	9.6	24	51
21	3.5	3.1	e1.6	e0.94	1.1	1.0	0.07	0.00	e0.75	14	25	47
22	3.8	3.1	e1.7	e0.94	1.2	0.94	0.05	0.00	e1.5	21	28	44
23	4.0	3.1	e1.6	e0.94	2.1	0.90	0.03	0.00	e2.3	23	28	44
24	4.0	3.0	e1.0	e0.77	3.3	0.80	0.02	0.00	e2.4	24	25	51
25	4.0	2.9	e1.1	e0.52	3.6	0.73	0.00	0.00	e2.5	29	23	65
26	3.9	2.7	e1.1	e0.52	3.6	0.62	0.02	0.00	e2.6	45	22	69
27	3.7	2.6	e1.1	e0.52	3.6	0.59	0.07	0.00	e2.8	46	20	66
28	3.7	2.5	e1.1	e0.52	3.6	0.66	0.08	0.00	e3.0	44	20	60
29	3.7	2.5	e1.1	e0.52	---	0.57	0.07	0.00	e2.9	39	29	55
30	3.7	2.4	e1.2	0.58	---	0.46	0.06	0.00	e2.8	36	41	49
31	3.6	---	e1.2	0.59	---	0.39	---	0.00	---	33	63	---
TOTAL	176.2	89.8	51.0	25.11	43.79	56.66	5.77	0.05	24.32	502.2	880	1594
MEAN	5.68	2.99	1.65	0.81	1.56	1.83	0.19	0.002	0.81	16.2	28.4	53.1
MAX	13	3.6	2.3	1.2	3.6	3.5	0.38	0.04	3.0	46	63	69
MIN	3.5	2.4	1.0	0.52	0.60	0.39	0.00	0.00	0.00	2.8	20	36
CFSM	0.46	0.24	0.13	0.07	0.13	0.15	0.02	0.00	0.07	1.31	2.29	4.28
IN.	0.53	0.27	0.15	0.08	0.13	0.17	0.02	0.00	0.07	1.51	2.64	4.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

MEAN	6.69	3.78	4.26	4.79	4.84	5.29	3.43	1.11	1.68	5.20	7.46	8.46
MAX	38.3	16.0	45.1	45.9	37.5	43.0	23.0	11.9	20.2	31.6	38.0	53.1
(WY)	1996	1988	1998	1998	1998	1998	1987	1991	1991	1991	1995	2002
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1979	1968	1968	1968	1968	1968	1968	1967	1967	1967	1973	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	703.01		3448.90			
ANNUAL MEAN	1.93		9.45		4.68	
HIGHEST ANNUAL MEAN					17.2	1998
LOWEST ANNUAL MEAN					0.000	1981
HIGHEST DAILY MEAN	27	Sep 16	69	Sep 3,26	96	Dec 29 1997
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	May 3	0.00	Many days
MAXIMUM PEAK FLOW			70	Sep 2,25	97	Dec 29 1997
MAXIMUM PEAK STAGE			95.02	Sep 25	95.17	Dec 29 1997
ANNUAL RUNOFF (CFSM)	0.16		0.76		0.38	
ANNUAL RUNOFF (INCHES)	2.11		10.35		5.13	
10 PERCENT EXCEEDS	4.1		36		14	
50 PERCENT EXCEEDS	0.00		2.1		0.77	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-73, 1977, 1979-80, 1982-98, 2002.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 2001 to current year.
WATER TEMPERATURE: December 2001 to current year.
DISSOLVED OXYGEN: December 2001 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Extremes for current year and extremes for period of of daily record are based on recorded values and may have been exceeded during period of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 234 µS/cm @ 25 °C, Jan. 19-21,23, Mar. 23, 2002; minimum daily mean, 73 µS/cm @ 25 °C, Sept. 17, 2002.
WATER TEMPERATURE: Maximum daily mean, 27.9 °C, July 17,18, 2002; minimum daily mean, 8.1 °C, Jan. 9, 2002.
DISSOLVED OXYGEN: Maximum daily mean, 3.6 mg/L, Jan. 9, 2002; minimum daily mean, 0.0 mg/L, July 10-13,15-17, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 234 µS/cm @ 25 °C, Jan. 19-21,23, Mar. 23; minimum daily mean, 73 µS/cm @ 25 °C, Sept. 17.
WATER TEMPERATURE: Maximum daily mean, 27.9 °C, July 17,18; minimum daily mean, 8.1 °C, Jan. 9.
DISSOLVED OXYGEN: Maximum daily mean, 3.6 mg/L, Jan. 9; minimum daily mean 0.0 mg/L, July 10-13, 15-17.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	218	226	218	---	---	---	---	---	94
2	---	---	---	220	227	220	---	---	---	---	---	92
3	---	---	---	218	228	222	---	---	---	---	---	87
4	---	---	---	218	229	224	---	---	---	---	---	80
5	---	---	---	218	227	225	---	---	---	---	---	78
6	---	---	---	219	226	225	---	---	---	---	---	77
7	---	---	---	221	225	226	---	---	---	---	---	78
8	---	---	---	223	223	229	---	---	---	---	---	78
9	---	---	---	225	223	231	---	---	---	132	---	77
10	---	---	---	227	225	231	---	---	---	134	---	75
11	---	---	---	229	225	232	---	---	---	136	---	76
12	---	---	---	230	224	224	---	---	---	139	---	78
13	---	---	---	231	223	229	---	---	---	145	---	78
14	---	---	---	232	223	231	---	---	---	149	---	79
15	---	---	---	232	224	230	---	---	---	155	---	78
16	---	---	---	230	224	229	---	---	---	160	---	76
17	---	---	---	233	224	230	---	---	---	165	102	73
18	---	---	---	233	226	231	---	---	---	165	100	75
19	---	---	---	234	228	232	---	---	---	161	100	79
20	---	---	210	234	228	232	---	---	---	156	105	84
21	---	---	210	234	229	232	---	---	---	145	108	83
22	---	---	210	232	224	232	---	---	---	139	112	81
23	---	---	211	234	210	234	---	---	---	142	113	82
24	---	---	211	232	201	232	---	---	---	143	111	80
25	---	---	212	231	204	230	---	---	---	140	110	79
26	---	---	213	227	210	230	---	---	---	130	108	77
27	---	---	214	226	213	230	---	---	---	129	103	79
28	---	---	215	225	215	230	---	---	---	130	99	80
29	---	---	217	227	---	---	---	---	---	126	97	79
30	---	---	218	227	---	---	---	---	---	---	95	77
31	---	---	218	227	---	---	---	---	---	---	93	---
MEAN	---	---	---	227	222	229	---	---	---	---	---	80
MAX	---	---	---	234	229	234	---	---	---	---	---	94
MIN	---	---	---	218	201	218	---	---	---	---	---	73

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	12.6	20.3	12.2	---	---	---	---	---	26.7
2	---	---	---	12.9	20.1	15.0	---	---	---	---	---	27.4
3	---	---	---	11.8	19.3	17.2	---	---	---	---	---	27.7
4	---	---	---	8.5	16.8	15.1	---	---	---	---	---	27.6
5	---	---	---	9.0	14.8	12.4	---	---	---	---	---	27.3
6	---	---	---	11.6	15.9	13.1	---	---	---	---	---	27.1
7	---	---	---	11.0	16.8	14.3	---	---	---	---	---	26.9
8	---	---	---	8.9	14.3	15.8	---	---	---	---	---	26.9
9	---	---	---	8.1	14.8	17.0	---	---	---	25.3	---	27.0
10	---	---	---	8.7	16.7	18.0	---	---	---	25.2	---	26.9
11	---	---	---	9.5	16.8	17.6	---	---	---	25.3	---	26.5
12	---	---	---	11.0	16.1	18.4	---	---	---	25.4	---	26.0
13	---	---	---	12.1	14.9	19.1	---	---	---	25.4	---	26.1
14	---	---	---	12.5	14.6	18.5	---	---	---	26.1	---	26.3
15	---	---	---	13.9	14.8	18.5	---	---	---	26.6	---	26.6
16	---	---	---	12.8	15.5	19.9	---	---	---	27.3	---	26.8
17	---	---	---	13.7	14.5	21.0	---	---	---	27.9	26.5	26.8
18	---	---	---	14.4	13.8	21.0	---	---	---	27.9	26.3	27.1
19	---	---	---	14.7	14.0	21.5	---	---	---	27.5	26.4	27.3
20	---	---	16.0	16.4	15.2	21.3	---	---	---	27.2	26.1	27.3
21	---	---	14.5	17.6	17.4	21.1	---	---	---	26.1	26.0	27.2
22	---	---	14.2	18.3	17.8	20.3	---	---	---	25.7	25.9	26.9
23	---	---	15.1	19.3	16.4	18.3	---	---	---	26.0	26.0	26.6
24	---	---	16.7	19.3	14.9	18.5	---	---	---	26.7	26.3	26.4
25	---	---	14.3	19.3	14.7	19.6	---	---	---	27.0	26.4	26.4
26	---	---	12.1	19.9	15.4	20.6	---	---	---	26.7	26.4	26.5
27	---	---	10.9	19.6	14.8	20.7	---	---	---	27.1	26.2	26.7
28	---	---	11.9	20.2	12.0	20.2	---	---	---	27.4	26.2	26.9
29	---	---	14.3	20.6	---	---	---	---	---	27.4	26.1	26.9
30	---	---	14.5	20.5	---	---	---	---	---	---	26.0	26.8
31	---	---	14.0	20.7	---	---	---	---	---	---	26.1	---
MEAN	---	---	---	14.5	15.8	18.1	---	---	---	---	---	26.9
MAX	---	---	---	20.7	20.3	21.5	---	---	---	---	---	27.7
MIN	---	---	---	8.1	12.0	12.2	---	---	---	---	---	26.0

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	1.4	0.4	2.3	---	---	---	---	---	0.4
2	---	---	---	1.9	0.5	1.5	---	---	---	---	---	0.4
3	---	---	---	2.0	0.5	1.1	---	---	---	---	---	0.5
4	---	---	---	3.0	0.7	2.1	---	---	---	---	---	0.5
5	---	---	---	2.9	0.7	2.9	---	---	---	---	---	0.5
6	---	---	---	2.4	0.7	2.5	---	---	---	---	---	0.5
7	---	---	---	2.6	0.7	2.1	---	---	---	---	---	0.6
8	---	---	---	3.2	1.1	1.9	---	---	---	---	---	0.6
9	---	---	---	3.6	1.2	1.7	---	---	---	0.3	---	0.6
10	---	---	---	3.5	0.8	1.6	---	---	---	0.0	---	0.7
11	---	---	---	3.5	0.9	1.6	---	---	---	0.0	---	0.6
12	---	---	---	3.2	1.0	1.6	---	---	---	0.0	---	0.4
13	---	---	---	2.8	1.1	1.4	---	---	---	0.1	---	0.3
14	---	---	---	2.8	1.3	1.5	---	---	---	0.1	---	0.2
15	---	---	---	2.0	1.3	1.5	---	---	---	0.1	---	0.2
16	---	---	---	2.1	1.3	1.3	---	---	---	0.0	---	0.4
17	---	---	---	1.8	1.6	1.2	---	---	---	0.0	0.3	0.2
18	---	---	---	1.8	1.9	1.3	---	---	---	0.1	0.3	0.2
19	---	---	---	1.7	1.9	1.3	---	---	---	0.2	0.3	0.2
20	---	---	0.4	1.1	1.8	1.3	---	---	---	0.2	0.5	0.2
21	---	---	0.6	0.9	1.3	1.2	---	---	---	---	0.6	0.2
22	---	---	0.5	0.7	1.1	1.5	---	---	---	---	0.6	0.3
23	---	---	0.6	0.5	1.8	1.0	---	---	---	---	0.6	0.3
24	---	---	0.3	0.5	1.7	0.8	---	---	---	---	0.7	0.3
25	---	---	0.5	0.5	1.6	1.3	---	---	---	---	0.7	0.2
26	---	---	1.3	0.5	1.5	1.1	---	---	---	---	0.8	0.3
27	---	---	1.7	0.6	2.1	0.7	---	---	---	---	0.6	0.4
28	---	---	1.7	0.5	2.7	0.6	---	---	---	---	0.5	0.5
29	---	---	1.2	0.5	---	---	---	---	---	---	0.4	0.5
30	---	---	1.2	0.5	---	---	---	---	---	---	0.5	0.6
31	---	---	1.2	0.5	---	---	---	---	---	---	0.4	---
MEAN	---	---	---	1.8	1.3	1.5	---	---	---	---	---	0.4
MAX	---	---	---	3.6	2.7	2.9	---	---	---	---	---	0.7
MIN	---	---	---	0.5	0.4	0.6	---	---	---	---	---	0.2

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)
OCT													
23...	0930	4.1	93.89	183	5.3	22.6	--	--	.3	.53	--	<.010	--
NOV													
20...	1400	3.0	93.77	210	4.8	20.1	--	--	.5	.78	--	.010	--
DEC													
19...	1000	1.6	93.51	209	4.9	16.6	--	--	.5	.48	--	.010	--
JAN													
15...	1430	.89	93.34	231	4.6	14.8	--	--	2.2	1.10	--	<.010	--
FEB													
12...	1300	1.4	93.36	220	4.5	16.6	--	--	1.6	.41	--	.020	--
MAR													
11...	1600	2.2	93.43	233	4.4	19.1	--	--	2.0	.17	--	<.010	--
APR													
09...	1200	.30	93.09	237	4.5	20.2	--	--	1.2	.20	--	.010	--
JUN													
25...	1200	.19	93.25	219	5.1	24.5	1.7	640	1.1	.69	.70	.020	.02
JUL													
30...	1300	36	94.52	126	5.0	28.2	--	--	.4	.04	--	.020	--
AUG													
27...	1000	21	94.34	98	5.2	25.9	--	--	.4	.06	--	.020	--

Date	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
OCT													
23...	E4.2	--	<.02	E.18	.18	87.0	--	--	--	--	--	--	--
NOV													
20...	E5.1	--	<.02	E.24	.20	83.0	--	--	--	--	--	--	--
DEC													
19...	E13	--	<.02	.21	.15	83.0	--	--	--	--	--	--	--
JAN													
15...	4.9	--	<.02	.19	.17	81.0	--	--	--	--	--	--	--
FEB													
12...	4.6	--	<.02	.15	.14	1.3	--	--	--	--	--	--	--
MAR													
11...	3.4	--	<.02	.06	.04	51.0	--	--	--	--	--	--	--
APR													
09...	3.6	--	<.02	.07	.06	70.0	--	--	--	--	--	--	--
JUN													
25...	3.7	<.020	<.02	.16	.15	76.0	.160	41	8.80	4.70	20.0	7.90	10
JUL													
30...	2.5	--	<.02	.23	.20	56.0	--	--	--	--	--	--	--
AUG													
27...	2.3	--	<.02	.29	.27	55.0	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 23...	--	--	--	9.8	--	--	--	--	--	--	--	--	--
NOV 20...	--	--	--	13.0	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
JAN 15...	--	--	--	8.8	--	--	--	--	--	--	--	--	--
FEB 12...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
APR 09...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
JUN 25...	12.0	37.0	<.1	<.1	1	<1	542	<1.0	1.5	4.1	744	1	23
JUL 30...	--	--	--	8.2	--	--	--	--	--	--	--	--	--
AUG 27...	--	--	--	8.4	--	--	--	--	--	--	--	--	--

Date	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	DEF TOTAL (UG/L) (39040)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)
JUN 25...	1.1	20	<1	<.1	<.01	<.10	<.02	<.02	<.01	<.006	<.2	<.2	<.1

Date	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN TOTAL (UG/L) (39380)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL (UG/L) (39388)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)
JUN 25...	<3	<.007	<.5	<.006	<.2	<.009	<.5	<.006	<.2	<.02	<.2	<.01	<.2

Date	ETHION, TOTAL (UG/L) (39398)	TOX-APHENE, TOTAL (UG/L) (39400)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)
JUN 25...	<.01	<1	<50	<.01	<.2	<.009	<.2	<.020	<2.5	<.1	<5	.00	<.01

Date	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BI-PHENYL, NONA-CHLORO-SUR SCD 1325 PERCENT (90575)
JUN 25...	<.02	<.02	<.006	<.2	<.02	<.01	60

< -- Less than

02266205 WHITTENHORSE CREEK AT S-411, NEAR VINELAND, FL

LOCATION.--Lat 28°23'34", long 81°36'40", in SE¼ sec.16, T.24 S., R.27 E., Orange County, Hydrologic Unit 03090101, on upstream side of control structure S-411, 0.2 mi upstream from mouth, and 6.6 mi west of Vineland.

DRAINAGE AREA.--13 mi^2, approximately.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage and gate-opening recorder. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark). Auxiliary water-stage recorder at downstream side of control structure.

REMARKS.--Records fair. Flow regulated by operation of structure 411. At high stages interconnection exists between Reedy Creek, Whittenhorse Creek, and Boggy Creek.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.2	4.9	3.0	2.3	1.9	0.00	0.00	0.00	9.0	25	75
2	3.2	3.3	4.9	2.4	2.4	1.9	0.00	0.00	0.00	12	13	69
3	3.2	3.4	5.1	3.0	2.2	1.8	0.00	0.00	0.00	168	3.7	66
4	3.2	3.4	5.1	1.4	1.7	2.3	0.00	0.00	0.00	305	3.7	66
5	3.2	3.5	4.7	1.4	1.6	2.0	0.00	0.00	0.00	314	4.1	63
6	3.2	3.2	4.4	1.8	1.5	1.0	0.00	0.00	0.00	318	4.2	48
7	3.3	3.2	4.3	3.1	2.5	0.00	0.00	0.00	0.00	309	6.7	39
8	3.4	3.2	4.1	3.5	2.0	0.02	0.00	0.00	0.00	95	4.7	36
9	3.3	3.5	4.1	2.3	1.8	0.03	0.00	0.00	0.00	0.00	4.7	32
10	3.3	3.6	3.8	2.3	1.3	0.36	0.00	0.00	0.00	0.00	5.0	28
11	3.2	3.6	3.6	2.5	1.2	0.74	0.00	0.00	0.00	0.00	5.4	25
12	3.4	3.9	3.4	2.7	0.91	0.84	0.81	0.00	0.00	0.00	21	18
13	3.6	4.6	3.3	3.0	0.60	0.59	1.2	0.00	0.00	0.00	40	15
14	3.6	5.0	3.2	3.9	0.22	0.74	0.00	0.00	0.00	0.00	41	14
15	3.5	4.9	3.2	3.4	0.09	0.84	0.00	0.00	0.00	0.00	43	16
16	3.4	4.7	3.0	2.9	0.31	0.79	0.00	0.00	0.00	13	42	29
17	3.5	4.8	2.4	2.7	0.43	0.70	0.00	0.00	0.42	18	41	46
18	3.6	5.2	2.4	2.8	0.43	0.52	0.00	0.00	1.5	18	40	45
19	3.7	5.1	2.3	3.2	0.42	0.27	0.00	0.00	1.1	19	40	46
20	3.9	5.1	2.7	3.2	0.50	0.16	0.00	0.00	2.7	19	40	45
21	5.6	5.1	2.8	3.2	0.52	0.17	0.00	0.00	3.1	22	24	38
22	5.7	5.1	2.7	3.2	2.8	0.08	0.00	0.00	4.2	19	7.7	33
23	5.1	5.2	2.8	3.2	5.0	0.30	0.00	0.00	4.4	22	10	39
24	4.1	5.6	2.9	2.9	3.9	0.36	0.00	0.00	5.7	19	10	52
25	2.4	5.3	3.4	2.7	2.6	0.11	0.00	0.00	4.8	20	10	75
26	2.2	5.2	3.3	3.1	2.0	0.00	0.00	0.00	4.7	22	9.9	72
27	2.3	5.0	3.2	2.9	1.8	0.00	0.00	0.00	5.5	24	9.8	63
28	2.5	4.9	3.2	2.7	1.8	0.00	0.00	0.00	5.9	24	10	59
29	2.7	5.1	3.0	2.6	---	0.00	0.00	0.00	4.6	24	15	54
30	3.0	4.9	3.1	2.4	---	0.00	0.00	0.00	7.7	27	42	51
31	3.2	---	3.1	2.4	---	0.00	---	0.00	---	26	80	---
TOTAL	107.1	131.8	108.4	85.8	44.83	18.52	2.01	0.00	56.32	1866.00	656.6	1357
MEAN	3.45	4.39	3.50	2.77	1.60	0.60	0.067	0.000	1.88	60.2	21.2	45.2
MAX	5.7	5.6	5.1	3.9	5.0	2.3	1.2	0.00	7.7	318	80	75
MIN	2.2	3.2	2.3	1.4	0.09	0.00	0.00	0.00	0.00	0.00	3.7	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	9.10	5.30	4.92	8.45	3.81	5.33	2.02	0.67	1.41	6.67	6.92	7.01
MAX	66.1	22.2	23.5	71.8	23.4	25.5	8.87	2.55	8.97	60.2	59.3	45.2
(WY)	1996	1995	1995	1996	1998	1998	1987	1995	1991	2002	1995	2002
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1998	1990	1990	1997	2001	1997	1997	1996	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	604.94		4434.38			
ANNUAL MEAN	1.66		12.1		5.16	
HIGHEST ANNUAL MEAN					17.9	1995
LOWEST ANNUAL MEAN					0.21	1990
HIGHEST DAILY MEAN	7.7	Sep 14	318	Jul 6	318	Jul 6 2002
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 24	0.00	Mar 26	0.00	Many days
MAXIMUM PEAK STAGE			96.98	Sep 16	97.21	Mar 3 1993
10 PERCENT EXCEEDS	4.1		37		14	
50 PERCENT EXCEEDS	1.1		3.1		0.90	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

02266291 LATERAL 405 AT S-405A, NEAR DOCTOR PHILLIPS, FL

LOCATION.--Lat 28°25'37", long 81°36'19" in SW$^{1}/_{4}$ sec.3, T.24 S., R.27 E., Orange County, Hydrologic Unit 03090101, on right upstream wingwall of control structure S-405A, 200 ft upstream from Lateral 407, and 6.4 mi west of Doctor Phillips.

DRAINAGE AREA.--19.6 mi^2.

PERIOD OF RECORD.--June 1969 to September 1972 (gage heights and periodic discharge measurements only), October 1986 to current year.

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage and gate-opening recorder. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark). Auxiliary water-stage recorder at downstream side of control structure.

REMARKS.--Records good. Flow regulated by operation of structure 405A. Discharge computed from relation between discharge and gate openings and does not include leakage, which is less than 5.0 ft^3/s, around structure or gates.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	2.7	0.00	1.8	e0.00	24
2	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	2.7	0.00	1.8	e0.00	15
3	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	1.8	0.00	1.8	e0.00	9.9
4	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	1.8	0.00	1.8	e0.00	9.9
5	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	1.8	0.00	1.8	e0.00	15
6	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	1.8	0.00	1.8	e0.00	12
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.00	1.8	e0.00	9.0
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.00	1.8	e0.00	8.1
9	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	1.8	0.00	1.8	e0.00	7.2
10	0.00	0.00	e0.00	0.00	0.00	0.00	0.90	1.8	0.00	1.8	e0.00	4.5
11	0.00	0.00	e0.00	0.00	0.00	0.00	0.90	1.8	0.00	1.8	e0.00	3.6
12	0.00	0.00	e0.00	0.00	0.00	0.00	5.4	1.8	0.00	1.8	e0.00	0.00
13	0.00	0.00	e0.00	0.00	0.00	0.00	6.3	1.8	0.00	1.8	e0.00	0.00
14	0.00	0.00	e0.00	0.00	0.00	0.00	3.6	1.8	0.00	1.8	e0.00	0.00
15	0.00	0.00	e0.00	0.00	0.00	0.00	3.6	1.8	0.00	1.8	e0.00	0.00
16	5.4	0.00	e0.00	0.00	0.00	0.00	3.6	1.8	0.00	1.8	e0.00	0.00
17	8.1	0.00	e0.00	0.00	0.00	0.00	3.6	1.8	0.00	1.8	e0.00	5.4
18	9.0	0.00	e0.00	0.00	0.00	0.00	3.6	1.8	0.00	1.8	e0.90	3.6
19	9.0	0.00	0.00	0.00	0.00	0.00	2.7	1.8	0.00	1.8	e0.90	3.6
20	9.0	0.00	0.00	0.00	0.00	0.00	2.7	1.8	1.8	1.8	e0.90	7.2
21	9.0	e0.00	0.00	0.00	0.00	0.00	2.7	1.8	1.8	1.8	e0.90	7.2
22	9.0	e0.00	0.00	0.00	0.00	0.00	2.7	1.8	1.8	1.8	e0.90	6.3
23	4.5	e0.00	0.00	0.00	0.00	0.00	2.7	1.8	1.8	1.8	e0.90	5.4
24	0.00	e0.00	0.00	0.00	0.00	0.00	2.7	0.90	1.8	13	e0.90	4.5
25	0.00	e0.00	0.00	0.00	0.00	0.00	2.7	0.90	1.8	14	e0.90	5.4
26	0.00	e0.00	0.00	0.00	0.00	0.00	2.7	0.90	1.8	9.9	e0.90	4.5
27	0.00	e0.00	0.00	0.00	0.00	0.00	2.7	0.90	1.8	0.00	e0.90	4.5
28	0.00	e0.00	0.00	0.00	0.00	0.00	2.7	0.90	1.8	0.00	0.90	4.5
29	0.00	e0.00	0.00	0.00	---	0.00	2.7	0.00	1.8	0.00	7.2	3.6
30	0.00	e0.00	0.00	0.00	---	0.00	2.7	0.00	1.8	e0.00	25	2.7
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	e0.00	36	---
TOTAL	63.00	0.00	0.00	0.00	0.00	0.00	63.90	47.70	19.80	78.30	78.10	186.60
MEAN	2.03	0.000	0.000	0.000	0.000	0.000	2.13	1.54	0.66	2.53	2.52	6.22
MAX	9.0	0.00	0.00	0.00	0.00	0.00	6.3	2.7	1.8	14	36	24
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	4.47	3.90	8.98	7.96	8.11	8.48	6.39	3.31	2.92	3.55	2.62	4.11
MAX	14.2	17.0	104	73.9	85.0	74.5	29.5	22.1	28.0	22.6	17.1	17.7
(WY)	1997	1998	1998	1998	1998	1998	1998	1991	1991	1991	1997	1994
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1990	1990	1999	1999	2000	1999	1990	1990	1989	1989	1989	1989

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	73.43		537.40			
ANNUAL MEAN	0.20		1.47		5.39	
HIGHEST ANNUAL MEAN					32.7	1998
LOWEST ANNUAL MEAN					0.029	2001
HIGHEST DAILY MEAN	9.0	Oct 18-22	36	Aug 31	e200	Dec 27 1997
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Many days
MAXIMUM PEAK STAGE			96.50	Aug 30,31	96.57	Dec 27 1997
10 PERCENT EXCEEDS	0.00		4.0		11	
50 PERCENT EXCEEDS	0.00		0.00		1.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02266294 LATERAL 405 BELOW S-405, NEAR VINELAND, FL

LOCATION.--Lat 28°23'39", long 81°35'07", in SW¼ sec.14, T. 24 S., R. 27 E., Orange County, Hydrologic Unit 03090101, at downstream side of structure S-405 on Bear Island Road, 1.7 mi south of Walt Disney World's Magic Kingdom, and 6 mi southwest of Windermere.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Water years 1971-72, 1975-77, 1979-94, 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	COLOR (PLATINUM-COBALT UNITS) (00080)	OXYGEN, DISSOLVED (MG/L) (00300)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
JUN 26...	1400	290	6.2	26.3	.99	400	2.8	.26	.02	1.7	.070	.30	30.0

Date	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)
JUN 26...	.260	64	18.0	4.60	26.0	8.20	39	15.0	47.0	.1	20	<1	165

Date	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	SELENIUM, TOTAL (UG/L AS SE) (01147)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	CHLORPYRIFOS TOTAL RECOVER (UG/L) (38932)	DISULFOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)
JUN 26...	<1.0	<1.0	3.2	260	<1	30	1.0	13	<1	<.1	<.01	<.10	<.02

Date	DEF TOTAL (UG/L) (39040)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)	CHLORDANE, TECHNICAL TOTAL (UG/L) (39350)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDD, RECOVER IN BOTTOM MATERIAL (UG/KG) (39363)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDE, RECOVER IN BOTTOM MATERIAL (UG/KG) (39368)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	P,P'-DDT, RECOVER IN BOTTOM MATERIAL (UG/KG) (39373)
JUN 26...	<.02	<.01	<.006	<.2	<.2	<.1	<3	<.007	<.5	<.006	<.2	<.009	<.5

Date	DIELDRIN TOTAL (UG/L) (39380)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)	ENDOSULFAN I TOTAL (UG/L) (39388)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (UG/KG) (39389)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	ETHION, TOTAL (UG/L) (39398)	TOXAPHENE, TOTAL (UG/L) (39400)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39403)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)
JUN 26...	<.006	<.2	<.02	<.2	<.01	<.2	<.01	<1	<50	<.01	<.2	<.009	<.2

Date	METHOXYCHLOR, TOTAL (UG/L) (39480)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) (39519)	MALATHION, TOTAL (UG/L) (39530)	PARATHION, TOTAL (UG/L) (39540)	DIAZINON, TOTAL (UG/L) (39570)	METHYL PARATHION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG) (39758)	CARBOPHENOTHION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DYFONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BIPHENYL, NONACHLOROSUR SCD 1325 PERCENT (90575)
JUN 26...	<.020	<2.5	<.1	<5	E.07	<.01	<.02	<.02	<.006	<.2	<.02	<.01	58

< -- Less than
E -- Estimated value

02266295 LATERAL 410 AT S-410, NEAR VINELAND, FL

LOCATION.--Lat 28°21'58", long 81°35'55" in SE¼ sec.27, T.24 S., R.27 E., Orange County, Hydrologic Unit 03090101, at upstream side of control structure S-410, 0.5 mi west of sewage treatment plant road, 3.0 mi southwest of EPCOT Center, and 6.2 mi southwest of Vineland.

DRAINAGE AREA.--7.53 mi^2.

PERIOD OF RECORD.--October 1986 to current year.

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage and gate-opening recorder. Datum of gage is at NGVD of 1929. Auxilliary gage at downstream side of control structure 410.

REMARKS.--Records good except for periods of estimated daily discharge, which are fair. Flow regulated by operation of structure 410. Discharge computed from relation between discharge and gate openings and does not include leakage, which is less than 5.0 ft^3/s, around structure or gates. At high stages interconnection exists between Reedy Creek, Whittenhorse Creek, and Boggy Creek.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	2.0	e38
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	2.0	e35
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	2.0	e32
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	2.0	e31
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	2.0	e26
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	2.0	e22
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	6.8	e20
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	12	e19
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	14	e18
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	10	e17
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	8.1	e17
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	10	e16
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	17	e16
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	18	e18
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	23	e19
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	24	e21
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	23	e29
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	20	e26
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	18	e26
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	16	e26
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	16	e26
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	18	e25
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	22	e28
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	22	e34
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	20	e40
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	19	e38
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	19	e36
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	19	e34
29	0.00	0.00	0.00	0.00	---	0.00	0.00	e0.00	e0.00	e0.00	23	e32
30	0.00	0.00	0.00	0.00	---	0.00	0.00	e0.00	e0.00	e0.00	32	e30
31	0.00	---	0.00	0.00	---	0.00	---	e0.00	---	e0.00	41	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	482.9	795
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.6	26.5
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41	40
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.0	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

MEAN	4.78	4.12	5.53	3.04	2.67	4.90	4.75	2.19	2.54	5.09	7.05	8.35
MAX	23.5	24.7	18.9	14.1	10.4	23.4	19.8	11.2	19.3	26.2	31.4	26.5
(WY)	1993	1988	1989	1993	1993	1993	1993	1991	1991	1991	1997	2002
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1987	1987	1987	1987	1987	1999	1999	1999	1998	1998	1998	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	194.80		1277.90			
ANNUAL MEAN	0.53		3.50		4.59	
HIGHEST ANNUAL MEAN					12.4	1993
LOWEST ANNUAL MEAN					0.14	2000
HIGHEST DAILY MEAN	22	Sep 17	41	Aug 31	114	Apr 1 1987
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Many days
MAXIMUM PEAK STAGE					97.26	Oct 12 1995
10 PERCENT EXCEEDS	0.00		19		15	
50 PERCENT EXCEEDS	0.00		0.00		1.8	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02266298 REEDY CREEK ABOVE U.S. HIGHWAY 192 NEAR VINELAND, FL

LOCATION.--Lat 28°20'54", long 81°34'53", in SE¼ sec.35, T.24 S., R.27 E., Orange County, Hydrologic Unit 03090101, on right bank, 1.2 mi above State Highway 192, 5.8 mi southwest of Vineland, and 29 mi upstream from mouth.

PERIOD OF RECORD.--Water years 1983, 1986 to December 2002 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1982 to December 2002 (discontinued).
WATER TEMPERATURE: November 1982 to December 2002 (discontinued).
DISSOLVED OXYGEN: November 1982 to December 2002 (discontinued).

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 766 µS/cm @ 25 °C, Dec. 9, 2000; minimum daily mean, 77 µS/cm @ 25 °C, Aug. 25, 1991.
WATER TEMPERATURE: Maximum daily mean, 29.4 °C, July 23, 1996, June 24, 1998; minimum daily mean, 4.4 °C, Dec. 24, 1989.
DISSOLVED OXYGEN: Maximum daily mean, 11.1 mg/L, Jan. 5, 2001; minimum daily mean, 0.4 mg/L, July 15, 1987.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 291 µS/cm @ 25 °C, Dec. 16; minimum daily mean, 224 µS/cm @ 25 °C, Oct. 1.
WATER TEMPERATURE: Maximum daily mean, 24.9 °C, Oct. 25; minimum daily mean, 18.4 °C, Oct. 28.
DISSOLVED OXYGEN: Maximum daily mean, 4.9 mg/L, Dec. 2; minimum daily mean, 2.2 mg/L, Oct. 25.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD OCTOBER TO DECEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	254	284	---	---	---	---	---	---	---	---	---
2	229	257	283	---	---	---	---	---	---	---	---	---
3	231	259	282	---	---	---	---	---	---	---	---	---
4	234	260	282	---	---	---	---	---	---	---	---	---
5	237	261	281	---	---	---	---	---	---	---	---	---
6	239	264	283	---	---	---	---	---	---	---	---	---
7	240	262	283	---	---	---	---	---	---	---	---	---
8	239	263	283	---	---	---	---	---	---	---	---	---
9	240	267	283	---	---	---	---	---	---	---	---	---
10	240	270	284	---	---	---	---	---	---	---	---	---
11	242	273	285	---	---	---	---	---	---	---	---	---
12	244	275	286	---	---	---	---	---	---	---	---	---
13	245	276	286	---	---	---	---	---	---	---	---	---
14	246	269	287	---	---	---	---	---	---	---	---	---
15	245	268	289	---	---	---	---	---	---	---	---	---
16	242	265	291	---	---	---	---	---	---	---	---	---
17	242	269	289	---	---	---	---	---	---	---	---	---
18	246	267	---	---	---	---	---	---	---	---	---	---
19	247	271	---	---	---	---	---	---	---	---	---	---
20	248	276	---	---	---	---	---	---	---	---	---	---
21	246	276	---	---	---	---	---	---	---	---	---	---
22	241	273	---	---	---	---	---	---	---	---	---	---
23	237	273	---	---	---	---	---	---	---	---	---	---
24	236	276	---	---	---	---	---	---	---	---	---	---
25	238	278	---	---	---	---	---	---	---	---	---	---
26	242	279	---	---	---	---	---	---	---	---	---	---
27	245	280	---	---	---	---	---	---	---	---	---	---
28	248	282	---	---	---	---	---	---	---	---	---	---
29	248	283	---	---	---	---	---	---	---	---	---	---
30	249	283	---	---	---	---	---	---	---	---	---	---
31	251	---	---	---	---	---	---	---	---	---	---	---
MEAN	241	270	---	---	---	---	---	---	---	---	---	---
MAX	251	283	---	---	---	---	---	---	---	---	---	---
MIN	224	254	---	---	---	---	---	---	---	---	---	---

02266298 REEDY CREEK ABOVE U.S. HIGHWAY 192 NEAR VINELAND, FL--Continued

TEMPERATURE, WATER (DEG. C), PERIOD OCTOBER TO DECEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.2	21.3	20.1	---	---	---	---	---	---	---	---	---
2	21.9	22.0	20.4	---	---	---	---	---	---	---	---	---
3	22.4	22.4	20.7	---	---	---	---	---	---	---	---	---
4	23.1	22.5	21.0	---	---	---	---	---	---	---	---	---
5	23.5	21.6	20.8	---	---	---	---	---	---	---	---	---
6	24.2	20.1	20.9	---	---	---	---	---	---	---	---	---
7	24.7	19.5	21.5	---	---	---	---	---	---	---	---	---
8	24.3	19.6	22.0	---	---	---	---	---	---	---	---	---
9	23.5	19.4	22.1	---	---	---	---	---	---	---	---	---
10	23.2	19.2	22.3	---	---	---	---	---	---	---	---	---
11	23.5	18.9	22.1	---	---	---	---	---	---	---	---	---
12	23.9	19.2	22.1	---	---	---	---	---	---	---	---	---
13	23.9	19.6	21.7	---	---	---	---	---	---	---	---	---
14	24.3	19.9	22.4	---	---	---	---	---	---	---	---	---
15	24.5	19.8	22.4	---	---	---	---	---	---	---	---	---
16	24.1	19.5	22.4	---	---	---	---	---	---	---	---	---
17	22.2	19.9	21.8	---	---	---	---	---	---	---	---	---
18	21.4	20.5	---	---	---	---	---	---	---	---	---	---
19	22.3	20.5	---	---	---	---	---	---	---	---	---	---
20	23.4	20.4	---	---	---	---	---	---	---	---	---	---
21	23.6	19.9	---	---	---	---	---	---	---	---	---	---
22	23.7	19.6	---	---	---	---	---	---	---	---	---	---
23	23.7	20.2	---	---	---	---	---	---	---	---	---	---
24	24.4	20.7	---	---	---	---	---	---	---	---	---	---
25	24.9	21.0	---	---	---	---	---	---	---	---	---	---
26	23.1	20.8	---	---	---	---	---	---	---	---	---	---
27	19.7	20.4	---	---	---	---	---	---	---	---	---	---
28	18.4	20.1	---	---	---	---	---	---	---	---	---	---
29	19.1	20.3	---	---	---	---	---	---	---	---	---	---
30	20.2	20.3	---	---	---	---	---	---	---	---	---	---
31	20.7	---	---	---	---	---	---	---	---	---	---	---
MEAN	22.8	20.3	---	---	---	---	---	---	---	---	---	---
MAX	24.9	22.5	---	---	---	---	---	---	---	---	---	---
MIN	18.4	18.9	---	---	---	---	---	---	---	---	---	---

OXYGEN DISSOLVED (MG/L), PERIOD OCTOBER TO DECEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	---	4.8	---	---	---	---	---	---	---	---	---
2	3.8	3.7	4.9	---	---	---	---	---	---	---	---	---
3	3.9	3.6	4.8	---	---	---	---	---	---	---	---	---
4	3.8	3.6	4.7	---	---	---	---	---	---	---	---	---
5	3.8	3.8	4.7	---	---	---	---	---	---	---	---	---
6	3.6	4.3	4.5	---	---	---	---	---	---	---	---	---
7	3.4	4.7	4.4	---	---	---	---	---	---	---	---	---
8	3.3	4.7	4.2	---	---	---	---	---	---	---	---	---
9	3.6	4.7	4.0	---	---	---	---	---	---	---	---	---
10	3.6	4.8	4.1	---	---	---	---	---	---	---	---	---
11	3.2	4.7	4.2	---	---	---	---	---	---	---	---	---
12	3.2	4.3	4.2	---	---	---	---	---	---	---	---	---
13	3.2	4.2	4.3	---	---	---	---	---	---	---	---	---
14	3.1	3.5	4.0	---	---	---	---	---	---	---	---	---
15	3.0	3.7	4.0	---	---	---	---	---	---	---	---	---
16	3.0	4.1	4.1	---	---	---	---	---	---	---	---	---
17	3.4	4.8	4.4	---	---	---	---	---	---	---	---	---
18	3.6	4.6	---	---	---	---	---	---	---	---	---	---
19	3.5	4.5	---	---	---	---	---	---	---	---	---	---
20	3.2	4.4	---	---	---	---	---	---	---	---	---	---
21	3.0	4.7	---	---	---	---	---	---	---	---	---	---
22	2.8	4.8	---	---	---	---	---	---	---	---	---	---
23	2.7	4.7	---	---	---	---	---	---	---	---	---	---
24	2.5	4.6	---	---	---	---	---	---	---	---	---	---
25	2.2	4.4	---	---	---	---	---	---	---	---	---	---
26	2.6	4.5	---	---	---	---	---	---	---	---	---	---
27	3.5	4.6	---	---	---	---	---	---	---	---	---	---
28	3.8	4.8	---	---	---	---	---	---	---	---	---	---
29	3.8	4.7	---	---	---	---	---	---	---	---	---	---
30	---	4.7	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

02266300 REEDY CREEK NEAR VINELAND, FL

LOCATION.--Lat 28°19'57", long 81°34'48", in NE¼ sec.11, T.25 S., R.27 E., Osceola County, Hydrologic Unit 03090101, 100 ft downstream of bridge on U.S. Highway 192, about 2.5 mi upstream from bridge on Interstate Highway 4, 6.5 mi southwest of Vineland, and 28 mi upstream from mouth.

DRAINAGE AREA.--84.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Water years 1960, 1962-66 (annual maximum), May 1966 to current year.

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 66.37 ft above NGVD of 1929. Sept. 26, 1962, to January 1966, crest-stage gage at site 200 ft upstream at same datum. May 1966 to July 29, 1999 at site 100 ft upstream at same datum.

REMARKS.--Records good. Natural flow of stream affected by several canals, levees, and control structures.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	20	15	4.3	7.9	24	2.8	0.62	0.00	251	56	270
2	41	20	15	9.1	7.4	22	2.5	0.52	0.00	229	51	237
3	38	22	15	49	7.0	21	2.5	0.45	0.00	165	46	210
4	35	21	16	42	6.6	24	2.4	0.37	0.00	131	72	193
5	34	21	15	19	6.1	24	2.4	0.31	0.00	106	54	226
6	32	20	15	14	5.7	21	2.1	0.28	0.00	90	38	213
7	31	19	15	13	8.8	19	1.9	0.27	0.60	78	43	187
8	32	18	15	11	14	17	1.7	0.23	0.73	98	136	176
9	31	18	16	9.1	14	15	1.6	0.17	0.58	106	89	159
10	29	17	15	7.4	13	15	1.5	0.12	0.39	99	66	145
11	28	16	15	6.7	14	13	1.5	0.07	2.7	96	50	134
12	27	16	14	6.3	12	12	1.8	0.00	3.4	78	49	130
13	25	16	9.5	6.6	8.7	14	2.4	0.00	2.7	78	140	138
14	25	20	4.5	8.9	6.5	13	3.6	0.10	5.7	116	266	135
15	28	22	3.1	18	5.1	11	4.1	0.48	14	101	269	138
16	27	21	2.5	18	4.6	11	5.1	0.24	37	73	248	142
17	27	19	2.4	15	4.5	9.6	4.9	0.14	39	56	197	333
18	25	18	2.4	14	4.2	8.9	3.7	0.78	45	53	167	301
19	23	18	2.3	13	3.7	8.1	3.2	1.1	36	71	140	247
20	23	19	2.4	12	3.4	7.8	2.2	1.0	52	65	134	267
21	23	19	2.3	12	3.4	6.8	1.3	0.89	139	87	153	236
22	29	17	2.3	11	15	6.7	0.96	0.76	148	197	216	229
23	36	16	2.3	11	66	5.8	0.59	0.68	220	133	197	278
24	35	15	2.5	9.7	151	5.8	0.42	0.61	246	93	120	329
25	32	15	2.7	9.1	135	5.4	0.40	0.51	290	107	105	410
26	29	15	3.3	8.9	102	5.5	0.54	0.39	257	218	97	409
27	25	15	3.5	8.9	50	5.4	1.1	0.34	321	158	87	348
28	22	15	3.9	8.7	28	3.9	0.80	0.36	190	111	85	276
29	21	15	4.1	8.9	---	3.2	0.71	0.25	114	90	137	238
30	21	15	4.1	8.8	---	3.1	0.65	0.09	126	75	192	211
31	21	---	4.3	8.6	---	2.8	---	0.00	---	65	283	---
TOTAL	901	538	245.4	402.0	707.6	364.8	61.37	12.13	2290.80	3474	3983	6945
MEAN	29.1	17.9	7.92	13.0	25.3	11.8	2.05	0.39	76.4	112	128	232
MAX	46	22	16	49	151	24	5.1	1.1	321	251	283	410
MIN	21	15	2.3	4.3	3.4	2.8	0.40	0.00	0.00	53	38	130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

MEAN	45.2	31.9	35.4	38.6	38.7	39.7	25.4	15.5	30.7	52.1	63.1	69.0
MAX	195	159	339	257	278	271	109	75.7	108	151	198	232
(WY)	1996	1988	1998	1998	1998	1998	1987	1991	1991	1991	1995	2002
MIN	3.58	0.18	2.63	2.68	1.62	6.20	0.079	0.000	0.000	8.86	14.3	7.45
(WY)	1968	1968	1968	1968	2001	1968	1967	1967	1967	1969	2000	1978

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	10207.87		19925.10			
ANNUAL MEAN	28.0		54.6		40.5	
HIGHEST ANNUAL MEAN					135	1998
LOWEST ANNUAL MEAN					15.9	1971
HIGHEST DAILY MEAN	693	Sep 15	410	Sep 25	1110	Dec 28 1997
LOWEST DAILY MEAN	0.00	May 21,27	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.06	May 16	0.00	May 31	0.00	Many days
MAXIMUM PEAK FLOW			424	Sep 25	*1910	Sep 11 1960
MAXIMUM PEAK STAGE			11.68	Sep 25	14.90	Sep 11 1960
10 PERCENT EXCEEDS	73		192		92	
50 PERCENT EXCEEDS	11		15		22	
90 PERCENT EXCEEDS	0.70		0.61		6.0	

* From floodmark

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961-63, 1965-66, 1968-94, 1996 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1977 to current year.
pH: June 1977 to June 1986.
WATER TEMPERATURE: June 1977 to current year.
DISSOLVED OXYGEN: June 1977 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Extremes for current year and extremes for period of daily record are based on recorded values and may have been exceeded during periods of of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 823 µS/cm @ 25 °C, Dec. 10, 2000; minimum daily mean, 50 µS/cm @ 25 °C, Nov. 4, 1987.
pH: Maximum daily mean, 7.4 units, Jan. 5, 1980, June 8, 1986; minimum daily mean, 4.9 units, July 21, 1978.
WATER TEMPERATURE: Maximum daily mean, 28.8 °C, Aug. 6, 1989; minimum daily mean, 5.5 °C, Dec. 24 ,25, 1989.
DISSOLVED OXYGEN: Maximum daily mean, 9.8 mg/L, Mar. 3, 1980; minimum daily mean, 0.1 mg/L, Sept. 5, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 324 µS/cm @ 25 °C, Jan. 3; minimum daily mean, 130 µS/cm @ 25 °C, Sept. 26.
WATER TEMPERATURE: Maximum daily mean, 27.4 °C, July 17; minimum daily mean, 9.5 °C, Jan. 9.
DISSOLVED OXYGEN: Maximum daily mean, 7.2 mg/L, Jan. 9; minimum daily mean, 1.1 mg/L, July 16,19,24,28, Aug. 1.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	250	284	281	277	254	---	---	---	163	191	152
2	220	253	283	277	276	256	---	---	---	165	191	148
3	223	253	284	324	275	261	---	---	---	182	191	146
4	231	257	288	321	273	258	---	---	---	191	197	145
5	233	258	287	293	273	259	---	---	---	198	198	144
6	232	261	288	284	273	262	---	---	---	204	203	148
7	234	263	287	279	272	268	---	---	---	206	199	147
8	234	262	288	280	271	270	---	---	---	195	192	146
9	234	266	290	282	269	274	---	---	---	198	189	146
10	232	268	296	283	272	277	---	---	---	196	186	146
11	234	271	292	283	270	281	---	---	---	199	187	148
12	241	274	291	284	---	283	---	---	---	203	184	149
13	245	276	294	283	---	284	---	---	358	202	173	149
14	248	274	296	282	---	287	305	---	340	196	160	154
15	241	270	297	279	---	287	307	---	368	199	153	156
16	243	268	295	277	---	289	304	---	374	202	157	159
17	246	268	296	276	---	291	310	---	316	217	161	137
18	245	269	294	274	---	290	309	---	294	209	165	144
19	249	268	290	274	---	288	---	---	298	195	164	148
20	247	274	287	274	---	290	---	---	271	200	165	147
21	249	276	281	273	---	289	---	---	218	199	164	147
22	243	275	277	273	---	289	---	---	205	166	159	140
23	237	275	276	275	242	289	---	---	181	183	158	137
24	233	276	277	278	225	289	---	---	165	195	162	137
25	234	280	276	278	243	290	---	---	205	188	162	132
26	238	280	273	278	254	291	---	---	185	166	164	130
27	241	280	271	276	258	291	---	---	164	169	164	132
28	245	281	269	274	254	294	---	---	183	182	166	134
29	246	282	269	281	---	298	---	---	209	188	167	135
30	246	284	273	280	---	302	---	---	191	190	165	137
31	247	---	283	278	---	---	---	---	---	191	158	---
MEAN	238	270	285	282	---	---	---	---	---	192	174	144
MAX	249	284	297	324	---	---	---	---	---	217	203	159
MIN	218	250	269	273	---	---	---	---	---	163	153	130

CAL YR 2001 MEAN 276 MAX 416 MIN 161

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.3	21.1	19.8	13.9	20.8	14.3	---	---	---	24.4	26.6	26.4
2	20.7	21.7	20.2	14.1	20.8	17.1	---	---	---	24.4	26.1	26.8
3	21.4	22.1	20.4	14.0	20.2	19.4	---	---	---	24.5	25.5	26.9
4	22.3	22.3	20.8	10.4	18.5	17.3	---	---	---	24.8	25.5	26.7
5	22.9	21.5	20.6	10.5	15.7	14.3	---	---	---	24.5	26.1	26.5
6	23.8	19.8	20.8	12.8	16.3	15.6	---	---	---	24.7	26.8	26.2
7	24.3	19.1	21.4	13.0	17.9	16.9	---	---	---	25.0	26.4	26.4
8	23.9	19.1	21.8	10.4	15.8	18.1	---	---	---	24.9	25.3	26.4
9	23.2	19.0	21.8	9.5	16.0	19.4	---	---	---	24.9	24.9	26.5
10	22.9	18.7	22.2	10.2	18.1	20.2	---	---	---	24.8	25.2	26.2
11	23.1	18.5	22.0	11.0	18.0	19.8	---	---	---	24.8	25.2	25.7
12	23.4	18.8	22.0	12.4	17.6	20.3	---	---	---	25.1	25.2	25.0
13	23.5	19.3	21.6	13.7	16.7	20.8	---	---	24.9	25.0	24.6	25.3
14	23.9	19.7	22.1	13.9	15.9	20.0	21.7	---	25.3	25.5	24.9	26.1
15	24.1	19.6	22.3	15.5	15.7	20.3	21.4	---	25.0	26.2	25.1	26.2
16	23.7	19.2	22.3	14.3	16.9	21.6	22.3	---	24.7	26.8	25.7	26.5
17	21.8	19.6	21.7	15.0	15.8	22.5	22.9	---	24.3	27.4	26.3	26.1
18	20.7	20.3	21.0	16.1	14.9	22.4	23.0	---	23.4	27.2	26.0	26.4
19	21.7	20.4	17.9	15.7	14.9	22.7	---	---	23.8	26.6	26.0	26.6
20	23.0	20.1	16.9	17.5	16.0	22.5	---	---	23.6	26.5	25.5	26.6
21	23.4	19.6	15.0	18.6	17.6	22.3	---	---	23.5	25.3	25.4	26.6
22	23.4	19.4	14.8	19.4	18.8	21.7	---	---	23.8	24.8	25.4	26.3
23	23.4	19.9	15.7	20.1	17.5	19.6	---	---	24.0	25.5	25.5	25.9
24	24.0	20.4	17.3	19.9	15.5	19.8	---	---	24.3	26.2	25.6	25.9
25	24.6	20.9	15.9	19.7	16.0	20.9	---	---	24.4	26.3	25.7	25.9
26	22.9	20.6	13.6	20.7	17.4	22.1	---	---	24.4	25.8	25.7	26.1
27	19.1	20.3	11.7	20.4	16.7	22.0	---	---	24.6	26.2	25.5	26.4
28	17.6	19.8	12.2	20.6	13.5	21.6	---	---	24.8	26.7	25.6	26.3
29	18.4	20.0	14.5	20.9	---	21.6	---	---	24.9	26.4	25.6	26.4
30	19.6	20.0	15.6	20.7	---	22.7	---	---	24.6	26.2	25.5	26.4
31	20.2	---	15.5	21.1	---	---	---	---	---	26.4	25.7	---
MEAN	22.3	20.0	18.8	15.7	17.0	---	---	---	---	25.6	25.6	26.3
MAX	24.6	22.3	22.3	21.1	20.8	---	---	---	---	27.4	26.8	26.9
MIN	17.6	18.5	11.7	9.5	13.5	---	---	---	---	24.4	24.6	25.0

CAL YR 2001 MEAN 21.2 MAX 27.0 MIN 7.9

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.3	4.0	6.4	2.5	6.8	---	---	---	2.2	1.1	2.7
2	2.5	3.0	4.1	6.6	2.5	6.2	---	---	---	2.0	1.2	2.6
3	2.5	2.6	4.0	5.0	3.1	5.7	---	---	---	1.8	1.7	2.4
4	2.4	2.7	3.9	6.0	4.4	6.0	---	---	---	1.6	1.6	2.5
5	2.4	2.9	4.0	6.9	4.7	7.0	---	---	---	1.7	1.5	2.4
6	2.2	3.4	3.9	6.4	3.9	6.8	---	---	---	1.8	1.5	2.6
7	2.2	3.8	3.8	6.3	3.7	6.4	---	---	---	1.9	1.6	2.5
8	2.3	4.0	3.5	7.0	5.1	6.1	---	---	---	1.7	2.0	2.5
9	2.3	4.0	3.4	7.2	5.1	5.7	---	---	---	1.7	1.8	2.4
10	2.0	4.1	3.4	6.6	4.5	5.5	---	---	---	1.9	1.9	2.0
11	2.0	4.2	3.6	6.3	4.8	5.6	---	---	---	2.0	1.9	1.5
12	1.9	4.2	3.6	5.1	---	5.4	---	---	---	1.9	2.2	1.7
13	2.0	4.0	3.4	4.3	---	5.1	---	---	3.7	2.0	2.5	1.6
14	1.9	3.7	3.1	5.2	---	4.7	3.4	---	3.1	1.7	3.2	1.5
15	1.7	3.7	2.9	4.9	---	4.6	3.9	---	3.1	1.4	3.1	1.4
16	2.0	3.9	2.7	5.3	---	4.3	3.7	---	2.6	1.1	2.4	1.7
17	2.2	4.0	3.1	4.9	---	4.1	3.9	---	2.3	1.2	1.8	2.3
18	2.8	3.7	3.3	4.6	---	4.1	3.7	---	2.1	1.4	1.9	1.9
19	2.5	3.6	3.9	4.5	---	4.0	---	---	2.1	1.1	1.7	1.9
20	2.0	3.7	4.2	3.3	---	4.0	---	---	1.9	1.2	1.7	1.9
21	1.9	3.9	5.1	2.8	---	4.1	---	---	2.2	1.8	2.1	1.8
22	1.5	3.9	4.8	2.5	---	4.1	---	---	2.5	1.8	2.4	2.1
23	1.4	3.8	4.4	2.4	5.2	4.7	---	---	2.8	1.2	2.1	1.9
24	1.7	3.6	3.1	3.0	5.5	4.7	---	---	2.4	1.1	1.8	1.8
25	1.5	3.5	5.5	2.8	5.2	4.5	---	---	2.3	1.4	1.9	1.8
26	2.0	3.6	6.3	1.7	4.6	4.4	---	---	2.6	1.8	1.9	1.7
27	3.2	3.6	7.1	2.8	4.9	4.0	---	---	2.2	1.3	1.9	1.6
28	4.0	3.9	6.6	2.6	6.8	3.6	---	---	1.6	1.1	2.1	1.5
29	3.9	3.8	4.8	2.4	---	3.5	---	---	1.4	1.3	2.2	1.5
30	3.7	3.8	4.7	2.6	---	3.1	---	---	2.2	1.4	2.8	1.6
31	3.5	---	6.1	2.2	---	---	---	---	---	1.4	2.9	---
MEAN	2.3	3.7	4.2	4.5	---	---	---	---	---	1.6	2.0	2.0
MAX	4.0	4.2	7.1	7.2	---	---	---	---	---	2.2	3.2	2.7
MIN	1.4	2.6	2.7	1.7	---	---	---	---	---	1.1	1.1	1.4

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)
OCT													
23...	1045	37	9.84	234	6.2	23.1	--	--	1.9	.02	--	<.010	--
NOV													
19...	1500	18	9.28	266	6.3	20.9	--	--	4.1	.04	--	.010	--
DEC													
19...	1130	2.4	8.65	287	6.9	17.3	--	--	4.6	.06	--	<.010	--
JAN													
15...	1520	18	9.29	285	6.4	15.2	--	--	1.9	<.01	--	<.010	--
FEB													
12...	1430	12	9.09	275	6.3	17.4	--	--	5.0	.04	--	<.010	--
MAR													
11...	1500	13	9.10	284	6.4	20.6	--	--	5.8	.03	--	<.010	--
APR													
09...	1300	1.7	8.49	301	6.5	21.1	--	--	2.5	.03	--	<.010	--
JUN													
26...	1300	191	10.79	236	5.9	24.8	.89	400	2.7	.05	.04	.010	.02
JUL													
30...	1500	73	9.97	189	5.6	27.1	--	--	2.6	.04	--	.020	--
AUG													
27...	1200	86	9.98	158	5.7	25.6	--	--	2.8	.03	--	.020	--
SEP													
23...	1200	277	11.12	141	5.9	26.2	--	--	2.1	.05	--	.020	--

Date	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
OCT													
23...	E2.5	--	.10	E.14	.14	58.0	--	--	--	--	--	--	--
NOV													
19...	E1.9	--	.29	E.10	.09	49.0	--	--	--	--	--	--	--
DEC													
19...	1.4	--	.22	.08	.10	38.0	--	--	--	--	--	--	--
JAN													
15...	1.4	--	.09	.05	.04	43.0	--	--	--	--	--	--	--
FEB													
12...	1.5	--	.15	.05	.05	1.1	--	--	--	--	--	--	--
MAR													
11...	1.7	--	.26	.08	.06	39.0	--	--	--	--	--	--	--
APR													
09...	1.7	--	.15	.07	.05	30.0	--	--	--	--	--	--	--
JUN													
26...	1.7	.170	.17	.10	.11	43.0	.100	53	15.0	3.80	22.0	5.00	20
JUL													
30...	2.3	--	.13	.17	.18	63.0	--	--	--	--	--	--	--
AUG													
27...	2.7	--	.16	.19	.18	61.0	--	--	--	--	--	--	--
SEP													
23...	1.8	--	.19	.14	.19	60.0	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 23...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
NOV 19...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
JAN 15...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
FEB 12...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
APR 09...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
JUN 26...	16.0	39.0	<.1	13.0	9	<1	352	<1.0	1.0	2.1	241	<1	8
JUL 30...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
AUG 27...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
SEP 23...	--	--	--	.0	--	--	--	--	--	--	--	--	--

Date	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	DEF TOTAL (UG/L) (39040)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)
JUN 26...	<1.0	6	<1	<.1	<.01	<.10	<.02	<.02	<.01	<.006	<.2	<.2	<.1

Date	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN TOTAL (UG/L) (39380)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL (UG/L) (39388)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)
JUN 26...	<3	<.007	<.5	<.006	<.2	<.009	<.5	<.006	<.2	<.02	<.2	<.01	<.2

Date	ETHION, TOTAL (UG/L) (39398)	TOX-APHENE, TOTAL (UG/L) (39400)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)
JUN 26...	<.01	<1	<50	<.01	<.2	<.009	<.2	<.020	<2.5	<.1	<5	E.01	<.01

Date	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BI-PHENYL, NONA-CHLORO-SUR SCD 1325 PERCENT (90575)
JUN 26...	<.02	<.02	<.006	<.2	<.02	<.01	59

Date	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BI-PHENYL, NONA-CHLORO-SUR SCD 1325 PERCENT (90575)
JUN 26...	<.02	<.02	<.006	<.2	<.02	<.01	59

< -- Less than
E -- Estimated value

02266480 DAVENPORT CREEK NEAR LOUGHMAN, FL

LOCATION.--Lat 28°16'15", long 81°35'28", in NW¼ sec.35, T.25 S., R.27 E., Osceola County, Hydrologic Unit 03090101, at downstream side of culverts on State Highway 545, 2.0 mi upstream from mouth, and 2.5 mi northwest of Loughman.

DRAINAGE AREA.--23.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 77.69 ft above NGVD of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	5.5	3.2	3.0	4.0	15	2.4	1.1	0.68	86	13	74
2	18	5.5	3.2	4.3	3.9	13	3.4	1.0	0.64	87	13	63
3	16	6.6	3.1	6.9	3.8	12	4.4	0.94	0.59	74	12	61
4	14	6.2	3.0	5.9	3.6	13	4.9	0.89	0.57	59	13	60
5	13	5.8	3.0	5.3	3.5	13	4.4	0.87	0.58	46	11	53
6	12	5.6	3.0	5.1	3.4	11	4.0	0.85	0.56	37	9.5	47
7	11	5.2	3.3	5.0	4.0	11	3.8	0.81	1.0	30	11	38
8	11	5.0	3.8	4.9	4.8	9.9	3.5	0.78	1.5	26	15	31
9	9.8	4.9	4.1	4.8	4.6	9.0	3.0	0.73	0.95	21	14	26
10	9.2	4.7	4.0	4.6	4.7	8.2	4.6	0.67	0.78	22	14	22
11	8.7	4.4	3.8	4.4	4.9	7.3	7.1	0.66	0.81	23	11	21
12	8.1	4.2	3.6	4.3	4.6	6.4	5.6	0.64	0.90	24	12	23
13	7.7	4.2	3.5	4.4	4.3	7.3	6.3	0.64	0.79	25	21	25
14	7.8	4.7	3.3	4.7	4.2	7.3	7.1	0.65	0.84	43	33	27
15	8.6	4.9	3.1	7.1	4.1	6.0	8.7	0.66	1.4	48	63	26
16	8.2	4.7	3.0	7.0	3.9	5.4	8.6	0.64	3.4	38	71	24
17	7.8	4.2	3.0	6.7	3.8	5.0	7.2	0.72	6.0	27	58	57
18	7.4	4.2	3.3	6.4	3.6	4.6	5.1	1.4	7.9	22	42	73
19	7.1	4.1	3.3	6.1	3.4	4.0	3.8	1.4	8.1	35	31	60
20	7.1	4.1	3.1	5.8	3.3	3.7	3.0	1.2	18	43	26	47
21	7.2	4.0	3.0	5.6	3.1	3.3	2.3	0.92	23	39	23	38
22	8.2	3.9	3.0	5.5	9.7	3.1	1.9	0.80	24	42	20	36
23	8.7	3.9	3.0	5.3	26	2.9	1.7	0.74	28	38	19	60
24	8.4	3.8	3.0	5.1	43	2.6	1.5	0.70	30	31	17	83
25	8.0	3.7	3.1	5.0	45	2.4	1.3	0.68	30	26	15	117
26	7.6	3.6	3.5	4.9	35	2.7	1.3	0.66	29	35	14	147
27	7.1	3.6	3.3	4.8	24	3.4	1.8	0.67	37	39	14	135
28	6.6	3.5	3.2	4.7	18	2.7	1.5	0.66	39	30	14	112
29	6.3	3.4	3.1	4.6	---	2.3	1.2	0.64	37	23	17	84
30	6.0	3.3	3.0	4.3	---	2.1	1.2	0.66	48	18	25	68
31	5.7	---	3.0	4.2	---	1.9	---	0.77	---	15	59	---
TOTAL	293.3	135.4	100.9	160.7	284.2	201.5	116.6	25.15	380.99	1152	730.5	1738
MEAN	9.46	4.51	3.25	5.18	10.2	6.50	3.89	0.81	12.7	37.2	23.6	57.9
MAX	21	6.6	4.1	7.1	45	15	8.7	1.4	48	87	71	147
MIN	5.7	3.3	3.0	3.0	3.1	1.9	1.2	0.64	0.56	15	9.5	21
CFSM	0.41	0.20	0.14	0.23	0.44	0.28	0.17	0.04	0.55	1.62	1.02	2.52
IN.	0.47	0.22	0.16	0.26	0.46	0.33	0.19	0.04	0.62	1.86	1.18	2.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

MEAN	12.2	10.0	11.5	12.7	12.7	11.7	7.37	4.16	8.02	15.4	17.1	19.7
MAX	62.0	39.9	80.8	44.5	57.3	58.0	40.9	24.7	34.3	48.3	59.6	57.9
(WY)	1970	1970	1998	1998	1998	1998	1984	1979	1982	1991	1995	2002
MIN	1.34	1.06	1.15	1.20	1.05	1.49	0.90	0.48	0.85	1.58	1.83	2.08
(WY)	2001	2001	2001	2001	2001	1974	1981	1981	2001	2001	1989	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	2364.08		5319.24			
ANNUAL MEAN	6.48		14.6		11.9	
HIGHEST ANNUAL MEAN					31.0	1970
LOWEST ANNUAL MEAN					3.90	1981
HIGHEST DAILY MEAN	139	Sep 15	147	Sep 26	234	Oct 3 1969
LOWEST DAILY MEAN	0.53	Jun 13,14	0.56	Jun 6	0.37	May 19 1981
ANNUAL SEVEN-DAY MINIMUM	0.60	May 30	0.63	May 31	0.42	May 13 1981
MAXIMUM PEAK FLOW			149	Sep 26	498	Sep 22 1969
MAXIMUM PEAK STAGE			8.09	Sep 26	9.76	Sep 22 1969
INSTANTANEOUS LOW FLOW			0.51	Jun 5,6	0.32	May 19 1981
ANNUAL RUNOFF (CFSM)	0.28		0.63		0.52	
ANNUAL RUNOFF (INCHES)	3.82		8.60		7.01	
10 PERCENT EXCEEDS	14		39		30	
50 PERCENT EXCEEDS	1.6		5.4		5.5	
90 PERCENT EXCEEDS	0.80		0.93		1.6	

02266480 DAVENPORT CREEK NEAR LOUGHMAN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1968-94, 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)
OCT													
24...	0830	8.6	5.34	198	6.5	23.3	--	--	5.2	.02	--	<.010	--
NOV													
19...	1400	4.2	5.00	186	6.8	20.9	--	--	6.3	.02	--	<.010	--
DEC													
18...	1315	3.4	4.90	171	6.9	21.0	--	--	6.4	.04	--	<.010	--
JAN													
15...	1315	7.4	5.22	201	6.7	16.5	--	--	7.5	<.01	--	<.010	--
FEB													
12...	1145	4.7	5.00	198	6.7	17.5	--	--	7.9	.01	--	<.010	--
MAR													
11...	1400	7.4	5.20	200	6.4	19.5	--	--	7.1	.03	--	<.010	--
APR													
09...	1100	3.1	4.90	148	7.1	20.5	--	--	7.8	.03	--	<.010	--
MAY													
07...	1000	.84	4.57	144	7.1	24.6	--	--	7.6	<.01	--	<.010	--
JUN													
04...	1200	.60	4.53	132	7.0	25.8	--	--	7.1	.02	--	<.010	--
25...	1000	31	6.39	280	5.8	23.6	1.0	480	4.9	.03	.04	.010	.02
JUL													
30...	1200	18	5.89	134	5.8	25.2	--	--	4.9	.04	--	.020	--
AUG													
27...	0900	14	5.62	149	6.1	24.5	--	--	5.1	.03	--	.020	--
SEP													
24...	0700	78	7.42	122	6.0	24.7	--	--	4.0	.02	--	.030	--

Date	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)
OCT													
24...	E1.9	--	.22	E.06	.06	65.0	--	--	--	--	--	--	--
NOV													
19...	E1.7	--	.35	E.04	.04	45.0	--	--	--	--	--	--	--
DEC													
18...	1.4	--	.43	.05	.05	38.0	--	--	--	--	--	--	--
JAN													
15...	1.6	--	.17	.05	.03	50.0	--	--	--	--	--	--	--
FEB													
12...	1.9	--	.26	.03	.03	4.7	--	--	--	--	--	--	--
MAR													
11...	2.3	--	.23	.03	.02	49.0	--	--	--	--	--	--	--
APR													
09...	.50	--	.63	.03	.03	13.0	--	--	--	--	--	--	--
MAY													
07...	.60	--	.53	<.02	.03	10.0	--	--	--	--	--	--	--
JUN													
04...	.20	--	.55	.03	.04	4.3	--	--	--	--	--	--	--
25...	2.3	.090	.10	.02	.02	73.0	.020	120	33.0	8.40	12.0	2.20	16
JUL													
30...	3.4	--	.17	.23	.23	97.0	--	--	--	--	--	--	--
AUG													
27...	3.5	--	.22	.27	.25	88.0	--	--	--	--	--	--	--
SEP													
24...	3.0	--	.03	.19	.19	88.0	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02266480 DAVENPORT CREEK NEAR LOUGHMAN, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 24...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
NOV 19...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
DEC 18...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
JAN 15...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
FEB 12...	--	--	--	4.3	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	5.3	--	--	--	--	--	--	--	--	--
APR 09...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
MAY 07...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
JUN 04...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
25...	62.0	25.0	<.1	<.1	2	<1	388	<1.0	<1.0	1.4	422	<1	25
JUL 30...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
AUG 27...	--	--	--	<.1	--	--	--	--	--	--	--	--	--
SEP 24...	--	--	--	<.1	--	--	--	--	--	--	--	--	--

Date	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	DEF TOTAL (UG/L) (39040)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)
JUN 25...	<1.0	37	<1	<.1	<.01	<.10	<.02	<.02	<.01	<.006	<.2	<.2	<.1

Date	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN TOTAL (UG/L) (39380)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL (UG/L) (39388)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)
JUN 25...	<3	<.007	<.5	<.006	E.2	<.009	<.5	<.006	<.2	<.02	<.2	<.01	<.2

Date	ETHION, TOTAL (UG/L) (39398)	TOX-APHENE, TOTAL (UG/L) (39400)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)
JUN 25...	<.01	<1	<50	<.01	<.2	<.009	<.2	<.020	<2.5	<.1	<5	<.10	<.01

Date	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BI-PHENYL, NONA-CHLORO-SUR SCD 1325 PERCENT (90575)
JUN 25...	<.02	<.02	<.006	<.2	<.02	<.01	61

< -- Less than
E -- Estimated value

02266495 REEDY CREEK AT S-40, NEAR LOUGHMAN, FL

LOCATION.--Lat 28°16'32", long 81°32'39" in SE¼ sec.30, T.25 S., R.28 E., Osceola County, Hydrologic Unit 03090101, on right bank 15 ft upstream from spillway, 2.8 mi northeast of Loughman, and 22 mi upstream from mouth.

DRAINAGE AREA.--174 mi^2.

GAGE-HEIGHT RECORDS

PERIOD OF RECORD.--October 1986 to current year (gage heights only).

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 71.91 ft, Dec. 29, 1997; minimum daily, 65.71 ft, June 7,2000.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69.34	67.98	67.48	67.23	67.39	68.69	67.18	66.86	66.71	---	69.38	69.49
2	69.26	67.95	67.46	67.29	67.38	68.65	67.16	66.83	66.68	---	69.29	69.60
3	69.19	67.97	67.44	67.50	67.36	68.60	67.14	66.81	66.65	70.48	69.19	69.70
4	69.14	67.95	67.44	67.56	67.34	68.58	67.16	66.79	66.63	70.41	69.10	69.72
5	69.08	67.92	67.46	67.65	67.32	68.54	67.13	66.77	66.61	70.33	69.00	69.76
6	69.03	67.89	67.43	67.68	67.30	68.50	67.10	66.75	66.59	70.23	68.90	69.82
7	68.98	67.85	67.43	67.65	67.43	68.46	67.07	66.74	---	70.10	68.84	69.82
8	68.93	67.81	67.45	67.60	67.62	68.41	67.04	66.72	---	69.99	68.82	69.80
9	68.88	67.77	67.47	67.56	67.51	68.36	67.01	66.70	---	69.88	68.76	69.75
10	68.82	67.74	67.48	67.52	67.50	68.31	67.00	66.68	---	69.81	68.72	69.66
11	68.76	67.70	67.47	67.49	67.53	68.25	66.98	66.67	---	69.75	68.66	69.58
12	68.71	67.67	67.46	67.46	67.50	68.19	66.97	66.66	---	69.68	68.64	69.51
13	68.65	67.65	67.45	67.44	67.47	68.16	66.99	66.64	---	69.64	68.88	69.42
14	68.60	67.66	67.41	67.45	67.42	68.11	66.99	66.64	---	69.66	69.12	69.35
15	68.57	67.67	67.37	67.57	67.37	68.05	67.07	66.66	67.17	69.62	69.45	69.29
16	68.52	67.67	67.32	67.60	67.34	67.97	67.25	66.65	67.51	69.59	69.71	69.24
17	68.48	67.66	67.29	67.64	67.31	67.90	67.24	66.64	67.59	69.53	69.96	69.37
18	68.43	67.64	67.28	67.64	67.28	67.81	67.20	66.76	67.72	69.45	69.99	69.51
19	68.38	67.63	67.27	67.60	67.26	67.73	67.15	66.88	67.34	69.38	69.97	69.65
20	68.33	67.61	67.25	67.57	67.23	67.65	67.10	66.92	67.09	69.32	69.93	69.78
21	68.30	67.60	67.23	67.55	67.22	67.58	67.05	66.86	67.48	69.30	69.86	69.85
22	68.28	67.59	67.21	67.53	67.45	67.52	67.00	66.82	67.79	69.31	69.88	69.90
23	68.27	67.57	67.20	67.51	68.03	67.46	66.95	66.78	68.19	69.33	69.89	70.07
24	68.26	67.55	67.20	67.49	68.35	67.41	66.92	66.75	---	69.35	69.88	70.26
25	68.24	67.53	67.21	67.47	68.53	67.36	66.89	66.72	---	69.39	69.82	70.44
26	68.23	67.52	67.24	67.47	68.66	67.35	66.88	66.70	---	69.56	69.71	70.55
27	68.19	67.51	67.23	67.45	68.72	67.44	66.98	66.68	---	69.62	69.59	70.61
28	68.15	67.54	67.22	67.44	68.72	67.38	66.95	66.68	---	69.64	69.47	70.65
29	68.11	67.56	67.22	67.43	---	67.31	66.91	66.68	---	69.62	69.37	70.60
30	68.07	67.51	67.22	67.42	---	67.25	66.88	66.69	---	69.55	69.34	70.51
31	68.02	---	67.22	67.41	---	67.21	---	66.72	---	69.47	69.41	---
MEAN	68.59	67.70	67.34	67.51	67.63	67.94	67.04	66.74	---	---	69.37	69.84
MAX	69.34	67.98	67.48	67.68	68.72	68.69	67.25	66.92	---	---	69.99	70.65
MIN	68.02	67.51	67.20	67.23	67.22	67.21	66.88	66.64	---	---	68.64	69.24

CAL YR 2001 MEAN 67.70 MAX 70.78 MIN 66.47

02266495 REEDY CREEK AT S-40, NEAR LOUGHMAN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1985 to January 1987, July 1990 to September 1993, October 1994 to current year.
WATER TEMPERATURE: January 1985 to January 1987, July 1990 to current year.
DISSOLVED OXYGEN: January 1985 to November 1986, October 1990 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Extremes for current year and extremes for period of of daily record are based on recorded values and may have been exceeded during period of no record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 389 µS/cm @ 25 °C, Apr. 3, 2001; minimum daily mean, 74 µS/cm @ 25 °C, Aug. 14, 1997.
WATER TEMPERATURE: Maximum daily mean, 29.7 °C, June 21, 2000; minimum daily mean, 6.8 °C, Dec. 27, 1985.
DISSOLVED OXYGEN: Maximum daily mean, 9.8 mg/L, Jan. 4,5, 2001; minimum daily mean, 0.0 mg/L, Sept. 10, 1985, June 15,16, 1991, Oct. 1-9, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily mean, 366 µS/cm @ 25 °C, June 20; minimum daily mean, 116 µS/cm @ 25 °C, Sept. 26, 27.
WATER TEMPERATURE: Maximum daily mean, 26.3 °C, May 6,7; minimum daily mean, 9.9 °C, Jan. 10,11.
DISSOLVED OXYGEN: Maximum daily mean, 6.1 mg/L, Jan. 11,12; minimum daily mean 0.0 mg/L, Oct. 1-9.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	219	236	220	245	256	233	193	169	173	167	143
2	182	219	236	222	247	254	233	194	166	165	169	142
3	184	219	236	222	247	248	233	192	162	165	168	135
4	185	219	237	221	246	247	232	191	158	164	171	135
5	185	218	237	250	245	248	229	189	154	165	173	133
6	185	219	238	271	243	245	226	186	151	167	175	134
7	184	220	240	274	242	243	226	190	147	168	173	135
8	178	222	240	276	240	242	227	181	144	171	169	136
9	177	222	239	270	235	241	226	172	141	174	169	137
10	176	223	237	263	234	239	225	168	144	175	171	139
11	180	225	235	259	236	237	223	164	159	177	172	141
12	182	226	236	254	237	235	221	160	168	178	170	140
13	183	228	237	252	239	234	219	157	171	178	147	143
14	189	230	238	249	240	233	217	153	193	176	142	144
15	187	230	238	247	241	232	216	150	227	172	136	142
16	184	229	243	245	242	234	220	148	226	169	136	143
17	183	229	240	242	242	237	214	145	254	171	140	---
18	190	230	231	244	242	239	217	143	298	173	140	---
19	197	230	228	248	240	241	226	143	342	175	142	---
20	201	231	224	251	239	242	233	143	366	170	143	128
21	201	230	222	252	239	243	234	152	320	165	144	131
22	200	231	221	252	237	243	232	166	312	164	145	131
23	201	232	221	251	243	243	229	177	309	160	144	127
24	202	233	221	250	264	242	223	182	287	160	146	122
25	201	234	220	248	261	242	217	185	204	162	149	117
26	198	233	217	248	263	241	208	189	191	150	150	116
27	201	230	216	248	264	238	198	190	193	147	151	116
28	207	232	216	247	262	233	196	189	192	151	152	118
29	212	237	217	246	---	229	193	187	185	154	152	120
30	216	239	218	245	---	231	199	182	182	158	148	123
31	219	---	219	244	---	232	---	177	---	164	142	---
MEAN	192	227	230	249	245	240	221	172	210	166	155	---
MAX	219	239	243	276	264	256	234	194	366	178	175	---
MIN	176	218	216	220	234	229	193	143	141	147	136	---

CAL YR 2001 MEAN 225 MAX 389 MIN 147

02266495 REEDY CREEK AT S-40, NEAR LOUGHMAN, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.7	19.8	19.2	14.9	21.4	12.5	22.1	24.4	24.7	23.9	25.4	25.4
2	20.9	20.8	19.2	14.7	21.3	13.4	22.3	24.6	25.1	23.8	25.2	25.7
3	20.9	21.7	19.5	14.3	21.0	15.1	22.2	25.0	25.6	23.9	24.7	26.0
4	21.4	22.1	20.1	12.7	20.3	16.4	21.6	25.5	25.9	24.1	24.6	25.9
5	21.8	22.1	20.5	11.0	18.6	14.1	21.5	25.9	26.1	24.0	24.9	25.7
6	22.5	20.7	20.6	10.9	17.1	13.3	21.2	26.1	26.3	24.0	25.4	25.5
7	23.5	19.5	20.8	11.6	17.0	13.9	20.5	26.1	26.3	24.1	25.3	25.5
8	23.8	18.6	21.2	11.7	16.8	15.1	19.9	26.2	25.9	24.2	24.7	25.5
9	23.1	18.2	21.6	10.8	16.4	16.2	20.0	26.1	25.7	24.3	24.1	25.5
10	22.3	18.0	21.8	9.9	16.6	17.5	20.6	26.1	25.5	24.1	23.9	25.5
11	22.4	17.7	21.9	9.9	17.2	18.1	21.2	26.0	25.3	24.0	23.9	25.2
12	22.7	17.6	21.9	10.7	17.6	18.4	21.4	25.9	25.4	24.1	24.0	24.6
13	22.8	18.0	21.7	11.9	17.4	18.9	21.5	25.8	25.5	24.1	23.8	24.7
14	23.2	18.9	21.6	13.2	16.9	19.0	21.5	25.7	25.8	24.6	23.9	25.1
15	23.8	19.4	21.8	14.3	16.3	18.9	21.3	25.1	26.0	25.1	24.2	25.4
16	23.4	19.4	22.0	14.6	16.2	19.1	21.5	24.6	25.6	25.5	24.6	25.8
17	22.0	19.4	22.0	14.7	16.2	20.0	22.1	24.9	25.0	26.1	25.2	---
18	20.0	19.6	21.6	15.3	15.9	20.8	22.4	25.3	24.1	26.1	25.2	---
19	20.4	20.1	20.1	15.8	15.5	21.3	22.6	24.8	23.8	25.9	25.1	---
20	21.6	20.2	18.4	16.4	15.6	21.5	22.8	24.0	23.5	25.7	25.0	26.0
21	22.8	19.9	16.8	17.3	16.5	21.5	23.0	23.3	23.1	24.9	25.0	25.9
22	23.2	19.3	15.6	18.6	17.6	21.4	23.3	22.8	23.1	24.3	24.9	25.8
23	23.4	19.1	15.3	19.6	18.1	20.7	23.6	22.7	23.2	24.5	24.9	25.4
24	23.6	19.6	15.9	20.2	16.2	19.7	23.7	22.7	23.3	25.1	25.0	25.2
25	24.2	20.1	16.2	20.3	15.0	19.5	23.8	22.7	23.5	25.5	25.1	25.3
26	23.7	20.3	15.5	20.5	15.3	20.1	23.9	22.8	23.6	25.0	25.0	25.5
27	20.3	20.1	13.9	20.8	15.9	20.7	24.1	23.0	23.8	25.0	24.9	25.8
28	17.6	19.7	12.9	21.0	13.6	20.9	24.2	23.5	24.1	25.4	25.0	25.8
29	17.0	19.5	13.1	21.1	---	20.9	24.1	24.0	24.1	25.4	25.0	25.8
30	18.0	19.3	14.0	21.2	---	21.2	24.2	24.4	24.1	25.3	24.9	25.8
31	19.0	---	14.9	21.3	---	21.8	---	24.5	---	25.4	24.9	---
MEAN	21.8	19.6	18.8	15.5	17.1	18.4	22.3	24.7	24.8	24.8	24.8	---
MAX	24.2	22.1	22.0	21.3	21.4	21.8	24.2	26.2	26.3	26.1	25.4	---
MIN	17.0	17.6	12.9	9.9	13.6	12.5	19.9	22.7	23.1	23.8	23.8	---

CAL YR 2001 MEAN 21.2 MAX 26.8 MIN 8.7

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	2.5	3.3	4.9	3.1	1.9	3.0	4.6	4.1	1.0	1.0	0.8
2	0.0	2.3	3.2	4.6	3.2	2.1	2.9	4.8	4.3	0.7	3.2	1.3
3	0.0	1.7	3.2	5.3	3.3	2.1	2.7	4.5	3.8	0.6	3.4	2.0
4	0.0	1.5	3.1	5.6	3.4	2.0	2.8	4.0	3.0	0.4	1.9	1.5
5	0.0	1.7	3.1	6.1	3.8	1.8	3.0	3.5	2.4	---	4.1	1.4
6	0.0	2.0	3.1	6.0	4.8	2.0	3.7	2.9	2.9	---	3.3	1.0
7	0.0	2.1	3.0	5.8	5.0	2.0	4.1	2.8	3.2	---	0.7	1.0
8	0.0	2.4	2.8	5.6	4.7	1.9	4.5	3.5	2.8	---	0.4	1.0
9	0.0	2.6	2.7	5.7	4.6	1.7	4.8	4.5	3.5	---	0.4	0.9
10	0.1	2.9	2.7	6.0	4.8	1.5	5.2	5.2	4.2	---	0.7	0.6
11	0.1	3.0	2.7	6.1	4.5	1.2	4.9	5.1	3.5	---	0.7	0.5
12	0.1	3.2	2.6	6.1	4.3	1.7	5.0	4.6	3.1	---	1.0	0.3
13	0.1	3.3	2.6	6.0	4.3	2.1	4.0	3.7	3.6	---	1.7	0.7
14	0.1	3.3	2.8	5.6	4.4	1.9	3.7	2.9	3.6	---	1.3	2.6
15	0.1	3.2	2.8	5.3	4.9	2.5	3.4	2.8	3.1	---	1.9	4.2
16	0.1	3.1	2.5	4.9	4.8	2.7	3.5	3.2	3.2	0.4	1.4	5.2
17	0.1	3.1	2.4	4.7	4.7	2.7	3.6	3.2	3.8	0.5	1.2	---
18	0.1	3.1	2.5	4.6	4.8	2.6	3.4	2.9	3.5	1.7	1.0	---
19	0.3	3.0	2.8	4.5	5.1	2.4	3.4	2.6	2.9	1.7	1.0	---
20	0.7	2.9	3.2	4.5	5.3	2.4	3.4	3.5	2.5	2.7	0.9	0.7
21	0.6	2.9	3.8	4.0	5.0	2.8	3.4	4.0	2.2	0.4	0.6	0.6
22	0.4	3.2	4.2	4.0	4.3	2.8	3.3	4.6	1.4	0.4	0.7	0.7
23	0.3	3.2	4.4	3.9	4.4	2.8	3.2	4.3	1.1	0.7	0.6	0.8
24	0.4	3.1	4.5	3.7	3.4	3.4	3.0	4.3	1.0	0.4	0.5	1.0
25	0.3	3.0	4.6	3.7	2.1	3.8	3.1	4.9	1.3	0.8	0.5	1.0
26	0.2	2.9	4.7	3.7	1.7	4.1	3.0	4.6	1.3	1.3	0.5	0.7
27	0.6	2.7	5.0	3.3	1.7	3.7	3.3	3.7	1.1	0.8	1.1	0.6
28	1.5	2.9	5.3	3.5	1.8	3.3	3.5	3.5	1.0	0.8	4.1	0.6
29	2.1	3.1	5.6	3.4	---	3.1	4.1	4.0	0.9	0.6	5.2	0.5
30	2.4	3.2	5.4	3.2	---	3.3	4.3	4.1	1.1	0.5	1.3	---
31	2.6	---	5.3	3.2	---	3.3	---	3.9	---	0.5	0.9	---
MEAN	0.4	2.8	3.5	4.8	4.0	2.5	3.6	3.9	2.6	---	1.5	---
MAX	2.6	3.3	5.6	6.1	5.3	4.1	5.2	5.2	4.3	---	5.2	---
MIN	0.0	1.5	2.4	3.2	1.7	1.2	2.7	2.6	0.9	---	0.4	---

02266496 REEDY CREEK BELOW S-40, NEAR LOUGHMAN, FL

LOCATION.--Lat 28°16'32", long 81°32'39", in SE¼ sec.30, T.25 S., R.28 E., Osceola County, Hydrologic Unit 03090101, on left bank 30 ft downstream from spillway, 2.8 mi northeast of Loughman, and 22 mi upstream from mouth.

DRAINAGE AREA.--174 mi^2.

PERIOD OF RECORD.--October 1986 to September 1989 (gage heights only), October 1989 to September 1994, October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Reedy Creek Improvement District bench mark).

REMARKS.--Records fair. Flow regulated by Structure 40.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	5.4	2.1	1.1	1.1	e1.4	1.2	1.2	1.3	e297	94	141
2	63	4.9	2.1	1.2	0.98	e1.6	1.1	1.1	1.3	e304	91	142
3	52	4.8	2.0	1.5	0.94	e2.0	1.1	1.1	1.3	288	88	147
4	42	4.5	1.9	1.4	0.89	e2.4	1.1	1.1	1.3	275	85	145
5	36	4.4	1.9	1.4	0.82	2.5	1.0	1.1	1.3	264	82	149
6	30	4.3	1.8	1.4	0.81	2.3	0.98	1.1	1.3	243	79	147
7	24	4.0	1.8	1.5	0.93	2.2	0.97	1.1	1.5	211	78	148
8	22	3.8	1.8	1.5	1.2	2.1	0.98	1.1	1.6	192	77	144
9	19	3.5	1.8	1.5	1.1	2.0	0.96	1.1	1.5	175	76	140
10	18	3.4	1.7	1.4	1.0	1.9	0.95	1.1	1.5	164	75	136
11	16	3.2	1.7	1.4	1.0	1.8	0.95	1.1	1.6	156	73	136
12	15	3.1	1.6	1.3	0.97	1.7	0.96	1.1	1.7	146	73	131
13	13	3.0	1.6	1.3	0.92	1.8	0.96	1.1	1.7	137	78	125
14	12	3.0	1.6	1.3	0.90	1.7	1.0	1.0	1.9	135	82	121
15	12	2.9	1.5	1.5	0.88	1.7	1.1	1.0	2.2	124	90	119
16	11	2.9	1.5	1.5	0.88	1.6	1.2	1.0	2.6	111	113	115
17	11	2.8	1.5	1.4	0.85	1.5	1.2	1.0	2.6	105	155	119
18	9.7	2.8	1.5	1.4	0.84	1.5	1.2	1.1	2.7	98	169	120
19	9.0	2.9	1.4	1.4	0.83	1.4	1.2	1.3	e2.9	95	171	126
20	8.3	2.9	1.4	1.4	0.80	1.4	1.2	1.3	e3.4	93	170	123
21	8.1	2.9	1.3	1.3	0.80	1.3	1.2	1.2	e4.5	92	166	125
22	8.1	2.8	1.3	1.3	e1.4	1.3	1.1	1.2	e5.6	92	165	136
23	7.8	2.7	1.2	1.3	e2.1	1.2	1.1	1.2	e7.8	91	165	166
24	7.5	2.7	1.2	1.3	e2.6	1.1	1.1	1.2	e12	91	163	198
25	7.2	2.6	1.2	1.2	e2.3	1.1	1.1	1.2	e32	94	160	281
26	7.2	2.5	1.2	1.2	e2.1	1.2	1.1	1.1	e73	104	156	366
27	7.1	2.3	1.2	1.2	e1.8	1.8	1.2	1.1	e117	108	150	347
28	7.1	2.3	1.2	1.3	e1.6	1.6	1.2	0.95	e168	110	145	285
29	6.2	2.3	1.2	1.2	---	1.4	1.2	1.1	e206	109	141	276
30	5.6	2.2	1.1	1.1	---	1.3	1.2	1.2	e241	106	141	257
31	5.5	---	1.1	1.1	---	1.2	---	1.3	---	100	143	---
TOTAL	574.4	97.8	47.4	41.3	33.34	51.0	32.81	34.85	904.1	4710	3694	5111
MEAN	18.5	3.26	1.53	1.33	1.19	1.65	1.09	1.12	30.1	152	119	170
MAX	74	5.4	2.1	1.5	2.6	2.5	1.2	1.3	241	304	171	366
MIN	5.5	2.2	1.1	1.1	0.80	1.1	0.95	0.95	1.3	91	73	115
CFSM	0.11	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.17	0.87	0.68	0.98
IN.	0.12	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.19	1.01	0.79	1.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

MEAN	41.6	20.1	57.0	48.2	44.0	50.3	20.1	10.4	25.3	72.1	75.8	89.5
MAX	105	91.7	501	433	390	452	109	36.0	124	260	244	316
(WY)	1997	1998	1998	1998	1998	1998	1998	1993	1991	1991	1997	1994
MIN	1.70	1.10	1.35	1.17	0.79	1.34	1.09	0.87	1.49	2.11	2.01	2.10
(WY)	2001	1990	1994	2001	2001	2001	2002	1994	2000	2001	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002	
ANNUAL TOTAL	6406.57		15332.00			
ANNUAL MEAN	17.6		42.0		46.3	
HIGHEST ANNUAL MEAN					179	1998
LOWEST ANNUAL MEAN					9.64	2000
HIGHEST DAILY MEAN	330	Sep 17	366	Sep 26	1220	Dec 29,30 1997
LOWEST DAILY MEAN	0.65	Feb 18,19	0.80	Feb 20,21	0.55	May 27 1994
ANNUAL SEVEN-DAY MINIMUM	0.68	Feb 16	0.84	Feb 15	0.58	May 23 1994
MAXIMUM PEAK STAGE			68.92	Sep 27	70.30	Dec 30 1997
ANNUAL RUNOFF (CFSM)	0.10		0.24		0.27	
ANNUAL RUNOFF (INCHES)	1.37		3.28		3.61	
10 PERCENT EXCEEDS	52		147		124	
50 PERCENT EXCEEDS	1.6		2.0		4.9	
90 PERCENT EXCEEDS	0.99		1.1		1.2	

e Estimated

02266500 REEDY CREEK NEAR LOUGHMAN, FL

LOCATION.--Lat 28°15'48", long 81°32'12", in SW¼ sec.32, T.25 S., R.28 E., Osceola County, Hydrologic Unit 03090101, on left bank 100 ft upstream (revised) from bridge on U.S. Highways 17 and 92, 1.0 mi downstream from Reedy Creek Improvement District Structure 40, 2.5 mi northeast of Loughman, 3 mi downstream from Davenport Creek, and 21 mi upstream from mouth.

DRAINAGE AREA.--177 mi^2, approximately, includes an indeterminate portion of the Reedy Creek Swamp watershed.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to September 1959, July 1968 to current year.

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 64.49 ft above NGVD of 1929. Prior to Aug. 20, 1940, nonrecording gage at same site and datum.

REMARKS.--Records poor. Natural flow of stream affected by several canals, levees, and control structures which divert an undetermined amount of water into Reedy Creek above station or into the Shingle Creek basin. Since May 1970, flow regulated by Reedy Creek Improvement District Structure 40.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	2.8	0.16	0.00	0.00	0.63	0.00	0.00	0.00	369	134	182
2	87	2.7	0.12	0.00	0.00	0.52	0.00	0.00	0.00	372	128	182
3	71	2.8	0.07	0.00	0.00	0.41	0.00	0.00	0.00	371	127	192
4	57	2.6	0.03	0.00	0.00	0.41	0.00	0.00	0.00	362	123	189
5	47	2.5	0.00	0.00	0.00	0.35	0.00	0.00	0.00	357	115	196
6	39	2.3	0.00	0.00	0.00	0.27	0.00	0.00	0.00	346	108	194
7	32	2.1	0.00	0.00	0.00	0.20	0.00	0.00	0.00	317	108	193
8	26	1.9	0.00	0.00	0.00	0.15	0.00	0.00	0.00	292	106	191
9	22	1.8	0.00	0.00	0.00	0.09	0.00	0.00	0.00	267	103	186
10	19	1.7	0.00	0.00	0.00	0.04	0.00	0.00	0.00	251	101	183
11	16	1.5	0.00	0.00	0.00	0.01	0.00	0.00	0.00	236	97	183
12	14	1.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	221	100	180
13	12	1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	211	109	173
14	11	1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	205	108	167
15	9.9	1.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	190	119	161
16	8.9	1.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	171	130	156
17	8.0	1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.01	156	165	162
18	7.3	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.07	144	199	157
19	6.6	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.18	138	221	161
20	6.1	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.71	136	225	164
21	5.8	0.86	0.00	0.00	0.00	0.00	0.00	0.00	1.4	137	215	162
22	5.7	0.79	0.00	0.00	0.14	0.00	0.00	0.00	2.2	134	211	173
23	5.4	0.72	0.00	0.00	0.92	0.00	0.00	0.00	4.0	129	210	206
24	5.1	0.65	0.00	0.00	1.6	0.00	0.00	0.00	5.7	128	207	244
25	5.0	0.58	0.00	0.00	1.5	0.00	0.00	0.00	21	136	202	308
26	4.8	0.49	0.00	0.00	1.2	0.00	0.00	0.00	56	152	198	398
27	4.4	0.39	0.00	0.00	0.96	0.00	0.00	0.00	106	148	194	404
28	4.0	0.32	0.00	0.00	0.76	0.00	0.00	0.00	171	150	187	355
29	3.5	0.27	0.00	0.00	---	0.00	0.00	0.00	232	151	184	331
30	3.3	0.20	0.00	0.00	---	0.00	0.00	0.00	294	148	186	313
31	3.1	---	0.00	0.00	---	0.00	---	0.00	---	142	189	---
TOTAL	653.9	40.09	0.38	0.00	7.08	3.08	0.00	0.00	894.27	6667	4809	6446
MEAN	21.1	1.34	0.012	0.000	0.25	0.099	0.000	0.000	29.8	215	155	215
MAX	104	2.8	0.16	0.00	1.6	0.63	0.00	0.00	294	372	225	404
MIN	3.1	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	128	97	156

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	92.3	49.3	53.4	58.4	54.2	59.8	47.7	18.2	30.8	80.9	101	121
MAX	326	217	497	492	424	451	261	107	143	283	317	411
(WY)	1970	1988	1998	1998	1998	1998	1987	1979	1942	1991	1995	1953
MIN	1.12	0.040	0.000	0.000	0.000	0.099	0.000	0.000	0.000	0.000	0.000	1.90
(WY)	2001	1974	1974	1974	1974	2002	1972	1972	1981	1989	1989	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	6115.20		19520.80			
ANNUAL MEAN	16.8		53.5		64.1	
HIGHEST ANNUAL MEAN					191	1998
LOWEST ANNUAL MEAN					10.6	2000
HIGHEST DAILY MEAN	412	Sep 17	404	Sep 27	1080	Dec 30 1997
LOWEST DAILY MEAN	0.00	Jul 29-31	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Dec 5	0.00	Dec 5	0.00	Many days
MAXIMUM PEAK FLOW			418	Sep 27	1090	Dec 30 1997
MAXIMUM PEAK STAGE			3.33	Sep 27	4.25	Sep 24 1969
10 PERCENT EXCEEDS	27		193		167	
50 PERCENT EXCEEDS	1.0		0.09		33	
90 PERCENT EXCEEDS	0.09		0.00		1.4	

02266500 REEDY CREEK NEAR LOUGHMAN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1965, 1968-94, 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
24...	0730	5.2	1.37	216	6.1	23.5	--	--	.2	.10	<.010	--	E2.4
NOV													
19...	1130	.96	1.00	240	6.3	19.9	--	--	.2	.08	.010	--	E1.8
JUN													
25...	0900	16	1.74	407	5.6	23.5	.92	400	1.8	.10	.010	.02	2.5
JUL													
30...	1100	150	2.38	164	5.7	25.2	--	--	.6	.09	.020	--	2.7
AUG													
27...	0800	196	2.61	154	5.9	24.9	--	--	.4	.06	.020	--	2.5
SEP													
23...	0900	202	2.74	135	5.8	25.4	--	--	.3	.03	.020	--	2.2

Date	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT													
24...	--	<.02	E.08	.08	63.0	--	--	--	--	--	--	--	--
NOV													
19...	--	<.02	E.07	.06	46.0	--	--	--	--	--	--	--	--
JUN													
25...	.040	.05	.04	.02	56.0	.020	160	47.0	11.0	16.0	2.60	12	130
JUL													
30...	--	<.02	.09	.08	66.0	--	--	--	--	--	--	--	--
AUG													
27...	--	<.02	.15	.13	64.0	--	--	--	--	--	--	--	--
SEP													
23...	--	<.02	.14	.14	72.0	--	--	--	--	--	--	--	--

Date	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT													
24...	--	--	3.1	--	--	--	--	--	--	--	--	--	--
NOV													
19...	--	--	5.5	--	--	--	--	--	--	--	--	--	--
JUN													
25...	27.0	<.1	<.1	2	<1	408	<1.0	1.7	217	<1	28	1.1	9
JUL													
30...	--	--	<.1	--	--	--	--	--	--	--	--	--	--
AUG													
27...	--	--	<.1	--	--	--	--	--	--	--	--	--	--
SEP													
23...	--	--	<.1	--	--	--	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02266500 REEDY CREEK NEAR LOUGHMAN, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	DEF TOTAL (UG/L) (39040)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)
JUN 25...	<1	<.01	<.10	<.02	<.02	<.01	<.006	<.2	<.2	<.1	<3	<.007	E.5

Date	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-ELDRIN TOTAL (UG/L) (39380)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL (UG/L) (39388)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	ETHION, TOTAL (UG/L) (39398)	TOX-APHENE, TOTAL (UG/L) (39400)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)
JUN 25...	<.006	.2	<.009	.7	<.006	<.2	<.02	<.2	<.01	<.2	<.01	<1	<50

Date	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)
JUN 25...	<.01	<.2	<.009	<.2	<.020	<2.5	<.1	<5	<.10	<.01	<.02	<.02	<.006

Date	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	CARBO-PHENO-THION WATER UNFLTRD (UG/L) (39786)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	BI-PHENYL, NONA-CHLORO-SUR SCD 1325 PERCENT (90575)
JUN 25...	<.2	<.02	<.01	59

< -- Less than
E -- Estimated value

02266550 REEDY CREEK AT STATE HIGHWAY 531 NEAR POINSIANNA, FL

LOCATION.--Lat 28°08'59", long 81°26'28", in SE$^{1}/_{4}$ sec.7, T.27 S., R.29 E., Osceola County, Hydrologic Unit 03090101, at bridge on State Highway 531, 1.6 mi upstream from Lake Russell, and about 9 mi southeast of Poinsianna.

DRAINAGE AREA.--170 mi^2, approximately.

PERIOD OF RECORD.--October 1978 to current year (discharge measurements only).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 1,010 ft^3/s, Aug. 26, 1991; no flow observed during most years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)
NOV				MAY			
23...	0930	15	58.00	10...	1040	.00	58.04
JAN				JUL			
17...	1345	8.3	57.82	11...	1345	412	60.74
MAR				SEP			
12...	1340	24	58.20	19...	0910	218	59.19

02267000 CATFISH CREEK NEAR LAKE WALES, FL

LOCATION.--Lat 27°57'40", long 81°29'48", in sec.14, T.29 S., R.28 E., Polk County, Hydrologic Unit 03090101, on left bank, 0.2 mi downstream from Lake Pierce, 7 mi northeast of city of Lake Wales, and 9.3 mi upstream from mouth.

DRAINAGE AREA.--58.9 mi^2.

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 72.70 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	54	37	32	32	31	19	11	4.6	39	42	56
2	74	53	37	32	32	30	18	10	4.5	40	44	57
3	72	53	37	34	31	31	18	9.6	4.3	40	48	57
4	72	53	36	33	31	32	18	9.4	3.9	40	50	58
5	70	54	36	32	29	30	18	9.2	3.7	40	49	67
6	69	51	35	32	28	29	17	8.6	3.5	40	48	73
7	70	50	36	33	29	29	16	8.0	3.8	39	47	72
8	72	49	37	32	29	29	15	7.5	4.6	38	47	71
9	69	48	37	32	28	29	15	7.0	4.4	38	45	70
10	68	47	37	32	28	29	15	6.5	4.5	37	43	69
11	66	47	37	32	29	28	15	6.0	5.0	38	42	68
12	65	46	36	32	29	28	15	5.6	4.9	40	42	68
13	63	46	36	32	28	28	15	5.4	4.7	42	42	67
14	62	47	36	32	28	27	15	5.1	4.7	43	41	67
15	63	47	36	36	27	26	15	4.5	4.5	42	44	67
16	62	45	35	36	27	26	15	4.0	4.4	41	44	66
17	61	44	35	36	27	25	15	4.0	4.5	41	44	65
18	58	43	36	36	26	25	15	4.2	4.8	40	44	63
19	57	43	35	36	25	24	14	6.7	5.5	39	44	62
20	58	42	35	36	25	24	14	7.2	6.0	40	46	60
21	61	41	34	36	25	24	14	6.7	7.1	44	48	60
22	62	41	33	35	27	23	13	6.4	8.5	47	47	59
23	61	40	32	35	32	22	13	5.8	11	46	46	57
24	62	40	33	35	34	21	12	5.5	16	46	46	57
25	63	40	33	35	33	21	12	5.2	17	45	45	61
26	63	39	34	34	33	21	11	5.0	22	45	44	62
27	61	39	32	34	34	21	11	4.7	29	45	43	62
28	59	38	32	34	32	20	11	4.6	30	44	42	61
29	57	38	32	33	---	19	11	4.4	32	43	44	60
30	56	38	32	33	---	19	10	4.3	34	43	51	58
31	55	---	32	32	---	18	---	4.6	---	42	56	---
TOTAL	1988	1356	1081	1044	818	789	435	196.7	297.4	1287	1408	1900
MEAN	64.1	45.2	34.9	33.7	29.2	25.5	14.5	6.35	9.91	41.5	45.4	63.3
MAX	77	54	37	36	34	32	19	11	34	47	56	73
MIN	55	38	32	32	25	18	10	4.0	3.5	37	41	56
CFSM	1.09	0.77	0.59	0.57	0.50	0.43	0.25	0.11	0.17	0.70	0.77	1.08
IN.	1.26	0.86	0.68	0.66	0.52	0.50	0.27	0.12	0.19	0.81	0.89	1.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2002, BY WATER YEAR (WY)

MEAN	56.3	44.7	39.8	39.6	39.2	38.5	32.8	23.8	26.7	38.9	46.7	56.1
MAX	190	119	129	102	100	113	120	79.0	86.1	107	142	199
(WY)	1961	1954	1954	1954	1998	1998	1960	1960	1959	1959	1960	1960
MIN	10.4	7.17	11.6	10.1	8.24	5.53	5.27	1.22	0.48	1.98	9.56	7.94
(WY)	1990	1990	1990	2001	2001	2001	2000	1981	2000	2000	2000	1989

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1948 - 2002	
ANNUAL TOTAL	7991.79		12600.1			
ANNUAL MEAN	21.9		34.5		40.3	
HIGHEST ANNUAL MEAN					104	1960
LOWEST ANNUAL MEAN					9.47	1990
HIGHEST DAILY MEAN	84	Sep 24,25	77	Oct 1	235	Sep 17,18 1960
LOWEST DAILY MEAN	0.38	May 28,30	3.5	Jun 6	0.00	Jun 3-10 1985
ANNUAL SEVEN-DAY MINIMUM	0.45	May 25	4.0	Jun 3	0.00	Jun 3-10 1985
MAXIMUM PEAK STAGE			4.74	Oct 1	6.02	Sep 15 1960
ANNUAL RUNOFF (CFSM)	0.37		0.59		0.68	
ANNUAL RUNOFF (INCHES)	5.05		7.96		9.29	
10 PERCENT EXCEEDS	61		62		71	
50 PERCENT EXCEEDS	9.9		35		36	
90 PERCENT EXCEEDS	1.7		6.0		12	

02268903 KISSIMMEE RIVER AT S-65, NEAR LAKE WALES, FL

LOCATION.--Lat 27°48'14", long 81°11'53", in NW¼ sec.11, T.31 S., R.31 E., Osceola County, Hydrologic Unit 03090101, on right bank at upstream side of lock and control structure S-65, 0.1 mi downstream from bridge on State Highway 60, and 25 mi southeast of Lake Wales.

DRAINAGE AREA.--1,607 mi^2 at State Highway 60, includes areas drained by Lake Weohyakapka and Lake Marian.

PERIOD OF RECORD.--October 1969 to current year. Prior to October 1969, published as Kissimmee River below Lake Kissimmee (records not equivalent to present site).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Auxiliary water-stage recorder at downstream side of lock and control structure 65.

REMARKS.--Records good. Since July 1964 flow regulated by operation of control structure 65 and by storage releases at several structures in headwaters. Discharge computed from relation between discharge, head, and gate openings. Structure with two additional gates put in use August 1999.

COOPERATION.--Gage-height record and gate-operation record provided by South Florida Water Management District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4220	860	588	489	476	494	514	504	380	914	2900	4800
2	3760	863	582	482	485	482	518	523	377	943	2900	4780
3	3270	833	584	506	483	486	528	515	376	1060	2890	4800
4	2850	884	573	487	482	496	510	511	368	1380	2890	4870
5	2760	875	556	477	482	498	526	512	359	1570	2910	4840
6	2480	887	541	481	470	526	528	513	357	1590	2900	4920
7	2330	858	544	483	470	538	513	505	350	1610	2890	5040
8	2290	833	560	494	477	547	513	474	358	1630	2900	5080
9	1980	869	574	484	469	544	508	431	359	1630	2930	4890
10	1800	864	564	479	467	544	512	435	354	2030	2920	4830
11	1830	872	566	477	464	538	507	435	350	2270	2920	5150
12	1810	866	568	462	463	530	507	439	348	2140	2890	5120
13	1510	846	555	467	482	526	516	433	337	2250	2750	5250
14	1410	810	598	480	480	543	518	426	343	2340	2960	4890
15	1390	716	669	488	474	534	501	422	336	2380	3120	4960
16	1170	710	684	484	471	532	514	424	350	2350	3350	4760
17	1080	696	743	479	477	524	517	410	365	2440	3360	4760
18	1070	692	672	483	476	541	521	407	375	2540	3530	4560
19	1040	681	573	482	466	520	511	403	268	2580	3890	4320
20	1070	670	559	481	462	539	507	398	325	2560	4450	4270
21	1060	672	561	472	456	536	506	427	404	2560	4800	4260
22	1030	684	565	475	468	548	511	394	409	2590	4830	4220
23	1020	679	570	475	487	544	506	383	440	2560	4810	3970
24	1000	658	571	478	486	535	496	379	644	2720	4790	3760
25	983	670	554	475	483	522	498	372	644	2860	4800	3350
26	1040	672	567	484	495	521	497	374	578	2830	4780	3190
27	1030	629	538	487	496	526	490	367	692	2790	4770	3210
28	1020	588	493	475	499	518	486	369	914	2830	4710	3130
29	938	584	491	495	---	530	484	361	914	2880	4800	3070
30	881	588	488	485	---	526	494	373	904	2860	4940	2850
31	874	---	495	476	---	533	---	363	---	2900	4740	---
TOTAL	51996	22609	17746	14922	13346	16321	15257	13282	13578	68587	115020	131900
MEAN	1677	754	572	481	477	526	509	428	453	2212	3710	4397
MAX	4220	887	743	506	499	548	528	523	914	2900	4940	5250
MIN	874	584	488	462	456	482	484	361	268	914	2750	2850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

MEAN	748	344	661	1188	1394	1323	1386	897	233	542	1274	1024
MAX	5652	3598	5797	6868	5076	8652	4320	2364	1965	4352	4537	4554
(WY)	1970	1995	1998	1998	1998	1993	1984	1994	1974	1995	1995	
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1984	1984	1985	1985	1985	1991	2001	2001	1977	1985	1987	1970

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	203865.0		494564			
ANNUAL MEAN	559		1355		916	
HIGHEST ANNUAL MEAN					2508	1998
LOWEST ANNUAL MEAN					21.0	1981
HIGHEST DAILY MEAN	e4220	Sep 26	5250	Sep 13	12100	Feb 24 1988
LOWEST DAILY MEAN	0.00	Many days	268	Jun 19	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	337	Jun 14	0.00	Many days
MAXIMUM PEAK STAGE			52.18	Sep 10	54.07	Oct 8 1969
10 PERCENT EXCEEDS	1400		3920		2890	
50 PERCENT EXCEEDS	0.00		555		71	
90 PERCENT EXCEEDS	0.00		417		0.00	

e Estimated

02268903 KISSIMMEE RIVER AT S-65, NEAR LAKE WALES, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.11	51.30	50.82	50.44	50.21	50.36	50.28	49.82	49.18	50.30	51.58	51.89
2	52.03	51.30	50.81	50.40	50.24	50.21	50.28	49.79	49.15	50.59	51.61	51.89
3	51.96	51.31	50.81	50.59	50.21	50.30	50.28	49.71	49.13	50.66	51.63	51.90
4	51.91	51.33	50.80	50.54	50.25	50.56	50.30	49.70	49.04	50.74	51.64	51.90
5	51.84	51.48	50.74	50.40	50.24	50.57	50.33	49.71	49.02	50.78	51.65	51.91
6	51.80	51.37	50.72	50.33	50.07	50.42	50.29	49.69	49.01	50.81	51.67	52.05
7	51.80	51.26	50.72	50.44	50.06	50.42	50.16	49.66	49.00	50.83	51.72	52.09
8	51.78	51.22	50.74	50.44	50.20	50.41	50.07	49.62	49.06	50.90	51.78	52.10
9	51.67	51.21	50.79	50.35	50.12	50.41	50.09	49.57	49.06	50.96	51.71	52.11
10	51.61	51.18	50.75	50.30	50.12	50.44	50.11	49.55	49.03	50.98	51.67	52.11
11	51.53	51.15	50.77	50.30	50.16	50.43	50.11	49.48	49.01	51.04	51.63	52.08
12	51.49	51.15	50.74	50.27	50.14	50.40	50.09	49.47	49.00	51.17	51.61	52.02
13	51.43	51.14	50.72	50.29	50.19	50.43	50.08	49.45	48.94	51.24	51.73	51.99
14	51.38	51.20	50.69	50.27	50.19	50.42	50.11	49.46	48.95	51.35	51.79	51.95
15	51.44	51.27	50.71	50.38	50.13	50.41	50.12	49.44	48.92	51.40	51.79	51.92
16	51.43	51.21	50.68	50.38	50.15	50.38	50.11	49.33	48.98	51.43	51.79	51.86
17	51.46	51.11	50.66	50.35	50.18	50.38	50.10	49.30	49.10	51.41	51.83	51.77
18	51.37	51.06	50.70	50.37	50.14	50.38	50.08	49.32	49.12	51.40	51.89	51.67
19	51.29	51.04	50.66	50.33	50.02	50.36	50.07	49.41	49.20	51.42	51.89	51.61
20	51.27	51.01	50.70	50.31	49.98	50.33	50.05	49.53	49.18	51.43	51.86	51.54
21	51.27	51.00	50.67	50.30	50.00	50.38	50.03	49.50	49.24	51.47	51.82	51.48
22	51.33	50.95	50.57	50.31	50.11	50.45	50.05	49.51	49.25	51.49	51.84	51.40
23	51.30	50.90	50.49	50.27	50.41	50.38	50.05	49.35	49.35	51.50	51.83	51.33
24	51.29	50.88	50.54	50.26	50.44	50.29	49.97	49.26	49.53	51.50	51.80	51.29
25	51.37	50.88	50.59	50.28	50.36	50.28	49.90	49.23	49.68	51.51	51.76	51.23
26	51.48	50.88	50.65	50.30	50.37	50.29	49.89	49.24	49.79	51.54	51.73	51.16
27	51.54	50.85	50.46	50.28	50.53	50.39	49.85	49.18	49.91	51.55	51.69	51.21
28	51.49	50.81	50.44	50.27	50.47	50.36	49.86	49.20	50.03	51.54	51.70	51.18
29	51.41	50.80	50.41	50.25	---	50.30	49.89	49.17	50.09	51.57	51.68	51.13
30	51.39	50.80	50.42	50.22	---	50.24	49.85	49.14	50.13	51.58	51.73	51.07
31	51.33	---	50.43	50.19	---	50.24	---	49.16	---	51.58	51.85	---
MEAN	51.54	51.10	50.66	50.34	50.20	50.37	50.08	49.45	49.27	51.22	51.74	51.69
MAX	52.11	51.48	50.82	50.59	50.53	50.57	50.33	49.82	50.13	51.58	51.89	52.11
MIN	51.27	50.80	50.41	50.19	49.98	50.21	49.85	49.14	48.92	50.30	51.58	51.07

WTR YR 2002 MEAN 50.64 MAX 52.11 MIN 48.92

02268904 KISSIMMEE RIVER BELOW S-65, NEAR LAKE WALES, FL

LOCATION.--Lat 27°48'14", long 81°11'53" in NW1/4 sec.11, T.31 S., R.31 E., Osceola County, Hydrologic Unit 03090101, on right bank at downstream side of lock and control structure S-65, 0.1 mi downstream from bridge on State Highway 60, and 25 mi southeast of Lake Wales.

DRAINAGE AREA.--1,607 mi^2, at State Highway 60, includes areas drained by Lake Weohyakapka and Lake Marian.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by South Florida Water Management District).

REMARKS.--Gage heights partially regulated by operation of structure 65.

COOPERATION.--Gage-height record provided by South Florida Water Management District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 51.44 ft, Oct. 10, 1969; minimum daily, 41.55 ft, Apr. 4, 1977 (result of drawdown of Lake Kissimmee).

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.32	46.13	46.18	46.13	46.13	46.12	46.14	46.27	46.20	46.13	46.23	46.53
2	46.20	46.12	46.18	46.15	46.18	46.16	46.22	46.28	46.12	46.10	46.28	46.50
3	46.19	46.12	46.17	46.17	46.23	46.21	46.22	46.21	46.18	46.35	46.34	46.47
4	46.30	46.23	46.15	46.16	46.24	46.18	46.18	46.19	46.22	46.22	46.30	46.31
5	46.22	46.13	46.12	46.14	46.18	46.14	46.18	46.20	46.25	46.34	46.28	46.42
6	46.10	46.14	46.16	46.14	46.13	46.21	46.16	46.19	46.22	46.29	46.27	46.61
7	46.15	46.11	46.23	46.12	46.09	46.23	46.13	46.22	46.20	46.18	46.30	46.42
8	46.26	46.13	46.23	46.14	46.19	46.19	46.09	46.22	46.21	46.14	46.28	46.38
9	46.37	46.21	46.23	46.13	46.25	46.13	46.15	46.24	46.18	46.19	46.27	46.46
10	46.36	46.18	46.24	46.12	46.25	46.15	46.23	46.27	46.20	46.23	46.24	46.49
11	46.19	46.14	46.15	46.18	46.17	46.19	46.23	46.17	46.21	46.30	46.22	46.46
12	46.21	46.16	46.18	46.21	46.13	46.19	46.23	46.16	46.19	46.87	46.28	46.39
13	46.26	46.18	46.19	46.22	46.13	46.20	46.25	46.15	46.21	46.55	46.72	46.35
14	46.21	46.17	46.19	46.20	46.12	46.22	46.27	46.16	46.26	46.29	46.53	46.36
15	46.15	46.21	46.15	46.25	46.14	46.24	46.25	46.15	46.21	46.27	46.49	46.50
16	46.25	46.14	46.16	46.17	46.19	46.25	46.22	46.19	46.19	46.30	46.47	46.49
17	46.18	46.12	46.23	46.21	46.24	46.23	46.17	46.21	46.29	46.36	46.40	46.45
18	46.15	46.21	46.21	46.17	46.21	46.23	46.16	46.18	46.32	46.40	46.31	46.32
19	46.12	46.24	46.20	46.15	46.15	46.20	46.13	46.25	46.43	46.28	46.33	46.29
20	46.17	46.20	46.13	46.19	46.11	46.18	46.17	46.17	46.52	46.29	46.34	46.35
21	46.19	46.14	46.12	46.15	46.14	46.17	46.16	46.12	46.41	46.35	46.34	46.31
22	46.22	46.15	46.22	46.16	46.22	46.18	46.16	46.18	46.29	46.33	46.34	46.33
23	46.14	46.19	46.23	46.24	46.27	46.20	46.16	46.16	46.57	46.32	46.39	46.33
24	46.20	46.19	46.21	46.21	46.30	46.22	46.15	46.13	46.50	46.28	46.38	46.32
25	46.34	46.15	46.14	46.17	46.16	46.20	46.16	46.19	46.16	46.22	46.36	46.34
26	46.36	46.15	46.10	46.14	46.12	46.15	46.14	46.22	46.25	46.22	46.33	46.31
27	46.26	46.15	46.14	46.15	46.09	46.22	46.18	46.25	46.18	46.27	46.30	46.30
28	46.11	46.26	46.09	46.13	46.14	46.16	46.13	46.24	46.01	46.37	46.37	46.28
29	46.16	46.25	46.19	46.14	---	46.16	46.11	46.15	46.11	46.31	46.46	46.30
30	46.14	46.17	46.18	46.21	---	46.14	46.18	46.13	46.12	46.28	46.60	46.26
31	46.09	---	46.15	46.22	---	46.13	---	46.26	---	46.29	46.63	---
MEAN	46.21	46.17	46.18	46.17	46.17	46.19	46.18	46.20	46.25	46.30	46.37	46.39
MAX	46.37	46.26	46.24	46.25	46.30	46.25	46.27	46.28	46.57	46.87	46.72	46.61
MIN	46.09	46.11	46.09	46.12	46.09	46.12	46.09	46.12	46.01	46.10	46.22	46.26

WTR YR 2002 MEAN 46.23 MAX 46.87 MIN 46.01

02269148 KISSIMMEE RIVER NEAR LORIDA, FL

LOCATION.--Lat 27°31'18", long 81°12'40" in NE¼ sec.15, T.34 S., R.31 E., Highlands County, Hydrologic Unit 03090101, on right bank of natural river channel, 1.8 mi upstream from control structure 65-B, 6.0 mi northeast of Lorida and about 34 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1993 to current year (gage heights only).

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 43.65 ft, Feb. 22, 1998; minimum, 34.03 ft, May 22, 2001.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.50	40.27	37.89	37.03	36.93	37.54	37.07	36.57	35.76	41.79	41.08	42.78
2	42.45	40.13	37.84	37.01	36.85	37.37	36.96	36.53	35.76	41.80	41.06	42.96
3	42.20	39.99	37.82	37.02	36.80	37.21	37.04	36.61	35.58	41.92	41.04	43.03
4	42.09	39.87	37.80	37.01	36.77	37.14	37.11	36.62	35.45	42.00	41.04	43.00
5	42.08	39.85	37.75	37.00	36.81	37.09	37.08	36.59	35.38	42.07	41.02	42.97
6	---	39.78	37.64	36.99	36.84	37.02	37.08	36.57	35.43	42.08	40.98	43.16
7	---	39.70	37.52	36.98	36.83	37.20	37.06	36.50	35.47	42.01	40.94	43.17
8	---	39.59	37.62	36.96	36.77	37.38	37.00	36.43	35.51	41.85	40.90	43.05
9	---	39.50	37.71	36.95	36.73	37.44	36.93	36.16	35.50	41.65	40.84	42.89
10	---	39.48	37.77	36.94	36.80	37.39	36.92	35.98	35.47	41.55	40.80	42.75
11	---	39.44	37.85	36.85	36.93	37.35	36.92	36.09	35.45	41.69	40.75	42.66
12	---	39.39	37.81	36.79	36.89	37.32	36.92	36.06	35.43	41.97	40.72	42.61
13	---	39.34	37.78	36.79	36.87	37.29	36.92	35.99	35.44	42.37	40.83	42.55
14	---	39.30	37.76	36.90	36.87	37.28	36.94	35.94	35.50	42.46	41.05	42.50
15	---	39.06	37.75	37.23	36.81	37.26	37.01	35.91	35.63	42.34	41.27	42.55
16	---	38.95	37.69	37.40	36.71	37.24	37.04	35.92	35.70	42.16	41.50	42.54
17	---	38.82	37.59	37.32	36.66	37.23	37.11	35.92	35.80	41.95	41.69	42.50
18	---	38.67	37.60	37.34	36.70	37.21	37.10	35.76	35.99	41.79	41.66	42.41
19	---	38.59	37.59	37.31	36.73	37.19	37.04	35.75	36.30	41.65	41.61	42.22
20	---	38.57	37.61	37.24	36.71	37.17	36.93	35.81	37.23	41.53	41.62	42.06
21	---	38.51	37.53	37.21	36.61	37.16	36.91	35.71	38.67	41.51	41.62	42.01
22	---	38.45	37.42	37.14	36.61	37.16	36.87	35.52	39.61	41.59	41.78	41.98
23	40.73	38.39	37.44	37.04	36.84	37.13	36.84	35.53	40.37	41.58	42.03	41.93
24	39.89	38.37	37.49	37.07	37.60	37.11	36.78	35.53	41.03	41.56	42.05	41.85
25	40.03	38.34	37.53	37.06	37.91	37.11	36.73	35.44	41.59	41.49	42.07	41.82
26	40.51	38.31	37.52	37.06	37.95	37.13	36.73	35.40	41.90	41.39	42.06	41.73
27	40.80	38.24	37.45	37.04	37.86	37.08	36.75	35.38	42.13	41.29	42.04	41.63
28	40.86	38.00	37.30	37.02	37.66	37.11	36.76	35.41	42.14	41.24	42.00	41.57
29	40.77	37.91	37.06	36.99	---	37.12	36.74	35.49	42.03	41.22	42.03	41.53
30	40.58	37.94	37.02	36.89	---	37.13	36.64	35.46	41.85	41.17	42.16	41.46
31	40.42	---	37.02	36.90	---	37.13	---	35.54	---	41.12	42.45	---
MEAN	---	39.02	37.59	37.05	36.97	37.22	36.93	35.94	37.50	41.74	41.44	42.40
MAX	---	40.27	37.89	37.40	37.95	37.54	37.11	36.62	42.14	42.46	42.45	43.17
MIN	---	37.91	37.02	36.79	36.61	37.02	36.64	35.38	35.38	41.12	40.72	41.46

02270500 ARBUCKLE CREEK NEAR DE SOTO CITY, FL

LOCATION.--Lat 27°26'32", long 81°17'51", in SE¼ sec.11, T.35 S., R.30 E., Highlands County, Hydrologic Unit 03090101, on right bank 20 ft downstream from bridge on U.S. Highway 98, 1.3 mi upstream from mouth, and 7 mi east of De Soto City.

DRAINAGE AREA.--379 mi^2, excludes area drained by Lake Weohyakapka and includes area drained by Lake Sebring.

PERIOD OF RECORD.--June 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 35.51 ft above NGVD of 1929. Since June 7, 1967 auxiliary water-stage recorder at site 1.3 mi upstream. See WDR FL-82-2 for history of changes prior to June 7, 1967.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Records include small diversions into Lake Arbuckle from Lake Weohyakapka through Blue Jordan Swamp.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	e1300	205	154	145	348	68	36	41	1010	e780	e800
2	1260	e1250	197	150	142	341	67	36	34	1070	e750	e900
3	1220	e1300	195	160	140	323	86	37	29	1230	e690	e1000
4	1190	e1250	193	157	130	291	77	36	28	1380	e680	1150
5	1170	e1300	187	156	122	267	79	35	27	1660	e675	1060
6	1130	e1200	183	166	126	247	76	33	26	1570	e620	1020
7	1100	e1150	188	161	139	226	70	33	37	1250	e660	960
8	1090	e1100	197	156	125	236	67	32	45	1110	e630	911
9	1070	e1000	208	155	126	212	66	32	46	1010	e595	835
10	e1000	e960	211	153	149	204	60	31	36	e940	e570	775
11	e950	e920	215	153	178	180	58	31	38	e980	e530	730
12	e870	e820	216	151	177	164	140	29	52	e1010	e520	705
13	e820	e720	214	149	174	157	107	28	45	e950	e495	680
14	e750	e620	212	169	188	143	94	27	43	e890	e460	704
15	e680	e590	216	224	178	134	81	25	46	e840	e480	665
16	e620	e530	208	283	157	129	83	26	44	e810	e520	646
17	e560	e470	200	255	146	120	72	28	83	e850	e600	708
18	e510	e420	198	240	137	109	70	29	185	e900	e690	656
19	e460	e380	191	226	135	105	75	45	192	e860	e670	592
20	e420	363	191	224	132	99	61	44	161	e870	e625	566
21	e380	338	186	208	126	94	58	31	174	e810	e620	532
22	e380	320	178	211	138	90	53	30	365	e1000	e600	506
23	e410	306	170	208	242	85	50	30	515	e990	e535	489
24	e430	289	174	196	343	82	48	31	592	e1080	e560	492
25	e420	293	169	194	343	81	46	35	741	e1220	e650	512
26	e430	265	165	183	343	82	45	27	911	e1450	e690	598
27	e600	258	157	174	330	81	42	27	974	e1350	e560	584
28	e850	245	171	175	346	77	40	26	953	e1210	e450	564
29	e1450	225	157	159	---	75	38	25	919	e1000	e500	546
30	e1500	213	155	152	---	73	37	31	910	e920	e600	544
31	e1300	---	154	149	---	71	---	57	---	e870	e700	---
TOTAL	26350	20395	5861	5651	5157	4926	2014	1003	8292	33090	18705	21430
MEAN	850	680	189	182	184	159	67.1	32.4	276	1067	603	714
MAX	1500	1300	216	283	346	348	140	57	974	1660	780	1150
MIN	380	213	154	149	122	71	37	25	26	810	450	489

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

MEAN	591	265	176	181	201	226	164	95.5	231	405	488	683
MAX	2748	920	1013	988	1702	1659	841	566	1272	1491	1547	2787
(WY)	1949	1998	1998	1998	1998	1998	1998	1957	1959	1974	1960	1948
MIN	56.3	38.7	32.4	27.5	11.8	6.86	9.38	3.26	11.3	32.5	70.1	92.3
(WY)	1973	2001	2001	2001	2001	2001	1956	1981	1989	1977	1950	1972

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939 - 2002	
ANNUAL TOTAL	132415.28		152874			
ANNUAL MEAN	363		419		308	
HIGHEST ANNUAL MEAN					772	1960
LOWEST ANNUAL MEAN					60.5	1956
HIGHEST DAILY MEAN	3030	Sep 15	1660	Jul 5	7180	Sep 23 1948
LOWEST DAILY MEAN	0.68	Mar 18	25	May 15,29	a0.00	
ANNUAL SEVEN-DAY MINIMUM	0.80	Mar 22	27	May 12	0.80	Mar 22 2001
MAXIMUM PEAK FLOW			1830	Jul 5	*7380	Sep 23 1948
MAXIMUM PEAK STAGE			6.15	Jul 5	8.71	Sep 23 1948
INSTANTANEOUS LOW FLOW			0.00	May 30		
10 PERCENT EXCEEDS	1250		1010		717	
50 PERCENT EXCEEDS	115		216		161	
90 PERCENT EXCEEDS	3.6		38		43	

e Estimated
a Nov 23,30, Dec. 28, 1986, May 17-19,1996.
* From rating curve extended above 5300ft^3/s.

02273000 KISSIMMEE RIVER AT S-65E, NEAR OKEECHOBEE, FL

(Former national stream-quality accounting network station)

LOCATION.--Lat 27°13'32", long 80°57'46", in NE¼ sec.30, T.37 S., R.34 E., Okeechobee County, Hydrologic Unit 03090101, at upstream side of lock and control structure S-65E, 1.8 mi downstream from State Highway 70, 8.2 mi upstream from mouth, and 8.5 mi west of Okeechobee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1928 to September 1962, October 1962 to September 1964 (elevations only), October 1964 to current year. Prior to October 1964, published as Kissimmee River near Okeechobee. Monthly discharges only for some periods, published in WSP l304.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 28, 1949, nonrecording gage, and Apr. 28, 1949, to Sept. 30, 1964, water-stage recorder, 1.8 mi upstream at datum 1.37 ft lower. Auxiliary gage at downstream side of lock and control structure 65E.

REMARKS.--Records good. Flow regulated by operation of structure 65E beginning in October 1964. Discharge computed from relation between discharge, head, and gate openings. Records do not include diversions from Lake Istokpoga through control structure 68 on Canal 41A, which began July 1962.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1928, resulting from hurricane, reached a stage of 28.9 ft, present datum, discharge, 20,000 ft^3/s, from rating curve extended above 14,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5040	2150	282	410	379	433	376	407	289	5190	3330	7830
2	5070	1960	424	465	423	568	428	293	206	4640	3500	8120
3	4860	1950	658	658	367	472	449	364	191	5190	3470	7990
4	4600	1820	541	440	373	475	477	415	207	5600	3300	7600
5	4220	1750	530	270	413	425	418	303	187	5990	3290	7560
6	3890	1620	551	507	369	418	394	324	195	5850	3200	7710
7	3600	1430	558	433	368	508	391	369	195	6360	3150	8280
8	3470	1370	534	464	427	778	389	369	196	6250	3230	7420
9	3400	1520	568	466	361	467	388	339	161	5000	3150	7560
10	3150	1630	682	406	448	563	357	269	159	4440	2950	6170
11	2650	1520	575	377	447	395	350	155	185	4520	3060	6360
12	2260	1460	527	369	449	437	453	258	146	5590	2940	5960
13	2260	1290	495	555	399	499	374	281	146	6320	3050	5470
14	2240	1160	681	443	432	466	351	292	221	6250	3170	5410
15	1930	892	601	494	428	430	463	239	290	6710	3430	5380
16	1600	767	601	520	422	454	460	273	315	6500	3910	5440
17	1560	1060	601	469	360	418	404	283	396	5990	4410	5410
18	1620	1010	690	574	333	505	440	233	325	5440	5320	5320
19	1540	794	634	610	445	402	381	303	365	5040	5080	4860
20	1250	843	609	502	403	454	430	380	220	4580	5050	4880
21	1190	1020	577	445	421	419	475	233	631	4520	5320	4340
22	1460	1090	454	502	454	364	439	219	996	4840	6210	4270
23	1550	794	450	523	519	448	360	249	760	5130	6360	4270
24	1620	712	505	522	455	491	269	118	917	3220	6280	3940
25	1700	716	615	527	452	363	404	35	1470	4380	5900	4060
26	1900	862	533	558	464	402	415	128	2030	4550	5730	4170
27	2760	588	485	548	501	428	356	146	2620	3950	5510	4200
28	2590	356	484	408	484	429	357	168	3410	3320	5410	3600
29	2750	828	484	438	---	423	291	193	4470	3440	5080	3360
30	2910	922	449	486	---	486	336	134	3400	3400	5310	3370
31	2490	---	445	462	---	358	---	264	---	3520	6870	---
TOTAL	83130	35884	16823	14851	11796	14178	11875	8036	25299	155720	135970	170310
MEAN	2682	1196	543	479	421	457	396	259	843	5023	4386	5677
MAX	5070	2150	690	658	519	778	477	415	4470	6710	6870	8280
MIN	1190	356	282	270	333	358	269	35	146	3220	2940	3360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

MEAN	1577	698	738	1286	1495	1579	1455	902	814	1518	2169	2069
MAX	10000	4319	6539	7864	6871	9326	4947	2362	4676	9670	7421	6548
(WY)	1970	1995	1998	1998	1998	1998	1993	1984	1982	1974	1974	1995
MIN	36.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.65	0.80	13.6	189
(WY)	1973	2001	1989	1985	2001	1985	2001	2001	1981	1981	1977	1970

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002	
ANNUAL TOTAL	324901.0		683872			
ANNUAL MEAN	890		1874		1358	
HIGHEST ANNUAL MEAN					3304	1998
LOWEST ANNUAL MEAN					124	1981
HIGHEST DAILY MEAN	6870	Sep 18	8280	Sep 7	23500	Oct 3 1969
LOWEST DAILY MEAN	0.00	Many days	35	May 25	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	132	May 24	0.00	Many days
MAXIMUM PEAK FLOW					27900	Oct 3 1969
MAXIMUM PEAK STAGE			21.97	Oct 27	27.00	Oct 3 1969
10 PERCENT EXCEEDS	2730		5390		3690	
50 PERCENT EXCEEDS	140		558		564	
90 PERCENT EXCEEDS	0.00		287		1.6	

02273000 KISSIMMEE RIVER AT S-65E, NEAR OKEECHOBEE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.01	21.03	20.55	20.96	20.97	21.01	21.01	20.94	21.01	21.02	20.98	21.17
2	21.04	21.06	21.28	21.07	20.98	20.99	20.97	20.90	21.00	20.96	21.01	21.24
3	21.02	21.08	21.12	21.03	20.95	20.90	21.00	21.02	20.96	20.97	21.04	20.86
4	21.00	21.02	21.03	20.88	20.98	20.92	21.01	20.88	20.94	20.97	21.00	21.02
5	20.99	21.11	21.03	20.99	21.00	20.95	20.93	20.90	20.92	20.98	21.01	21.13
6	21.07	21.14	21.04	21.03	21.03	20.98	20.95	21.01	20.96	20.97	21.05	21.23
7	21.05	21.14	20.98	20.96	20.96	21.02	20.94	20.96	20.93	21.02	21.02	21.07
8	21.09	21.12	21.00	21.01	20.89	21.00	20.96	20.91	20.97	20.98	21.05	20.96
9	21.00	21.06	21.14	20.91	20.95	20.95	20.92	20.88	20.98	20.90	21.01	21.27
10	21.01	21.03	21.03	20.95	21.01	20.90	20.87	20.92	21.03	20.97	20.99	20.90
11	20.97	21.01	21.11	21.00	20.98	20.88	20.98	21.01	20.98	21.00	21.04	21.21
12	20.88	21.00	21.07	21.02	20.94	21.01	21.03	21.00	20.97	21.02	21.03	20.82
13	20.90	21.04	21.05	21.02	20.99	20.96	20.89	21.02	21.01	21.11	21.08	20.90
14	21.00	21.02	21.01	20.95	21.00	20.89	20.97	21.01	21.03	21.00	21.03	20.87
15	20.96	20.91	21.01	21.03	21.00	21.01	21.04	21.03	21.00	20.95	21.09	20.89
16	20.88	21.04	21.01	20.97	20.99	20.90	20.92	21.04	20.92	20.97	21.05	21.15
17	20.90	21.12	21.02	21.00	20.93	20.97	21.00	20.94	20.90	20.95	21.07	21.07
18	20.91	20.89	21.04	21.04	21.02	21.00	20.97	20.94	20.88	20.97	21.11	20.97
19	21.02	20.97	20.93	20.93	21.06	20.88	20.91	21.04	20.91	21.03	21.03	20.87
20	21.08	20.96	21.02	20.94	20.92	21.01	21.03	21.03	20.98	21.00	21.07	21.24
21	21.12	20.98	20.96	20.98	21.05	20.94	20.92	20.97	21.03	21.05	21.03	20.88
22	21.12	21.02	21.02	21.00	21.00	21.00	20.89	20.89	20.94	21.00	21.09	20.97
23	20.94	20.94	21.05	20.95	20.98	21.03	20.86	20.95	20.94	21.04	21.07	20.91
24	20.91	20.99	21.01	20.94	20.94	20.92	21.03	20.97	21.09	20.99	21.02	20.88
25	21.06	21.02	21.03	20.99	20.94	20.92	21.10	21.02	21.00	21.07	20.95	21.01
26	21.06	21.04	20.98	21.04	20.96	21.01	20.95	21.01	21.01	21.04	20.94	20.99
27	21.23	20.78	20.96	20.95	20.97	21.00	20.92	21.02	20.95	20.98	20.95	20.97
28	20.67	21.24	20.97	20.91	20.90	20.96	20.90	21.04	21.02	21.04	20.92	20.80
29	20.89	21.09	21.02	21.06	---	20.97	20.98	21.02	20.92	20.93	20.93	20.94
30	20.96	20.56	21.00	20.97	---	20.89	21.17	21.02	20.94	21.06	21.30	21.02
31	21.00	---	21.03	20.95	---	20.87	---	21.04	---	20.94	21.35	---
MEAN	20.99	21.01	21.02	20.98	20.97	20.96	20.97	20.98	20.97	21.00	21.04	21.01
MAX	21.23	21.24	21.28	21.07	21.06	21.03	21.17	21.04	21.09	21.11	21.35	21.27
MIN	20.67	20.56	20.55	20.88	20.89	20.87	20.86	20.88	20.88	20.90	20.92	20.80

WTR YR 2002 MEAN 20.99 MAX 21.35 MIN 20.55

02273001 KISSIMMEE RIVER BELOW S-65E, NEAR OKEECHOBEE, FL

LOCATION.--Lat 27°13'32", long 80°57'46", in NE¼ sec.30, T.37 S., R.34 E., Okeechobee County, Hydrologic Unit 03090101, at downstream side of lock and control structure S-65E, 1.8 mi downstream from State Highway 70, 8.2 mi upstream from mouth, and 8.5 mi west of Okeechobee.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Auxiliary gage for station 02273000 at upstream side of lock and control structure.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 18.56 ft, Mar. 25, 27, 28, 1998; minimum daily, 9.00 ft, May 24, 2001.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.83	14.64	14.71	14.42	14.46	14.28	13.75	12.86	11.73	12.78	14.33	15.13
2	13.99	14.68	14.68	14.57	14.39	14.43	13.75	12.86	11.73	12.84	14.38	15.17
3	14.07	14.67	14.66	14.37	14.39	14.32	13.66	12.87	11.72	12.97	14.45	15.19
4	14.10	14.62	14.67	14.28	14.21	13.96	13.62	12.80	11.71	13.03	14.45	15.28
5	14.14	14.54	14.69	14.42	14.20	13.82	13.47	12.69	11.66	13.10	14.44	15.38
6	14.17	14.63	14.68	14.56	14.43	14.11	13.41	12.62	11.58	13.21	14.37	15.37
7	14.13	14.72	14.73	14.39	14.37	14.16	13.51	12.57	11.56	13.31	14.33	15.36
8	14.10	14.80	14.77	14.27	14.18	14.17	13.59	12.54	11.51	13.46	14.30	15.37
9	14.06	14.80	14.76	14.41	14.26	14.17	13.60	12.52	11.40	13.53	14.36	15.42
10	14.19	14.79	14.77	14.45	14.33	14.09	13.48	12.44	11.46	13.65	14.31	15.48
11	14.19	14.81	14.74	14.46	14.31	14.09	13.44	12.40	11.51	13.65	14.32	15.50
12	14.22	14.78	14.75	14.46	14.36	14.17	13.42	12.33	11.58	13.77	14.40	15.57
13	14.28	14.75	14.74	14.43	14.27	14.16	13.40	12.34	11.62	13.89	14.40	15.56
14	14.32	14.77	14.79	14.49	14.21	14.10	13.40	12.12	11.59	13.86	14.50	15.54
15	14.20	14.74	14.71	14.50	14.37	14.11	13.38	11.99	11.84	13.91	14.57	15.50
16	14.20	14.64	14.71	14.47	14.33	14.11	13.36	12.10	11.64	13.97	14.55	15.49
17	13.87	14.72	14.72	14.53	14.23	14.10	13.34	12.16	11.76	13.98	14.58	15.49
18	13.98	14.76	14.68	14.50	14.18	14.08	13.35	12.09	11.83	14.02	14.59	15.50
19	14.19	14.79	14.63	14.54	14.36	14.06	13.32	12.13	11.75	14.04	14.62	15.53
20	14.18	14.81	14.53	14.55	14.38	14.11	13.31	11.94	11.89	14.00	14.65	15.54
21	14.21	14.79	14.44	14.54	14.36	14.01	13.31	11.81	12.06	14.10	14.69	15.54
22	14.33	14.82	14.55	14.54	14.28	13.77	13.32	11.76	12.05	14.18	14.65	15.57
23	14.39	14.86	14.63	14.59	14.13	13.77	13.15	11.96	12.09	14.22	14.71	15.58
24	14.48	14.85	14.59	14.60	14.20	13.88	13.13	12.01	12.13	14.24	14.77	15.67
25	14.53	14.81	14.42	14.54	14.31	13.87	13.19	11.97	12.29	14.29	14.81	15.83
26	14.29	14.81	14.31	14.53	14.35	13.83	13.15	11.91	12.42	14.33	14.85	15.82
27	14.20	14.82	14.54	14.51	14.12	13.79	13.12	11.96	12.48	14.36	14.85	15.73
28	14.28	14.82	14.58	14.50	14.04	13.72	13.06	11.83	12.53	14.38	14.90	15.65
29	14.49	14.80	14.62	14.50	---	13.80	12.93	11.85	12.62	14.34	14.91	15.62
30	14.54	14.78	14.52	14.51	---	13.84	12.90	11.89	12.69	14.37	15.01	15.59
31	14.59	---	14.50	14.51	---	13.82	---	11.79	---	14.42	15.05	---
MEAN	14.22	14.75	14.64	14.48	14.29	14.02	13.36	12.23	11.88	13.81	14.58	15.50
MAX	14.59	14.86	14.79	14.60	14.46	14.43	13.75	12.87	12.69	14.42	15.05	15.83
MIN	13.83	14.54	14.31	14.27	14.04	13.72	12.90	11.76	11.40	12.78	14.30	15.13

WTR YR 2002 MEAN 13.98 MAX 15.83 MIN 11.40

02275503 TAYLOR CREEK AT HGS-6, NEAR OKEECHOBEE, FL

LOCATION.--Lat 27°12'24", long 80°47'53", in SE¼ sec.35, T.37 S., R.35 E., Okeechobee County, Hydrologic Unit 03090102, inside lock chamber of S-193 at HGS No. 6, 1,100 ft south of U.S. Highway 441-98, 2.7 mi east of Sherman, and 3.2 mi southeast of Okeechobee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1991 to August 1992 (gage heights only), September 1992 to current year.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at NGVD of 1929.

REMARKS.--Records poor. Discharge not published for some periods due to missing velocity or gage height record. Flow regulated by hurricane lock gates at Lake Okeechobee. Since gage height data at this site is affected by lockages, water level at the structure will at times differ from that of the lake. Negative flow is considered flow into the rim canal.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	-13	4.9	-12	1.7	---	---	0.42	2.1	0.40
2	---	---	---	57	42	-7.5	1.4	-3.3	e-1.4	-3.6	0.44	1.4
3	---	---	---	-31	-17	-47	-0.16	e-2.0	---	-1.1	-0.52	1.1
4	---	---	---	13	21	24	-0.53	e-0.24	---	0.06	5.8	1.1
5	---	---	---	-44	-4.9	54	-0.41	---	---	-0.19	1.1	-0.26
6	---	---	---	34	-25	41	-0.44	---	---	0.03	-3.0	-2.6
7	---	---	-13	-10	25	-9.8	-0.29	---	---	2.6	1.2	-3.7
8	---	---	-0.92	3.1	-2.6	-15	-1.4	---	-0.14	2.9	2.8	4.2
9	---	---	-3.8	83	-10	2.3	-0.35	---	2.0	9.5	-0.26	18
10	---	---	-9.6	-27	9.7	15	0.29	e-3.9	-2.5	5.1	2.6	10
11	---	---	0.30	-51	0.31	1.6	1.6	---	-2.4	2.2	1.4	6.3
12	---	---	15	43	-5.0	-27	-0.02	---	1.2	3.1	1.4	19
13	---	---	-7.1	0.82	-3.9	24	0.18	e-2.5	6.7	1.5	-1.3	32
14	---	---	13	-31	-24	-19	-1.8	---	0.91	5.1	1.1	2.6
15	---	---	0.60	2.7	-6.6	-2.6	-3.4	e-2.1	-0.43	11	-0.49	-5.0
16	---	---	-39	-5.2	-14	-0.96	1.8	---	0.82	5.9	1.6	-4.4
17	---	---	117	-11	79	-2.3	3.9	---	2.3	3.3	0.44	4.7
18	---	---	-67	-16	9.6	2.2	---	---	0.28	-1.2	3.4	10
19	---	---	-25	-8.5	-27	-1.9	e0.37	---	6.3	2.4	0.88	6.8
20	---	---	67	125	-2.1	0.29	-2.9	---	3.4	15	1.6	5.0
21	---	---	-32	4.9	-8.3	0.14	-1.8	---	4.5	2.4	-0.78	2.9
22	---	---	82	-4.2	-2.0	1.3	-2.8	---	-1.3	0.62	1.0	2.5
23	---	---	-58	-18	36	-3.5	-2.1	---	1.2	1.7	-2.3	4.6
24	---	---	67	-12	-33	-3.4	-3.1	---	3.3	2.5	0.07	-1.3
25	---	---	-51	25	-5.7	-2.9	-4.7	---	1.5	0.94	1.6	-1.9
26	---	---	-17	-54	-25	-1.3	---	---	2.2	4.7	0.15	-2.7
27	---	---	-22	6.3	-2.7	4.9	-1.5	---	0.10	5.8	0.38	-2.0
28	---	---	26	4.9	54	1.2	-0.20	---	5.9	1.8	-3.0	-4.1
29	---	---	20	-2.4	---	0.81	-1.1	---	-0.08	4.6	-2.6	-7.7
30	---	---	15	-7.3	---	-1.1	-3.6	---	-0.55	-0.96	-2.3	-4.8
31	---	---	3.6	4.9	---	-1.00	---	---	---	2.2	-0.66	---
TOTAL	---	---	81.08	62.02	62.71	14.48	-21.36	-14.04	33.81	90.32	13.85	92.14
MEAN	---	---	3.24	2.00	2.24	0.47	-0.76	-2.34	1.41	2.91	0.45	3.07
MAX	---	---	117	125	79	54	3.9	-0.24	6.7	15	5.8	32
MIN	---	---	-67	-54	-33	-47	-4.7	-3.9	-2.5	-3.6	-3.0	-7.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

MEAN	6.04	6.29	8.12	3.54	6.66	3.98	9.47	0.24	10.1	9.65	8.36	6.68
MAX	24.3	18.9	20.7	18.0	21.0	20.1	29.4	20.1	32.4	44.9	24.5	23.7
(WY)	1995	1997	1998	1997	1998	1998	1997	1996	1999	1997	1995	1997
MIN	-29.5	-15.0	-15.9	-39.4	-29.0	-28.4	-21.0	-57.1	-28.2	-28.8	-33.2	-33.0
(WY)	2000	2000	1999	1993	1993	1993	1993	1998	1993	1999	1999	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	333.97		415.01			
ANNUAL MEAN					6.48	
HIGHEST ANNUAL MEAN					21.5	1997
LOWEST ANNUAL MEAN					-18.4	1993
HIGHEST DAILY MEAN	117	Dec 17	125	Jan 20	231	Jul 12 1997
LOWEST DAILY MEAN	-156	Sep 30	-67	Dec 18	-156	Sep 30 2000
ANNUAL SEVEN-DAY MINIMUM	-62	Sep 4	-9.7	Jan 13	-67	May 9 1998
MAXIMUM PEAK STAGE			15.16	Sep 14	19.50	Mar 9 1998
10 PERCENT EXCEEDS	25		15		25	
50 PERCENT EXCEEDS	0.00		0.15		9.8	
90 PERCENT EXCEEDS	-18		-14		-24	

e Estimated
Note.--Negative figures indicate reverse flow

02275503 TAYLOR CREEK AT HGS-6, NEAR OKEECHOBEE, FL--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-14	-3.6	-3.0	-10	3.0	-9.1	-1.7	4.9	-20	92	-4.7	-7.8
2	-3.7	-5.7	-8.0	-12	-7.7	-0.12	-2.7	-20	-12	44	-0.98	4.5
3	3.4	-9.8	-11	-9.7	-0.70	1.1	2.4	-43	21	-18	-6.1	-5.4
4	-4.2	-5.1	-6.8	-8.1	-7.5	-9.2	-8.3	-2.4	4.9	40	-5.7	-6.2
5	-4.0	-6.9	-2.4	-4.0	-15	-5.4	-7.1	38	6.7	-34	-5.4	-5.0
6	-2.8	-15	-3.4	-1.5	-3.0	-4.8	-5.6	8.9	-4.9	40	-6.8	-2.3
7	-3.8	-13	-8.9	-4.7	-4.3	-4.2	-2.8	-11	7.6	-25	-4.5	e-4.3
8	-2.0	-18	4.3	-9.5	-11	-2.7	-0.61	-38	55	-44	-7.3	e5.0
9	-8.3	-18	-1.2	-8.5	-5.6	-3.2	-4.1	-29	13	-36	-2.5	e-5.3
10	-4.2	-12	-5.0	-4.4	-3.3	-14	-3.8	45	-29	-27	-3.4	e-8.8
11	-4.8	-0.57	-9.5	-4.5	-2.7	-4.9	-2.6	-25	-38	58	-12	-7.7
12	-7.1	-1.4	-2.4	7.9	-1.4	5.4	-18	-18	-79	-27	-5.8	-5.0
13	-1.2	-1.5	-6.4	-5.5	-8.0	-6.4	0.29	-74	59	46	-1.9	-3.7
14	-0.30	-5.6	-0.09	3.8	-10	0.27	19	114	-89	33	-3.7	-3.6
15	-1.9	-6.4	-6.4	-1.5	4.8	4.9	-16	-23	46	8.7	2.6	-6.2
16	-5.9	-5.7	-5.4	-2.8	-14	1.0	17	55	-10	2.1	-5.3	-8.8
17	-1.9	-7.5	-2.8	-2.3	-12	2.9	2.1	-32	53	-1.6	-0.52	-3.8
18	-8.4	-5.1	-3.4	-0.78	-5.9	2.0	5.2	12	-20	0.20	-8.1	-7.2
19	-5.8	-8.6	-10	5.0	-4.1	3.5	-16	95	48	2.8	-7.4	-2.3
20	-2.6	-15	-7.6	8.0	-1.8	0.51	-41	75	-79	-1.7	-3.7	-6.1
21	-1.3	-8.9	-7.9	9.6	-1.7	-4.7	-43	60	-88	-2.2	-3.6	-5.5
22	-13	-6.5	-5.9	-12	-0.55	-6.0	-37	-17	44	-1.5	-5.3	-4.0
23	-5.2	-0.17	-2.7	-0.44	-11	-2.9	124	-44	-57	1.1	-3.8	-7.8
24	2.1	-3.0	-0.97	4.0	-12	-6.0	-32	-29	-16	-1.8	-2.2	-2.8
25	-2.8	-2.1	-7.0	-0.83	-11	-2.3	-100	3.1	-30	-5.9	-0.59	-6.5
26	-7.2	-0.37	-7.9	1.3	-3.0	5.1	-25	14	-71	-2.1	-6.9	-13
27	-7.7	-6.0	-13	-8.4	-7.2	-1.8	30	-15	-21	-1.3	-6.6	-3.4
28	-14	-4.2	-1.1	-4.0	-10	-5.3	-33	31	-56	-2.7	-6.7	-2.8
29	-6.9	-8.3	-2.1	2.6	---	-4.2	70	-38	0.70	-5.7	-6.7	-2.7
30	-3.6	-0.53	-9.2	2.9	---	-4.9	-44	7.6	-1.5	-1.4	-6.0	-10
31	-4.7	---	-9.7	-1.6	---	-4.5	---	31	---	-5.4	-5.6	---
TOTAL	-147.80	-204.54	-166.86	-71.95	-166.65	-79.94	-174.32	136.1	-362.50	123.60	-147.19	-148.5
MEAN	-4.77	-6.82	-5.38	-2.32	-5.95	-2.58	-5.81	4.39	-12.1	3.99	-4.75	-4.95
MAX	3.4	-0.17	4.3	9.6	4.8	5.4	124	114	59	92	2.6	5.0
MIN	-14	-18	-13	-12	-15	-14	-100	-74	-89	-44	-12	-13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

MEAN	4.80	4.64	6.60	2.95	5.33	3.27	7.70	0.72	7.43	8.98	6.58	5.45
MAX	24.3	18.9	20.7	18.0	21.0	20.1	29.4	20.1	32.4	44.9	24.5	23.7
(WY)	1995	1997	1998	1997	1998	1998	1997	1996	1999	1997	1995	1997
MIN	-29.5	-15.0	-15.9	-39.4	-29.0	-28.4	-21.0	-57.1	-28.2	-28.8	-33.2	-33.0
(WY)	2000	2000	1999	1993	1993	1993	1993	1998	1993	1999	1999	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1992 - 2002	
ANNUAL TOTAL	-185.27		-1410.55			
ANNUAL MEAN			-3.86		5.30	
HIGHEST ANNUAL MEAN					21.5	1997
LOWEST ANNUAL MEAN					-18.4	1993
HIGHEST DAILY MEAN	125	Jan 20	124	Apr 23	231	Jul 12 1997
LOWEST DAILY MEAN	-54	Jan 26	-100	Apr 25	-156	Sep 30 2000
ANNUAL SEVEN-DAY MINIMUM	-13	Nov 4	-42	Jun 20	-67	May 9 1998
MAXIMUM PEAK STAGE			16.42	Sep 24,25	19.50	Mar 9 1998
10 PERCENT EXCEEDS	6.2		7.7		25	
50 PERCENT EXCEEDS	-1.2		-4.5		6.0	
90 PERCENT EXCEEDS	-11		-20		-24	

e Estimated
Note.--Negative figures indicate reverse flow

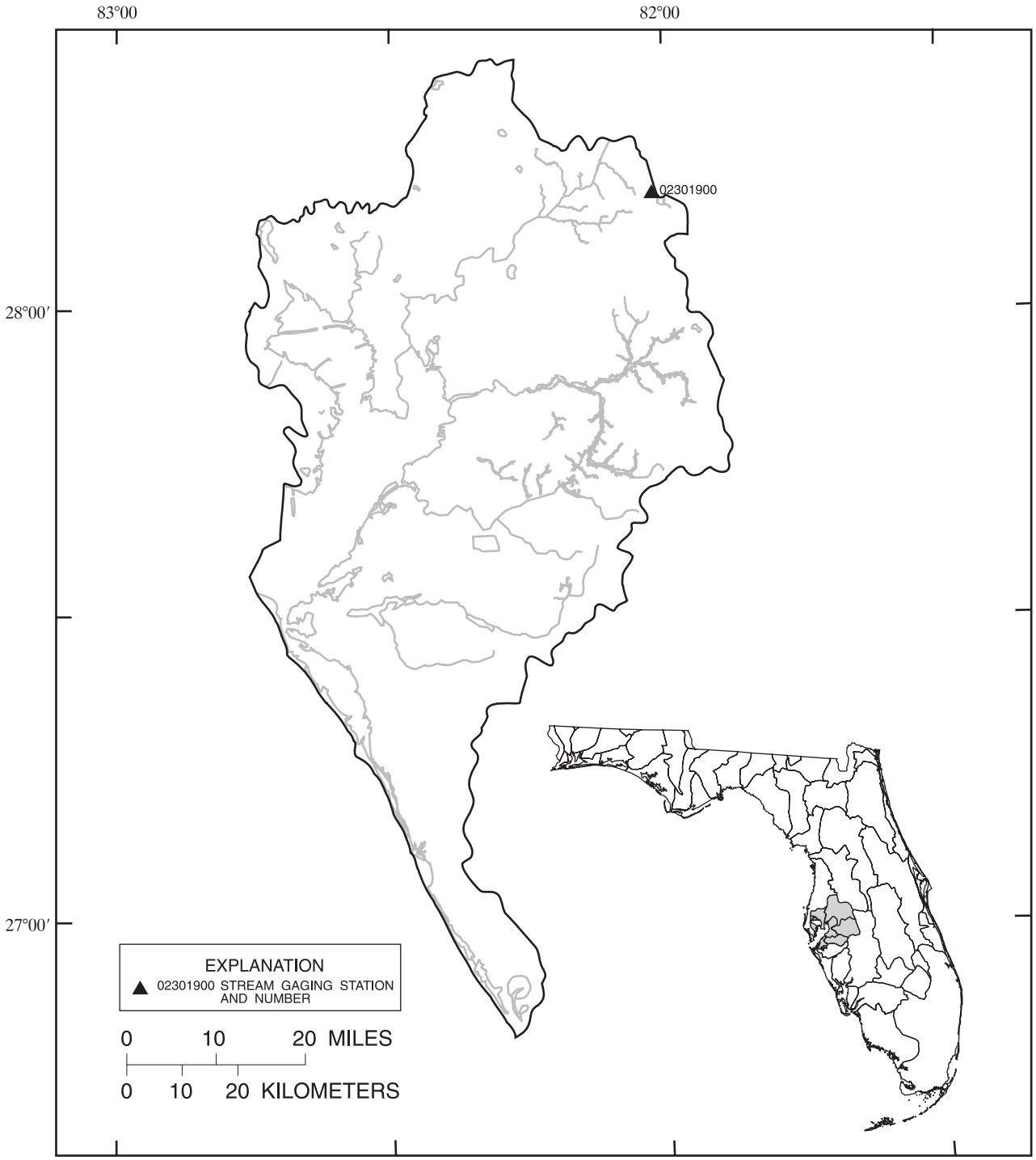

Figure 10.--Location of stream gaging stations in the Manatee, Little Manatee, Alafia, and Hillsborough River basins, and Tampa Bay and coastal areas.

02301900 FOX BRANCH NEAR SOCRUM, FL

LOCATION.--Lat 28°10'55", long 82°00'45", in NE¼ sec.33, T.26 S., R.23 E., Polk County, Hydrologic Unit 03100205, near center of span on downstream side of bridge on Rock Ridge Road, 1.1 mi northeast of Socrum, 8.7 mi upstream from mouth, and 10 mi north of Lakeland.

DRAINAGE AREA.--9.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1963 to current year.

REVISED RECORDS.--WRD FL 1969: 1968 (M).

GAGE.--Water-stage recorder. Datum of gage is 110.00 ft above NGVD of 1929.

REMARKS.--Records fair. Some diversion at times by pumpage for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	2.5	2.1	2.3	2.5	3.6	1.5	0.57	2.9	48	3.6	124
2	6.4	2.4	2.1	2.6	2.5	3.4	1.6	0.54	2.6	35	3.4	53
3	5.5	2.5	2.1	3.3	2.5	3.3	1.6	0.51	1.5	28	3.5	31
4	4.9	2.5	2.2	3.2	2.5	3.5	2.1	0.45	1.1	21	5.1	21
5	4.4	2.7	2.2	2.9	2.5	3.5	2.0	0.41	1.0	14	8.1	18
6	4.1	2.5	2.2	3.2	2.5	3.3	1.7	0.39	1.3	13	8.2	24
7	3.8	2.4	2.2	3.0	2.8	3.3	1.5	0.42	5.6	9.7	5.4	19
8	3.6	2.4	2.2	2.9	3.5	3.3	1.4	0.39	27	9.1	5.3	15
9	3.4	2.2	2.2	2.8	3.3	3.2	1.4	0.37	28	6.4	4.7	20
10	3.1	2.2	2.3	3.1	3.0	3.1	1.3	0.34	13	6.0	4.2	19
11	3.0	2.2	2.5	2.9	3.1	3.0	1.3	0.30	7.7	5.5	3.2	25
12	2.9	2.1	2.6	2.8	3.0	2.9	1.2	0.29	6.4	4.9	2.8	44
13	2.9	2.2	2.5	2.8	2.9	3.0	1.3	0.29	5.2	16	2.8	41
14	2.9	2.4	2.5	3.0	2.9	3.0	1.5	0.29	11	60	3.6	34
15	2.9	2.5	2.4	4.1	2.8	2.8	1.8	0.29	12	33	27	56
16	2.9	2.4	2.5	4.2	2.8	2.6	1.6	0.26	14	13	33	41
17	2.9	2.2	2.4	3.7	2.7	2.5	1.5	0.26	12	21	17	24
18	2.8	2.2	2.4	3.4	2.6	2.5	1.3	0.26	22	20	12	19
19	2.6	2.2	2.3	3.2	2.6	2.4	1.3	0.57	28	9.6	9.2	15
20	2.6	2.2	2.3	3.0	2.5	2.3	1.2	0.77	20	6.3	9.3	13
21	2.7	2.2	2.2	2.9	2.5	2.2	1.1	0.68	15	5.8	14	12
22	3.5	2.2	2.2	2.9	2.7	2.2	0.94	0.59	24	7.4	12	13
23	4.3	2.2	2.2	2.9	4.7	2.0	0.89	0.52	65	6.8	9.5	15
24	3.9	2.2	2.2	2.9	7.6	1.9	0.86	0.47	160	5.3	8.3	23
25	3.4	2.2	2.2	2.8	6.3	1.9	0.80	0.44	336	4.4	8.6	105
26	3.0	2.2	2.3	2.8	4.7	1.9	0.75	0.39	165	4.1	111	94
27	2.8	2.2	2.3	2.7	4.1	1.8	0.71	0.38	52	4.0	130	38
28	2.5	2.2	2.2	2.7	3.7	1.7	0.64	0.46	24	3.6	45	21
29	2.5	2.1	2.3	2.7	---	1.7	0.59	0.81	16	3.1	31	16
30	2.5	2.1	2.2	2.6	---	1.6	0.57	2.4	21	2.7	141	13
31	2.5	---	2.2	2.6	---	1.6	---	1.9	---	3.2	189	---
TOTAL	108.8	68.7	70.7	92.9	91.8	81.0	37.95	17.01	1100.3	429.9	870.8	1006
MEAN	3.51	2.29	2.28	3.00	3.28	2.61	1.26	0.55	36.7	13.9	28.1	33.5
MAX	7.6	2.7	2.6	4.2	7.6	3.6	2.1	2.4	336	60	189	124
MIN	2.5	2.1	2.1	2.3	2.5	1.6	0.57	0.26	1.0	2.7	2.8	12
CFSM	0.37	0.24	0.24	0.32	0.35	0.28	0.13	0.06	3.86	1.46	2.96	3.53
IN.	0.43	0.27	0.28	0.36	0.36	0.32	0.15	0.07	4.31	1.68	3.41	3.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2002, BY WATER YEAR (WY)

MEAN	5.57	3.62	7.43	5.88	7.37	8.20	3.92	2.74	10.2	14.3	17.2	21.9
MAX	17.5	20.4	121	16.5	39.7	39.2	24.2	14.7	61.5	95.7	65.0	127
(WY)	1970	1998	1998	1970	1998	1983	1984	1979	1968	1991	1995	2001
MIN	0.71	0.38	1.44	1.33	0.26	0.63	0.000	0.012	0.36	0.73	1.84	0.46
(WY)	1979	1979	1983	1981	2001	2000	1977	1977	2001	1981	1980	1978

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1967 - 2002	
ANNUAL TOTAL	5326.25		3975.86			
ANNUAL MEAN	14.6		10.9		9.02	
HIGHEST ANNUAL MEAN					22.3	1998
LOWEST ANNUAL MEAN					3.22	1981
HIGHEST DAILY MEAN	1020	Sep 15	336	Jun 25	1020	Sep 15 2001
LOWEST DAILY MEAN	0.00	Many days	0.26	May 16-18	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 22	0.28	May 12	0.00	Some years
MAXIMUM PEAK FLOW			389	Jun 25	1790	Dec 27 1997
MAXIMUM PEAK STAGE			6.74	Jun 25	8.28	Sep 14 2001
INSTANTANEOUS LOW FLOW			0.24	May 16-18		
ANNUAL RUNOFF (CFSM)	1.54		1.15		0.95	
ANNUAL RUNOFF (INCHES)	20.86		15.57		12.90	
10 PERCENT EXCEEDS	20		24		18	
50 PERCENT EXCEEDS	2.1		2.8		2.9	
90 PERCENT EXCEEDS	0.12		0.88		0.84	

02301900 FOX BRANCH NEAR SOCRUM, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-87, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)
NOV							
19...	1615	2.2	3.41	340	6.7	20.0	3.4
JAN							
22...	1620	2.9	3.54	335	7.2	20.2	6.6
MAR							
13...	1030	3.1	3.57	330	6.8	19.9	4.8
MAY							
06...	1515	.44	3.30	403	7.5	26.0	5.8
JUL							
09...	1433	6.2	3.97	244	6.7	25.5	4.5
SEP							
13...	0900	44	4.62	189	7.1	24.3	5.0

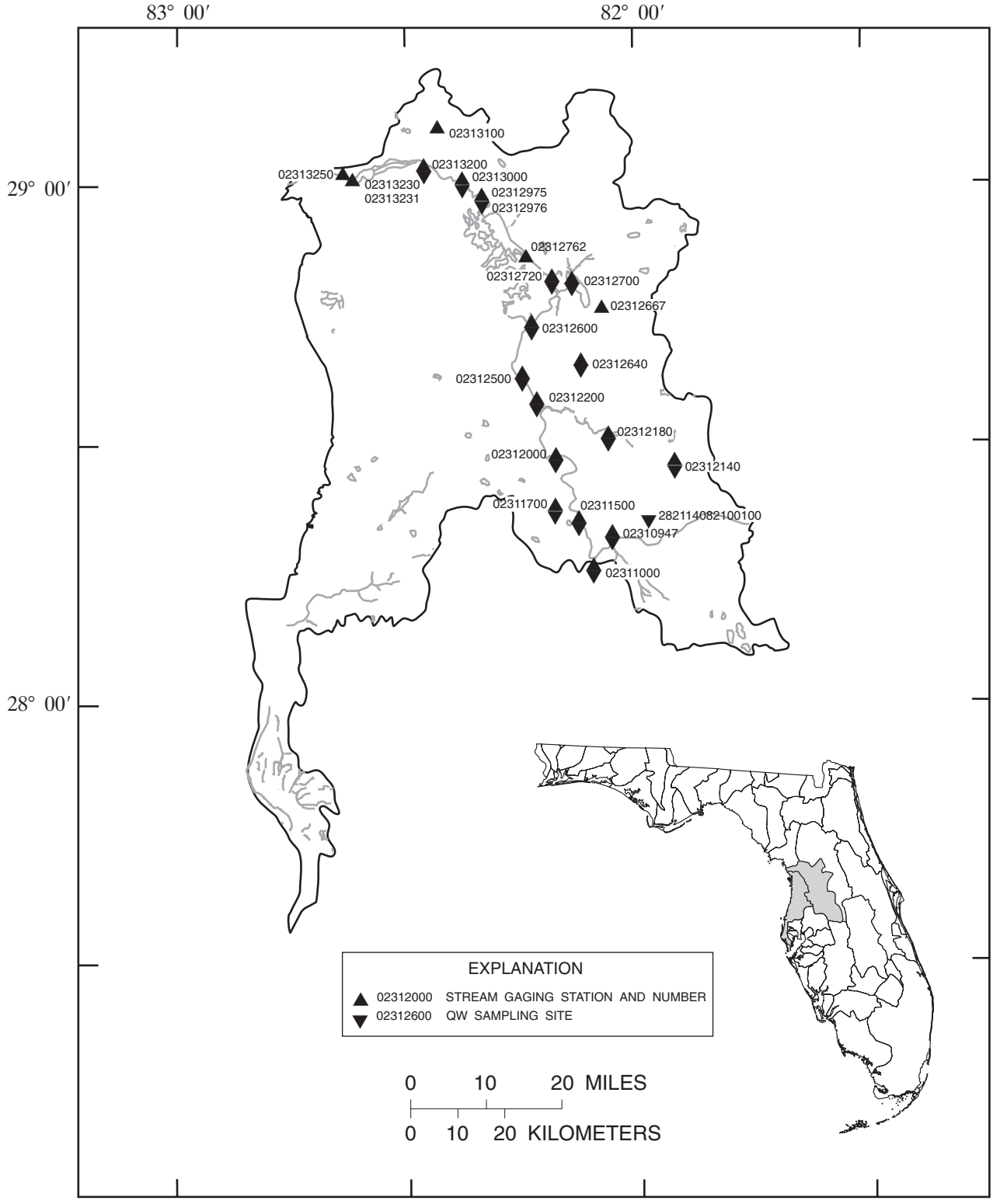

Figure 11.--Location of stream gaging stations in the Withlacoochee River basin and coastal areas.

282114082100100 GREEN SWAMP EAST WMA MARSH NEAR CUMPRESSCO, FL

LOCATION.--Lat 28°21'14", long 82°01'01", in NW$^{1}/_{4}$ sec.33, T.24 S., R.23 E., Sumter County, Hydrologic Unit 03100208, 0.2 mi south of levee road, 3.0 mi east of main gate at County Road 471.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 2000 to July 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2002

Date	Time	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT.DIS GRAN T. FIELD (MG/L CACO3) (29802)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV 2000													
08...	1200	8.3	3.9	73	13	3.50	1.10	.30	6.1	.0	9.00	.20	132
08...	1230	9.2	4.1	58	16	3.90	1.50	.40	4.8	.6	7.00	.31	138
08...	1300	9.2	3.8	61	14	3.30	1.30	.20	4.5	.0	7.70	<.20	116
APR 2001													
16...	1230	6.7	5.0	80	13	2.90	1.40	2.40	5.9	1.2	9.60	.20	164
16...	1300	9.0	5.5	89	11	2.40	1.30	2.30	5.5	2.0	9.10	.44	145
16...	1330	8.1	3.9	86	12	2.70	1.30	1.80	5.6	1.0	9.20	.30	148
JUL													
18...	1000	1.6	4.0	46	9	2.40	.80	.50	2.6	.6	4.30	.20	102
18...	1010	1.7	4.2	41	10	2.50	.90	.50	2.4	.3	3.70	1.3	95
18...	1020	1.3	5.2	48	15	4.70	.86	.80	3.3	5.5	5.00	.6	115
AUG													
23...	1000	1.5	4.4	50	9	2.10	.92	.40	3.6	1.5	4.20	.7	119
NOV													
07...	1100	5.8	5.0	40	7	1.50	.67	.30	2.2	3.8	3.10	<.20	89
MAR 2002													
07...	1130	8.0	5.5	36	6	1.40	.58	.20	2.5	2.3	3.60	<.20	83
JUL													
17...	1100	4.2	4.2	42	8	1.90	.82	.40	2.6	.5	3.80	1.00	90

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV 2000										
08...	.020	2.4	16	.005	.005	.007	<.001	.420	50.0	651
08...	.030	2.8	3.6	.005	.007	.009	<.001	.080	49.0	302
08...	.020	2.6	8.0	.003	.004	.010	<.001	.290	43.0	452
APR 2001										
16...	.040	3.8	4.7	.004	.006	.009	<.001	.040	54.0	596
16...	.040	3.3	7.9	.003	.004	.010	<.001	.230	50.0	610
16...	.040	3.3	6.7	<.002	.005	.006	<.001	.160	47.0	616
JUL										
18...	E.035	2.7	2.8	E.003	E.008	.021	<.001	.030	26.0	734
18...	E.038	2.2	2.5	<.002	E.007	.004	<.001	.044	22.0	420
18...	E.031	2.5	2.7	<.002	E.008	.018	<.001	.047	26.0	930
AUG										
23...	E.011	2.2	2.7	<.002	E.020	<.002	<.001	.014	36.0	1120
NOV										
07...	E.005	E1.7	E1.9	<.002	E.010	E.004	<.001	E.008	46.0	446
MAR 2002										
07...	.013	1.8	2.0	.006	.012	.008	.001	.050	32.0	248
JUL										
17...	.017	1.8	2.1	.009	.010	<.002	<.001	.007	37.0	609

< -- Less than
E -- Estimated value

02310947 WITHLACOOCHEE RIVER NEAR CUMPRESSCO, FL

LOCATION.--Lat 28°18'42", long 82°03'22", in NE¼ sec.13, T.25 S., R.22 E., Pasco County, Hydrologic Unit 03100208, near left bank on downstream side of bridge on State Highway 471, 0.6 mi upstream from Gator Creek, 3.4 mi south of Cumpressco, 5.8 mi east of Richland, and 120 mi upstream from mouth.

DRAINAGE AREA.--280 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 75.00 ft above NGVD of 1929 (Florida Department of Transportation bench mark). Prior to Aug. 3, 1978, at datum 5.00 ft higher.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Some interconnection with Gator Creek and some diversions to the north may exist during periods of extreme high water.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	30	7.2	2.8	7.4	16	0.70	0.00	0.00	12	133	e880
2	315	28	7.0	4.0	7.3	15	0.63	0.00	0.00	63	127	e970
3	280	27	6.8	7.1	6.8	14	0.65	0.00	0.00	100	130	e1070
4	249	25	6.4	7.2	5.8	15	0.75	0.00	0.00	144	129	e1170
5	223	25	6.0	6.1	5.4	15	0.69	0.00	0.00	178	130	e1260
6	196	23	5.4	6.3	5.1	13	0.55	0.00	0.00	204	139	e1340
7	181	22	5.2	7.5	5.2	12	0.30	0.00	0.00	209	179	e1330
8	174	20	5.0	7.6	5.7	11	0.18	0.00	0.00	208	247	e1270
9	157	19	4.9	7.0	5.6	10	0.11	0.00	0.00	204	264	e1200
10	136	18	5.0	6.4	5.4	9.3	0.09	0.00	0.00	205	268	e1130
11	118	17	5.1	6.0	5.7	8.8	0.09	0.00	0.00	206	263	e1010
12	104	16	4.7	5.7	5.8	7.8	0.09	0.00	0.00	210	248	806
13	90	15	4.5	5.7	5.4	8.4	0.12	0.00	0.00	214	237	770
14	82	15	4.5	6.9	5.2	7.8	0.10	0.00	0.00	236	261	744
15	75	15	4.5	10	5.0	6.6	0.20	0.00	0.00	259	442	751
16	68	14	4.5	11	4.8	5.6	0.19	0.00	0.00	301	502	715
17	62	13	4.7	11	4.6	5.0	0.12	0.00	0.00	354	566	806
18	56	13	4.8	11	4.4	4.6	0.08	0.00	0.00	382	590	827
19	50	12	4.6	11	4.1	4.2	0.05	0.00	0.00	377	606	898
20	47	12	4.3	11	3.5	3.9	0.02	0.00	0.00	359	584	803
21	44	11	4.1	10	3.1	3.4	0.00	0.00	0.00	331	530	716
22	44	10	3.9	9.4	3.5	3.4	0.00	0.00	0.00	322	462	643
23	42	9.4	3.8	9.1	7.3	3.0	0.00	0.00	0.00	314	399	594
24	39	9.3	3.6	9.1	13	2.6	0.00	0.00	0.05	294	351	611
25	44	8.9	3.6	8.9	13	2.4	0.00	0.00	0.02	e294	314	730
26	49	8.5	3.6	8.7	15	2.1	0.00	0.00	0.09	e288	292	775
27	48	8.4	3.4	8.3	18	1.9	0.00	0.00	0.18	e278	338	792
28	44	8.2	3.2	8.1	18	1.3	0.00	0.00	0.06	e268	350	770
29	39	7.9	3.1	7.9	---	1.1	0.00	0.00	0.06	e252	428	729
30	36	7.6	3.1	7.6	---	0.91	0.00	0.00	0.19	e220	658	676
31	32	---	3.0	7.5	---	0.80	---	0.00	---	142	e770	---
TOTAL	3484	468.2	143.5	245.9	199.1	215.91	5.71	0.00	0.65	7428	10937	26786
MEAN	112	15.6	4.63	7.93	7.11	6.96	0.19	0.000	0.022	240	353	893
MAX	360	30	7.2	11	18	16	0.75	0.00	0.19	382	770	1340
MIN	32	7.6	3.0	2.8	3.1	0.80	0.00	0.00	0.00	12	127	594

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2002, BY WATER YEAR (WY)

MEAN	155	59.7	95.2	113	129	157	91.3	14.8	46.7	162	261	321
MAX	708	298	1638	1203	963	1076	867	132	505	913	670	1024
(WY)	1980	1970	1998	1998	1998	1998	1987	1979	1968	1991	1995	1979
MIN	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006
(WY)	2001	1979	2001	1981	2001	2001	1999	1967	1977	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1967 - 2002	
ANNUAL TOTAL	34477.43		49913.97			
ANNUAL MEAN	94.5		137		134	
HIGHEST ANNUAL MEAN					457	1998
LOWEST ANNUAL MEAN					8.60	1999
HIGHEST DAILY MEAN	2210	Sep 17	e1340	Sep 6	e3250	Dec 29 1997
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Apr 21	0.00	Many days
MAXIMUM PEAK STAGE					a14.06	Dec 31 1997
10 PERCENT EXCEEDS	255		544		434	
50 PERCENT EXCEEDS	0.00		7.9		21	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated
a May have been higher during period of no record, Dec. 15-30, 1997.

02310947 WITHLACOOCHEE RIVER NEAR CUMPRESSCO, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961, 1965, 1967 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)
OCT													
25...	1200	45	6.64	--	6.1	25.4	2.2	.09	.01	E2.7	.090	E.15	.160
NOV													
27...	1155	8.1	5.71	217	6.4	19.7	3.4	.04	<.01	E2.7	.060	E.08	.050
DEC													
19...	1200	4.3	5.56	232	6.7	18.1	3.4	.06	<.01	2.9	.060	E.08	.050
JAN													
28...	1530	7.7	5.83	219	6.2	22.0	4.9	<.01	<.01	2.3	<.020	.05	.030
FEB													
25...	1245	13	6.04	277	6.5	15.9	--	<.01	<.01	1.9	<.020	.03	.020
MAR													
25...	1215	2.4	5.49	--	--	--	--	.04	.01	2.1	.030	.04	.030
APR													
22...	1045	.00	4.93	416	6.7	22.7	.9	.04	<.01	1.4	<.020	.05	.030
JUL													
29...	1015	E252	--	107	5.6	25.9	4.3	.03	.02	.20	.050	.15	.160
AUG													
26...	1140	286	8.23	90	6.0	25.1	4.1	.02	.02	2.7	.030	.17	.150
SEP													
16...	0945	715	9.87	75	5.8	25.4	3.6	.02	.02	2.1	<.020	.19	.180

< -- Less than
E -- Estimated value

02311000 WITHLACOOCHEE-HILLSBOROUGH OVERFLOW NEAR RICHLAND, FL

LOCATION.--Lat 28°16'16", long 82°05'53", in NW¼ sec.34, T.25 S., R.22 E., Pasco County, Hydrologic Unit 03100208, on left bank, 20 ft downstream of bridge on U.S. Highway 98, 0.6 mi south of channel of Withlacoochee River, 2.9 mi east of Richland, 8.5 mi southeast of Dade City, and 55 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to September 1931; September 1950, July 1958 to March 1960 (discharge measurements only); April 1960 to current year. Published as supplement to Hillsborough River near Zephyrhills (station 02303000) July 1958 to September 1959.

GAGE.--Water-stage recorder. Datum of gage is 75.42 ft above NGVD of 1929 (Florida Department of Transportation bench mark). Prior to July 17, 1958, nonrecording gage at site about 1 mi downstream at different datum; July 17, 1958, to Apr. 24, 1960, nonrecording gage and crest-stage gage at present site and datum.

REMARKS.--Records good except for period of estimated daily discharge, which is poor. Flow is uncontrolled natural diversion from the Withlacoochee River basin to the Hillsborough River basin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	251
2	65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	347
3	45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	388
4	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	409
5	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	423
6	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	407
7	9.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	365
8	8.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.1	0.00	316
9	6.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3	0.82	278
10	5.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.2	1.8	237
11	3.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	1.9	206
12	1.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	1.7	185
13	1.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.1	1.9	165
14	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.5	0.52	143
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.7	e1.3	144
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.2	e1.8	139
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	e3.7	149
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20	e7.8	172
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24	e14	208
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23	e17	210
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20	e14	179
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	e11	144
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14	e8.9	116
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12	e7.0	112
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.5	e5.6	163
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.0	e3.9	188
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.4	e3.7	199
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.5	e5.4	193
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	4.6	e8.4	174
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	2.0	52	149
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.41	143	---
TOTAL	302.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	208.58	317.14	6759
MEAN	9.75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.73	10.2	225
MAX	90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24	143	423
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

MEAN	24.7	3.13	15.7	17.0	15.6	25.7	22.2	1.07	10.5	25.6	52.1	80.0
MAX	222	71.8	444	272	192	214	268	21.8	271	305	372	521
(WY)	1980	1989	1998	1998	1998	1998	1930	1931	1930	1991	1960	1960
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1962	1962	1961	1961	1962	1961	1961	1961	1960	1969	1980	1970

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1930 - 2002	
ANNUAL TOTAL	11008.25		7587.07			
ANNUAL MEAN	30.2		20.8		21.6	
HIGHEST ANNUAL MEAN					98.1	1998
LOWEST ANNUAL MEAN					0.005	2000
HIGHEST DAILY MEAN	959	Sep 17	423	Sep 5	1270	Sep 14 1960
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 15	0.00	Many days
MAXIMUM PEAK FLOW			431	Sep 5	1880	Mar 19 1960
MAXIMUM PEAK STAGE			4.87	Sep 5	6.87	Mar 19 1960
10 PERCENT EXCEEDS	21		27		46	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02311000 WITHLACOOCHEE-HILLSBOROUGH OVERFLOW NEAR RICHLAND, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.66	2.63	2.43	2.23	2.51	2.59	2.00	0.70	---	2.45	2.72	4.36
2	3.52	2.63	2.42	2.30	2.50	2.58	1.95	0.61	---	2.47	2.70	4.67
3	3.39	2.63	2.42	2.42	2.50	2.57	1.94	0.57	---	2.57	2.71	4.77
4	3.27	2.62	2.41	2.45	2.48	2.61	1.95	0.55	---	2.62	2.70	4.82
5	3.17	2.61	2.40	2.46	2.47	2.59	1.93	0.54	---	2.66	2.69	4.85
6	3.09	2.59	2.39	2.50	2.45	2.58	1.88	0.54	---	2.72	2.67	4.82
7	3.03	2.58	2.39	2.51	2.47	2.57	1.82	0.54	---	2.78	2.68	4.71
8	3.00	2.57	2.39	2.51	2.48	2.57	1.76	0.53	---	2.81	2.72	4.58
9	2.98	2.56	2.38	2.51	2.48	2.55	1.70	---	---	2.82	2.80	4.46
10	2.94	2.55	2.38	2.50	2.47	2.53	1.63	---	---	2.82	2.84	4.31
11	2.89	2.54	2.37	2.50	2.48	2.52	1.59	---	---	2.81	2.85	4.19
12	2.85	2.53	2.37	2.50	2.48	2.50	1.53	---	---	2.81	2.84	4.10
13	2.82	2.52	2.36	2.52	2.47	2.52	1.54	---	---	2.85	2.84	4.01
14	2.79	2.54	2.36	2.56	2.46	2.50	1.59	---	---	2.90	2.87	3.91
15	2.76	2.54	2.35	2.65	2.45	2.48	1.78	---	---	2.93	---	3.92
16	2.74	2.53	2.35	2.66	2.44	2.47	1.79	---	---	2.98	---	3.89
17	2.71	2.53	2.34	2.65	2.44	2.45	1.77	---	---	3.07	---	3.94
18	2.70	2.52	2.34	2.64	2.42	2.42	1.74	---	---	3.17	---	4.04
19	2.69	2.51	2.33	2.62	2.40	2.40	1.69	---	---	3.21	---	4.19
20	2.68	2.51	2.32	2.61	2.40	2.37	1.63	---	0.79	3.20	---	4.20
21	2.69	2.50	2.30	2.60	2.38	2.36	1.57	---	1.23	3.17	---	4.07
22	2.69	2.49	2.29	2.59	2.41	2.35	1.49	---	1.41	3.13	---	3.91
23	2.68	2.49	2.28	2.58	2.55	2.32	1.39	---	1.59	3.10	---	3.78
24	2.68	2.48	2.28	2.58	2.70	2.29	1.30	---	1.78	3.06	---	3.76
25	2.68	2.47	2.28	2.57	2.70	2.27	1.19	---	1.93	3.03	---	4.00
26	2.67	2.47	2.28	2.56	2.67	2.24	1.11	---	2.02	3.02	---	4.11
27	2.67	2.46	2.27	2.55	2.64	2.20	1.07	---	2.04	3.03	---	4.16
28	2.66	2.45	2.26	2.54	2.61	2.17	0.97	---	2.05	2.99	---	4.13
29	2.66	2.44	2.26	2.54	---	2.13	0.85	---	2.15	2.93	---	4.04
30	2.65	2.44	2.25	2.53	---	2.09	0.77	---	2.31	2.85	3.50	3.93
31	2.64	---	2.24	2.52	---	2.05	---	---	---	2.78	3.92	---
MEAN	2.87	2.53	2.34	2.53	2.50	2.41	1.56	---	---	2.89	---	4.22
MAX	3.66	2.63	2.43	2.66	2.70	2.61	2.00	---	---	3.21	---	4.85
MIN	2.64	2.44	2.24	2.23	2.38	2.05	0.77	---	---	2.45	---	3.76

02311000 WITHLACOOCHEE-HILLSBOROUGH OVERFLOW NEAR RICHLAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1930-1931, 1950, 1958-61, 1963, 1966, 1969-85, 1989, 1991, 1993-98, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
AUG 30...	0922	47	3.42	94	6.5	25.1	320	1.8	.07	.02	1.5	.040	.76

Date	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
AUG 30...	27.0	.730	44	15.0	1.60	2.4	2.30	32	2.70	4.70	.1	3.50	116

Date	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
AUG 30...	29.0

02311500 WITHLACOOCHEE RIVER NEAR DADE CITY, FL

LOCATION.--Lat 28°21'08", long 82°07'34", in SE¼ sec.32, T.24 S., R.22 E., Pasco County, Hydrologic Unit 03100208, on left bank 50 ft downstream from Lanier Bridge on River Road, 4 mi east of Dade City, and 110 mi upstream from mouth.

DRAINAGE AREA.--390 mi^2, approximately.

PERIOD OF RECORD.--February 1930 to March 1933, July 1958 to October 1962 (discharge measurements only), water years 1959-62 (annual maximum), January 1964 to September 1983 (discharge measurements and gage heights only); October 1983 to current year.

REVISED RECORDS.--WRD FL 1962: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Feb. 11, 1930 to Mar. 31, 1933, and July 21 to Nov. 19, 1958, nonrecording gage, and Nov. 20, 1958 to Oct. 3, 1962, non-recording gage and crest-stage gage at same site at datum 64.29 ft higher. Jan. 21, 1964 to Oct. 8, 1987, nonrecording gage at same site and datum.

REMARKS.--Records fair. High-water diversion above station into Hillsborough River basin through Withlacoochee-Hillsborough Overflow near Richland (station 02311000).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	736	74	18	9.0	16	23	7.2	1.0	0.00	11	303	659
2	630	71	18	10	15	23	6.7	0.77	0.00	12	275	899
3	546	67	17	13	15	24	6.6	0.55	0.00	16	249	1110
4	492	63	16	14	14	27	6.7	0.35	0.00	22	236	1240
5	448	60	16	14	14	27	6.3	0.19	0.00	58	223	1320
6	412	55	15	15	13	27	5.8	0.05	0.00	118	208	1390
7	384	51	15	15	13	26	5.3	0.00	0.00	184	209	1380
8	361	47	15	15	14	26	4.8	0.00	0.00	244	221	1330
9	336	44	14	14	13	25	4.4	0.00	0.00	278	235	1270
10	318	42	14	14	13	24	4.0	0.00	0.00	292	269	1180
11	300	39	14	13	13	22	3.9	0.00	0.00	297	291	1090
12	280	38	14	13	13	21	3.6	0.00	0.00	308	303	1030
13	258	36	13	13	13	21	3.5	0.00	0.00	336	312	984
14	231	37	13	14	12	20	3.5	0.00	0.00	363	332	905
15	206	36	12	18	12	20	4.1	0.00	0.00	352	398	854
16	184	34	12	19	12	19	4.1	0.00	0.00	347	453	803
17	165	32	12	20	12	18	3.9	0.00	0.00	357	519	1010
18	149	31	12	20	12	17	3.7	0.00	0.00	379	590	1010
19	135	30	12	19	11	16	3.3	0.00	0.00	409	644	961
20	123	28	11	19	11	14	3.0	0.00	0.01	435	678	964
21	114	27	11	19	11	14	2.8	0.00	0.50	446	676	956
22	108	26	11	18	11	13	2.5	0.00	1.8	449	651	896
23	101	25	10	18	14	12	2.3	0.00	6.0	443	604	817
24	96	23	10	18	18	12	2.0	0.00	14	428	546	774
25	93	23	10	18	21	11	1.8	0.00	12	415	492	844
26	89	22	10	18	23	10	1.7	0.00	9.7	414	446	863
27	84	21	9.8	17	23	9.8	1.9	0.00	8.2	413	409	876
28	82	20	9.5	17	23	9.3	1.8	0.00	7.8	399	380	884
29	81	20	9.5	17	---	8.7	1.5	0.00	8.7	384	373	871
30	80	19	9.4	16	---	8.1	1.3	0.00	9.0	360	398	841
31	78	---	9.1	16	---	7.6	---	0.00	---	331	486	---
TOTAL	7700	1141	392.3	493.0	405	555.5	114.0	2.91	77.71	9300	12409	30011
MEAN	248	38.0	12.7	15.9	14.5	17.9	3.80	0.094	2.59	300	400	1000
MAX	736	74	18	20	23	27	7.2	1.0	14	449	678	1390
MIN	78	19	9.1	9.0	11	7.6	1.3	0.00	0.00	11	208	659

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

MEAN	189	86.8	141	183	133	179	201	34.8	76.0	158	256	369
MAX	890	430	1746	1487	1025	1262	1089	263	699	1022	897	1197
(WY)	1996	1998	1998	1998	1998	1998	1987	1931	1930	1991	1995	1988
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	2001	2001	2001	2001	2001	2001	2000	2000	1992	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1930 - 2002	
ANNUAL TOTAL	48264.3		62601.42			
ANNUAL MEAN	132		172		163	
HIGHEST ANNUAL MEAN					547	1998
LOWEST ANNUAL MEAN					10.4	2000
HIGHEST DAILY MEAN	e2680	Sep 19	1390	Sep 6	3880	Dec 31 1997
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	May 7	0.00	Many days
MAXIMUM PEAK FLOW			1390	Sep 6,7	*5900	Mar 21 1960
MAXIMUM PEAK STAGE			75.22	Sep 6,7	78.57	Mar 21 1960
10 PERCENT EXCEEDS	370		614		453	
50 PERCENT EXCEEDS	0.00		18		31	
90 PERCENT EXCEEDS	0.00		0.00		0.03	

* From rating curve extended above 3,600 ft^3/s
e Estimated

02311500 WITHLACOOCHEE RIVER NEAR DADE CITY, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73.76	69.92	68.78	68.39	68.85	69.13	68.34	67.56	---	68.50	71.79	73.54
2	73.46	69.87	68.76	68.49	68.83	69.14	68.30	67.49	---	68.57	71.58	74.17
3	73.18	69.82	68.74	68.69	68.82	69.16	68.29	67.41	---	68.72	71.39	74.63
4	72.92	69.76	68.72	68.70	68.79	69.24	68.31	67.32	---	68.94	71.31	74.90
5	72.69	69.70	68.70	68.71	68.76	69.25	68.27	67.23	---	69.70	71.24	75.08
6	72.49	69.63	68.69	68.75	68.74	69.24	68.22	67.13	---	70.45	71.14	75.21
7	72.32	69.55	68.68	68.77	68.75	69.23	68.17	67.03	---	70.98	71.14	75.19
8	72.18	69.49	68.67	68.76	68.76	69.21	68.12	66.93	---	71.37	71.22	75.10
9	72.02	69.43	68.65	68.73	68.73	69.18	68.08	66.83	---	71.60	71.31	74.97
10	71.89	69.38	68.65	68.72	68.73	69.15	68.04	66.72	---	71.71	71.53	74.79
11	71.76	69.33	68.64	68.71	68.73	69.11	68.03	66.62	---	71.75	71.70	74.60
12	71.62	69.29	68.62	68.70	68.72	69.07	67.99	66.52	---	71.83	71.79	74.46
13	71.45	69.25	68.60	68.70	68.71	69.05	67.97	66.42	---	72.02	71.85	74.37
14	71.29	69.27	68.59	68.76	68.70	69.03	67.97	66.33	---	72.19	71.99	74.19
15	71.12	69.25	68.57	68.91	68.69	69.01	68.06	66.23	---	72.12	72.41	74.07
16	70.97	69.21	68.57	68.96	68.68	68.98	68.06	66.14	---	72.09	72.72	73.94
17	70.83	69.17	68.56	68.98	68.67	68.94	68.04	66.05	---	72.15	73.06	74.42
18	70.70	69.14	68.55	68.98	68.64	68.90	68.00	65.97	65.98	72.30	73.34	74.42
19	70.58	69.12	68.53	68.97	68.63	68.86	67.96	65.97	66.47	72.47	73.50	74.32
20	70.47	69.08	68.51	68.96	68.61	68.81	67.93	65.96	66.91	72.62	73.60	74.33
21	70.38	69.05	68.49	68.96	68.60	68.78	67.90	65.89	67.36	72.68	73.60	74.31
22	70.32	69.01	68.47	68.95	68.61	68.74	67.86	65.83	67.68	72.70	73.53	74.17
23	70.25	68.98	68.46	68.96	68.76	68.70	67.81	65.78	68.18	72.67	73.38	73.98
24	70.19	68.96	68.47	68.96	68.96	68.67	67.77	65.72	68.83	72.58	73.18	73.86
25	70.15	68.93	68.45	68.96	69.06	68.63	67.73	65.67	68.67	72.51	72.92	74.04
26	70.10	68.90	68.45	68.95	69.12	68.59	67.71	65.61	68.50	72.50	72.68	74.09
27	70.05	68.88	68.43	68.93	69.14	68.55	67.76	65.57	68.37	72.50	72.47	74.12
28	70.02	68.85	68.42	68.91	69.13	68.51	67.73	---	68.32	72.42	72.30	74.14
29	70.01	68.83	68.42	68.90	---	68.47	67.68	---	68.38	72.32	72.26	74.11
30	70.00	68.81	68.41	68.88	---	68.42	67.62	---	68.38	72.17	72.41	74.04
31	69.97	---	68.40	68.87	---	68.38	---	---	---	71.99	72.89	---
MEAN	71.26	69.26	68.57	68.82	68.78	68.91	67.99	---	---	71.58	72.30	74.39
MAX	73.76	69.92	68.78	68.98	69.14	69.25	68.34	---	---	72.70	73.60	75.21
MIN	69.97	68.81	68.40	68.39	68.60	68.38	67.62	---	---	68.50	71.14	73.54

02311700 DADE CITY CANAL NEAR DADE CITY, FL

LOCATION.--Lat 28°22'55", long 82°10'48", in SW$^{1}/_{4}$ sec.23, T.24 S., R.21 E., Pasco County, Hydrologic Unit 03100208, near center of span, on downstream side of bridge over Evans Canal immediately upstream from confluence with Pasco Beverage Company Canal, 1.0 mi downstream from Pasco Beverage Company at Dade City, and 4.0 mi upstream from Withlacoochee River.

DRAINAGE AREA.--35 mi^{2}.

PERIOD OF RECORD.--February 1957 to October 1962 (discharge measurements for Pasco Beverage Company and Evans Canals only). November 1962 to current year (discharge measurements only). Prior to October 1985, published with station 02312000 Withlacoochee River at Trilby.

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929. Prior to Aug. 16, 1961, nonrecording gage 150 ft upstream at different datum.

REMARKS.--Discharge measurements made near bridge over Dade City Canal, 30 ft downstream from confluence of Pasco Beverage Company and Evans Canals. Water is diverted from ground-water sources through canals to the Withlacoochee River.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 103 ft^{3}/s, Feb. 24, 1967; no flow observed Dec. 2, 1964, Aug. 24, 1965, Oct. 1, 1979, Sept. 27, 2001.

DISCHARGE MEASUREMENTS AND WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)
NOV							
14...	1545	14	69.20	485	6.8	22.0	2.2
JAN							
18...	1535	9.4	69.14	651	7.6	20.9	1.8
MAR							
11...	1705	5.2	68.76	593	6.8	21.7	1.1
MAY							
07...	1025	4.0	68.60	584	7.6	27.3	3.0
JUL							
09...	0956	8.6	69.08	580	6.6	27.5	1.4
AUG							
28...	1509	4.3	69.85	701	6.7	26.9	1.4

02312000 WITHLACOOCHEE RIVER AT TRILBY, FL

LOCATION.--Lat 28°28'47", long 82°10'40", in SE¼ sec.14, T.23 S., R.21 E., Hernando County, Hydrologic Unit 03100208, on right bank at downstream side of bridge on U.S. Highway 301, 1.6 mi northeast of Trilby, 10 mi upstream from Little Withlacoochee River, and 93 mi upstream from mouth.

DRAINAGE AREA.--570 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to February 1929, February 1930 to current year.

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 49.27 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Oct. 1, 1938, nonrecording gage at site 1.5 mi downstream at datum 0.12 ft lower.

REMARKS.--Records fair. High-water diversion above station into Hillsborough River basin through Withlacoochee-Hillsborough Overflow near Richland (station 02311000). Records include water diverted from ground-water supplies through Dade City Canal (station 02311700) by citrus processing plants, in SW¼ sec.23, T.24 S., R.21 E., 5 mi upstream from Withlacoochee River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2330	126	41	22	52	42	20	9.8	12	42	554	828
2	2140	123	40	30	55	39	19	9.9	8.0	43	541	800
3	1950	118	39	36	57	38	19	9.9	6.9	39	535	773
4	1760	115	38	37	56	41	20	9.9	5.7	34	556	796
5	1570	113	37	37	52	41	18	10	6.1	33	567	936
6	1390	108	37	36	48	40	16	9.9	6.1	32	560	1060
7	1210	102	35	35	48	38	14	9.9	5.9	29	532	1160
8	1050	96	35	34	52	37	13	9.5	6.9	27	516	1280
9	912	91	35	32	55	36	12	9.4	6.7	27	501	1410
10	797	87	34	31	54	35	12	9.9	6.3	30	471	1530
11	701	83	34	29	53	34	11	9.6	6.1	57	430	1630
12	622	78	34	28	50	34	11	9.2	5.0	109	401	1710
13	554	74	34	28	48	36	12	9.0	4.5	163	385	1810
14	499	74	34	29	45	36	13	9.2	3.7	267	391	1890
15	449	72	34	34	42	37	14	9.1	5.6	307	497	1980
16	403	71	33	38	39	38	12	8.9	3.4	329	584	2020
17	360	68	33	41	37	37	12	9.0	6.7	353	626	2000
18	316	65	34	42	35	37	11	9.1	10	368	685	1980
19	278	62	34	40	32	36	11	13	5.7	376	726	1930
20	250	60	33	39	29	34	11	13	4.9	395	780	1870
21	231	58	32	40	27	33	11	11	3.4	417	840	1810
22	216	57	30	40	28	33	11	9.5	6.5	454	900	1730
23	204	55	29	40	34	32	10	9.1	e15	519	939	1660
24	195	55	28	41	46	31	9.8	8.9	e44	540	961	1650
25	186	53	27	43	52	31	9.7	8.2	e27	556	966	1880
26	176	50	27	44	52	30	9.9	7.5	e24	575	956	1990
27	167	47	26	45	50	27	10	7.6	26	623	942	1970
28	158	45	25	45	46	25	10	7.8	30	618	928	1890
29	150	44	23	46	---	24	9.7	6.9	39	601	899	1800
30	141	43	23	47	---	22	9.8	7.1	34	582	862	1700
31	133	---	22	49	---	21	---	9.8	---	568	842	---
TOTAL	21498	2293	1000	1158	1274	1055	381.9	290.6	375.1	9113	20873	47473
MEAN	693	76.4	32.3	37.4	45.5	34.0	12.7	9.37	12.5	294	673	1582
MAX	2330	126	41	49	57	42	20	13	44	623	966	2020
MIN	133	43	22	22	27	21	9.7	6.9	3.4	27	385	773

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2002, BY WATER YEAR (WY)

MEAN	515	204	170	223	241	365	311	112	167	332	540	767
MAX	2152	890	1850	2614	1291	3049	1945	790	3357	2191	2777	4255
(WY)	1929	1960	1998	1998	1998	1960	1987	1959	1934	1934	1960	1933
MIN	9.20	6.52	7.31	5.34	4.88	5.24	5.01	2.64	1.64	3.56	11.2	5.57
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2000	2001	1992	1999

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1928 - 2002	
ANNUAL TOTAL	66094.21		106784.6			
ANNUAL MEAN	181		293		324	
HIGHEST ANNUAL MEAN					1211	1960
LOWEST ANNUAL MEAN					15.8	2000
HIGHEST DAILY MEAN	2940	Sep 26	2330	Oct 1	8840	Jun 21 1934
LOWEST DAILY MEAN	0.71	Jun 13	3.4	Jun 16,21	0.07	Jun 10 2000
ANNUAL SEVEN-DAY MINIMUM	1.1	Jun 11	4.9	Jun 10	0.16	Jun 5 2000
MAXIMUM PEAK FLOW			2030	Sep 16	*8840	Jun 21 1934
MAXIMUM PEAK STAGE			13.91	Oct 1	*20.50	Jun 21 1934
INSTANTANEOUS LOW FLOW			2.9	Jun 16,17	0.00	Jun 10,11 2000
10 PERCENT EXCEEDS	398		948		858	
50 PERCENT EXCEEDS	5.5		40		123	
90 PERCENT EXCEEDS	2.4		9.5		23	

e Estimated
* Site and datum then in use.

02312000 WITHLACOOCHEE RIVER AT TRILBY, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.70	2.40	1.19	1.06	2.10	2.50	2.00	1.37	0.93	1.43	6.95	8.58
2	13.31	2.34	1.18	1.23	2.18	2.46	1.96	1.36	0.80	1.44	6.86	8.44
3	12.89	2.28	1.17	1.38	2.23	2.46	1.96	1.35	0.75	1.37	6.81	8.29
4	12.44	2.23	1.16	1.40	2.23	2.55	1.96	1.33	0.70	1.27	6.97	8.41
5	11.97	2.20	1.15	1.42	2.18	2.57	1.90	1.32	0.69	1.25	7.04	9.09
6	11.48	2.13	1.14	1.40	2.13	2.57	1.84	1.31	0.68	1.24	7.00	9.55
7	10.94	2.04	1.12	1.39	2.14	2.57	1.79	1.29	0.66	1.17	6.79	9.92
8	10.42	1.96	1.12	1.37	2.24	2.56	1.75	1.26	0.67	1.13	6.66	10.30
9	9.87	1.88	1.13	1.35	2.31	2.56	1.72	1.25	0.65	1.12	6.55	10.66
10	9.30	1.81	1.13	1.33	2.32	2.57	1.69	1.24	0.62	1.21	6.31	10.98
11	8.76	1.75	1.14	1.30	2.32	2.56	1.66	1.22	0.61	1.70	5.97	11.24
12	8.28	1.67	1.14	1.29	2.30	2.56	1.65	1.19	0.58	2.53	5.67	11.45
13	7.83	1.61	1.15	1.30	2.28	2.57	1.67	1.17	0.56	3.39	5.51	11.68
14	7.41	1.61	1.16	1.34	2.24	2.57	1.67	1.16	0.53	4.96	5.57	11.89
15	7.01	1.59	1.16	1.44	2.21	2.58	1.68	1.14	0.60	5.37	6.52	12.08
16	6.57	1.57	1.16	1.52	2.18	2.57	1.63	1.11	0.52	5.56	7.16	12.17
17	6.11	1.54	1.16	1.60	2.16	2.56	1.60	1.10	0.62	5.75	7.43	12.12
18	5.64	1.49	1.19	1.62	2.14	2.54	1.56	1.09	0.73	5.86	7.79	12.08
19	5.22	1.45	1.20	1.62	2.10	2.50	1.54	1.16	0.60	5.88	8.03	11.97
20	4.81	1.43	1.20	1.62	2.06	2.45	1.53	1.16	0.57	6.03	8.33	11.84
21	4.43	1.41	1.18	1.65	2.04	2.43	1.52	1.07	0.52	6.19	8.64	11.68
22	4.13	1.39	1.15	1.67	2.07	2.41	1.50	1.03	0.62	6.47	8.95	11.50
23	3.89	1.37	1.13	1.70	2.22	2.38	1.48	1.00	e0.86	6.92	9.11	11.31
24	3.71	1.37	1.13	1.74	2.47	2.34	1.46	0.98	e1.47	7.03	9.20	11.29
25	3.51	1.35	1.12	1.78	2.61	2.32	1.44	0.94	e1.13	7.09	9.22	11.85
26	3.31	1.30	1.12	1.82	2.63	2.29	1.43	0.91	e1.07	7.15	9.18	12.11
27	3.11	1.26	1.10	1.86	2.60	2.22	1.42	0.89	1.11	7.41	9.12	12.05
28	2.91	1.24	1.09	1.89	2.55	2.17	1.41	0.88	1.20	7.38	9.07	11.88
29	2.74	1.22	1.07	1.93	---	2.12	1.39	0.84	1.37	7.27	8.94	11.65
30	2.60	1.21	1.06	1.97	---	2.08	1.38	0.83	1.26	7.15	8.76	11.43
31	2.48	---	1.06	2.02	---	2.04	---	0.88	---	7.05	8.66	---
MEAN	7.12	1.67	1.14	1.55	2.26	2.44	1.64	1.12	0.79	4.41	7.57	10.98
MAX	13.70	2.40	1.20	2.02	2.63	2.58	2.00	1.37	1.47	7.41	9.22	12.17
MIN	2.48	1.21	1.06	1.06	2.04	2.04	1.38	0.83	0.52	1.12	5.51	8.29

CAL YR 2001 MEAN 2.11 MAX 14.85 MIN 0.28
WTR YR 2002 MEAN 3.57 MAX 13.70 MIN 0.52

e Estimated

02312000 WITHLACOOCHEE RIVER AT TRILBY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1958-61, 1963, 1966-87, 1992, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)
NOV							
14...	1120	81	1.62	332	6.5	19.9	3.0
JAN							
18...	1241	42	1.62	400	7.1	17.7	4.9
MAR							
11...	1343	34	2.56	376	6.4	21.3	5.2
MAY							
07...	1448	9.4	1.28	456	7.5	28.0	9.6
JUL							
08...	1500	26	1.12	456	6.8	26.6	5.3
AUG							
29...	1520	876	8.93	109	6.2	26.4	2.6

02312140 BAYROOT SLOUGH HEADWATERS NEAR BAY LAKE, FL

LOCATION.--Lat 28°27'23", long 81°55'14", in NW¼ sec.28, T.23 S., R.24 E., Lake County, Hydrologic Unit 03100208, at bridge on State Highway 565, 0.1 mi upstream from James A. Van Fleet Trail, and 1.5 mi southwest of town of Bay Lake.

DRAINAGE AREA.--18 mi^2, approximately.

PERIOD OF RECORD.--1960-61, October 1963 to current year (discharge measurements only).

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

REMARKS.--Discharge measurements made along the James A. Van Fleet Trail from 1.0 mi north to 0.8 mi south of State Highway 565, which includes Bayroot Slough, Bayroot Drain and Cam Slough.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 202 ft^3/s, Sept. 14, 1960; no flow observed at times in most years.

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1963-64, 1966-80, 1982-83, 1986, 1994-99, 2001 to current year.

DISCHARGE AND WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)
NOV							
20...	1215	.00	--	--	--	--	--
JAN							
15...	1445	.00	--	--	--	--	--
MAR							
14...	1130	.00	--	--	--	--	--
MAY							
08...	1140	.00	--	--	--	--	--
JUL							
10...	1050	2.3	99.53	109	4.0	24.8	.8
SEP							
06...	0825	23.3	100.15	59	4.5	25.8	5.4

02312180 LITTLE WITHLACOOCHEE RIVER NEAR TARRYTOWN, FL

LOCATION.--Lat 28°31'17", long 82°03'18", in NE¼ sec.1, T.23 S., R.22 E., Sumter County, Hydrologic Unit 03100208, near center of span on downstream side of bridge on State Highway 471, 2.3 mi south of Tarrytown, 3.1 mi southwest of Linden, and 14 mi upstream from mouth.

DRAINAGE AREA.--85 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 80.00 ft above NGVD of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records fair. Above bankfull stage, discharge measurements are made along State Highway 471 and include all culvert flow from 2.3 mi north to 2.8 mi south of gaging station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	2.9	0.00	0.00	0.24	1.5	0.00	0.00	0.00	1.2	17	135
2	105	2.5	0.00	0.18	0.21	1.4	0.00	0.00	0.00	0.33	21	123
3	97	2.4	0.00	0.57	0.16	1.5	0.00	0.00	0.00	0.05	35	246
4	88	2.2	0.00	0.34	0.11	2.3	0.00	0.00	0.00	0.00	44	248
5	80	2.2	0.00	0.30	0.04	2.4	0.00	0.00	0.00	0.40	37	315
6	71	1.9	0.00	0.31	0.00	2.2	0.00	0.00	0.00	0.76	33	283
7	63	1.5	0.00	0.33	0.11	2.1	0.00	0.00	0.00	0.16	41	242
8	55	1.3	0.00	0.28	0.29	1.8	0.00	0.00	0.00	0.00	54	198
9	48	1.1	0.00	0.23	0.24	1.6	0.00	0.00	0.00	0.03	51	165
10	38	0.96	0.00	0.19	0.23	1.4	0.00	0.00	0.00	0.09	48	138
11	33	0.88	0.00	0.15	0.26	1.1	0.00	0.00	0.00	0.02	44	117
12	29	0.77	0.00	0.11	0.24	0.95	0.00	0.00	0.00	0.74	41	107
13	25	0.68	0.00	0.12	0.21	0.98	0.00	0.00	0.00	2.0	54	114
14	22	0.74	0.00	0.41	0.16	0.94	0.00	0.00	0.00	5.5	69	145
15	19	0.81	0.00	1.0	0.13	0.83	0.00	0.00	0.00	3.9	87	154
16	17	0.73	0.00	1.1	0.09	0.75	0.00	0.00	0.00	2.1	97	137
17	15	0.59	0.00	0.99	0.05	0.64	0.00	0.00	0.00	1.2	124	121
18	13	0.48	0.00	0.92	0.00	0.51	0.00	0.00	0.00	0.59	269	112
19	10	0.41	0.00	0.83	0.00	0.38	0.00	0.00	0.00	1.3	244	98
20	9.1	0.35	0.00	0.77	0.00	0.31	0.00	0.00	0.00	3.5	228	84
21	8.2	0.31	0.00	0.67	0.00	0.26	0.00	0.00	0.00	5.1	170	70
22	8.1	0.27	0.00	0.69	0.00	0.23	0.00	0.00	0.00	27	135	61
23	7.7	0.24	0.00	0.66	0.81	0.11	0.00	0.00	0.00	44	111	59
24	7.4	0.20	0.00	0.60	2.3	0.01	0.00	0.00	0.00	33	94	90
25	7.2	0.15	0.00	0.52	2.4	0.06	0.00	0.00	0.10	24	77	156
26	6.5	0.13	0.00	0.46	2.2	0.36	0.00	0.00	0.31	24	71	172
27	5.7	0.07	0.00	0.43	2.1	0.28	0.00	0.00	0.22	33	91	165
28	4.9	0.02	0.00	0.38	1.7	0.25	0.00	0.00	0.15	29	91	159
29	4.3	0.00	0.00	0.36	---	0.18	0.00	0.00	1.0	23	81	149
30	3.7	0.00	0.00	0.31	---	0.05	0.00	0.00	1.8	19	94	138
31	3.3	---	0.00	0.27	---	0.00	---	0.00	---	17	152	---
TOTAL	1019.1	26.79	0.00	14.48	14.28	27.38	0.00	0.00	3.58	301.97	2805	4501
MEAN	32.9	0.89	0.000	0.47	0.51	0.88	0.000	0.000	0.12	9.74	90.5	150
MAX	115	2.9	0.00	1.1	2.4	2.4	0.00	0.00	1.8	44	269	315
MIN	3.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	59
CFSM	0.39	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.11	1.06	1.77
IN.	0.45	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.13	1.23	1.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2002, BY WATER YEAR (WY)

MEAN	62.3	20.1	27.6	40.9	40.5	53.6	35.1	5.61	9.98	25.4	57.4	96.1
MAX	354	159	386	386	285	351	329	68.6	129	275	263	362
(WY)	1996	1970	1998	1998	1998	1987	1987	1991	1991	1994	1994	1994
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1981	1971	1971	1981	1981	1981	1968	1967	1971	1971	1987	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1967 - 2002	
ANNUAL TOTAL	5902.75		8713.58			
ANNUAL MEAN	16.2		23.9		39.5	
HIGHEST ANNUAL MEAN					130	1998
LOWEST ANNUAL MEAN					0.000	2000
HIGHEST DAILY MEAN	e756	Sep 16	315	Sep 5	1180	Mar 31 1987
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Nov 29	0.00	Many days
MAXIMUM PEAK FLOW			323	Sep 5	1210	Mar 31 1987
MAXIMUM PEAK STAGE			5.58	Sep 5	6.58	Sep 28 1979
ANNUAL RUNOFF (CFSM)	0.19		0.28		0.47	
ANNUAL RUNOFF (INCHES)	2.58		3.81		6.32	
10 PERCENT EXCEEDS	14		97		127	
50 PERCENT EXCEEDS	0.00		0.33		1.4	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

02312180 LITTLE WITHLACOOCHEE RIVER NEAR TARRYTOWN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-71, 1973, 1984, 1986-89, 1991, 1999, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV													
19...	1140	.42	3.48	108	4.6	19.8	2.3	.04	.01	E3.9	<.020	E.20	--
JAN													
15...	1040	1.1	3.59	101	6.2	14.6	4.1	<.01	<.01	2.5	<.020	.07	74.0
MAR													
11...	1655	1.0	3.54	102	5.1	20.1	4.9	.02	<.01	2.4	<.020	.04	--
JUL													
10...	0910	.11	3.38	103	6.4	25.0	1.5	.06	.02	2.6	<.020	.05	73.0
AUG													
29...	0820	78	4.80	63	5.2	24.4	2.6	.01	.02	2.0	<.020	.02	--

Date	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
NOV													
19...	.210	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
15...	.070	39	12.0	2.10	6.3	1.50	9	4.20	13.0	<.1	1.20	184	24.0
MAR													
11...	.020	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
10...	.060	54	19.0	1.70	4.9	.80	25	2.90	9.00	<.1	5.50	212	39.0
AUG													
29...	.020	--	--	--	--	--	--	--	--	--	--	--	--

< -- Less than
E -- Estimated value

02312200 LITTLE WITHLACOOCHEE RIVER AT RERDELL, FL

LOCATION.--Lat 28°34'21", long 82°09'20", in SE¼ sec.13, T.22 S., R.21 E., Hernando County, Hydrologic Unit 03100208, near center of span on upstream side of bridge on U.S. Highway 301, 0.2 mi north of Rerdell, and 4.8 mi upstream from mouth.

DRAINAGE AREA.--145 mi^2, approximately.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 59.02 ft above NGVD of 1929.

REMARKS.--Records fair. Above bankfull stage, discharge measurements are made along U.S. Highway 301 and include all flow from 3.4 mi north to 1.8 mi south of gaging station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	16	5.7	4.2	6.5	8.2	3.9	0.59	0.00	50	190	347
2	147	16	5.5	12	6.5	7.9	3.9	0.43	0.00	60	175	315
3	135	16	5.5	9.3	6.4	8.6	4.1	0.25	0.00	36	180	374
4	122	16	5.5	7.6	6.2	15	4.2	0.18	0.00	37	168	457
5	112	17	5.5	7.4	6.2	11	3.6	0.16	0.00	40	152	576
6	103	14	5.5	7.7	6.0	11	3.3	0.14	0.00	38	142	590
7	96	13	5.4	7.9	6.5	11	3.2	0.12	0.00	34	137	581
8	89	12	5.4	7.5	6.5	11	3.1	0.11	0.00	32	133	508
9	82	12	5.4	7.3	6.1	10	2.8	e0.08	0.00	37	128	421
10	75	11	5.2	7.3	5.9	9.9	3.1	0.05	0.00	40	127	340
11	68	11	5.2	7.2	5.9	9.7	3.4	0.04	0.00	34	124	274
12	62	9.8	5.1	7.1	5.6	9.4	3.0	0.02	0.00	32	121	241
13	57	9.5	5.0	7.2	5.7	9.4	2.8	0.00	0.00	40	126	235
14	52	9.3	5.0	8.2	5.6	9.2	2.9	0.00	0.00	63	134	243
15	48	9.0	4.9	8.4	5.4	8.9	2.8	0.00	0.00	51	156	316
16	44	8.5	4.8	7.9	5.6	8.6	2.6	0.00	0.00	44	184	336
17	40	8.2	4.7	7.6	5.5	8.3	2.3	0.00	0.00	40	189	307
18	37	8.0	4.9	7.4	5.4	7.8	2.2	0.00	0.00	37	300	268
19	35	7.9	4.7	7.2	5.1	7.5	1.9	0.00	0.00	37	429	238
20	32	7.8	4.6	7.3	5.0	7.0	1.8	0.00	0.00	37	507	213
21	32	7.6	4.4	7.2	5.2	6.8	1.7	0.00	0.00	42	513	193
22	31	7.4	4.3	7.1	6.1	6.8	1.6	0.00	0.74	70	448	178
23	29	7.2	4.3	7.0	8.6	6.2	1.5	0.00	5.9	129	358	175
24	27	7.0	4.7	7.0	8.7	5.9	1.4	0.00	15	136	278	201
25	26	6.8	4.6	6.9	8.0	5.7	1.2	0.00	17	139	231	352
26	23	6.5	4.4	7.0	8.0	5.7	1.1	0.00	12	137	211	396
27	21	6.3	4.5	6.9	7.9	5.2	1.0	0.00	18	194	245	392
28	20	6.1	4.4	7.0	8.2	4.9	0.90	0.00	28	220	226	360
29	19	6.0	4.3	7.0	---	4.6	0.74	0.00	28	235	210	313
30	18	5.9	4.4	6.8	---	4.2	0.67	0.00	35	214	205	271
31	17	---	4.2	6.7	---	4.1	---	0.00	---	206	322	---
TOTAL	1858	298.8	152.0	230.3	178.3	249.5	72.71	2.17	159.64	2541	7049	10011
MEAN	59.9	9.96	4.90	7.43	6.37	8.05	2.42	0.070	5.32	82.0	227	334
MAX	159	17	5.7	12	8.7	15	4.2	0.59	35	235	513	590
MIN	17	5.9	4.2	4.2	5.0	4.1	0.67	0.00	0.00	32	121	175
CFSM	0.41	0.07	0.03	0.05	0.04	0.06	0.02	0.00	0.04	0.57	1.57	2.30
IN.	0.48	0.08	0.04	0.06	0.05	0.06	0.02	0.00	0.04	0.65	1.81	2.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

MEAN	98.3	34.4	38.8	66.5	77.3	124	73.5	18.2	26.1	55.8	108	158
MAX	488	242	461	661	518	1045	469	122	249	488	695	707
(WY)	1961	1970	1998	1998	1998	1960	1987	1959	1966	1959	1960	1960
MIN	0.24	0.53	0.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.036
(WY)	1962	1962	2001	2001	2001	1985	2000	1985	1981	1992	1997	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1958 - 2002	
ANNUAL TOTAL	7443.30		22802.42			
ANNUAL MEAN	20.4		62.5		73.4	
HIGHEST ANNUAL MEAN					312	1960
LOWEST ANNUAL MEAN					1.79	2000
HIGHEST DAILY MEAN	558	Sep 19	590	Sep 6	3380	Mar 19 1960
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Some years
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	May 13	0.00	Some years
MAXIMUM PEAK FLOW			600	Sep 7	3400	Mar 19 1960
MAXIMUM PEAK STAGE			7.49	Sep 7	12.32	Mar 19 1960
ANNUAL RUNOFF (CFSM)	0.14		0.43		0.51	
ANNUAL RUNOFF (INCHES)	1.91		5.85		6.88	
10 PERCENT EXCEEDS	33		228		210	
50 PERCENT EXCEEDS	0.00		7.6		15	
90 PERCENT EXCEEDS	0.00		0.00		0.63	

e Estimated

02312200 LITTLE WITHLACOOCHEE RIVER AT RERDELL, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV													
15...	1615	9.4	1.73	347	6.8	19.5	160	3.5	.26	.01	E1.5	.070	E.05
JAN													
18...	0908	7.1	1.63	354	7.2	15.0	50	5.9	.09	.01	.80	.080	.04
MAR													
18...	1152	7.9	1.51	350	7.2	23.2	70	4.0	.07	<.01	.60	.050	.02
JUL													
10...	1525	39	2.66	327	6.8	26.2	100	3.4	.16	.01	1.1	.060	.05
AUG													
29...	1040	212	4.88	165	6.6	25.8	400	1.7	.08	.01	1.9	.040	.12

Date	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV													
15...	22.0	.030	170	65.0	2.40	5.8	.70	E158	2.00	11.0	.1	6.70	244
JAN													
18...	14.0	<.010	170	66.0	2.40	6.0	.50	170	3.80	11.0	.1	5.00	223
MAR													
18...	14.0	.010	170	65.0	2.30	6.1	.30	160	3.90	12.0	.1	4.00	227
JUL													
10...	16.0	.050	160	61.0	2.30	5.6	.60	149	8.60	11.0	.1	7.40	224
AUG													
29...	37.0	.100	82	30.0	1.70	3.8	1.00	66	1.80	6.70	<.1	4.40	173

Date	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
NOV	
15...	75.0
JAN	
18...	77.0
MAR	
18...	78.0
JUL	
10...	71.0
AUG	
29...	37.0

< -- Less than
E -- Estimated value

02312500 WITHLACOOCHEE RIVER AT CROOM, FL

LOCATION.--Lat 28°35'33", long 82°13'20", in NE¼ sec.8, T.22 S., R.21 E., Hernando County, Hydrologic Unit 03100208, on left bank at upstream side of abandoned highway bridge, 0.4 mi northwest of Croom, 2.3 mi downstream from Little Withlacoochee River, 4.5 mi southeast of Nobleton, and 77 mi upstream from mouth.

DRAINAGE AREA.--810 mi^2, approximately.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 38.94 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Feb. 2, 1940, nonrecording gage at railroad bridge 500 ft upstream at same datum.

REMARKS.--Records fair. Records include water diverted from ground-water supplies (see station 02311700). High-water diversion in headwaters (station 02311000).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1934 reached a stage of 15.2 ft, from floodmark, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2270	198	82	45	47	39	19	9.7	3.1	98	670	1080
2	2140	190	81	56	47	38	18	8.9	3.0	104	647	1060
3	2000	184	79	69	47	38	19	8.4	2.5	105	637	1050
4	1860	178	77	67	46	52	20	8.2	2.1	100	630	1070
5	1730	175	75	63	45	49	20	8.2	1.8	100	616	1170
6	1600	169	74	62	44	46	19	7.7	1.5	98	605	1280
7	1470	162	72	61	43	43	18	7.4	1.8	93	598	1340
8	1340	155	72	59	43	43	17	7.0	3.0	89	582	1380
9	1230	149	71	57	42	42	17	6.4	2.9	90	558	1400
10	1110	143	70	55	41	41	16	6.0	2.5	91	539	1400
11	987	138	69	54	41	40	17	5.6	2.4	90	516	1400
12	879	133	67	53	41	39	18	5.0	2.0	88	503	1410
13	794	129	67	52	40	37	22	4.5	1.6	99	495	1420
14	717	127	65	53	38	36	22	4.1	1.3	131	478	1460
15	648	124	64	55	37	35	21	3.6	2.2	181	496	1520
16	586	120	63	55	36	34	20	3.4	2.1	218	561	1570
17	530	117	62	55	35	33	19	3.3	3.7	243	655	1600
18	484	114	61	56	34	32	18	3.2	8.7	263	767	1590
19	446	112	60	56	32	31	18	3.5	9.0	280	877	1570
20	414	109	58	56	31	29	17	3.5	8.3	301	995	1560
21	383	106	57	55	30	28	17	3.2	7.2	330	1080	1530
22	356	103	56	54	31	26	17	2.9	11	352	1130	1500
23	332	100	55	54	37	24	16	2.5	16	401	1130	1480
24	312	98	55	53	41	23	15	2.3	22	455	1100	1480
25	295	96	53	52	41	22	14	2.1	36	498	1070	1540
26	278	93	52	51	41	23	14	1.9	45	523	1040	1610
27	262	91	51	51	40	23	13	1.8	45	571	1040	1650
28	246	88	49	51	40	22	13	1.9	53	648	1040	1660
29	231	86	48	51	---	20	12	1.8	74	696	1020	1640
30	219	84	47	49	---	19	11	1.9	85	696	1020	1600
31	208	---	46	49	---	19	---	2.3	---	682	1050	---
TOTAL	26357	3871	1958	1709	1111	1026	517	142.2	459.7	8714	24145	43020
MEAN	850	129	63.2	55.1	39.7	33.1	17.2	4.59	15.3	281	779	1434
MAX	2270	198	82	69	47	52	22	9.7	85	696	1130	1660
MIN	208	84	46	45	30	19	11	1.8	1.3	88	478	1050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	660	292	253	317	333	484	404	166	160	355	664	894
MAX	2710	1050	1957	3234	1738	3633	2484	1015	1045	2091	3470	3691
(WY)	1961	1960	1998	1998	1998	1960	1960	1959	1959	1959	1960	1950
MIN	13.0	6.64	4.39	1.71	1.69	0.20	0.19	0.000	0.000	0.000	8.31	26.1
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	1992	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	65185.30		113029.9			
ANNUAL MEAN	179		310		415	
HIGHEST ANNUAL MEAN					1551	1960
LOWEST ANNUAL MEAN					24.9	2000
HIGHEST DAILY MEAN	2430	Sep 29	2270	Oct 1	8630	Mar 23 1960
LOWEST DAILY MEAN	0.00	Many days	1.3	Jun 14	*0.00	
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 12	2.0	May 24	*0.00	
MAXIMUM PEAK FLOW			1670	Sep 28	8650	Mar 23 1960
MAXIMUM PEAK STAGE			9.25	Oct 1	13.78	Mar 23 1960
10 PERCENT EXCEEDS	375		1130		1060	
50 PERCENT EXCEEDS	1.2		57		193	
90 PERCENT EXCEEDS	0.00		4.8		41	

* During 2000, 2001 water years

02312500 WITHLACOOCHEE RIVER AT CROOM, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.18	3.67	2.31	1.77	1.80	1.67	1.21	0.78	0.43	2.30	6.39	7.42
2	9.03	3.59	2.29	1.93	1.79	1.66	1.20	0.75	0.42	2.39	6.31	7.39
3	8.86	3.53	2.26	2.13	1.79	1.67	1.20	0.73	0.38	2.41	6.28	7.36
4	8.68	3.47	2.24	2.09	1.78	1.87	1.22	0.72	0.34	2.36	6.25	7.41
5	8.49	3.44	2.21	2.04	1.77	1.83	1.20	0.71	0.31	2.36	6.20	7.60
6	8.31	3.38	2.19	2.03	1.75	1.77	1.18	0.68	0.28	2.34	6.16	7.78
7	8.11	3.30	2.17	2.01	1.74	1.74	1.15	0.66	0.30	2.28	6.13	7.89
8	7.91	3.23	2.16	1.98	1.73	1.73	1.13	0.64	0.41	2.24	6.07	7.95
9	7.71	3.16	2.15	1.95	1.72	1.72	1.11	0.62	0.40	2.25	5.97	7.96
10	7.49	3.10	2.14	1.92	1.71	1.71	1.10	0.60	0.38	2.28	5.90	7.96
11	7.26	3.05	2.12	1.90	1.71	1.69	1.10	0.58	0.37	2.27	5.80	7.95
12	7.02	2.99	2.10	1.88	1.71	1.67	1.11	0.55	0.34	2.23	5.74	7.96
13	6.80	2.94	2.09	1.87	1.69	1.65	1.19	0.53	0.32	2.37	5.70	7.98
14	6.59	2.91	2.07	1.89	1.66	1.63	1.16	0.50	0.29	2.79	5.61	8.04
15	6.37	2.87	2.05	1.92	1.65	1.61	1.15	0.48	0.40	3.35	5.70	8.14
16	6.15	2.83	2.04	1.92	1.63	1.59	1.12	0.46	0.39	3.72	5.98	8.24
17	5.94	2.79	2.02	1.92	1.61	1.57	1.10	0.44	0.50	3.95	6.32	8.28
18	5.73	2.75	2.01	1.93	1.59	1.54	1.08	0.44	0.74	4.13	6.69	8.26
19	5.53	2.72	1.99	1.93	1.57	1.51	1.06	0.46	0.77	4.27	6.99	8.23
20	5.33	2.68	1.97	1.93	1.55	1.48	1.04	0.46	0.76	4.44	7.25	8.19
21	5.14	2.64	1.95	1.92	1.53	1.45	1.04	0.44	0.72	4.67	7.43	8.13
22	4.97	2.60	1.94	1.91	1.55	1.41	1.01	0.41	0.84	4.83	7.52	8.06
23	4.80	2.57	1.92	1.90	1.65	1.38	0.97	0.39	0.97	5.16	7.53	8.00
24	4.65	2.54	1.92	1.88	1.71	1.35	0.95	0.37	1.10	5.50	7.47	8.00
25	4.51	2.50	1.90	1.87	1.70	1.33	0.93	0.35	1.34	5.73	7.41	8.13
26	4.38	2.47	1.87	1.86	1.70	1.33	0.90	0.33	1.49	5.84	7.34	8.29
27	4.25	2.44	1.85	1.86	1.69	1.32	0.89	0.32	1.49	6.03	7.34	8.38
28	4.11	2.40	1.83	1.85	1.69	1.29	0.87	0.33	1.62	6.32	7.35	8.40
29	3.98	2.37	1.81	1.85	---	1.26	0.84	0.32	1.95	6.47	7.32	8.35
30	3.87	2.34	1.80	1.83	---	1.24	0.80	0.33	2.10	6.47	7.30	8.26
31	3.76	---	1.78	1.82	---	1.23	---	0.36	---	6.43	7.36	---
MEAN	6.29	2.91	2.04	1.92	1.68	1.55	1.07	0.51	0.74	3.88	6.61	8.00
MAX	9.18	3.67	2.31	2.13	1.80	1.87	1.22	0.78	2.10	6.47	7.53	8.40
MIN	3.76	2.34	1.78	1.77	1.53	1.23	0.80	0.32	0.28	2.23	5.61	7.36

CAL YR 2001 MEAN 1.24 MAX 9.36 MIN -1.78
WTR YR 2002 MEAN 3.11 MAX 9.18 MIN 0.28

02312500 WITHLACOOCHEE RIVER AT CROOM, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1960-61, 1963, 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV													
15...	1150	129	2.87	309	6.3	20.0	320	3.4	.19	.01	E2.4	.600	E.10
JAN													
17...	1530	51	1.92	370	7.7	15.8	100	8.4	.01	<.01	1.0	.440	.06
MAR													
15...	1515	36	1.61	363	7.5	22.9	120	6.6	.03	<.01	.90	<.020	.04
MAY													
08...	1007	6.7	.65	273	8.6	28.4	40	9.3	.14	<.01	1.4	<.020	<.02
JUL													
10...	1104	84	2.28	316	6.7	28.2	70	5.5	.04	<.01	.80	<.020	.05
SEP													
05...	1026	1170	7.60	106	6.4	29.1	480	3.0	.04	.02	2.2	.080	.13

Date	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV													
15...	42.0	.080	150	55.0	3.20	7.1	2.00	E106	25.0	11.0	.1	9.10	275
JAN													
17...	20.0	.030	180	67.0	3.30	6.6	.90	142	34.0	11.0	<.1	6.90	261
MAR													
15...	20.0	.020	180	66.0	3.10	6.8	.60	137	30.0	12.0	<.1	1.30	252
MAY													
08...	12.0	.020	140	50.0	2.80	4.8	<.10	131	10.0	9.60	.1	2.60	175
JUL													
10...	14.0	.030	160	58.0	2.60	5.5	.70	122	28.0	9.00	<.1	5.90	224
SEP													
05...	45.0	.100	52	18.0	1.60	4.6	1.30	36	1.20	7.20	<.1	4.40	158

Date	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
NOV	
15...	150
JAN	
17...	190
MAR	
15...	180
MAY	
08...	170
JUL	
10...	140
SEP	
05...	44.0

< -- Less than
E -- Estimated value

02312600 WITHLACOOCHEE RIVER NEAR FLORAL CITY, FL

LOCATION.--Lat 28°44'36", long 82°13'13", in SE¼ sec.17, T.20 S., R.21 E., Citrus County, Hydrologic Unit 03100208, on left bank on upstream shoreward corner of pavillion at Trails End Camp, 1.1 mi downstream from diversions to Tsala Apopka Lake, 4.7 mi east of Floral City, and 62 mi upstream from mouth.

DRAINAGE AREA.--995 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1958 to January 1965 (gage heights only), February 1965 to September 1983 (discharge measurements and gage heights only); October 1983 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to Oct. 1, 1983, nonrecording gage at same site and datum.

REMARKS.--Records fair. Discharge published is for site at bridge on State Highway 48 about 2 mi upstream from gage and about 1 mi upstream from diversions to Tsala Apopka Lake through Leslie Heifner and Orange State Canals. High-water diversion in headwaters (station 02311000).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	247	90	44	29	22	8.4	0.00	0.00	5.7	245	598
2	1940	234	89	50	28	22	7.4	0.00	0.00	7.0	274	593
3	1900	222	88	61	27	23	7.9	0.00	0.00	7.6	296	587
4	1860	210	87	61	26	31	8.3	0.00	0.00	8.4	310	584
5	1790	199	86	60	24	32	7.3	0.00	0.00	9.1	322	610
6	1730	190	86	60	23	32	6.7	0.00	0.00	8.8	316	625
7	1650	180	86	58	24	32	5.8	0.00	0.00	8.0	313	645
8	1560	171	86	55	23	32	5.2	0.00	0.00	8.4	309	669
9	1460	163	86	52	22	31	4.6	0.00	0.00	9.3	300	691
10	1360	155	86	50	21	29	3.8	0.00	0.00	9.9	292	707
11	1260	148	87	47	20	28	3.2	0.00	0.00	9.4	280	714
12	1150	142	85	46	19	28	3.0	0.00	0.00	9.0	276	736
13	1050	135	83	45	17	29	3.3	0.00	0.00	16	286	760
14	965	131	80	46	16	28	3.2	0.00	0.00	37	282	782
15	893	128	77	50	15	26	2.9	0.00	0.00	39	275	813
16	822	124	75	49	15	26	2.5	0.00	0.00	39	275	828
17	753	119	74	47	14	25	2.1	0.00	0.00	41	287	838
18	687	117	72	45	13	23	1.7	0.00	0.00	43	334	851
19	631	114	69	44	13	22	0.92	0.00	0.00	47	361	859
20	580	112	67	41	13	21	0.35	0.00	0.00	53	404	868
21	537	109	64	41	12	20	0.00	0.00	0.00	64	435	857
22	499	107	62	38	12	18	0.00	0.00	0.00	77	472	848
23	456	105	60	38	18	17	0.00	0.00	0.00	85	507	834
24	423	102	59	36	26	16	0.00	0.00	0.00	94	532	845
25	399	101	57	35	27	15	0.00	0.00	0.00	108	544	893
26	374	98	55	34	27	14	0.00	0.00	0.28	121	536	916
27	349	96	53	33	26	14	0.00	0.00	0.35	134	534	948
28	322	95	51	32	23	12	0.00	0.00	1.1	150	543	974
29	301	93	50	33	---	11	0.00	0.00	3.1	174	543	996
30	283	92	47	32	---	10	0.00	0.00	3.5	192	564	992
31	265	---	46	30	---	9.2	---	0.00	---	222	609	---
TOTAL	30199	4239	2243	1393	573	698.2	88.57	0.00	8.33	1836.6	11856	23461
MEAN	974	141	72.4	44.9	20.5	22.5	2.95	0.000	0.28	59.2	382	782
MAX	1950	247	90	61	29	32	8.4	0.00	3.5	222	609	996
MIN	265	92	46	30	12	9.2	0.00	0.00	0.00	5.7	245	584

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

MEAN	513	258	292	445	351	367	465	145	98.9	175	353	634
MAX	1992	1033	1951	3979	2075	2757	3175	769	361	1187	1652	2355
(WY)	1996	1996	1998	1998	1998	1998	1987	1987	1991	1991	1991	1985
MIN	0.87	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.47
(WY)	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1984 - 2002	
ANNUAL TOTAL	52719.39		76595.70			
ANNUAL MEAN	144		210		341	
HIGHEST ANNUAL MEAN					1180	1998
LOWEST ANNUAL MEAN					17.0	2000
HIGHEST DAILY MEAN	1950	Oct 1	1950	Oct 1	4900	Jan 8 1998
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	*0.00	
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Apr 21	*0.00	
MAXIMUM PEAK FLOW			1950	Oct 1	5010	Jan 8 1998
MAXIMUM PEAK STAGE			42.31	Oct 1	a45.24	Mar 25 1960
INSTANTANEOUS LOW FLOW			0.00	Apr 20	0.00	Apr 20 2002
10 PERCENT EXCEEDS	384		723		811	
50 PERCENT EXCEEDS	0.00		45		140	
90 PERCENT EXCEEDS	0.00		0.00		2.9	

* During 1992, 2000-02 water years
a Observed

02312600 WITHLACOOCHEE RIVER NEAR FLORAL CITY, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.31	39.79	38.40	37.85	37.92	37.93	37.64	37.06	36.23	38.04	40.48	41.49
2	42.30	39.73	38.38	37.96	37.91	37.93	37.62	37.03	36.20	38.09	40.59	41.48
3	42.26	39.66	38.35	38.12	37.90	37.95	37.63	37.00	36.18	38.11	40.67	41.46
4	42.22	39.60	38.32	38.13	37.88	38.08	37.64	36.97	36.15	38.14	40.71	41.46
5	42.16	39.53	38.30	38.12	37.85	38.10	37.61	36.93	36.13	38.17	40.76	41.52
6	42.10	39.47	38.28	38.13	37.86	38.11	37.59	36.90	36.10	38.16	40.74	41.55
7	42.03	39.40	38.26	38.11	37.88	38.11	37.56	36.88	36.14	38.15	40.74	41.59
8	41.94	39.34	38.25	38.09	37.88	38.10	37.54	36.85	36.30	38.17	40.74	41.63
9	41.85	39.27	38.23	38.06	37.87	38.09	37.52	36.82	36.33	38.19	40.71	41.68
10	41.76	39.21	38.22	38.04	37.87	38.06	37.49	36.79	36.31	38.22	40.69	41.70
11	41.67	39.16	38.21	38.01	37.85	38.04	37.47	36.75	36.28	38.21	40.66	41.72
12	41.56	39.10	38.19	37.99	37.84	38.03	37.45	36.72	36.26	38.20	40.65	41.75
13	41.45	39.04	38.17	37.99	37.82	38.05	37.47	36.71	36.26	38.35	40.68	41.80
14	41.35	39.00	38.16	38.01	37.80	38.03	37.47	36.66	36.24	38.76	40.67	41.84
15	41.26	38.96	38.13	38.10	37.80	38.00	37.45	36.62	36.26	38.80	40.65	41.89
16	41.16	38.92	38.11	38.09	37.79	37.99	37.43	36.60	36.24	38.81	40.65	41.92
17	41.05	38.87	38.11	38.07	37.78	37.97	37.42	36.58	36.28	38.85	40.69	41.94
18	40.95	38.83	38.10	38.05	37.75	37.95	37.40	36.57	36.37	38.90	40.84	41.96
19	40.85	38.79	38.07	38.04	37.74	37.93	37.37	36.53	36.50	38.96	40.92	41.97
20	40.76	38.76	38.05	38.01	37.74	37.91	37.35	36.50	36.50	39.05	41.04	41.99
21	40.68	38.72	38.03	38.01	37.72	37.90	37.32	36.48	36.50	39.21	41.12	41.98
22	40.61	38.69	38.00	37.98	37.72	37.86	37.30	36.45	36.68	39.37	41.20	41.97
23	40.53	38.65	37.99	37.98	37.85	37.83	37.26	36.42	37.05	39.47	41.28	41.95
24	40.45	38.62	37.99	37.97	38.00	37.81	37.24	36.39	37.21	39.56	41.33	41.96
25	40.37	38.58	37.97	37.95	38.01	37.79	37.22	36.37	37.55	39.69	41.36	42.02
26	40.28	38.55	37.95	37.94	38.01	37.77	37.19	36.35	37.78	39.79	41.34	42.04
27	40.19	38.52	37.93	37.94	37.99	37.76	37.16	36.33	37.79	39.89	41.34	42.07
28	40.10	38.49	37.92	37.93	37.95	37.72	37.14	36.30	37.83	40.00	41.37	42.10
29	40.02	38.46	37.91	37.95	---	37.70	37.11	36.27	37.93	40.14	41.37	42.12
30	39.94	38.43	37.88	37.94	---	37.68	37.08	36.24	37.95	40.25	41.41	42.11
31	39.87	---	37.87	37.93	---	37.66	---	36.24	---	40.39	41.50	---
MEAN	41.16	39.00	38.12	38.02	37.86	37.93	37.40	36.62	36.65	38.91	40.93	41.82
MAX	42.31	39.79	38.40	38.13	38.01	38.11	37.64	37.06	37.95	40.39	41.50	42.12
MIN	39.87	38.43	37.87	37.85	37.72	37.66	37.08	36.24	36.10	38.04	40.48	41.46

CAL YR 2001 MEAN 37.26 MAX 42.31 MIN 35.26
WTR YR 2002 MEAN 38.71 MAX 42.31 MIN 36.10

02312600 WITHLACOOCHEE RIVER NEAR FLORAL CITY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to 2000, 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
24...	1122	422	40.45	148	6.5	24.9	480	.2	.65	<.01	E3.9	<.020	E.32
DEC													
12...	1135	86	38.19	361	7.0	22.9	200	1.8	.08	<.01	E2.0	.060	E.09
FEB													
15...	1330	15	37.80	451	7.6	18.3	80	6.7	.05	<.01	1.2	.030	.02
APR													
18...	0942	1.2	37.40	376	8.2	28.4	80	9.9	.04	<.01	1.0	<.020	<.02
AUG													
09...	1046	302	40.72	168	6.6	26.8	480	.2	.16	.02	<.20	<.020	.17
SEP													
23...	1214	837	41.94	102	7.2	27.3	480	.3	.03	.02	1.9	.040	.12

Date	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
OCT													
24...	--	.270	74	26.0	2.30	5.1	2.50	E46	3.00	7.80	.1	7.20	E213
DEC													
12...	--	.070	170	62.0	3.70	7.9	2.00	130	29.0	12.0	.1	6.90	E283
FEB													
15...	--	.020	210	78.0	4.30	7.8	1.50	147	66.0	13.0	.1	1.10	326
APR													
18...	20.0	.020	180	66.0	3.90	8.5	.30	135	37.0	15.0	.1	1.10	266
AUG													
09...	--	.120	84	30.0	2.10	5.5	1.40	63	4.00	9.30	.1	7.20	209
SEP													
23...	46.0	.140	51	18.0	1.50	4.0	1.40	35	1.10	6.30	.1	4.50	142

Date	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT	
24...	71.0
DEC	
12...	190
FEB	
15...	250
APR	
18...	220
AUG	
09...	74.0
SEP	
23...	44.0

< -- Less than
E -- Estimated value

02312640 JUMPER CREEK CANAL NEAR BUSHNELL, FL

LOCATION.--Lat 28°41'45", long 82°06'34", in NE¼ sec.4, T.21 S., R.22 E., Sumter County, Hydrologic Unit 03100208, near center of span on downstream side of bridge on State Highway 475, 2.2 mi north of Bushnell, and 10 mi upstream from mouth.

DRAINAGE AREA.--40 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR FL-81-3: 1980 (m).

GAGE.--Water-stage recorder. Datum of gage is 55.00 ft above NGVD of 1929.

REMARKS.--Records fair. Diurnal fluctuation caused by mining operations upstream; daily flows are not affected appreciably.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	4.2	2.8	2.1	1.9	1.8	2.3	1.0	0.19	6.0	14	50
2	8.2	4.1	2.8	2.7	1.9	1.8	2.2	0.89	0.00	5.8	13	43
3	7.6	4.1	2.7	2.8	1.9	1.9	2.5	0.82	0.00	5.8	14	38
4	7.2	4.1	2.6	2.4	1.8	2.9	2.3	0.74	0.00	5.8	14	39
5	6.9	4.1	2.6	2.3	1.8	2.2	2.2	0.68	0.00	5.7	14	39
6	6.6	4.0	2.5	2.4	1.8	2.2	2.1	0.64	0.00	5.7	13	39
7	6.4	3.9	2.6	2.3	1.9	2.4	2.1	0.59	0.10	5.7	13	36
8	6.2	3.8	2.5	2.2	1.8	2.5	2.0	0.52	0.57	5.8	13	34
9	6.2	3.7	2.4	2.2	1.8	2.5	2.0	0.49	0.02	5.8	13	33
10	5.8	3.7	2.4	2.2	1.8	2.6	1.9	0.44	0.00	5.6	12	32
11	5.5	3.6	2.3	2.2	1.8	2.6	1.9	0.39	0.00	5.4	12	31
12	5.5	3.6	2.4	2.2	1.8	2.6	2.0	0.34	0.00	5.3	12	30
13	5.2	3.6	2.4	2.2	1.8	2.8	1.9	0.32	0.00	6.9	13	31
14	5.1	3.6	2.4	2.4	1.8	2.7	1.9	0.28	0.00	9.0	14	32
15	5.1	3.6	2.3	2.4	1.8	2.6	1.9	0.20	0.07	6.7	14	32
16	5.0	3.5	2.3	2.2	1.8	2.6	1.8	0.20	0.08	6.4	16	33
17	4.8	3.4	2.2	2.1	1.8	2.6	1.8	0.19	0.18	6.2	17	32
18	4.7	3.3	2.3	2.1	1.7	2.6	1.7	0.16	1.1	6.2	20	31
19	4.6	3.3	2.2	2.1	1.7	2.6	1.7	0.28	0.85	6.1	32	29
20	4.6	3.2	2.1	2.1	1.7	2.5	1.6	0.22	1.2	7.4	33	28
21	4.6	3.2	2.1	2.1	1.7	2.5	1.6	0.14	0.97	9.3	34	26
22	4.8	3.1	2.1	2.1	1.9	2.5	1.5	0.04	2.2	9.7	32	24
23	4.8	3.1	2.1	2.0	2.2	2.5	1.5	0.05	3.0	11	28	23
24	4.7	3.0	2.1	2.0	2.0	2.5	1.4	0.00	4.1	11	26	23
25	4.7	3.0	2.1	2.0	1.8	2.5	1.3	0.00	4.5	11	25	27
26	4.6	3.0	2.0	2.0	1.8	2.6	1.2	0.00	4.7	11	24	29
27	4.5	2.9	2.1	2.0	1.8	2.5	1.2	0.00	4.9	12	25	29
28	4.4	2.9	2.1	2.0	1.8	2.4	1.2	0.01	5.3	14	27	26
29	4.4	2.8	2.1	2.0	---	2.3	1.1	0.00	5.5	13	26	24
30	4.4	2.9	2.1	1.9	---	2.3	1.1	0.00	5.8	13	28	23
31	4.4	---	2.1	1.9	---	2.3	---	0.02	---	13	42	---
TOTAL	170.1	104.3	71.8	67.6	51.1	75.9	52.9	9.65	45.33	251.3	633	946
MEAN	5.49	3.48	2.32	2.18	1.82	2.45	1.76	0.31	1.51	8.11	20.4	31.5
MAX	8.6	4.2	2.8	2.8	2.2	2.9	2.5	1.0	5.8	14	42	50
MIN	4.4	2.8	2.0	1.9	1.7	1.8	1.1	0.00	0.00	5.3	12	23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

MEAN	22.7	19.8	19.4	21.7	25.8	27.2	24.8	18.4	18.0	21.4	23.8	26.0
MAX	59.8	43.3	54.6	64.4	104	102	70.2	57.2	45.7	67.5	57.3	69.0
(WY)	1996	1970	1970	1970	1970	1998	1987	1983	1983	1966	1965	1964
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
(WY)	2001	2001	2001	2001	2001	2001	2000	2000	2000	1992	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964 - 2002	
ANNUAL TOTAL	629.66		2478.98			
ANNUAL MEAN	1.73		6.79		22.4	
HIGHEST ANNUAL MEAN					47.0	1970
LOWEST ANNUAL MEAN					0.37	2000
HIGHEST DAILY MEAN	24	Sep 16	50	Sep 1	235	Feb 18 1998
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	*0.00	
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	May 24	*0.00	
MAXIMUM PEAK FLOW			51	Sep 1	238	Feb 18 1998
MAXIMUM PEAK STAGE			4.96	Sep 1	7.21	Feb 18 1998
10 PERCENT EXCEEDS	4.7		25		41	
50 PERCENT EXCEEDS	0.00		2.5		20	
90 PERCENT EXCEEDS	0.00		0.37		1.9	

* During 1992, 2000-02 water years

02312640 JUMPER CREEK CANAL NEAR BUSHNELL, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-88, 1991, 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV								
19...	1540	3.1	2.76	375	6.9	22.0	8.5	--
JAN								
14...	1315	2.4	2.26	312	7.5	15.2	9.1	13.0
MAR								
11...	1400	3.1	2.31	338	7.9	23.8	9.8	--
MAY								
07...	1330	.54	2.12	325	7.6	29.9	10.5	--
JUL								
09...	0850	11	2.85	395	8.4	25.1	8.1	4.6
AUG								
28...	0820	26	4.26	346	6.4	25.6	5.2	--

02312667 SHADY BROOK NEAR SUMTERVILLE, FL

LOCATION.--Lat 28°46'12", long 82°03'50", in NW¼ sec.12, T.20 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on right bank in Thompkins Park, 400 ft upstream from bridge on U.S. Highway 301, and 1.7 mi north of Sumterville.

DRAINAGE AREA.--8.0 mi^2, approximately.

PERIOD OF RECORD.--1932-33, 1946, 1956, 1961, 1965-67, 1980-81 (miscellaneous discharge measurements), March 1982 to September 1992, October 1993 to current year. Prior to November 1980, published as Panasoffkee River near Sumterville.

REVISED RECORDS.--WDR FL-95-1A: Datum.

GAGE.--Water-stage recorder. Datum of gage is 4.30 ft below NGVD of 1929 (levels by Southwest Florida Water Management District).

REMARKS.--Records good. Records include discharge from mining operations upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	28	18	12	13	14	11	6.7	4.1	43	112	77
2	78	27	18	18	13	13	11	6.4	3.8	42	124	80
3	74	28	18	20	13	15	11	6.3	3.7	40	141	86
4	72	28	17	15	12	26	12	6.1	3.7	37	142	90
5	71	28	17	14	12	20	11	6.0	3.7	45	137	95
6	70	26	17	15	12	19	10	5.9	3.6	50	128	96
7	68	26	17	14	13	19	9.9	5.8	4.1	47	124	94
8	65	25	17	14	13	19	9.7	5.7	4.7	42	121	90
9	64	24	17	13	13	20	9.5	5.6	4.1	40	115	86
10	62	24	16	13	12	20	9.4	5.3	3.8	40	109	82
11	60	24	16	13	12	20	12	5.2	3.7	41	105	77
12	58	23	15	13	12	19	14	5.1	3.6	41	99	72
13	55	23	15	13	12	20	12	5.0	3.6	52	97	69
14	53	24	15	15	12	20	12	5.0	3.4	98	94	68
15	53	24	15	20	12	19	12	4.9	4.0	99	88	65
16	51	23	15	17	12	18	11	4.7	4.4	89	83	61
17	47	23	14	16	12	17	10	4.8	5.5	85	79	59
18	44	23	15	15	12	16	9.7	4.8	7.7	90	75	59
19	43	23	14	15	11	15	9.3	4.9	7.3	97	73	59
20	41	22	14	15	11	15	8.9	4.9	8.2	119	77	59
21	40	22	14	14	11	14	8.6	4.5	6.0	136	76	59
22	39	21	14	14	12	14	8.3	4.5	21	136	73	56
23	38	21	13	14	17	14	8.0	4.5	64	137	70	54
24	36	21	14	14	19	13	7.7	4.4	52	126	68	55
25	35	20	14	14	16	13	7.5	4.3	43	119	67	61
26	34	20	13	14	15	13	7.3	4.1	36	114	65	61
27	32	20	13	14	15	13	7.1	4.1	31	124	62	59
28	31	19	13	14	14	13	7.2	4.0	33	124	60	55
29	31	19	13	14	---	12	7.1	3.9	38	123	57	54
30	30	19	13	13	---	12	6.9	4.1	40	118	58	51
31	30	---	12	13	---	11	---	4.3	---	115	75	---
TOTAL	1591	698	466	452	363	506	291.1	155.8	454.7	2609	2854	2089
MEAN	51.3	23.3	15.0	14.6	13.0	16.3	9.70	5.03	15.2	84.2	92.1	69.6
MAX	86	28	18	20	19	26	14	6.7	64	137	142	96
MIN	30	19	12	12	11	11	6.9	3.9	3.4	37	57	51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)

MEAN	36.2	28.2	27.4	37.3	38.8	46.3	44.0	26.8	29.6	39.1	40.7	41.7
MAX	133	71.2	73.7	118	121	158	168	125	135	207	159	124
(WY)	1983	1983	1984	1998	1998	1998	1983	1983	1982	1982	1982	1982
MIN	4.04	2.64	2.11	1.91	1.95	4.84	4.51	2.24	1.40	0.68	3.19	5.22
(WY)	1994	1991	1991	1991	1991	1992	1992	1992	1992	1992	1992	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1982 - 2002	
ANNUAL TOTAL	6892.1		12529.6			
ANNUAL MEAN	18.9		34.3		36.4	
HIGHEST ANNUAL MEAN					127	1982
LOWEST ANNUAL MEAN					5.39	1992
HIGHEST DAILY MEAN	106	Sep 15	142	Aug 4	243	Jul 8 1982
LOWEST DAILY MEAN	4.2	Jun 17	3.4	Jun 14	0.38	Jul 27,30 1992
ANNUAL SEVEN-DAY MINIMUM	4.4	Jun 13	3.7	Jun 9	0.39	Jul 24 1992
MAXIMUM PEAK FLOW			163	Jul 20	340	Apr 23 1983
MAXIMUM PEAK STAGE			49.94	Jul 20	50.76	Apr 23 1983
INSTANTANEOUS LOW FLOW			3.2	Jun 14,15	*.38	
10 PERCENT EXCEEDS	45		88		90	
50 PERCENT EXCEEDS	12		17		22	
90 PERCENT EXCEEDS	5.3		5.2		4.7	

* Jul 24, 25-31, 1992

02312700 OUTLET RIVER AT PANACOOCHEE RETREATS, FL

LOCATION.--Lat 28°49'01", long 82°08'40", in SE¼ sec.19, T.19 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on west shore of Lake Panasoffkee, 0.8 mi north of outlet, 1.3 mi north of Panacoochee Retreats, 2.0 mi upstream from mouth, and 5.1 mi northwest of town of Lake Panasoffkee.

DRAINAGE AREA.--420 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year. Prior to October 1967, published as Panasoffkee River near Lake Panasoffkee.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark). Prior to Dec. 18, 1962, nonrecording gage and Dec. 18, 1962, to Oct. 7, 1975, water-stage recorder at sites within 0.8 mi south at same datum.

REMARKS.--Records fair except for period of estimated daily discharge, which is poor. Discharge measurements made at bridge on State Highway 470, about 1 mi downstream from lake outlet. Flow affected at times by backwater from Withlacoochee River. Prior to 1962, flow partially controlled by small rock dams and at times during 1962-64 by a temporary sheet piling dam about 400 ft downstream from bridge on State Highway 470. Flow partially controlled by sandbag dam June 6-10, 1992. Gage heights are published as elevations for Lake Panasoffkee (station 02312698)in the section of this report entitled "ELEVATIONS OF LAKES".

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	158	81	54	58	57	46	29	e7.0	112	293	246
2	205	155	78	59	57	58	45	28	e7.0	119	300	242
3	213	151	76	59	56	56	46	28	e6.0	122	312	240
4	221	145	75	60	53	60	45	27	e6.0	124	322	235
5	227	140	74	62	54	63	45	27	e3.0	127	325	235
6	232	137	73	61	54	65	44	26	e1.5	129	323	232
7	235	134	71	59	53	65	44	25	e10	130	325	227
8	239	131	70	60	54	65	44	25	e15	129	321	222
9	242	128	69	60	55	64	40	24	16	128	315	217
10	241	125	69	60	53	63	39	24	13	129	308	212
11	241	122	67	59	53	63	40	24	12	127	301	207
12	240	118	67	59	52	62	43	23	13	127	295	205
13	240	115	66	59	51	61	41	21	13	136	300	202
14	237	111	65	62	51	62	41	19	13	161	300	210
15	234	107	64	65	50	61	41	21	11	169	297	210
16	230	107	64	66	50	61	41	19	12	175	297	207
17	225	107	63	66	49	61	40	19	18	177	290	204
18	222	104	61	65	49	60	39	20	26	179	284	200
19	217	102	61	65	50	60	39	e18	30	181	283	197
20	213	100	59	65	51	58	37	e15	36	189	285	193
21	210	98	59	64	46	56	37	e14	34	213	280	189
22	206	97	59	64	47	55	35	e13	46	235	282	185
23	202	96	60	63	50	54	36	e13	63	250	281	182
24	198	94	58	63	58	54	36	e12	69	257	275	183
25	194	92	57	61	59	53	34	e12	77	261	266	193
26	185	89	54	62	58	52	33	e11	85	265	259	194
27	178	88	57	61	53	49	33	e11	89	272	251	190
28	173	87	57	61	55	49	32	e10	93	278	244	187
29	167	85	55	61	---	49	30	e10	101	286	238	184
30	163	82	56	61	---	49	31	e9.0	106	287	237	181
31	161	---	54	61	---	48	---	e8.0	---	290	249	---
TOTAL	6587	3405	1999	1907	1479	1793	1177	585.0	1031.5	5764	8938	6211
MEAN	212	114	64.5	61.5	52.8	57.8	39.2	18.9	34.4	186	288	207
MAX	242	158	81	66	59	65	46	29	106	290	325	246
MIN	161	82	54	54	46	48	30	8.0	1.5	112	237	181
CFSM	0.51	0.27	0.15	0.15	0.13	0.14	0.09	0.04	0.08	0.44	0.69	0.49
IN.	0.58	0.30	0.18	0.17	0.13	0.16	0.10	0.05	0.09	0.51	0.79	0.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2002, BY WATER YEAR (WY)

MEAN	208	157	142	165	190	196	190	144	135	154	188	212
MAX	626	426	262	468	627	771	567	340	360	523	479	449
(WY)	1983	1996	1984	1998	1998	1998	1998	1987	1982	1982	1965	1985
MIN	31.6	19.3	18.6	22.0	21.3	29.3	39.2	18.9	19.8	5.94	29.1	40.0
(WY)	1964	1998	1998	2001	2001	2001	2002	2002	2001	1963	1963	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1963 - 2002	
ANNUAL TOTAL	23321.4		40876.5			
ANNUAL MEAN	63.9		112		173	
HIGHEST ANNUAL MEAN					360	1983
LOWEST ANNUAL MEAN					38.1	2001
HIGHEST DAILY MEAN	242	Oct 9	325	Aug 5,7	820	Mar 23 1998
LOWEST DAILY MEAN	7.7	May 31	e1.5	Jun 6	*0.00	
ANNUAL SEVEN-DAY MINIMUM	11	May 26	5.5	May 31	0.00	Jun 27 1963
MAXIMUM PEAK FLOW			328	Aug 4	a821	Jan 16 1998
MAXIMUM PEAK STAGE			39.89	Sep 26	a42.71	Jan 16 1998
ANNUAL RUNOFF (CFSM)	0.15		0.27		0.41	
ANNUAL RUNOFF (INCHES)	2.07		3.62		5.61	
10 PERCENT EXCEEDS	158		249		318	
50 PERCENT EXCEEDS	44		65		149	
90 PERCENT EXCEEDS	19		22		56	

e Estimated
* Jun 27-Jul 15, 1963 temporary dam in place
a From floodmark

02312700 OUTLET RIVER AT PANACOOCHEE RETREATS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1908, 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
24...	1624	206	39.13	390	8.2	26.5	--	9.2	--	--	--	--	--
DEC													
13...	1158	68	37.97	390	8.2	26.5	--	9.2	--	--	--	--	--
APR													
17...	1224	38	37.63	324	8.9	29.7	20	9.5	.04	<.01	.70	<.020	<.02
JUN													
06...	1004	E1.5	--	271	8.3	30.4	--	9.2	--	--	--	--	--
AUG													
08...	1008	323	39.77	445	7.2	28.6	--	.5	--	--	--	--	--
SEP													
24...	0840	181	39.71	392	7.4	28.4	160	1.7	.48	<.01	2.5	<.020	.08

Date	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
APR													
17...	9.1	<.010	150	48.0	6.80	6.6	<.10	54	91.0	11.0	.1	9.20	236
SEP													
24...	25.0	.050	190	69.0	4.00	6.0	1.60	160	20.0	10.0	.2	14.0	286

Date	ARSENIC TOTAL (UG/L AS AS) (01002)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
APR													
17...	<1	440	4	<1.0	<1.0	9	5	<1	<1	4	2	<1.0	<2
SEP													
24...	2	340	22	<1.0	<1.0	191	173	<1	<1	26	21	1.7	<2

< -- Less than
E -- Estimated value

02312720 WITHLACOOCHEE RIVER AT WYSONG DAM, AT CARLSON, FL

LOCATION.--Lat 28°49'23", long 82°11'00", in NW¼ sec.23, T.19 S., R.21 E., Sumter County, Hydrologic Unit 03100208, at downstream end of left wall of lock of Wysong Dam, at Carlson, 1.8 mi downstream from Outlet River, 2.7 mi southeast of Rutland, and 55 mi upstream from mouth.

DRAINAGE AREA.--1,520 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1965 to September 1980, October 1980 to September 1981 (monthly mean discharge only), October 1981 to current year. Prior to October 1967, published as "at Carlson's Landing, near Lake Panasoffkee."

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Some diversions upstream from station at times into Tsala Apopka Lake. High-water diversion in headwaters (station 02311000). Inflatable fabri-dam removed June 27, 1988.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1100	485	197	128	140	131	103	42	7.7	159	630	1110
2	1140	462	194	138	136	131	101	41	6.8	162	692	1110
3	1180	444	189	156	134	138	101	40	5.9	167	744	1100
4	1220	426	187	159	129	160	100	38	5.0	163	797	1090
5	1240	408	184	160	125	157	102	34	1.6	154	827	1110
6	1260	390	182	161	125	158	99	33	2.7	154	829	1110
7	1280	371	181	161	130	158	96	31	11	153	829	1110
8	1280	356	179	155	131	157	94	29	15	145	835	1100
9	1270	343	178	152	128	155	91	26	12	139	823	1100
10	1260	330	177	149	127	149	87	24	11	140	813	1100
11	1240	318	177	144	126	142	83	22	12	147	799	1100
12	1220	306	175	142	123	141	84	22	11	147	795	1110
13	1190	297	175	141	120	144	83	23	9.0	157	827	e1130
14	1160	293	172	147	117	141	81	20	7.7	235	835	e1170
15	1120	285	168	165	116	140	78	20	5.9	269	836	e1260
16	1080	275	165	160	117	138	79	19	8.8	278	858	e1290
17	1030	265	161	160	114	135	76	21	14	279	881	e1290
18	980	259	164	156	111	134	74	20	21	276	967	e1280
19	934	252	160	152	109	130	69	18	22	288	946	e1270
20	892	249	156	149	108	126	67	18	27	310	952	e1270
21	856	240	152	146	108	124	63	16	28	386	e930	e1270
22	823	238	148	145	110	122	58	15	46	455	e918	e1260
23	788	233	146	143	128	122	55	15	70	476	e940	e1260
24	752	228	147	141	145	121	54	14	80	485	1020	e1280
25	717	223	144	140	146	119	54	12	110	427	983	e1310
26	679	219	142	141	146	121	50	10	127	469	981	e1330
27	638	215	138	140	142	118	48	10	140	522	983	e1340
28	599	210	137	142	134	113	48	10	135	538	981	e1350
29	564	206	135	146	---	113	46	9.2	137	564	976	e1350
30	538	202	132	143	---	111	44	8.5	142	575	1000	e1350
31	510	---	131	140	---	106	---	8.5	---	597	1090	---
TOTAL	30540	9028	5073	4602	3525	4155	2268	669.2	1232.1	9416	27317	36310
MEAN	985	301	164	148	126	134	75.6	21.6	41.1	304	881	1210
MAX	1280	485	197	165	146	160	103	42	142	597	1090	1350
MIN	510	202	131	128	108	106	44	8.5	1.6	139	630	1090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

MEAN	838	512	448	606	647	716	668	389	326	490	676	866
MAX	2906	1601	1476	4199	3326	4095	2469	1289	864	1651	1983	2283
(WY)	1980	1996	1970	1998	1998	1998	1987	1983	1982	1966	1974	1985
MIN	55.8	37.1	31.2	31.0	30.2	38.9	44.2	21.5	27.4	37.7	42.4	61.2
(WY)	2001	2001	2001	2001	2001	2001	2000	2001	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	67308		134135.3			
ANNUAL MEAN	184		367		598	
HIGHEST ANNUAL MEAN					1510	1998
LOWEST ANNUAL MEAN					72.5	2001
HIGHEST DAILY MEAN	1280	Oct 7,8	e1350	Sep 28-30	4880	Jan 16 1998
LOWEST DAILY MEAN	14	May 25	1.6	Jun 5	1.6	Jun 5 2002
ANNUAL SEVEN-DAY MINIMUM	15	May 23	5.5	May 31	5.5	May 31 2002
MAXIMUM PEAK STAGE					41.54	Jan 16 1998
10 PERCENT EXCEEDS	576		1110		1310	
50 PERCENT EXCEEDS	63		154		412	
90 PERCENT EXCEEDS	22		22		116	

e Estimated

02312720 WITHLACOOCHEE RIVER AT WYSONG DAM, AT CARLSON, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.00	36.60	35.47	35.15	35.33	35.38	35.28	34.88	34.46	35.67	37.25	38.19
2	38.07	36.53	35.44	35.20	35.32	35.39	35.28	34.87	34.44	35.69	37.40	38.19
3	38.14	36.48	35.42	35.30	35.31	35.42	35.28	34.86	34.42	35.71	37.52	38.17
4	38.20	36.42	35.40	35.31	35.29	35.53	35.27	34.84	34.41	35.69	37.63	38.15
5	38.25	36.36	35.38	35.32	35.27	35.52	35.29	34.79	34.32	35.65	37.69	38.19
6	38.29	36.30	35.37	35.33	35.27	35.53	35.27	34.78	34.37	35.66	37.69	38.20
7	38.31	36.23	35.36	35.33	35.31	35.53	35.25	34.77	34.51	35.65	37.69	38.19
8	38.32	36.18	35.35	35.31	35.31	35.52	35.24	34.74	34.57	35.62	37.71	38.18
9	38.31	36.13	35.33	35.30	35.31	35.51	35.23	34.71	34.53	35.59	37.68	38.18
10	38.28	36.08	35.33	35.28	35.30	35.49	35.21	34.69	34.51	35.60	37.66	38.17
11	38.25	36.04	35.32	35.27	35.30	35.46	35.18	34.66	34.53	35.63	37.63	38.17
12	38.20	35.99	35.30	35.26	35.29	35.46	35.19	34.67	34.52	35.63	37.63	38.19
13	38.15	35.95	35.30	35.26	35.28	35.47	35.18	34.67	34.49	35.68	37.69	---
14	38.10	35.94	35.28	35.29	35.27	35.45	35.17	34.64	34.47	36.03	37.71	---
15	38.03	35.90	35.28	35.38	35.26	35.45	35.16	34.64	34.44	36.16	37.71	---
16	37.96	35.86	35.26	35.37	35.27	35.45	35.17	34.62	34.49	36.19	37.75	---
17	37.87	35.82	35.25	35.37	35.26	35.43	35.15	34.65	34.57	36.20	37.79	---
18	37.77	35.79	35.27	35.35	35.24	35.43	35.13	34.63	34.68	36.19	37.95	---
19	37.68	35.76	35.25	35.34	35.24	35.41	35.10	34.60	34.70	36.24	37.91	---
20	37.59	35.73	35.24	35.33	35.24	35.39	35.08	34.61	34.75	36.32	37.92	---
21	37.52	35.70	35.22	35.32	35.23	35.38	35.05	34.59	34.76	36.56	37.33	---
22	37.45	35.68	35.21	35.31	35.25	35.38	35.01	34.56	34.92	36.77	37.32	---
23	37.38	35.66	35.20	35.31	35.36	35.38	34.99	34.57	35.14	36.83	37.81	---
24	37.30	35.63	35.21	35.30	35.45	35.37	34.98	34.55	35.21	36.86	38.04	---
25	37.22	35.61	35.20	35.30	35.45	35.37	34.98	34.52	35.40	36.69	37.98	---
26	37.13	35.59	35.19	35.31	35.45	35.38	34.95	34.49	35.49	36.81	37.97	---
27	37.02	35.56	35.18	35.31	35.43	35.36	34.93	34.49	35.57	36.96	37.97	---
28	36.92	35.54	35.17	35.33	35.40	35.33	34.93	34.49	35.54	37.01	37.97	---
29	36.83	35.51	35.17	35.35	---	35.33	34.92	34.48	35.56	37.08	37.96	---
30	36.75	35.49	35.16	35.34	---	35.33	34.89	34.47	35.58	37.11	38.01	---
31	36.68	---	35.15	35.33	---	35.31	---	34.47	---	37.16	38.15	---
MEAN	37.74	35.94	35.28	35.31	35.31	35.42	35.12	34.65	34.78	36.21	37.75	---
MAX	38.32	36.60	35.47	35.38	35.45	35.53	35.29	34.88	35.58	37.16	38.15	---
MIN	36.68	35.49	35.15	35.15	35.23	35.31	34.89	34.47	34.32	35.59	37.25	---

02312720 WITHLACOOCHEE RIVER AT WYSONG DAM, AT CARLSON, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-87, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT								
25...	1027	707	37.24	298	7.0	25.4	.7	--
APR								
17...	0934	78	35.16	460	7.7	27.1	6.3	14.0
AUG								
08...	1100	825	37.71	415	6.9	28.2	.4	--
SEP								
24...	1012	1220	38.43	190	6.8	27.2	.3	45.0

02312762 WITHLACOOCHEE RIVER NEAR INVERNESS, FL

LOCATION.--Lat 28°54'43", long 82°16'49", in NW¼ sec.23, T.18 S., R.20 E., Citrus County, Hydrologic Unit 03100208, on left bank at Potts Preserve Campground, 0.4 mi upstream from Gum Slough, 8.5 mi northeast of Inverness, and 48 mi upstream from mouth.

DRAINAGE AREA.--1,700 mi^2.

PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Water-stage recorder. Datum of gage is undetermined.

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1100	597	243	155	184	187	118	51	16	262	e715	1220
2	e1140	573	237	166	182	185	112	49	15	264	e760	1210
3	e1190	561	232	182	179	198	112	49	13	256	e820	1200
4	e1220	537	227	183	176	230	112	48	11	269	e835	1190
5	e1240	513	223	184	173	225	106	47	12	307	e860	1210
6	e1260	489	218	186	170	219	102	44	11	304	e865	1230
7	e1290	467	214	188	172	216	100	40	17	e277	e880	1210
8	e1300	448	212	185	179	213	92	38	32	263	e855	1200
9	e1280	430	210	183	176	208	87	38	33	256	e888	1190
10	e1260	414	208	181	175	203	82	37	29	e252	e877	1180
11	e1240	399	204	178	174	197	83	34	29	e247	e870	1180
12	e1220	387	201	176	171	190	84	32	29	e241	e860	1180
13	e1190	376	198	176	169	190	88	29	27	e270	e870	1190
14	e1160	372	194	186	167	187	88	28	26	e300	e885	1220
15	e1120	363	191	223	164	181	79	26	27	e340	e900	1300
16	e1080	351	189	217	165	179	72	24	26	e400	e910	1310
17	1080	339	185	209	165	177	73	24	32	e395	e925	1310
18	1040	329	187	203	163	169	71	26	42	e390	e990	1310
19	1010	320	183	198	162	163	68	25	51	e400	e1010	1300
20	980	311	179	195	159	160	67	23	54	e455	e995	1290
21	952	304	174	192	157	157	67	21	49	e530	e990	1290
22	928	296	171	190	160	152	66	18	71	e540	966	1280
23	898	291	169	187	187	147	63	16	134	e545	943	1280
24	867	285	168	184	208	147	61	15	140	e540	979	1290
25	837	279	167	184	206	144	58	15	157	e535	1030	1340
26	801	272	164	196	201	141	59	14	183	e550	1050	1350
27	761	266	161	193	196	141	59	14	198	e580	1060	1350
28	722	260	160	190	190	133	57	13	200	e595	1070	1350
29	686	254	159	191	---	122	55	11	203	e620	1080	1350
30	654	249	159	190	---	121	53	13	226	e660	1130	1340
31	625	---	156	188	---	122	---	15	---	e690	1190	---
TOTAL	32131	11332	5943	5839	4930	5404	2394	877	2093	12533	29058	37850
MEAN	1036	378	192	188	176	174	79.8	28.3	69.8	404	937	1262
MAX	1300	597	243	223	208	230	118	51	226	690	1190	1350
MIN	625	249	156	155	157	121	53	11	11	241	715	1180
CFSM	0.61	0.22	0.11	0.11	0.10	0.10	0.05	0.02	0.04	0.24	0.55	0.74
IN.	0.70	0.25	0.13	0.13	0.11	0.12	0.05	0.02	0.05	0.27	0.64	0.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEAR - 2002, BY WATER YEAR (WY)

MEAN	1036	378	192	188	176	174	79.8	28.3	69.8	404	937	1262
MAX	1036	378	192	188	176	174	79.8	28.3	69.8	404	937	1262
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	1036	378	192	188	176	174	79.8	28.3	69.8	404	937	1262
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS	FOR 2002 WATER YEAR	
ANNUAL TOTAL	150384	
ANNUAL MEAN	412	
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	1350	Sep 26-29
LOWEST DAILY MEAN	11	May 29, Jun 4,6
ANNUAL SEVEN-DAY MINIMUM	13	May 31
INSTANTANEOUS LOW FLOW	10	May 29, Jun 4,6
ANNUAL RUNOFF (CFSM)	0.24	
ANNUAL RUNOFF (INCHES)	3.29	
10 PERCENT EXCEEDS	1190	
50 PERCENT EXCEEDS	198	
90 PERCENT EXCEEDS	33	

e Estimated

02312762 WITHLACOOCHEE RIVER NEAR INVERNESS, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	21.99	20.43	19.93	20.10	20.12	19.90	19.57	19.16	20.53	---	23.57
2	---	21.90	20.40	19.99	20.09	20.11	19.87	19.56	19.14	20.54	---	23.56
3	---	21.86	20.37	20.09	20.07	20.18	19.88	19.56	19.10	20.50	---	23.54
4	---	21.77	20.34	20.10	20.06	20.36	19.88	19.55	19.06	20.56	---	23.51
5	---	21.68	20.32	20.10	20.04	20.33	19.86	19.54	19.06	20.76	---	23.56
6	---	21.58	20.29	20.12	20.02	20.31	19.84	19.51	19.03	20.74	---	23.59
7	---	21.49	20.27	20.12	20.03	20.29	19.84	19.48	19.09	20.60	---	23.55
8	---	21.41	20.26	20.11	20.07	20.28	19.80	19.46	19.26	20.54	---	23.52
9	---	21.33	20.25	20.09	20.06	20.26	19.78	19.46	19.27	20.50	---	23.51
10	---	21.26	20.24	20.08	20.05	20.23	19.76	19.44	19.21	---	---	23.49
11	---	21.19	20.22	20.07	20.05	20.20	19.78	19.42	19.20	---	---	23.48
12	---	21.13	20.20	20.05	20.03	20.17	19.79	19.40	19.19	---	---	23.49
13	---	21.08	20.18	20.06	20.01	20.17	19.81	19.37	19.15	---	---	23.51
14	---	21.06	20.16	20.11	20.00	20.16	19.82	19.36	19.13	---	---	23.57
15	---	21.02	20.14	20.32	19.99	20.14	19.78	19.34	19.13	---	---	23.74
16	---	20.97	20.13	20.29	19.99	20.13	19.74	19.31	19.10	---	---	23.76
17	23.26	20.91	20.11	20.24	19.99	20.12	19.75	19.31	19.16	---	---	23.76
18	23.19	20.86	20.12	20.21	19.98	20.09	19.75	19.34	19.25	---	---	23.75
19	23.12	20.82	20.10	20.18	19.97	20.06	19.73	19.33	19.32	---	---	23.74
20	23.04	20.78	20.07	20.16	19.95	20.05	19.72	19.30	19.34	---	---	23.72
21	22.98	20.74	20.05	20.15	19.94	20.04	19.71	19.27	19.28	---	---	23.72
22	22.92	20.70	20.02	20.14	19.96	20.02	19.71	19.24	19.44	---	23.01	23.71
23	22.84	20.68	20.01	20.12	20.12	20.00	19.68	19.21	19.88	---	22.95	23.70
24	22.77	20.64	20.01	20.11	20.24	20.00	19.66	19.20	19.90	---	23.04	23.72
25	22.69	20.62	20.00	20.10	20.23	19.99	19.64	19.19	19.99	---	23.15	23.83
26	22.60	20.58	19.98	20.17	20.20	19.98	19.65	19.19	20.12	---	23.20	23.85
27	22.49	20.55	19.97	20.15	20.17	19.98	19.65	19.18	20.21	---	23.23	23.85
28	22.39	20.52	19.96	20.13	20.14	19.95	19.63	19.16	20.21	---	23.25	23.84
29	22.28	20.49	19.95	20.15	---	19.90	19.61	19.13	20.22	---	23.27	23.84
30	22.18	20.46	19.95	20.14	---	19.90	19.60	19.14	20.34	---	23.38	23.83
31	22.08	---	19.94	20.13	---	19.91	---	19.15	---	---	23.52	---
MEAN	---	21.07	20.14	20.13	20.06	20.11	19.75	19.34	19.43	---	---	23.66
MAX	---	21.99	20.43	20.32	20.24	20.36	19.90	19.57	20.34	---	---	23.85
MIN	---	20.46	19.94	19.93	19.94	19.90	19.60	19.13	19.03	---	---	23.48

02312975 TSALA APOPKA OUTFALL CANAL AT S-353, NEAR HERNANDO, FL

LOCATION.--Lat 28°57'19", long 82°20'13", in NE¼ sec.6, T.18 S., R.20 E., Citrus County, Hydrologic Unit 03100208, on left bank at control structure 353, on graded road 2.3 mi northeast of Hernando, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Auxiliary gage at downstream side of control structure.

REMARKS.--Records poor. Flow regulated by manipulation of gates in spillway. Discharge computed from relation between discharge, head, and gate openings and does not include leakage, which is less than 2.0 ft^3/s, around structure or gates.

COOPERATION.--Gate-opening record provided by Southwest Florida Water Management District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)

MEAN	17.0	2.54	5.17	9.69	11.0	23.5	21.3	8.51	9.18	24.6	16.9	25.3
MAX	162	61.0	144	180	187	158	135	118	68.7	159	198	186
(WY)	1996	1970	1970	1970	1970	1970	1983	1984	1983	1984	1974	1982
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1982	1973	1973	1973	1973	1982	1982	1982	1982	1985	1993	1993

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1968 - 2002	
ANNUAL TOTAL						
ANNUAL MEAN					14.2	
HIGHEST ANNUAL MEAN					76.7	1970
LOWEST ANNUAL MEAN					*0.000	
HIGHEST DAILY MEAN					410	Sep 4 1968
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Many days
MAXIMUM PEAK STAGE			36.89	Sep 30	40.22	Feb 17 1998
10 PERCENT EXCEEDS	0.00		0.00		24	
50 PERCENT EXCEEDS	0.00		0.00		0.10	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

* During 2000,2001,2002 water years

02312975 TSALA APOPKA OUTFALL CANAL AT S-353, NEAR HERNANDO, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	35.97
19	---	---	---	---	---	---	---	---	---	---	---	36.02
20	---	---	---	---	---	---	---	---	---	---	---	36.08
21	---	---	---	---	---	---	---	---	---	---	---	36.14
22	---	---	---	---	---	---	---	---	---	---	---	36.20
23	---	---	---	---	---	---	---	---	---	---	---	36.26
24	---	---	---	---	---	---	---	---	---	---	---	36.36
25	---	---	---	---	---	---	---	---	---	---	---	36.51
26	---	---	---	---	---	---	---	---	---	---	---	36.59
27	---	---	---	---	---	---	---	---	---	---	---	36.67
28	---	---	---	---	---	---	---	---	---	---	---	36.73
29	---	---	---	---	---	---	---	---	---	---	---	36.79
30	---	---	---	---	---	---	---	---	---	---	---	36.86
31	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

02312976 TSALA APOPKA OUTFALL CANAL BELOW S-353, NEAR HERNANDO, FL

LOCATION.--Lat 28°57'19", long 82°20'13", in NE¼ sec.6, T.18 S., R.20 E., Citrus County, Hydrologic Unit 03100208, on left bank at control structure 353, on graded road 2.3 mi northeast of Hernando, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1968 to current year (gage heights only).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 38.29 ft, Mar. 21, 1998; minimum, 27.34 ft, June 2, 1992.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.73	29.87	28.39	28.07	28.15	28.15	27.76	27.68	27.80	28.53	30.23	32.05
2	30.91	29.76	28.36	28.13	28.12	28.12	27.73	27.68	27.81	28.59	30.31	32.11
3	31.09	29.74	28.32	28.28	28.11	28.23	27.73	27.68	27.80	28.57	30.42	32.11
4	31.28	29.62	28.29	28.26	28.09	28.53	27.77	27.69	27.76	28.62	30.54	32.09
5	31.45	29.51	28.27	28.26	28.04	28.45	27.75	27.68	27.76	28.90	30.68	32.13
6	31.61	29.42	28.25	28.32	28.03	28.37	27.72	27.66	27.80	28.93	30.80	32.22
7	31.75	29.35	28.23	28.33	28.11	28.32	27.70	27.69	27.81	28.77	30.90	32.19
8	31.85	29.29	28.24	28.31	28.13	28.27	27.67	27.71	27.83	28.64	30.97	32.12
9	31.91	29.23	28.26	28.29	28.13	28.23	27.70	27.73	27.84	28.56	31.01	32.07
10	31.95	29.17	28.27	28.29	28.15	28.18	27.71	27.74	27.84	28.48	31.03	32.04
11	31.99	29.11	28.28	28.28	28.16	28.10	27.70	27.73	27.84	28.38	31.02	32.03
12	32.01	29.06	28.27	28.27	28.15	28.07	27.71	27.75	27.84	28.35	31.03	32.03
13	32.01	29.01	28.27	28.27	28.14	28.13	27.76	27.80	27.86	28.59	31.13	32.06
14	31.99	29.03	28.27	28.31	28.12	28.10	27.79	27.80	27.82	29.42	31.15	32.11
15	31.94	29.01	28.26	28.55	28.10	28.06	27.80	27.77	27.78	29.35	31.22	32.36
16	31.86	28.95	28.24	28.45	28.08	28.03	27.79	27.77	27.70	29.30	31.38	32.50
17	31.77	28.88	28.25	28.35	28.07	28.00	27.79	27.83	27.78	29.24	31.42	32.53
18	31.65	28.82	28.28	28.29	28.01	27.98	27.83	27.86	27.80	29.19	31.44	32.52
19	31.52	28.77	28.26	28.24	27.98	27.92	27.82	27.87	27.82	29.20	31.48	32.50
20	31.42	28.73	28.26	28.19	27.97	27.90	27.83	27.84	27.83	29.34	31.51	32.47
21	31.33	28.69	28.22	28.15	27.98	27.89	27.82	27.81	27.79	29.94	31.50	32.44
22	31.26	28.65	28.19	28.10	27.95	27.85	27.82	27.77	27.94	30.33	31.42	32.42
23	31.18	28.62	28.17	28.09	28.07	27.80	27.78	27.73	28.17	30.29	31.18	32.41
24	31.08	28.59	28.19	28.09	28.26	27.77	27.73	27.73	28.20	30.28	31.07	32.43
25	30.95	28.56	28.18	28.14	28.27	27.77	27.74	27.73	28.11	30.24	31.13	32.58
26	30.81	28.53	28.18	28.37	28.28	27.80	27.72	27.72	28.09	30.22	31.24	32.66
27	30.64	28.50	28.13	28.29	28.29	27.82	27.71	27.73	28.07	30.19	31.34	32.70
28	30.49	28.47	28.12	28.22	28.22	27.79	27.71	27.74	28.10	30.18	31.41	32.72
29	30.32	28.44	28.13	28.19	---	27.76	27.70	27.75	28.13	30.19	31.52	32.72
30	30.17	28.42	28.10	28.18	---	27.74	27.68	27.79	28.20	30.22	31.70	32.72
31	30.02	---	28.09	28.16	---	27.75	---	27.79	---	30.21	31.94	---
MEAN	31.32	28.99	28.23	28.25	28.11	28.03	27.75	27.75	27.90	29.33	31.13	32.33
MAX	32.01	29.87	28.39	28.55	28.29	28.53	27.83	27.87	28.20	30.33	31.94	32.72
MIN	30.02	28.42	28.09	28.07	27.95	27.74	27.67	27.66	27.70	28.35	30.23	32.03

CAL YR 2001 MEAN 28.45 MAX 32.01 MIN 27.55
WTR YR 2002 MEAN 29.10 MAX 32.72 MIN 27.66

02313000 WITHLACOOCHEE RIVER NEAR HOLDER, FL

LOCATION.--Lat 28°59'19", long 82°20'59", in NW¼ sec.30, T.17 S., R.20 E., Marion County, Hydrologic Unit 03100208, near right bank on downstream side of bridge on State Highway 200, 4.5 mi northeast of Holder, and 38 mi upstream from mouth.

DRAINAGE AREA.--1,825 mi^2, approximately.

PERIOD OF RECORD.--August 1928 to February 1929, August 1931 to current year.

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 27.52 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Aug. 14, 1928 to Feb. 15, 1929, nonrecording gage at present site at datum 2.00 ft higher. Aug. 29, 1931, to May 19, 1961, water-stage recorder at site 100 ft downstream at present datum.

REMARKS.--Records fair. High-water diversion in headwaters (station 02311000).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	938	788	325	221	238	247	161	131	138	314	792	1360
2	995	750	317	237	230	241	155	130	142	330	816	1380
3	1060	745	305	273	225	270	156	129	140	322	849	1380
4	1120	708	295	271	220	351	165	131	128	335	886	1370
5	1170	672	288	271	208	330	160	127	125	416	928	1390
6	1220	644	282	288	204	308	154	121	136	426	965	1420
7	1260	623	276	290	224	294	151	127	140	376	997	1410
8	1300	606	279	284	229	283	145	134	142	339	1020	1390
9	1320	588	283	281	230	272	150	139	144	317	1030	1370
10	1330	567	287	281	235	258	152	140	144	294	1030	1360
11	1340	550	286	278	236	239	149	140	142	264	1030	1350
12	1350	533	284	274	235	232	150	143	141	254	1030	1350
13	1360	517	283	275	230	250	163	153	145	323	1060	1360
14	1360	519	285	286	228	241	172	151	135	560	1070	1380
15	1350	514	278	351	223	230	173	144	122	540	1090	1470
16	1330	495	273	321	219	225	169	146	104	526	1150	1520
17	1310	475	275	294	216	217	170	156	121	506	1160	1530
18	1270	458	284	278	201	211	177	165	129	489	1160	1540
19	1240	443	279	264	196	196	175	165	132	494	1180	1530
20	1210	432	274	250	195	190	175	157	133	533	1180	1520
21	1190	418	266	241	194	190	174	148	122	712	1190	1510
22	1180	404	258	226	187	177	171	137	160	833	1160	1500
23	1160	398	252	224	219	165	160	127	221	818	1080	1490
24	1130	389	256	224	271	158	150	126	228	814	1040	1500
25	1100	379	250	238	275	162	150	127	203	802	1060	1560
26	1050	368	251	296	277	169	144	124	194	794	1100	1590
27	1010	360	240	276	280	172	141	125	189	788	1130	1610
28	964	352	237	257	262	166	141	123	197	782	1160	1610
29	919	342	238	249	---	160	134	128	205	781	1190	1620
30	877	335	231	247	---	157	131	136	221	791	1250	1620
31	835	---	226	241	---	159	---	137	---	787	1320	---
TOTAL	36248	15372	8443	8287	6387	6920	4718	4267	4623	16660	33103	43990
MEAN	1169	512	272	267	228	223	157	138	154	537	1068	1466
MAX	1360	788	325	351	280	351	177	165	228	833	1320	1620
MIN	835	335	226	221	187	157	131	121	104	254	792	1350
CFSM	0.64	0.28	0.15	0.15	0.13	0.12	0.09	0.08	0.08	0.30	0.59	0.81
IN.	0.74	0.31	0.17	0.17	0.13	0.14	0.10	0.09	0.09	0.34	0.68	0.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2002, BY WATER YEAR (WY)

MEAN	1601	1024	785	839	879	985	967	642	562	840	1218	1607
MAX	6206	3068	2483	4414	4176	4869	7096	2946	2240	5925	5415	5221
(WY)	1961	1961	1954	1998	1998	1998	1960	1960	1959	1934	1960	1960
MIN	72.4	60.4	72.8	79.6	80.0	80.5	106	80.4	94.7	101	82.8	100
(WY)	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1928 - 2002	
ANNUAL TOTAL	99937		189018			
ANNUAL MEAN	274		518		985	
HIGHEST ANNUAL MEAN					3374	1960
LOWEST ANNUAL MEAN					127	2001
HIGHEST DAILY MEAN	1360	Oct 13,14	1620	Sep 29,30	8660	Apr 5 1960
LOWEST DAILY MEAN	33	Mar 12	104	Jun 16	33	Mar 12 2001
ANNUAL SEVEN-DAY MINIMUM	43	Mar 8	123	Jun 15	43	Mar 8 2001
MAXIMUM PEAK FLOW			1630	Sep 28	8660	Apr 5 1960
MAXIMUM PEAK STAGE			5.33	Sep 28	13.28	Apr 5 1960
INSTANTANEOUS LOW FLOW			104	Jun 16	26	Jul 9 2000
ANNUAL RUNOFF (CFSM)	0.15		0.28		0.54	
ANNUAL RUNOFF (INCHES)	2.04		3.86		7.35	
10 PERCENT EXCEEDS	793		1330		2080	
50 PERCENT EXCEEDS	127		278		683	
90 PERCENT EXCEEDS	69		140		240	

02313000 WITHLACOOCHEE RIVER NEAR HOLDER, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.30	2.44	0.96	0.64	0.73	0.73	0.34	0.27	0.39	1.11	2.80	4.62
2	3.48	2.32	0.93	0.69	0.70	0.71	0.32	0.27	0.40	1.17	2.89	4.69
3	3.68	2.31	0.89	0.83	0.68	0.81	0.31	0.27	0.39	1.15	2.99	4.68
4	3.86	2.19	0.86	0.83	0.66	1.09	0.35	0.28	0.36	1.20	3.11	4.67
5	4.03	2.07	0.84	0.83	0.62	1.02	0.33	0.27	0.35	1.48	3.25	4.71
6	4.19	1.98	0.82	0.89	0.61	0.94	0.30	0.25	0.39	1.51	3.37	4.80
7	4.33	1.92	0.80	0.89	0.69	0.89	0.28	0.27	0.40	1.35	3.48	4.77
8	4.43	1.86	0.82	0.87	0.71	0.84	0.26	0.30	0.42	1.22	3.56	4.71
9	4.49	1.80	0.83	0.86	0.71	0.80	0.28	0.32	0.43	1.14	3.59	4.65
10	4.53	1.74	0.84	0.86	0.73	0.75	0.29	0.33	0.43	1.07	3.60	4.62
11	4.56	1.68	0.85	0.85	0.73	0.68	0.29	0.33	0.43	0.96	3.60	4.61
12	4.59	1.63	0.84	0.84	0.73	0.65	0.29	0.34	0.43	0.93	3.61	4.61
13	4.58	1.57	0.84	0.84	0.71	0.71	0.34	0.39	0.44	1.17	3.71	4.64
14	4.57	1.59	0.85	0.89	0.69	0.68	0.38	0.38	0.40	1.99	3.73	4.69
15	4.52	1.57	0.83	1.12	0.67	0.64	0.39	0.36	0.36	1.93	3.80	4.94
16	4.44	1.51	0.82	1.01	0.66	0.62	0.37	0.37	0.29	1.88	3.96	5.07
17	4.34	1.44	0.82	0.92	0.65	0.58	0.38	0.41	0.36	1.81	4.00	5.11
18	4.22	1.39	0.85	0.86	0.59	0.56	0.41	0.45	0.39	1.77	4.02	5.11
19	4.10	1.34	0.84	0.81	0.56	0.50	0.41	0.45	0.41	1.78	4.06	5.09
20	3.99	1.30	0.82	0.76	0.56	0.48	0.41	0.42	0.42	1.91	4.08	5.06
21	3.91	1.26	0.79	0.73	0.56	0.47	0.41	0.39	0.37	2.51	4.08	5.03
22	3.84	1.22	0.76	0.67	0.53	0.42	0.40	0.35	0.52	2.91	4.00	5.01
23	3.76	1.19	0.75	0.67	0.64	0.38	0.36	0.31	0.75	2.87	3.76	5.00
24	3.66	1.16	0.76	0.67	0.83	0.35	0.32	0.32	0.78	2.85	3.65	5.02
25	3.53	1.13	0.74	0.72	0.84	0.36	0.33	0.32	0.69	2.82	3.71	5.17
26	3.38	1.10	0.75	0.94	0.85	0.38	0.31	0.31	0.67	2.79	3.82	5.26
27	3.21	1.07	0.71	0.87	0.85	0.40	0.30	0.32	0.65	2.78	3.92	5.29
28	3.05	1.04	0.69	0.80	0.79	0.37	0.30	0.32	0.68	2.76	3.99	5.30
29	2.89	1.02	0.70	0.77	---	0.34	0.28	0.34	0.71	2.76	4.10	5.31
30	2.73	0.99	0.67	0.76	---	0.33	0.27	0.37	0.78	2.80	4.28	5.31
31	2.59	---	0.66	0.74	---	0.33	---	0.37	---	2.78	4.52	---
MEAN	3.90	1.56	0.80	0.82	0.69	0.61	0.33	0.34	0.48	1.91	3.71	4.92
MAX	4.59	2.44	0.96	1.12	0.85	1.09	0.41	0.45	0.78	2.91	4.52	5.31
MIN	2.59	0.99	0.66	0.64	0.53	0.33	0.26	0.25	0.29	0.93	2.80	4.61

CAL YR 2001 MEAN 1.03 MAX 4.59 MIN 0.13
WTR YR 2002 MEAN 1.68 MAX 5.31 MIN 0.25

02313100 RAINBOW SPRINGS NEAR DUNNELLON, FL

LOCATION.--Lat 29°06'08", long 82°26'16", in SE¼ sec.12, T.16 S., R.18 E., Marion County, Hydrologic Unit 03100208, at head of springs, 3.9 mi north of Dunnellon, and 5.7 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--1899, 1905, 1907, 1917, 1929-30 (one discharge measurement each water year), October 1930 to November 1964 (discharge measurements only), January 1965 to current year. Prior to October 1940, published as Blue Springs near Dunnellon.

GAGE.--Nonrecording gage. Datum of gage is 28.34 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 19, 1948, at datum 1.63 ft higher. No gage prior to Oct. 8, 1930. July 22, 1931 to Apr. 1, 1933, water-stage recorder at present site. (April 1933 to March 1969, and since April 1971, nonrecording gage read at time of discharge measurements only.)

REMARKS.--Records good. Discharge measurements made approximately, 0.25 mi upstream of bridge on State Highway 484, 5.0 mi downstream from head of springs; surface inflow between springs and measuring site is negligible except after heavy rains. Discharge computed from relation between artesian pressure at Rainbow Springs well and discharge at measuring site. Artesian pressures are published as water levels for Rainbow Springs Well (290514082270701) in Water Resources Data, Volume 1B, Northeast Florida Ground Water.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	625	632	610	586	568	553	528	505	487	500	558	579
2	628	630	608	587	567	553	528	504	484	502	560	578
3	630	631	607	588	566	552	527	503	484	503	562	577
4	634	631	605	586	565	553	529	502	482	505	564	576
5	636	630	604	587	565	553	528	498	478	510	564	580
6	639	628	604	588	565	552	526	498	480	512	566	582
7	640	627	604	585	565	550	523	498	481	511	564	580
8	642	629	605	585	565	549	523	496	484	512	565	577
9	642	628	603	584	565	547	522	496	484	514	566	577
10	642	629	605	583	563	545	521	496	484	513	566	577
11	644	627	604	582	563	544	521	495	486	513	564	576
12	645	625	602	581	563	545	521	494	483	514	566	579
13	647	626	603	579	561	546	522	496	484	518	568	581
14	647	627	601	581	561	546	521	495	482	524	567	582
15	647	629	600	583	561	544	520	492	483	530	568	584
16	647	627	598	581	560	542	520	492	480	534	570	585
17	646	625	599	579	558	540	521	493	481	533	573	585
18	647	623	600	577	557	539	522	493	484	535	573	584
19	646	622	598	577	556	539	521	493	483	536	575	584
20	645	622	596	574	555	538	520	495	485	538	576	584
21	646	620	595	572	555	538	517	493	485	539	574	583
22	648	621	595	571	555	536	516	489	488	543	573	580
23	650	620	595	570	555	535	515	489	491	546	573	581
24	644	619	594	570	555	533	512	488	493	547	572	583
25	642	616	594	570	556	533	510	487	493	548	569	586
26	641	615	591	573	556	533	510	485	493	548	571	587
27	640	614	592	573	554	531	509	486	491	550	571	587
28	637	612	591	573	553	531	507	489	491	551	572	586
29	635	613	590	572	---	530	508	486	493	556	573	586
30	635	611	586	570	---	529	507	487	494	557	576	587
31	632	---	586	569	---	528	---	487	---	557	579	---
TOTAL	19869	18709	18565	17936	15688	16787	15575	15300	14571	16399	17638	17453
MEAN	641	624	599	579	560	542	519	494	486	529	569	582
MAX	650	632	610	588	568	553	529	505	494	557	579	587
MIN	625	611	586	569	553	528	507	485	478	500	558	576

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

MEAN	752	734	712	698	687	688	688	674	665	676	699	735
MAX	1023	953	907	934	924	1016	957	925	914	879	993	1039
(WY)	1966	1966	1966	1998	1998	1998	1998	1970	1970	1970	1965	1965
MIN	525	537	532	520	514	514	514	491	480	487	537	549
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002	
ANNUAL TOTAL	198486		204490			
ANNUAL MEAN	544		560		701	
HIGHEST ANNUAL MEAN					897	1970
LOWEST ANNUAL MEAN					521	2001
HIGHEST DAILY MEAN	650	Oct 23	650	Oct 23	1060	Sep 19 1988
LOWEST DAILY MEAN	a470		478	Jun 5	a470	
ANNUAL SEVEN-DAY MINIMUM	473	Jun 15	482	Jun 2	473	Jun 15 2001
MAXIMUM PEAK FLOW			652	Oct 23	*1230	Oct 12 1964
MAXIMUM PEAK STAGE			2.48	Nov 5	5.90	Apr 6 1960
INSTANTANEOUS LOW FLOW			475	Jun 5	*460	Jun 7 2000
10 PERCENT EXCEEDS	629		629		862	
50 PERCENT EXCEEDS	519		565		683	
90 PERCENT EXCEEDS	480		492		566	

* Measured
a Jun 18,19, Jul 9, 2001

02313200 WITHLACOOCHEE RIVER AT DUNNELLON, FL

LOCATION.--Lat 29°02'45", long 82°27'53", in NW¼ sec.35, T.16 S., R.18 E., Marion County, Hydrologic Unit 03100208, near right bank 50 ft upstream from bridge on U.S. Highway 41 at Dunnellon, 0.6 mi downstream from Blue Run, 0.8 mi upstream from Lake Rousseau, and 25 mi upstream from mouth.

DRAINAGE AREA.--1,960 mi^2, approximately.

GAGE-HEIGHT RECORDS

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

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929. Prior to Oct. 4, 2000, nonrecording gage at same site and datum.

REMARKS.--Gage height regulated by gated structures located at the Inglis Dam and Withlachoochee River Bypass Channel.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 29.70 ft, March 20,21, 1998; minimum, 23.10 ft, estimated, Oct. 11, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height since at least 1931, 33.0 ft in April 1960, from floodmarks.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.05	27.48	27.72	27.76	27.80	27.84	27.61	27.66	27.84	27.81	28.00	28.09
2	28.11	27.46	27.72	27.79	27.78	27.83	27.59	27.66	27.85	27.87	28.06	28.07
3	28.19	27.51	27.69	27.86	27.77	27.88	27.59	27.67	27.84	27.92	28.06	28.12
4	28.29	27.52	27.68	27.85	27.76	27.99	27.62	27.68	27.82	27.96	28.04	28.22
5	28.38	27.52	27.67	27.84	27.72	27.94	27.61	27.67	27.82	28.03	28.04	28.33
6	28.46	27.59	27.66	27.91	27.74	27.88	27.60	27.66	27.84	28.06	28.08	28.25
7	28.50	27.66	27.67	27.92	27.82	27.84	27.58	27.69	27.86	28.00	28.12	28.13
8	28.47	27.72	27.70	27.91	27.82	27.80	27.57	27.72	27.87	27.92	28.15	28.04
9	28.40	27.76	27.73	27.91	27.83	27.78	27.60	27.74	27.87	27.85	28.16	28.07
10	28.36	27.79	27.76	27.92	27.87	27.76	27.62	27.76	27.88	27.73	28.16	28.14
11	28.38	27.82	27.78	27.93	27.88	27.70	27.63	27.76	27.88	27.63	28.15	28.19
12	28.42	27.83	27.80	27.93	27.89	27.69	27.63	27.78	27.88	27.64	28.05	28.25
13	28.39	27.83	27.81	27.93	27.88	27.78	27.66	27.82	27.90	27.80	27.99	28.20
14	28.36	27.87	27.83	27.95	27.87	27.76	27.68	27.82	27.85	28.08	28.01	28.09
15	28.32	27.90	27.83	27.99	27.86	27.74	27.70	27.80	27.81	28.09	28.07	28.13
16	28.27	27.88	27.83	27.85	27.85	27.74	27.71	27.81	27.75	28.03	28.14	28.24
17	28.21	27.86	27.85	27.80	27.83	27.70	27.73	27.86	27.78	27.97	28.18	28.29
18	28.13	27.83	27.88	27.76	27.77	27.69	27.77	27.89	27.82	27.91	28.20	28.26
19	28.08	27.82	27.87	27.74	27.76	27.66	27.77	27.88	27.81	27.91	28.20	28.22
20	28.15	27.81	27.87	27.70	27.77	27.65	27.78	27.86	27.80	27.95	28.20	28.16
21	28.26	27.80	27.85	27.68	27.76	27.64	27.77	27.83	27.79	28.00	28.19	28.12
22	28.34	27.79	27.84	27.63	27.73	27.60	27.76	27.79	27.93	28.12	28.17	28.08
23	28.36	27.79	27.83	27.65	27.78	27.57	27.73	27.77	28.03	28.12	28.13	28.11
24	28.28	27.78	27.85	27.67	27.84	27.56	27.71	27.77	27.97	28.08	28.08	28.19
25	28.22	27.76	27.83	27.75	27.87	27.56	27.71	27.78	27.78	28.04	28.04	28.26
26	28.13	27.76	27.85	27.94	27.90	27.58	27.69	27.77	27.67	28.03	28.02	28.18
27	28.05	27.75	27.81	27.88	27.93	27.61	27.68	27.77	27.57	28.02	28.05	28.24
28	27.93	27.75	27.80	27.83	27.88	27.60	27.68	27.77	27.55	28.01	28.10	28.34
29	27.81	27.74	27.81	27.80	---	27.60	27.66	27.79	27.58	28.01	28.16	28.39
30	27.70	27.74	27.79	27.79	---	27.60	27.66	27.83	27.66	28.03	28.24	28.35
31	27.59	---	27.77	27.78	---	27.61	---	27.83	---	28.00	28.20	---
MEAN	28.21	27.74	27.79	27.83	27.82	27.72	27.67	27.77	27.81	27.96	28.11	28.19
MAX	28.50	27.90	27.88	27.99	27.93	27.99	27.78	27.89	28.03	28.12	28.24	28.39
MIN	27.59	27.46	27.66	27.63	27.72	27.56	27.57	27.66	27.55	27.63	27.99	28.04

WTR YR 2002 MEAN 27.88 MAX 28.50 MIN 27.46

02313200 WITHLACOOCHEE RIVER AT DUNNELLON, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-87, 1993, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	GAGE HEIGHT (FEET) (00065)	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
FEB							
12...	1538	27.89	357	7.9	--	8.4	--
APR							
16...	1707	27.72	290	6.6	24.8	8.4	2.0
AUG							
02...	1032	28.05	408	6.9	26.7	4.5	--
SEP							
24...	1322	28.17	234	6.9	26.2	3.0	30.0

02313230 WITHLACOOCHEE RIVER AT INGLIS DAM, NEAR DUNNELLON, FL

LOCATION.--Lat 29°00'35", long 82°37'01", in SW¼ sec.8, T.17 S., R.17 E., Levy County, Hydrologic Unit 03100208, on left bank at upstream side of control structure of Inglis Dam, 3.5 mi southeast of Inglis, 9.8 mi west of Dunnellon, and 11 mi upstream from mouth.

DRAINAGE AREA.--2,020 mi^2, approximately.

PERIOD OF RECORD.--June 1964 to September 1969 (gage heights and discharge measurements only), October 1969 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to July 20, 1971, water-stage recorder at site in forebay of powerhouse of the old Inglis Dam and July 20, 1971, to Aug. 23, 1972, at site in private boat basin on south shore of Lake Rousseau at same datum. Auxiliary gage at downstream side of control structure.

REMARKS.--Records good. Records include flow of springs, approximately 70 ft^3/s just downstream from control structure; spring flow is considered to be mostly leakage from Lake Rousseau. Flow regulated by manipulation of gates in spillway. Discharge computed from relation between discharge and gate openings. Since December 1969, entire flow diverted below station from old river channel into Cross-Florida Barge Canal, and diversions above station from Lake Rousseau, for boat lockages, through Cross-Florida Barge Canal (see station 02313237) and for maintaining flow in old river channel through Withlacoochee River Bypass Channel (see station 02313250).

COOPERATION.--Gate opening record provided by Southwest Florida Water Management District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	232	70	70	70	70	70	70	70	70	70	752
2	70	70	70	70	70	70	70	70	70	70	129	613
3	70	70	70	70	70	70	70	70	70	70	190	396
4	70	70	70	70	70	70	70	70	70	70	190	437
5	205	70	70	70	70	70	70	70	70	111	120	960
6	290	70	70	70	70	70	70	70	70	428	70	960
7	429	70	70	70	70	70	70	70	70	476	70	960
8	624	70	70	70	70	70	70	70	70	214	70	887
9	624	70	70	70	70	70	70	70	70	70	112	460
10	422	70	70	70	70	70	70	70	70	70	240	460
11	290	70	70	70	70	70	70	70	70	70	461	460
12	390	70	70	70	70	70	70	70	70	70	606	666
13	460	70	70	70	70	70	70	70	70	70	352	960
14	460	70	70	70	70	70	70	70	70	70	344	860
15	460	70	70	460	70	70	70	70	70	70	344	524
16	460	70	70	326	70	70	70	70	70	70	358	580
17	460	70	70	70	70	70	70	70	70	70	508	748
18	460	70	70	70	70	70	70	70	70	70	508	826
19	249	70	70	70	70	70	70	70	70	70	508	826
20	70	70	70	70	70	70	70	70	70	70	508	826
21	70	70	70	70	70	70	70	70	70	70	508	826
22	196	70	70	70	70	70	70	70	70	70	508	787
23	464	70	70	70	70	70	70	70	70	70	508	540
24	559	70	70	70	70	70	70	70	70	70	508	614
25	460	70	70	70	70	70	70	70	70	70	508	960
26	460	70	70	70	70	70	70	70	70	70	493	1690
27	460	70	70	70	70	70	70	70	70	70	344	540
28	460	70	70	70	70	70	70	70	70	70	344	566
29	460	70	70	70	---	70	70	70	70	70	344	792
30	460	70	70	70	---	70	70	70	70	70	670	953
31	460	---	70	70	---	70	---	70	---	70	960	---
TOTAL	11142	2262	2170	2816	1960	2170	2100	2170	2100	3119	11453	22429
MEAN	359	75.4	70.0	90.8	70.0	70.0	70.0	70.0	70.0	101	369	748
MAX	624	232	70	460	70	70	70	70	70	476	960	1690
MIN	70	70	70	70	70	70	70	70	70	70	70	396

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

MEAN	690	390	291	449	474	510	435	218	162	256	395	601
MAX	3175	2573	2035	4417	4390	5067	3353	1125	696	2058	1995	2675
(WY)	1980	1970	1970	1998	1998	1998	1998	1987	1982	1982	1974	1982
MIN	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.8	71.0
(WY)	2001	1974	1974	1974	1974	1974	1974	1973	1973	1973	1981	1981

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	59242		65891			
ANNUAL MEAN	162		181		406	
HIGHEST ANNUAL MEAN					1645	1998
LOWEST ANNUAL MEAN					78.8	1981
HIGHEST DAILY MEAN	1300	Sep 16	1690	Sep 26	6000	Mar 20-22 1998
LOWEST DAILY MEAN	70	Many days	70	Many days	70	Many days
ANNUAL SEVEN-DAY MINIMUM	70	Jan 5	70	Nov 2	70	Many days
MAXIMUM PEAK STAGE			28.01	Jun 23	28.28	Jun 19 1982
10 PERCENT EXCEEDS	460		508		1040	
50 PERCENT EXCEEDS	70		70		70	
90 PERCENT EXCEEDS	70		70		70	

02313231 WITHLACOOCHEE RIVER BELOW INGLIS DAM, NEAR DUNNELLON, FL

LOCATION.--Lat 29°00'35", long 82°37'01", in SW¼ sec.8, T.17 S., R.17 E., Levy County, Hydrologic Unit 03100208, at downstream side of control structure of Inglis Dam, 3.5 mi southeast of Inglis, 9.8 mi west of Dunnellon, and 11 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to June 21, 1971, at downstream end of lock chamber of former Inglis Dam at same datum. June 21, 1971, to Aug. 23, 1972, near left bank 1,500 ft downstream at same datum. This is the auxiliary gage for station 02313230 located at upstream side of control structure.

REMARKS.--Stage affected by tide and manipulation of gates immediately above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.73 ft, Sept. 13, 1964; minimum, 3.72 ft, below NGVD of 1929, Jan. 16, 1972.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.27	1.16	0.78	0.21	0.47	0.00	1.03	1.18	0.97	0.69	1.01	1.86
2	0.64	0.96	0.59	0.48	0.31	1.52	0.86	1.25	1.01	0.61	1.15	1.72
3	0.96	1.02	0.40	0.43	0.28	1.47	1.13	0.98	0.99	0.70	1.18	1.44
4	1.10	0.67	0.26	-0.44	0.07	-0.25	0.73	0.92	0.77	0.71	1.14	1.57
5	1.44	0.31	0.32	0.37	-0.63	-0.88	0.19	0.66	0.88	0.62	0.94	2.08
6	1.52	0.72	0.45	1.38	0.81	-0.31	0.15	0.49	0.95	0.85	0.97	2.57
7	1.37	0.94	0.59	-0.03	1.22	0.26	0.05	0.75	0.94	0.93	0.91	2.46
8	1.44	1.07	1.05	-0.38	0.02	0.35	0.78	0.86	0.84	0.58	0.55	2.03
9	1.36	1.01	0.82	0.03	0.20	0.35	1.10	1.09	0.60	0.83	0.62	1.34
10	1.21	0.93	0.85	0.35	0.39	-0.05	0.72	0.96	0.72	0.97	0.78	1.54
11	1.44	1.20	0.80	0.41	0.15	-0.07	0.59	0.83	0.66	1.16	1.23	1.66
12	1.97	0.88	0.61	0.56	0.28	0.75	0.65	0.94	1.10	1.25	1.52	2.15
13	2.39	0.38	0.71	0.46	0.16	0.78	0.79	1.25	1.29	1.78	1.31	2.37
14	2.48	0.05	0.90	0.61	0.04	0.51	0.78	0.98	1.48	1.31	1.21	2.15
15	1.67	0.35	0.71	0.83	0.26	0.49	0.77	0.37	1.56	0.98	1.10	1.48
16	1.81	0.38	0.45	0.45	0.59	0.63	0.66	0.46	1.17	0.81	1.00	1.44
17	1.31	0.16	1.08	0.24	0.39	0.55	0.69	0.90	1.32	0.87	1.20	1.80
18	1.29	0.29	0.89	0.31	-0.20	0.59	0.66	1.49	0.96	0.80	1.26	1.99
19	0.98	0.67	0.89	0.58	0.46	0.55	0.75	0.45	0.69	0.99	1.26	2.07
20	0.90	1.08	0.23	0.43	1.22	0.88	0.74	-0.10	0.36	0.82	1.36	2.17
21	0.90	1.05	-0.06	0.53	1.01	1.10	0.83	-0.21	0.27	0.88	1.34	2.31
22	1.19	1.11	0.45	0.18	0.70	-0.03	0.81	-0.57	0.81	0.98	1.28	2.14
23	1.65	1.15	1.34	0.34	-0.12	0.01	0.58	-0.01	0.90	0.93	1.24	1.76
24	1.92	1.23	1.05	0.60	0.15	0.45	0.49	0.77	0.95	0.96	1.40	1.91
25	1.65	0.92	0.51	0.56	0.39	0.71	0.95	1.05	0.96	0.92	1.45	2.74
26	0.53	0.75	0.38	0.17	0.80	0.67	0.86	1.05	1.02	0.90	1.36	4.44
27	0.29	0.87	0.47	0.19	0.58	0.66	0.91	0.86	0.99	0.90	1.57	2.26
28	0.22	0.89	0.95	0.29	-0.02	0.40	1.10	0.95	0.86	0.83	1.31	1.70
29	0.37	1.13	1.15	0.43	---	0.50	1.18	1.11	0.80	1.01	1.13	2.02
30	0.72	1.07	0.55	0.40	---	0.70	1.05	1.07	0.65	0.99	1.52	2.00
31	1.03	---	0.42	0.54	---	1.20	---	1.04	---	1.00	2.13	---
MEAN	1.23	0.81	0.66	0.37	0.36	0.47	0.75	0.77	0.92	0.92	1.21	2.04
MAX	2.48	1.23	1.34	1.38	1.22	1.52	1.18	1.49	1.56	1.78	2.13	4.44
MIN	0.22	0.05	-0.06	-0.44	-0.63	-0.88	0.05	-0.57	0.27	0.58	0.55	1.34

CAL YR 2001 MEAN 0.80 MAX 2.86 MIN -0.68
WTR YR 2002 MEAN 0.88 MAX 4.44 MIN -0.88

02313250 WITHLACOOCHEE RIVER BYPASS CHANNEL NEAR INGLIS, FL

LOCATION.--Lat 29°01'15", long 82°38'17", in NE¼ sec.12, T.17 S., R.16 E., Levy County, Hydrologic Unit 03100208, on right bank 1.3 mi upstream from control structure, 1.4 mi upstream from mouth, and 3.0 mi east of Inglis.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to July 16, 1971, water-stage recorder for Withlacoochee River at Inglis Dam, near Dunnellon (station 02313230) used as base gage for this station. Prior to Sept. 26, 1991, gage located 90 ft above control structure and 1.2 mi downstream from present site.

REMARKS.--Records good. Flow regulated by manipulation of gates in spillway; channel completed and flow through spillway began Dec. 17, 1969. Discharge computed from relation between discharge and gate openings. Discharge at station is the diversion from Lake Rousseau to maintain flow in the old river channel.

COOPERATION.--Gate-opening record provided by Southwest Florida Water Management District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	1540	869	712	672	670	554	419	358	610	1390	1540
2	1460	1480	869	712	672	739	554	400	358	610	1390	1540
3	1460	1420	869	712	672	691	545	400	358	632	1390	1540
4	1460	1420	824	712	642	740	515	400	358	653	1390	1540
5	1460	1220	791	712	623	790	515	400	358	674	1390	1540
6	1460	1030	791	712	623	790	515	391	358	692	1390	1540
7	1490	1030	748	712	623	790	515	334	358	692	1420	1540
8	1540	1030	712	694	623	774	493	334	358	894	1460	1540
9	1540	1030	712	672	623	751	476	334	358	1080	1480	1540
10	1540	1030	712	658	623	751	476	334	358	1170	1500	1540
11	1540	1030	712	672	623	751	476	334	407	923	1500	1540
12	1540	1030	712	672	623	719	476	334	407	925	1500	1540
13	1540	1030	712	675	626	672	476	334	458	925	1500	1540
14	1540	991	712	774	668	672	476	334	476	928	1500	1540
15	1540	948	712	800	672	672	476	334	476	1070	1500	1540
16	1540	948	712	800	672	672	476	334	473	1120	1500	1540
17	1540	948	712	800	672	672	476	334	455	1120	1500	1540
18	1540	948	712	800	648	672	476	334	476	1120	1500	1540
19	1540	948	712	800	633	672	476	359	476	1120	1520	1540
20	1540	917	712	800	633	672	476	405	476	1120	1540	1540
21	1540	869	712	800	633	629	476	405	476	1120	1540	1540
22	1540	869	712	716	633	606	476	405	524	1250	1540	1540
23	1540	869	712	665	633	606	476	380	741	1450	1540	1540
24	1540	869	712	665	633	606	476	358	1040	1480	1540	1540
25	1540	869	712	665	633	577	476	358	1020	1390	1540	1540
26	1540	869	712	816	633	554	476	358	922	1390	1540	512
27	1540	869	712	863	633	554	476	358	775	1390	1540	1500
28	1540	869	712	806	655	554	456	358	641	1390	1540	1500
29	1540	869	712	712	---	554	436	358	610	1390	1540	1500
30	1540	869	712	712	---	554	436	358	610	1390	1540	1500
31	1540	---	712	691	---	554	---	358	---	1390	1540	---
TOTAL	47210	30658	22849	22712	17952	20680	14578	11236	15519	33108	46200	45012
MEAN	1523	1022	737	733	641	667	486	362	517	1068	1490	1500
MAX	1540	1540	869	863	672	790	554	419	1040	1480	1540	1540
MIN	1460	869	712	658	623	554	436	334	358	610	1390	512

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

MEAN	1065	1035	1018	1018	1057	1031	1024	946	940	1011	1080	1095
MAX	1594	1566	1574	1549	1502	1480	1574	1518	1551	1548	1557	1577
(WY)	1974	1980	1998	1989	1989	1986	1984	1984	1984	1984	1984	1973
MIN	265	240	436	435	442	470	463	362	364	442	364	508
(WY)	1973	1973	2001	2001	2001	2000	2001	2002	2000	2001	2001	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	223430		327714			
ANNUAL MEAN	612		898		1026	
HIGHEST ANNUAL MEAN					1488	1984
LOWEST ANNUAL MEAN					454	2001
HIGHEST DAILY MEAN	*1540		*1540		1840	Oct 1 1987
LOWEST DAILY MEAN	187	Jul 24	334	May 7-18	53	Oct 11 1972
ANNUAL SEVEN-DAY MINIMUM	299	Jul 24	334	May 7	86	Oct 9 1972
MAXIMUM PEAK STAGE			27.89	Jun 23	28.31	May 19 1977
10 PERCENT EXCEEDS	1420		1540		1500	
50 PERCENT EXCEEDS	436		712		1030	
90 PERCENT EXCEEDS	318		400		560	

* Oct 8-Nov 1, Aug 20-Sep 25

DISCHARGE AT 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.

Discharge measurements made at miscellaneous sites during water year 2002

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (Water years)	Measurements Date	Measurements Discharge (ft^3/s)
ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER						
02234650 Miami Springs	Unnamed Creek	Lat 28°42'36", long 81°26'34", in $NE^1/_4$ sec.31, T.20 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, 1,100 ft upstream from Wekiva River, and 5.9 mi west of Longwood.		1945,1960 1973-2001	05-24-02 09-24-02	4.1 6.4
02234991 Sanlando Springs	Little Wekiva River	Lat 28°41'19", long 81°23'45", in $SE^1/_4$ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at north outlet of spring pool, 0.2 mi upstream from Little Wekiva River, and 3.0 mi west of Longwood.		1942,1946 1954,1956 1958,1961 1972-2001	05-23-02 09-24-02	12 25
02234996 Palm Springs	Little Wekiva River	Lat 28°41'27", long 81°23'34", in $NW^1/_4$ sec.2, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, 200 ft upstream from Little Wekiva River, and 2.9 mi west of Longwood.		1942,1954 1956,1961 1972-2001	05-23-02 09-24-02	4.6 7.3
02234997 Starbuck Spring	Little Wekiva River	Lat 28°41'48", long 81°23'28", in $NW^1/_4$ sec.2, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, at edge of Little Wekiva River, and 2.7 mi west of Longwood.		1944,1961 1972-2001	05-23-02 09-24-02	11 14
02236095 Alexander Springs	St. Johns River	Lat 29°04'50", long 81°34'30", in Levy Land Grant, T.16 S., R.27 E., Lake County, Hydrologic Unit 03080101, at head of Alexander Springs Creek, 1.5 mi upstream from bridge on State Highway 445, and 6.5 mi southwest of Astor.		1931,1933 1935-1936 1946,1956 1961 1966-1967 1969,1972 1977 1981-2001	05-17-02 09-17-02	111 121
02236110 Ponce DeLeon Springs	Spring Garden Creek	Lat 29°08'02", long 81°21'47", in land grant 42, T.16 S., R.29 E., Volusia County, Hydrologic Unit 03080101, at weir outlets to Spring Garden Lake, 1.8 mi upstream from Deep Creek, and 8.1 mi northwest of De Land.		1929,1932 1946-1947 1956,1961 1965-1980† 1981-2001	05-20-02 09-18-02	22 30

Discharge measurements made at miscellaneous sites during water year 2002--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (Water years)	Measurements Date	Measurements Discharge (ft^3/s)
ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER--Continued						
02236130 Juniper Springs	Lake George	Lat 29°11'01", long 81°42'45", in SE 1/4 sec.17, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, at head of Juniper Creek, 4.3 mi west of the intersection of State Highways 19 and 40, 9.3 mi upstream from Lake George, and 26.1 mi east of Ocala.		1929 1935-1937 1946,1956 1961,1972 1981-2001	05-16-02 09-27-02	8.0 12
02236132 Fern Hammock Springs [a]	Juniper Creek	Lat 29°11'00", long 81°42'29", in SE 1/4 sec.17, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, 0.4 mi downstream from Juniper Springs, 9.0 mi upstream from Lake George, and 26.3 mi east of Ocala.		1935-1937 1946,1956 1961,1972 1981-2001	05-16-02 09-27-02	12 14
02236147 Sweetwater Springs	Juniper Creek	Lat 29°13'07" long 81°39'36", in NE 1/4 of F. M. Arredondo Grant, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, near left bank of Juniper Creek, 0.5 mi upstream from State Highway 19, and 7.2 mi northwest of Astor Park.		1981-2001	05-17-02 09-27-02	12 16
02236160 Silver Glen Springs	Lake George	Lat 29°14'40", long 81°38'34", in SE 1/4 sec.25, T.14 S., R.26 E., Marion County, Hydrologic Unit 03080101, 0.5 mi upstream from Lake George, and 9.1 mi northwest of Astor.		1931-1933 1935-1936 1946,1956 1961,1972 1981-1982 1984-2001	05-23-02 08-01-02 09-19-02	143 135 152
02236205 Salt Springs	Lake George	Lat 29°21'00", long 81°43'40", in sec.42, Joseph M. Hernandez Grant, T.13 S., R.26 E., Marion County, Hydrologic Unit 03080101, 4.0 mi upstream from Lake George, and 10.9 mi east of Eureka.		1929-1933 1935-1936 1946,1956 1961 1966-1967 1972 1981-2001	05-23-02 09-20-02	64 84

Discharge measurements made at miscellaneous sites during water year 2002--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (Water years)	Measurements Date	Measurements Discharge (ft^3/s)
ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER--Continued						
292258081381100 St. Johns River at Georgetown	Atlantic Ocean	Lat 29°22'58", long 81°38'11", in $NE^1/_4$ sec.39, T.13 S., R.26 E., Putnam County, Hydrologic Unit 03080101, near northern tip of Drayton Island, and 0.5 mi southeast of Georgetown.			05-29-02	-6650
						-6240
						-6460
						-5940
						-5790
						-4970
						-4200
						374
						2210
						4430
						5690
						6330
						5790
						5280
						3920
						3720
						3350
						148
						-3260
						-6260
						-8690
						-7760
292558081404000 St. Johns River nr Fruitland	Atlantic Ocean	Lat 29°25'58", long 81°40'40", in $SE^1/_4$ sec.22, T.12 S., R.26 E., Putnam County, Hydrologic Unit 03080101, about 0.6 mi downstream from powerline crossing, and 2.0 mi west of Fruitland.			05-29-02	-15500
						-14500
						-14800
						-15000
						-13800
						-13200
						-9690
						-8050
						-7140
						-5550
						-4330
						-2840
						6.8
						1660
						3520
						5100
						7140
						7940
						8520
						9610
						9120
						9780
						9020
						8740
						7990
						6200
						5550
						4880
						4090
						818
						-1300
						-4070
						-6120
						-7280
						-9130
						-13400
						-14300
						-15200
						-16500
						-16000
						-17200
						-16400

Discharge measurements made at miscellaneous sites during water year 2002--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (Water years)	Measurements Date	Measurements Discharge (ft^3/s)
COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET						
290209080542100 Indian River nr New Smyrna Beach	Atlantic Ocean	Lat 29°02'09", long 80°54'21", in sec.9, T.17 S., R.34 E., Volusia County, Hydrologic Unit 03080202, 900 ft north of bridge on State Highway 44, 1.7 mi northeast of the intersection with U.S. Highway 1 at New Smyrna Beach			05-20-02	15000
					05-21-02	3800
						275
						-5800
						-10400
						-11400
						-12600
						-14600
						-15000
						-14300
						-13400
						-11900
						-10400
						-9300
						-7900
						-6700
						-3100
						-800
						1300
						3800
						6800
						8700
						13400
						15700
						17100
						18700
						20400
						23200
						24000
						23500
						22800
						21400
						19600
						18600
						17200
						16000
						13900
						9300
						7400
						4900
						3100
						1070
283715080475200 Indian River at Titusville	Atlantic Ocean	Lat 28°37'15", long 80°47'52", in $NE^1/_4$ sec.34, T.21 S., R.35 E., Brevard County, Hydrologic Unit 03080202, at bridge on Brewer Causeway (State Highway 402), 0.7 mi northeast of the intersection with U.S. Highway 1 at Titusville.			05-21-02	5800
						6990
						7710
						9110
						10400

Discharge measurements made at miscellaneous sites during water year 2002--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (Water years)	Measurements Date	Measurements Discharge (ft^3/s)
COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET						
283137080455500 Indian River nr Titusville	Atlantic Ocean	Lat 28°31'37", long 80°45'55", in Delespine Grant, T.22 S., R.35 E., Brevard County, Hydrologic Unit 03080202, at bridge on NASA Causeway (State Highway 405), 1.5 mi east of the intersection with U.S. Highway 1, and 6.4 mi southeast of Titusville.			05-21-02	-7990 -4050 -434 3300
282408080440500 Indian River nr Cocoa	Atlantic Ocean	Lat 28°24'08", long 80°44'05", in $NW^1/_4$ sec.16, T.24 S., R.36 E., Brevard County, Hydrologic Unit 03080202, at bridge on Bennett Causeway (State Highway 528), 1.1 mi east of the intersection with U.S. Highway 1, and 3.3 mi north of Cocoa.			05-21-02	13000 13700 14000 14100
282120080430600 Indian River at Cocoa	Atlantic Ocean	Lat 28°21'20", long 80°43'06", in $NW^1/_4$ sec.34, T.24 S., R.36 E., Brevard County, Hydrologic Unit 03080202, at Hubert Humphrey bridge on State Highway 520, 0.9 mi east of the intersection with U.S. Highway 1 at Cocoa.			05-21-02	10600 10700 11800 12700 13500 14200
281221080390000 Indian River nr Eau Gallie	Atlantic Ocean	Lat 28°12'21", long 80°39'00", in $SW^1/_4$ sec.20, T.26 S., R.37 E., Brevard County, Hydrologic Unit 03080202, at bridge on Pineda Causeway (State Highway 404), 0.7 mi east of the intersection with U.S. Highway 1, and 5 mi north of Eau Gallie.			05-21-02	11500 9530 10900 10400 12300 13200
280756080370200 Indian River nr Melbourne	Atlantic Ocean	Lat 28°07'56", long 80°37'02", in $SW^1/_4$ sec.15, T.27 S., R.37 E., Brevard County, Hydrologic Unit 03080202, at bridge on Eau Gallie Causeway (State Highway 511), 0.8 mi east of the intersection with U.S. Highway 1 at Eau Gallie.			05-21-02	4760 6290 12000 17600
280500080352900 Indian River at Melbourne	Atlantic Ocean	Lat 28°05'00", long 80°35'29", in $NE^1/_4$ sec.2, T.28 S., R.37 E., Brevard County, Hydrologic Unit 03080202, at bridge on U.S. Highway 192, 0.8 mi northeast of the intersection with U.S. Highway 1 at Melbourne.			05-21-02	-835 -1140 -330 1720 13300 12700

Discharge measurements made at miscellaneous sites during water year 2002--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (Water years)	Measurements Date	Measurements Discharge (ft^3/s)
COASTAL AREA BETWEEN SEBASTIAN INLET AND ST. LUCIE RIVER						
273909080222400 Indian River at Vero Beach	Atlantic Ocean	Lat 27°39'09", long 80°22'24", in $NW^1/_4$ sec.31, T.32 S., R.40 E., Indian River County, Hydrologic Unit 03080203, 150 ft north of bridge on State Highway 60, 1.6 mi northeast of Vero Beach.			05-21-02	271
						477
						1380
						2280
						3810
						4470
						5850
						6460
						7280
						8070
						8820
						9950
						9820
						10700
						11100
						10300
						8390
						8040
						7050
						6830
						7390

† Operated as a periodic station
[a] Also known as "The Aquarium"
Note.--Negative figures indicate reverse flow in the St. Johns River and southerly flow in the Indian River

ELEVATION OF LAKES

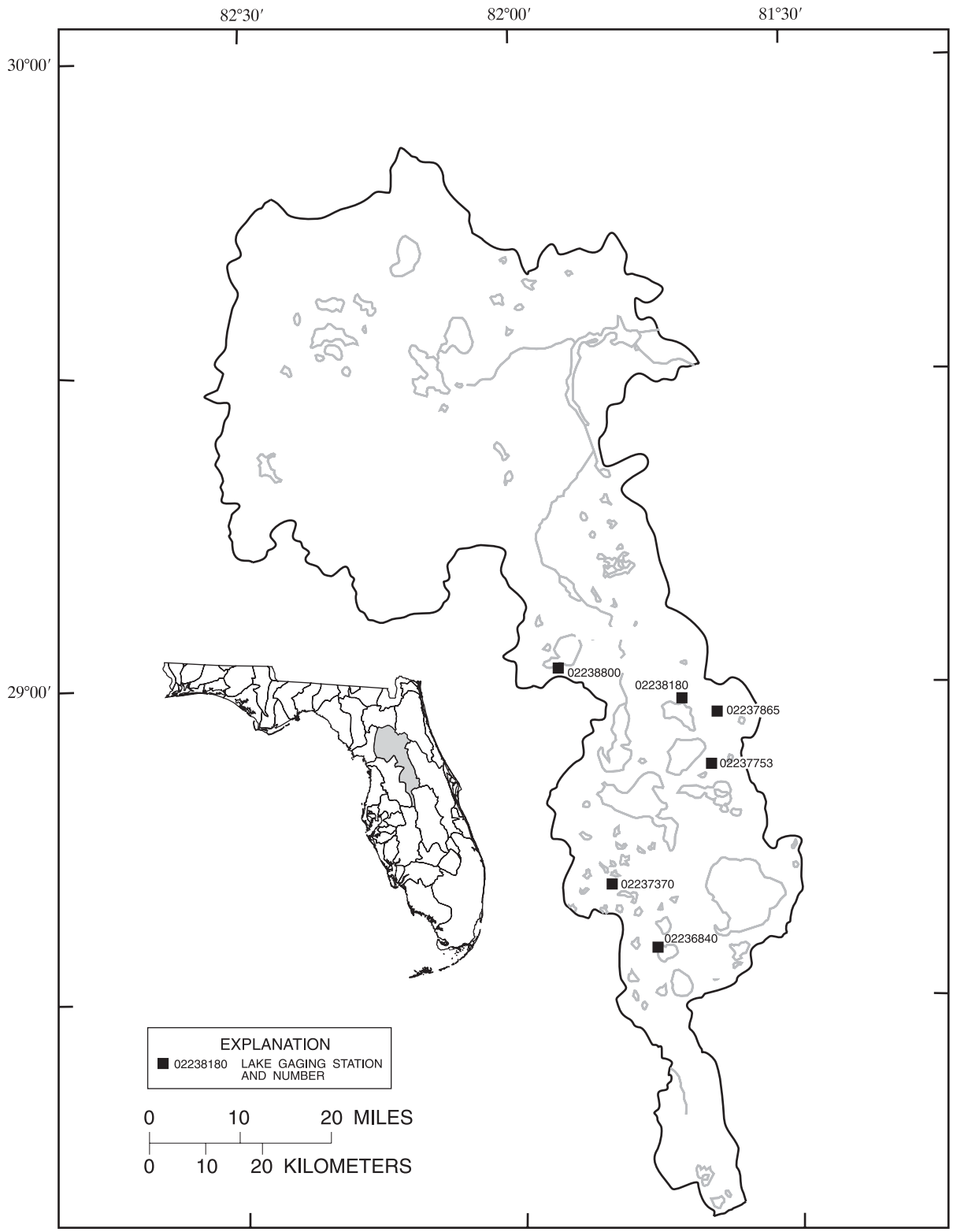

Figure 12.--Location of lake gaging stations in the Ocklawaha River basin.

02236840 LAKE MINNEHAHA AT CLERMONT, FL

LOCATION.--Lat 28°32'13", long 81°47'02", in NW¼ sec.26, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, on northwest side of lake in Cypress Cove, on private pier, 500 ft east of State Highway 561, and 1.2 mi southwest of Clermont.

SURFACE AREA.--2,410 acres (3.77 mi^2).

DRAINAGE AREA.--131 mi^2.

PERIOD OF RECORD.--May 1945 to September 1995, October 1998 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to June 5, 1946, nonrecording gage, and June 5, 1946, to Dec. 8, 1969, water-stage recorder, at site 1.8 mi east on north shore of lake. Gage at datum 91.32 ft higher May 31, 1945 to Aug. 20, 1955. Dec. 9, 1969 to Sept. 30, 1995, water-stage recorder at site 0.2 mi north at present datum.

REMARKS.--Lake is one of the Palatlakaha River headwaters chain of lakes. Since 1956, lake level partly controlled by earthen dam and concrete spillway with radial lift gates at outlet of Cherry Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 99.04 ft, Apr. 5, 1960; minimum daily, 87.66 ft, June 2, 2002.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	89.33	89.06	88.78	88.88	88.90	88.53	88.16	87.67	88.68	---	89.38
2	---	---	89.04	88.83	88.88	88.91	88.52	88.14	87.66	88.66	---	89.39
3	---	---	89.03	88.87	88.86	88.91	88.52	88.12	87.68	88.64	---	89.40
4	---	---	89.02	88.85	88.81	88.90	88.52	88.11	87.68	88.63	---	89.42
5	---	---	89.01	88.85	88.79	88.92	88.50	88.09	87.68	88.64	---	89.47
6	---	---	89.00	88.86	88.81	88.92	88.48	88.08	87.68	88.64	---	89.50
7	---	---	88.99	88.84	88.83	88.91	88.48	88.05	87.77	88.63	---	89.54
8	---	89.26	88.98	88.82	88.80	88.95	88.46	88.03	87.85	88.63	---	89.58
9	---	89.25	88.99	88.80	88.80	88.94	88.43	88.00	87.85	88.62	88.98	89.64
10	---	89.24	88.99	88.83	88.83	88.95	88.41	87.98	87.87	88.61	---	89.70
11	---	89.23	89.00	88.86	88.85	88.87	88.43	87.97	87.91	88.62	---	89.76
12	---	89.23	89.00	88.87	88.84	88.80	88.43	87.94	87.90	88.62	---	89.83
13	---	89.22	88.99	88.81	88.82	88.79	88.41	87.89	87.93	88.68	---	89.93
14	---	89.22	88.98	88.84	88.81	88.74	88.41	87.87	88.04	88.73	---	90.02
15	---	89.21	88.97	88.88	88.85	88.74	88.45	87.86	88.04	88.72	---	90.14
16	89.48	89.20	88.97	88.89	88.90	88.79	88.45	87.83	88.05	88.72	---	90.25
17	---	89.19	88.97	88.96	88.90	88.83	88.44	87.80	88.11	88.71	---	90.38
18	---	89.20	89.07	88.98	88.91	88.74	88.42	87.79	88.23	88.69	---	90.49
19	---	89.19	89.01	88.98	88.91	88.77	88.40	87.82	88.24	88.67	---	90.60
20	---	89.17	88.97	88.97	88.88	88.70	88.37	87.81	88.24	88.66	---	90.70
21	---	89.16	88.91	88.97	88.85	88.67	88.36	87.79	88.25	---	---	90.80
22	---	89.16	88.91	89.00	88.90	88.66	88.33	87.76	88.29	---	---	90.91
23	---	89.14	88.97	88.99	88.94	88.63	88.32	87.76	88.31	---	---	91.01
24	---	89.14	88.99	88.99	88.94	88.62	88.31	87.75	88.40	---	89.06	91.16
25	---	89.13	88.93	88.99	88.94	88.62	88.27	87.74	88.53	---	89.05	91.38
26	---	89.12	88.85	88.98	88.96	88.62	88.26	87.72	88.53	88.74	89.09	91.53
27	---	89.11	88.82	88.96	88.90	88.61	88.26	87.72	88.57	---	89.08	91.65
28	---	89.10	88.83	88.93	88.87	88.60	88.22	87.70	88.58	---	89.08	91.79
29	---	89.08	88.83	88.92	---	88.59	88.20	87.67	88.58	---	89.10	91.93
30	---	89.06	88.80	88.90	---	88.58	88.19	87.68	88.63	---	89.20	92.05
31	---	---	88.79	88.91	---	88.55	---	87.68	---	---	89.36	---
MEAN	---	---	88.96	88.90	88.87	88.77	88.39	87.88	88.09	---	---	90.38
MAX	---	---	89.07	89.00	88.96	88.95	88.53	88.16	88.63	---	---	92.05
MIN	---	---	88.79	88.78	88.79	88.55	88.19	87.67	87.66	---	---	89.38

02237370 CHURCH LAKE NEAR GROVELAND, FL

LOCATION.--Lat 28°38'40", long 81°50'47", in SE¼ sec.19, T.21 S., R.25 E., Lake County, Hydrologic Unit 03080102, on west shore of lake, 0.8 mi south of U.S. Highway 27, and 5.7 mi north of Groveland.

SURFACE AREA.--155 acres (0.24 mi^2).

DRAINAGE AREA.--1.66 mi^2.

PERIOD OF RECORD.--March 1970 to current year (weekly).

REVISED RECORD.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark).

REMARKS.--There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 87.66 ft, Aug. 26, 1970; minimum observed, 77.96 ft, June 23, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 83.18 ft, Sept. 8; minimum observed, 80.48 ft, May 7.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	81.30	---	83.10
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	81.20	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	80.48	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	83.18
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	81.20	---	---	---	---	83.14
11	---	---	---	---	---	81.72	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	81.98	---	---	---	---	---	---	---	83.12
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	82.80	---
19	---	82.17	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	82.78	---
21	---	---	---	---	---	---	81.09	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	83.08
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	82.75	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	81.08	---	---	---	---	83.10
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

02237753 WEST CROOKED LAKE NEAR EUSTIS, FL

LOCATION.--Lat 28°49'49", long 81°40'20", in SW¼ sec.13, T.19 S., R.26 E., Lake County, Hydrologic Unit 03080102, on east shore of southeast bay of lake, 1.7 mi southeast of Eustis.

SURFACE AREA.--107 acres (0.17 mi^2).

DRAINAGE AREA.--0.67 mi^2, includes East Crooked Lake.

PERIOD OF RECORD.--February 1970 to current year (weekly).

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

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929.

REMARKS.--Lake is interconnected with East Crooked Lake above an elevation of about 69 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 71.48 ft, Apr. 11, 1970; minimum observed, 58.16 ft, June 21, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 74.74 ft was reached in 1960 from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 61.36 ft, Sept. 30; minimum observed, 58.84 ft, June 6.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	59.78	---	---
2	---	---	---	60.80	---	60.54	---	---	58.92	---	---	61.02
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	60.62	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	60.84	---	---	---	---	---	58.84	---	---	---
7	---	60.98	---	---	---	---	60.26	59.50	---	---	---	---
8	60.94	---	---	---	---	---	---	---	---	---	---	61.16
9	---	---	---	---	---	60.52	---	---	---	---	---	---
10	60.93	---	---	60.72	---	---	---	---	---	---	---	---
11	---	---	---	---	60.56	60.56	---	---	---	59.98	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	60.80	---	---	60.54	---	---	---	60.16	60.60	---
15	---	60.98	---	60.78	---	---	---	---	---	---	---	61.16
16	60.94	---	---	---	---	---	60.18	---	58.86	---	---	---
17	---	---	---	---	---	---	---	59.26	---	---	---	---
18	---	---	---	60.76	---	---	---	---	---	---	---	---
19	---	---	---	---	---	60.44	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	60.70	---
21	---	---	---	---	60.46	---	---	---	59.08	60.30	---	---
22	---	---	60.78	---	---	---	60.04	---	---	---	60.76	---
23	---	60.94	---	---	---	---	---	---	---	---	---	61.26
24	60.96	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	60.60	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	60.80	---
27	---	---	---	60.70	---	---	---	58.98	---	---	---	---
28	---	---	---	---	---	---	---	---	59.66	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	60.92	60.76	---	---	---	59.78	---	---	---	---	61.36
31	60.94	---	---	---	---	---	---	---	---	60.42	---	---

02237865 LAKE UMATILLA AT UMATILLA, FL

LOCATION.--Lat 28°55'06", long 81°39'44", in SE¼ sec.13, T.18 S., R.26 E., Lake County, Hydrologic Unit 03080102, on south shore of lake, 0.8 mi south of Umatilla.

SURFACE AREA.--165 acres (0.26 mi^2).

DRAINAGE AREA.--2.46 mi^2.

PERIOD OF RECORD.--March 1970 to current year (weekly).

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

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929. Prior to Feb. 4, 1983, at site 1,200 ft west at present datum.

REMARKS.--Lake is landlocked except above an elevation of about 70 ft, when there is overflow to the south into a swamp known as Eustis Meadows, thence through a canal into Lake Eustis.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 68.87 ft, Nov. 16, 1994; minimum observed, 64.20 ft, Dec. 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 67.96 ft, Sept. 8,29, minimum observed, 65.40 ft, May 25.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	66.60	---	---	---	---	---	65.70	---	---	67.80
2	---	---	---	---	66.50	66.50	---	---	---	---	---	---
3	---	66.58	---	---	---	---	---	---	---	---	67.20	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	66.48	---	---	---	---	---	---	---	---
6	66.74	---	---	---	---	---	66.34	---	---	66.60	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	66.58	---	---	---	---	---	65.70	---	---	67.96
9	---	---	---	---	66.48	66.68	---	65.80	---	---	---	---
10	---	66.56	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	66.66	---	65.78	---	66.64	67.22	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	66.68	---	---	---	---	---	66.28	---	---	66.76	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	66.60	---	---	---	---	65.64	65.78	---	---	67.90
16	---	66.64	---	66.58	66.40	66.66	---	---	---	---	---	---
17	---	66.60	---	---	---	---	---	---	---	---	67.50	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	65.58	---	---	---	67.84
20	66.62	---	---	---	---	---	66.20	---	---	66.86	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	66.50	66.56	---	---	---	---	66.12	---	67.50	---
23	---	---	---	---	---	66.54	---	---	---	---	---	---
24	---	---	---	---	66.56	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	65.40	---	---	---	---
26	---	---	---	66.58	---	---	---	---	---	---	---	---
27	66.60	---	---	---	---	---	---	---	---	67.02	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	66.46	---	---	---	---	---	66.58	---	---	67.96
30	---	66.60	---	---	---	66.46	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

02238180 HOLLY LAKE NEAR UMATILLA, FL

LOCATION.--Lat 28°56'11", long 81°43'04", in SW¼ sec.9, T.18 S., R.26 E., Lake County, Hydrologic Unit 03080102, on south shore of lake, at county boat ramp on County Road 450, and 3.1 mi west of Umatilla.

SURFACE AREA.--96 acres (0.15 mi^2).

DRAINAGE AREA.--0.78 mi^2.

PERIOD OF RECORD.--October 1967 to October 1968 (thrice weekly); November 1968 to February 1970 (weekly); August 1982 to March 1983 (fragmentary); April 1983 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929.

REMARKS.--At high stages Holly, Ella, and Yale Lakes are interconnected and some natural diversion occurs northward to Nicotoon Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.43 ft, July 31, 1984; minimum observed, 53.99 ft, June 12, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 56.41 ft, Sept. 8,30; minimum observed, 54.68 ft, May 29,31.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	55.82	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	55.77	---	---	55.68	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	55.43	---	---
5	---	---	---	---	---	---	---	---	54.77	---	---	---
6	---	56.01	55.92	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	55.09	---	---	---	---
8	---	---	---	---	55.79	55.96	---	---	---	---	56.08	56.41
9	56.25	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	55.71	---	---	---	---	---	---	---	---
11	---	---	---	---	---	55.96	---	---	---	55.52	---	---
12	---	---	---	---	---	---	55.57	---	---	---	---	---
13	---	---	55.94	---	---	---	---	---	54.73	---	---	---
14	---	56.06	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	55.71	55.90	---	54.90	---	---	---	---
16	56.19	56.02	---	55.86	---	---	55.56	---	---	---	56.22	56.38
17	---	---	---	55.86	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	55.86	---	---
20	---	---	55.87	---	---	---	---	---	---	---	---	---
21	---	55.99	---	---	---	---	---	---	55.22	---	---	---
22	---	---	---	---	---	55.81	---	54.69	---	---	56.22	---
23	56.12	---	---	---	---	---	55.41	---	---	---	---	56.32
24	---	---	---	---	---	---	---	---	---	56.15	---	---
25	---	---	---	55.83	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	55.78	---	55.79	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	55.98	---	---	---	55.73	---	54.68	---	---	56.28	---
30	55.97	---	---	---	---	---	55.30	---	55.57	---	---	56.41
31	---	---	---	---	---	---	---	54.68	---	56.08	---	---

02238800 LAKE WEIR NEAR WEIRSDALE, FL

(Formerly published as Lake Weir at Ocklawaha)

LOCATION.--Lat 29°00'13", long 81°55'16", in NW¼ sec. 21, T.17 S., R.24 E., Marion County, Hydrologic Unit 03080102, on southeast shore of lake, on private pier, 1.5 mi north of Weirsdale.

SURFACE AREA.--5,760 acres (9.00 mi^2).

DRAINAGE AREA.--53.8 mi^2.

PERIOD OF RECORD.--April 1936 to October 1942 (monthly means only), November 1942 to September 1997, October 2000 to current year.

REVISED RECORDS.--WDR FL-74-1: Surface area, drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at NGVD of 1929 (levels by St. Johns River Water Management District). Prior to Oct. 1, 1997 at various locations on the north shore of the lake at different datums. See WDR FL-97-1 for the history of changes.

REMARKS.--Lake level partly controlled by broad-crested weir in outlet canal to the Ocklawaha River; elevation of fixed crest is 57.4 ft. Canal dug and control built in April 1938.

EXTREMES FOR PERIOD OF RECORD.--Maximum monthly elevation, 59.6 ft, Jan. 1938; minimum daily, 51.49 ft, June 10, 2002.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.87	52.51	52.44	52.14	52.46	52.40	52.29	52.08	51.53	52.20	53.05	53.13
2	52.85	52.53	52.44	52.17	52.46	52.39	52.28	52.07	51.52	52.21	53.05	53.13
3	52.84	52.56	52.43	52.23	52.45	52.42	52.28	52.05	51.53	52.21	53.04	53.12
4	52.84	52.57	52.42	52.20	52.45	52.52	52.28	52.04	51.52	52.22	53.04	53.13
5	52.83	52.57	52.40	52.18	52.42	52.49	52.28	52.03	51.50	52.21	53.03	53.15
6	52.83	52.54	52.40	52.19	52.38	52.48	52.27	52.01	51.50	52.20	53.02	53.14
7	52.82	52.52	52.39	52.19	52.41	52.47	52.24	51.99	51.52	52.19	53.01	53.13
8	52.81	52.52	52.38	52.17	52.45	52.47	52.21	51.98	51.51	52.21	52.99	53.12
9	52.79	52.51	52.38	52.16	52.43	52.47	52.19	51.95	51.50	52.27	52.96	53.10
10	52.77	52.51	52.37	52.15	52.43	52.47	52.22	51.93	51.49	52.28	52.94	53.09
11	52.76	52.50	52.37	52.15	52.43	52.47	52.27	51.91	51.52	52.27	52.92	53.08
12	52.76	52.49	52.36	52.15	52.42	52.46	52.26	51.88	51.61	52.29	52.92	53.06
13	52.75	52.49	52.35	52.16	52.42	52.47	52.25	51.86	51.60	52.36	52.98	53.07
14	52.75	52.52	52.35	52.19	52.41	52.46	52.26	51.84	51.59	52.44	52.99	53.09
15	52.75	52.53	52.35	52.30	52.39	52.46	52.28	51.80	51.58	52.44	52.99	53.10
16	52.74	52.51	52.34	52.30	52.39	52.46	52.28	51.77	51.56	52.45	52.99	53.10
17	52.72	52.49	52.33	52.30	52.40	52.46	52.27	51.76	51.63	52.45	52.98	53.09
18	52.68	52.49	52.35	52.30	52.36	52.45	52.27	51.75	51.73	52.44	52.99	53.08
19	52.67	52.48	52.33	52.29	52.33	52.44	52.26	51.74	51.76	52.43	52.99	53.07
20	52.66	52.48	52.32	52.30	52.32	52.44	52.25	51.71	51.80	52.49	52.99	53.07
21	52.66	52.48	52.29	52.30	52.32	52.44	52.24	51.68	51.81	52.71	52.97	53.08
22	52.68	52.47	52.27	52.30	52.34	52.43	52.23	51.63	51.89	52.81	52.96	53.08
23	52.68	52.46	52.26	52.30	52.43	52.40	52.20	51.59	51.99	52.89	52.95	53.12
24	52.68	52.46	52.25	52.30	52.47	52.37	52.18	51.58	52.02	52.90	52.94	53.13
25	52.68	52.46	52.24	52.33	52.46	52.35	52.16	51.56	52.04	52.92	52.93	53.20
26	52.67	52.46	52.22	52.46	52.46	52.35	52.15	51.55	52.07	52.92	52.91	53.21
27	52.63	52.45	52.19	52.46	52.46	52.35	52.13	51.55	52.11	52.94	52.89	53.24
28	52.58	52.45	52.18	52.46	52.43	52.33	52.12	51.56	52.11	52.99	52.88	53.23
29	52.55	52.44	52.17	52.46	---	52.31	52.10	51.55	52.13	53.06	52.88	53.22
30	52.53	52.44	52.16	52.46	---	52.30	52.09	51.54	52.18	53.05	52.98	53.20
31	52.52	---	52.16	52.46	---	52.30	---	51.54	---	53.04	53.14	---
MEAN	52.72	52.50	52.32	52.27	52.41	52.42	52.23	51.79	51.73	52.53	52.98	53.13
MAX	52.87	52.57	52.44	52.46	52.47	52.52	52.29	52.08	52.18	53.06	53.14	53.24
MIN	52.52	52.44	52.16	52.14	52.32	52.30	52.09	51.54	51.49	52.19	52.88	53.06

WTR YR 2002 MEAN 52.42 MAX 53.24 MIN 51.49

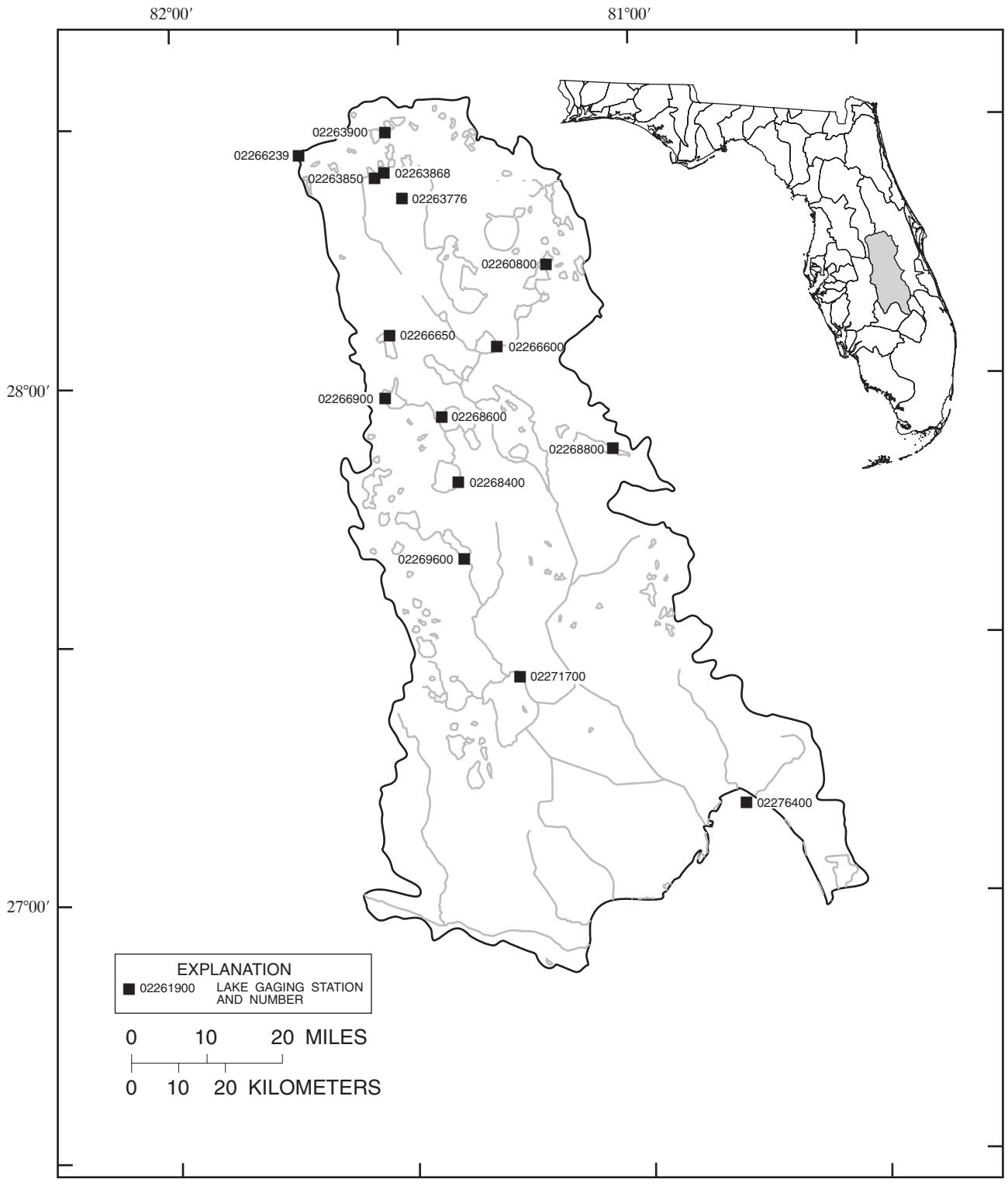

Figure 13.--Location of lake gaging stations in the Kissimmee River basin, the Taylor Creek basin and inflow to Lake Okeechobee from the north, and Fisheating Creek basin and inflow to Lake Okeechobee from the northwest.

02260800 ALLIGATOR LAKE NEAR ASHTON, FL

LOCATION.--Lat 28°13'53", long 81°11'20", in SW¼ sec.11, T.26 S., R.31 E., Osceola County, Hydrologic Unit 03090101, on northeast shore of lake, at Alligator Lakeside Inn Fish Camp, 0.1 mi south of U.S. Highway 192, and 3.6 mi east of Ashton.

SURFACE AREA.--3,401 acres (5.31 mi^2).

DRAINAGE AREA.--26.6 mi^2.

PERIOD OF RECORD.--November 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Prior to Feb. 19, 1975, at several sites at datum 60.74 ft higher. Feb. 19, 1975 to May 5, 1989, at several sites on the north side of lake at present datum. May 6, 1989 to Apr. 24, 1997, nonrecording gage at present site and datum.

REMARKS.--Lake is one of the Kissimmee River headwaters chain of lakes. Oct. 1, 2000 to Aug. 1, 2001 water level was below the recording gage and the elevations are observer daily staff gage readings. Subsequent to 1962, the improvement of canals and natural drains between these lakes and the construction of dams with gated controls has resulted in the partial regulation of lake elevations.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 66.81 ft, Sept. 25, 1960; minimum observed, 58.31 ft, May 31, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 67.7 ft was reached in June 1934, from information by local resident.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.25	62.74	62.96	62.86	62.93	63.14	62.93	62.46	62.20	63.46	63.32	63.86
2	62.27	62.75	62.96	62.86	62.92	63.17	62.92	62.44	62.20	63.48	63.32	63.93
3	62.30	62.80	---	62.87	62.91	63.18	62.92	62.42	62.19	63.51	63.34	63.95
4	62.32	---	---	62.85	62.90	63.17	62.91	62.40	62.17	63.50	63.35	63.84
5	62.34	---	62.96	62.84	62.88	63.16	62.89	62.36	62.15	63.47	63.34	63.79
6	62.37	62.85	---	62.85	62.87	63.15	62.86	62.34	62.14	63.44	63.32	63.66
7	62.38	62.87	62.96	62.84	62.87	63.15	62.83	62.32	62.16	63.40	63.38	63.52
8	62.39	62.88	62.97	62.84	62.88	63.16	62.81	62.30	62.17	63.36	63.43	63.38
9	62.39	62.88	62.98	62.83	62.87	63.16	62.79	62.28	62.16	63.33	63.43	63.26
10	62.41	62.88	62.98	62.83	62.87	63.16	62.78	62.26	62.14	63.31	63.42	63.18
11	62.42	62.89	62.98	62.83	62.87	63.16	62.76	62.23	62.13	63.29	63.42	63.26
12	62.43	---	62.98	62.83	62.87	63.16	62.74	62.21	62.13	63.28	63.45	63.31
13	62.44	62.88	62.98	62.82	62.87	63.17	62.74	62.19	62.11	63.29	63.59	63.35
14	62.45	62.91	62.98	62.84	62.85	63.15	62.74	62.17	62.15	63.29	63.73	63.37
15	62.46	62.92	---	62.91	62.84	63.14	62.74	62.14	62.30	63.25	63.78	63.40
16	62.47	62.94	---	62.92	62.84	63.13	62.73	62.13	62.33	63.21	63.78	63.42
17	62.46	---	62.98	62.93	62.83	63.12	62.72	62.12	62.36	63.17	63.77	63.43
18	62.45	---	62.98	62.93	62.81	63.12	62.70	62.10	62.38	63.26	63.74	63.44
19	62.46	62.94	62.98	62.94	62.80	63.11	62.69	62.17	62.41	63.26	63.71	63.45
20	62.48	62.96	62.93	62.94	62.80	63.10	62.67	62.18	62.44	63.23	63.68	63.46
21	62.51	62.96	62.91	62.94	62.79	63.09	62.66	62.16	62.50	63.32	63.64	63.47
22	62.56	---	62.90	62.94	62.87	63.07	62.64	62.13	62.59	---	63.61	63.48
23	62.58	62.97	62.90	62.95	63.01	63.04	62.62	62.12	62.70	---	63.62	63.48
24	62.60	62.96	62.90	62.95	63.12	63.02	62.60	62.10	62.88	63.39	63.57	63.51
25	62.64	62.96	62.90	62.95	63.14	63.01	62.58	62.08	62.99	63.31	63.50	63.55
26	62.70	62.97	62.89	62.95	63.16	63.01	62.56	62.07	63.08	63.30	63.44	63.56
27	62.74	62.97	62.87	62.94	63.16	63.00	62.54	62.05	63.14	63.27	63.38	63.58
28	62.74	62.97	62.87	62.94	63.15	62.99	62.52	62.04	63.19	63.27	63.33	63.58
29	---	---	62.87	62.94	---	62.97	62.50	62.02	63.31	63.30	63.43	63.57
30	62.74	62.96	62.87	62.94	---	62.96	62.47	62.04	63.40	63.33	63.67	63.57
31	62.74	---	62.86	62.94	---	62.95	---	62.19	---	63.33	63.77	---
MEAN	---	---	---	62.89	62.92	63.10	62.72	62.20	62.47	---	63.52	63.52
MAX	---	---	---	62.95	63.16	63.18	62.93	62.46	63.40	---	63.78	63.95
MIN	---	---	---	62.82	62.79	62.95	62.47	62.02	62.11	---	63.32	63.18

02263776 LAKE BRYAN NEAR VINELAND, FL

LOCATION.--Lat 28°21'46", long 81°29'57", in SE¼ sec.27, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on west shore of lake, 1.1 mi south of intersection of Interstate Highway 4 and State Highway 535, and 2.2 mi south of Vineland.

SURFACE AREA.--210 acres (0.33 mi^2).

DRAINAGE AREA.--2.70 mi^2.

PERIOD OF RECORD.--September 1969 to current year (fragmentary).

REVISED RECORDS.--WDR FL-72-2: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 90.00 ft above NGVD of 1929 (Florida Department of Transportation benchmark). Gage readings have been reduced to elevations above NGVD of 1929. Prior to June 11, 1997 gage located about 50 ft south at datum 90.00 ft lower.

REMARKS.--Outflow from lake is to Shingle Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 100.33 ft on or about Aug. 11, 1984, from floodmarks; minimum observed, 95.64 ft, May 8, 1981.

ELEVATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	ELEVATION ABOVE NGVD (FEET) (72020)
OCT		
24...	0800	99.84
DEC		
19...	1008	98.65
FEB		
20...	1410	98.51
APR		
04...	1545	98.67
JUN		
12...	0825	98.85
AUG		
02...	1220	99.41

02263850 BAY LAKE NEAR VINELAND, FL

LOCATION.--Lat 28°24'48", long 81°33'28", in NW¼ sec.7, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on right bank at upstream wingwall of control structure 105A in lateral 105, 200 ft south of natural lake shore line, and 3.5 mi northwest of Vineland.

SURFACE AREA.--436 acres (0.68 mi^2).

DRAINAGE AREA.--14.8 mi^2.

PERIOD OF RECORD.--February 1967 to September 1969; October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Walt Disney World bench mark). Prior to Feb. 7, 1969, on north shore of lake at datum 90.00 ft higher.

REMARKS.--Outflow from lake is through L-105 to Bonnet Creek since fall of 1968. In the fall of 1968, structure 105A was completed and became the control outlet of the lake. Draining of Bay Lake through S-105A began on Dec. 20, 1968. The headwater elevation at S-105A represented the lake level until Aug. 25, 1969, when a dike was constructed 200 ft upstream from the control structure. The lake elevation was then independent of the headwater elevation at S-105A. The dike was removed in August 1970 as the lake refilled. Since August 1970, lake elevation regulated by pumpage from ground water.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 95.07 ft, Aug. 18, 1967; minimum daily, 85.30 ft, Aug. 23,25, 1969, except when lake was drained in 1970.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94.42	93.99	93.79	93.62	93.79	93.91	93.66	93.44	93.28	94.56	94.50	94.60
2	94.39	93.99	93.79	93.65	93.79	93.90	93.66	93.42	93.28	94.57	94.49	94.58
3	94.38	93.98	93.78	93.71	93.79	93.91	93.66	93.41	93.28	94.57	94.54	94.57
4	94.37	93.98	93.77	93.69	93.78	93.93	93.66	93.40	93.28	94.55	94.58	94.57
5	94.35	93.97	93.76	93.68	93.74	93.90	93.65	93.39	93.27	94.54	94.56	94.58
6	94.35	93.94	93.75	93.70	93.74	93.88	93.62	93.37	93.27	94.53	94.54	94.58
7	94.33	93.93	93.74	93.70	93.75	93.87	93.60	93.36	93.28	94.53	94.59	94.57
8	94.32	93.92	93.74	93.69	93.76	93.88	93.58	93.35	93.31	94.54	94.64	94.55
9	94.30	93.92	93.74	93.68	93.74	93.87	93.57	93.34	93.32	94.53	94.61	94.53
10	94.27	93.90	93.73	93.68	93.74	93.87	93.56	93.33	93.35	94.54	94.58	94.51
11	94.26	93.89	93.73	93.68	93.75	93.86	93.56	93.32	93.39	94.53	94.56	94.49
12	94.25	93.88	93.72	93.68	93.74	93.85	93.56	93.29	93.39	94.53	94.56	94.48
13	94.23	93.89	93.72	93.69	93.73	93.86	93.55	93.28	93.39	94.54	94.65	94.49
14	94.22	93.93	93.73	93.70	93.72	93.84	93.55	93.29	93.39	94.57	94.74	94.49
15	94.22	93.92	93.73	93.75	93.72	93.84	93.55	93.29	93.46	94.54	94.84	94.50
16	94.21	93.90	93.73	93.75	93.73	93.83	93.55	93.27	93.57	94.51	94.72	94.50
17	94.18	93.89	93.73	93.75	93.73	93.83	93.54	93.27	93.64	94.48	94.22	94.53
18	94.16	93.88	93.73	93.75	93.72	93.82	93.54	93.27	93.71	94.46	94.20	94.55
19	94.14	93.87	93.72	93.75	93.71	93.81	93.53	93.30	93.75	94.44	94.20	94.57
20	94.13	93.87	93.71	93.75	93.70	93.79	93.53	93.30	93.84	94.43	94.21	94.64
21	94.15	93.86	93.69	93.77	93.71	93.79	93.52	93.27	93.96	94.48	94.31	94.62
22	94.19	93.86	93.69	93.77	93.77	93.77	93.52	93.24	94.03	94.52	94.52	94.61
23	94.18	93.85	93.68	93.77	93.90	93.74	93.50	93.23	94.09	94.53	94.51	94.64
24	94.17	93.84	93.68	93.78	93.98	93.72	93.48	93.22	94.16	94.53	94.49	94.67
25	94.15	93.84	93.67	93.78	93.97	93.71	93.47	93.21	94.28	94.54	94.48	94.68
26	94.13	93.83	93.67	93.79	93.97	93.70	93.47	93.20	94.31	94.63	94.46	94.67
27	94.09	93.83	93.65	93.78	93.97	93.70	93.50	93.20	94.32	94.60	94.45	94.65
28	94.06	93.82	93.64	93.78	93.92	93.69	93.49	93.20	94.32	94.58	94.45	94.63
29	94.03	93.81	93.64	93.78	---	93.68	93.47	93.19	94.34	94.56	94.54	94.61
30	94.02	93.80	93.64	93.78	---	93.67	93.46	93.19	94.45	94.54	94.58	94.58
31	94.00	---	93.63	93.78	---	93.66	---	93.22	---	94.52	94.62	---
MEAN	94.21	93.89	93.71	93.73	93.79	93.81	93.55	93.29	93.69	94.53	94.51	94.57
MAX	94.42	93.99	93.79	93.79	93.98	93.93	93.66	93.44	94.45	94.63	94.84	94.68
MIN	94.00	93.80	93.63	93.62	93.70	93.66	93.46	93.19	93.27	94.43	94.20	94.48

WTR YR 2002 MEAN 93.94 MAX 94.84 MIN 93.19

02263868 SOUTH LAKE NEAR VINELAND, FL

LOCATION.--Lat 28°24'45", long 81°32'17", in SW¼ sec.8, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on right bank at upstream wingwall of control structure 15 in Canal No. 1, 300 ft south of natural lake shoreline, 1,600 ft west of State Highway 535, and 2.4 mi northwest of Vineland.

SURFACE AREA.--128 acres (0.20 mi^2).

DRAINAGE AREA.--4.0 mi^2, approximately.

PERIOD OF RECORD.--April 1969 to current year. Records for South Lake Outlet at S-15, near Vineland (station 02263869).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Walt Disney World bench mark).

REMARKS.--Since January 1969, lake controlled by structure 15. Outflow is to Bonnet Creek through Canal No. 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 94.50 ft, Apr. 6, 1987; minimum observed, 88.98 ft, June 27, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91.43	91.11	90.93	90.68	90.71	90.79	90.49	89.84	---	91.32	91.49	93.40
2	91.41	91.10	90.92	90.71	90.70	90.79	90.48	89.80	---	91.44	91.49	93.41
3	91.39	91.10	90.91	90.76	90.68	90.79	90.47	89.75	---	91.52	91.53	93.41
4	91.37	91.09	90.90	90.75	90.67	90.82	90.48	89.71	---	91.52	91.60	93.42
5	91.36	91.09	90.90	90.74	90.64	90.80	90.47	89.66	---	91.51	91.61	93.52
6	91.34	91.07	90.89	90.74	90.62	90.79	90.43	89.61	---	91.50	91.61	93.62
7	91.33	91.05	90.88	90.74	90.63	90.79	90.39	89.57	---	91.47	91.67	93.62
8	91.32	91.05	90.88	90.73	90.65	90.79	90.36	89.52	---	91.45	91.74	93.64
9	91.30	91.04	90.88	90.73	90.64	90.79	90.32	---	---	91.42	91.75	93.65
10	91.28	91.03	90.88	90.72	90.64	90.78	90.29	---	---	91.42	91.74	93.65
11	91.27	91.02	90.88	90.72	90.64	90.77	90.26	---	---	91.42	91.73	93.64
12	91.25	91.01	90.87	90.71	90.64	90.76	90.23	---	---	91.43	91.75	93.65
13	91.24	91.01	90.86	90.71	90.63	90.75	90.20	---	---	91.44	91.88	93.73
14	91.24	91.04	90.85	90.72	90.62	90.74	90.19	---	---	91.49	92.10	93.76
15	91.26	91.05	90.85	90.76	90.61	90.73	90.20	---	---	91.46	92.36	93.82
16	91.24	91.04	90.84	90.76	90.61	90.72	90.18	---	89.81	91.44	92.44	93.83
17	91.22	91.02	90.83	90.76	90.60	90.71	90.16	---	89.94	91.40	92.48	93.90
18	91.19	91.02	90.82	90.76	90.58	90.70	90.14	---	90.07	91.38	92.50	94.05
19	91.19	91.01	90.81	90.76	90.57	90.69	90.11	---	90.11	91.34	92.54	94.08
20	91.18	91.01	90.80	90.75	90.56	90.67	90.08	---	90.21	91.32	92.60	94.23
21	91.20	91.00	90.77	90.75	90.56	90.66	90.06	---	90.35	91.36	92.70	94.25
22	91.22	91.00	90.76	90.75	90.60	90.64	90.02	---	90.43	91.44	93.02	94.27
23	91.22	90.99	90.75	90.75	90.73	90.61	89.99	---	90.50	91.46	93.10	94.30
24	91.22	90.98	90.74	90.75	90.83	90.60	89.95	---	90.60	91.46	93.13	94.30
25	91.21	90.98	90.73	90.74	90.83	90.59	89.92	---	90.72	91.48	93.13	94.30
26	91.19	90.97	90.72	90.74	90.83	90.58	89.91	---	90.79	91.54	93.14	94.28
27	91.17	90.96	90.71	90.73	90.82	90.57	89.99	---	90.88	91.55	93.15	94.26
28	91.14	90.95	90.71	90.72	90.80	90.56	89.96	---	90.90	91.54	93.16	94.25
29	91.12	90.95	90.70	90.72	---	90.54	89.92	---	90.92	91.53	93.21	94.22
30	91.11	90.94	90.69	90.72	---	90.52	89.88	---	91.07	91.51	93.29	94.20
31	91.11	---	90.69	90.71	---	90.50	---	---	---	91.51	93.38	---
MEAN	91.25	91.02	90.82	90.74	90.67	90.69	90.18	---	---	91.45	92.36	93.89
MAX	91.43	91.11	90.93	90.76	90.83	90.82	90.49	---	---	91.55	93.38	94.30
MIN	91.11	90.94	90.69	90.68	90.56	90.50	89.88	---	---	91.32	91.49	93.40

CAL YR 2001 MEAN 90.31 MAX 91.79 MIN 89.34

02263900 LAKE BUTLER AT WINDERMERE, FL

LOCATION.--Lat 28°29'17", long 81°32'01", in NW¼ sec.17, T.23 S., R.28 E., Orange County, Hydrologic Unit 03090101, on east shore of lake at Windermere.

SURFACE AREA.--1,665 acres (2.60 mi^2).

DRAINAGE AREA.--14.5 mi^2.

PERIOD OF RECORD.--January 1933 to October 1941 (weekly); November 1941 to July 1976 (once daily); August 1976 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is 90.00 ft above NGVD of 1929 ; gage readings have been reduced to elevations above sea level. See WRD FL-99-1A for history of gage locations and datums prior to March 24, 1999.

REMARKS.--Lake is one of the Cypress Creek headwaters chain of lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.78 ft, Sept. 13, 1960; minimum observed, 94.62 ft, July 21,29, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 98.72 ft, Sept. 29; minimum observed, 95.50 ft, May 24,31.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	96.00	---	96.32	96.82	---
2	97.20	---	96.90	---	96.64	---	---	---	---	---	96.82	---
3	---	---	---	---	---	---	96.45	---	---	---	---	98.04
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	96.98	---	96.62	---	---	---	---	95.52	---	96.90	98.12
6	97.18	---	---	---	96.56	96.62	---	---	---	---	---	---
7	---	---	---	---	---	---	---	95.82	---	---	---	---
8	---	---	---	---	96.58	---	96.40	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	96.86	96.64	---	---	---	---	---	---	---	98.22
11	97.12	---	---	---	---	---	---	---	95.52	---	---	---
12	---	---	---	---	---	---	---	---	95.56	---	97.02	98.28
13	---	---	---	---	---	96.60	96.32	95.74	---	---	---	---
14	---	96.96	---	96.72	---	---	---	---	---	---	97.22	---
15	97.10	---	96.80	---	96.54	---	---	---	95.72	---	---	---
16	---	---	---	---	---	---	---	---	---	96.56	---	---
17	97.08	---	---	---	---	---	---	---	95.86	---	---	---
18	---	---	---	---	---	96.58	96.20	---	---	---	---	---
19	---	---	96.78	---	---	---	---	---	---	---	97.54	---
20	---	---	---	---	96.48	---	---	95.54	95.92	---	---	---
21	97.10	---	96.76	---	---	---	---	---	---	96.72	---	---
22	---	96.96	---	---	---	96.54	---	---	---	---	---	98.62
23	---	---	---	96.72	---	---	---	---	---	---	97.78	---
24	97.10	---	---	---	96.70	---	96.14	95.50	96.19	96.80	---	---
25	---	---	---	---	---	---	---	---	---	---	---	98.70
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	96.92	---	---	---	---	---	---	96.24	96.82	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	97.86	98.72
30	97.00	96.90	96.60	---	---	96.48	96.00	---	96.32	---	---	---
31	---	---	---	96.74	---	---	---	95.50	---	---	98.00	---

02266239 TROUT LAKE NEAR CLERMONT, FL

LOCATION.--Lat 28°27'04", long 81°43'00", in SW¼ sec.28, T.23 S., R.26 E., Lake County, Hydrologic Unit 03090101, on northwest shore of lake, 7.8 mi southeast of Clermont.

SURFACE AREA.--163 acres (0.25 mi^2).

DRAINAGE AREA.--1.31 mi^2.

PERIOD OF RECORD.--March 1970 to current year (weekly).

REVISED RECORDS.--WDR FL-81-1: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929.

REMARKS.--Lake is landlocked except at extremely high stages.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 98.78 ft, Apr. 9, 1998; minimum observed, 85.98 ft, Dec. 19,26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 91.48 ft, Sept. 30, minimum observed, 87.10 ft, June 11.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	88.38	---	90.80
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	88.18	---	---	---	87.10	---	---	---
8	---	88.26	---	---	---	88.24	---	87.62	---	---	89.70	---
9	---	---	---	88.18	---	---	87.98	87.62	---	---	---	---
10	---	---	88.20	---	---	---	---	---	---	---	---	---
11	88.32	---	---	---	---	---	---	---	---	88.40	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	88.24	---	---	---	---	---	---
14	---	---	---	---	88.14	---	---	---	87.82	---	---	---
15	---	88.24	---	88.26	---	88.20	---	---	---	---	89.62	---
16	---	---	---	88.32	---	---	87.92	87.64	---	---	---	91.09
17	---	---	88.18	---	---	---	---	---	---	---	---	---
18	88.28	---	---	---	---	---	---	---	---	88.52	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	88.20	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	88.22	---	---	---	88.10	---	---	---
22	---	88.22	---	---	---	88.14	---	---	---	---	89.74	---
23	---	---	---	88.28	---	---	87.86	87.42	---	---	---	91.32
24	88.22	---	88.14	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	88.78	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	89.80	---
28	---	---	---	---	88.24	---	---	---	---	---	---	---
29	---	88.20	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	88.10	87.76	---	88.38	---	---	91.48
31	88.18	---	88.10	88.26	---	---	---	87.20	---	88.96	90.60	---

02266600 CYPRESS LAKE NEAR ST. CLOUD, FL

LOCATION.--Lat 28°04'29", long 81°18'07", in SW¼ sec.2, T.28 S., R.30 E., Osceola County, Hydrologic Unit 03090101, on east shore of lake, near mouth of Canoe Creek, and about 12 mi south of St. Cloud.

SURFACE AREA.--4,085 acres (6.38 mi^2).

DRAINAGE AREA.--1,162 mi^2, combined drainage area of Cypress Lake and Lake Hatchineha.

PERIOD OF RECORD.--January 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to June 6, 1950, at site on northwest shore at datum 48.78 ft higher and June 6, 1950 to Dec. 13, 1973, at site 2.3 mi southwest at datum 48.78 ft higher. Dec. 13, 1973 to June 21, 1979, at site 2.3 mi southwest at present datum.

REMARKS.--Lake is one of the Kissimmee River headwaters chain of lakes. Stage is affected by operation of control structures upstream and downstream. Flow into Short Canal begins at about elevation 53.2 ft. Overflow over the south shore begins at a slightly higher stage.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 57.18 ft, Sept. 26, 1960; minimum daily, 47.60 ft, June 4, 1971.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.56	51.38	50.90	50.45	50.31	50.46	50.44	50.04	49.24	50.89	52.14	52.66
2	52.32	51.40	50.88	50.48	50.27	50.59	50.41	49.99	49.25	51.02	52.16	52.66
3	52.21	51.38	50.85	50.51	50.26	50.67	50.43	49.96	49.21	51.13	52.22	52.68
4	52.12	51.38	50.80	50.41	50.20	50.55	50.40	49.93	49.20	51.25	52.24	52.77
5	52.06	51.29	50.78	50.46	50.11	50.40	50.33	49.89	49.16	51.32	52.22	52.97
6	52.04	51.29	50.78	50.53	50.20	50.45	50.28	49.81	49.14	51.42	52.20	53.07
7	51.95	51.33	50.80	50.45	50.34	50.50	50.29	49.79	49.17	51.49	52.18	53.08
8	51.84	51.34	50.86	50.40	50.18	50.51	50.34	49.78	49.21	51.54	52.14	53.07
9	51.76	51.31	50.91	50.41	50.19	50.53	50.35	49.75	49.11	51.60	52.05	53.04
10	51.76	51.28	50.92	50.41	50.24	50.52	50.32	49.71	49.07	51.64	52.01	52.98
11	51.74	51.25	50.89	50.40	50.21	50.51	50.28	49.65	49.10	51.74	51.96	52.86
12	51.70	51.21	50.87	50.40	50.23	50.58	50.28	49.61	49.11	51.82	51.97	52.79
13	51.66	51.18	50.86	50.37	50.18	50.66	50.28	49.61	49.13	51.91	52.13	52.69
14	51.65	51.16	50.87	50.39	50.17	50.56	50.27	49.55	49.14	51.96	52.30	52.51
15	51.54	51.14	50.82	50.47	50.20	50.54	50.27	49.42	49.12	51.96	52.49	52.43
16	51.50	51.08	50.78	50.46	50.19	50.57	50.26	49.44	49.14	51.96	52.63	52.31
17	51.40	51.08	50.81	50.47	50.18	50.56	50.25	49.48	49.23	51.99	52.71	52.16
18	51.35	51.10	50.79	50.45	50.11	50.55	50.25	49.53	49.23	51.99	52.79	52.02
19	51.35	51.09	50.76	50.49	50.16	50.54	50.24	49.52	49.28	52.01	52.77	51.91
20	51.35	51.10	50.69	50.46	50.22	50.57	50.24	49.40	49.28	52.01	52.77	51.87
21	51.36	51.07	50.63	50.47	50.20	50.57	50.22	49.35	49.33	52.01	52.76	51.79
22	51.43	51.07	50.64	50.42	50.23	50.44	50.20	49.27	49.54	52.06	52.73	51.71
23	51.44	51.07	50.66	50.45	50.32	50.41	50.14	49.27	49.73	52.09	52.72	51.65
24	51.45	51.06	50.65	50.46	50.40	50.44	50.12	49.34	50.00	52.10	52.69	51.63
25	51.53	51.03	50.58	50.43	50.45	50.44	50.14	49.35	50.23	52.14	52.65	51.63
26	51.50	51.00	50.55	50.39	50.52	50.45	50.11	49.29	50.37	52.15	52.62	51.62
27	51.46	51.00	50.55	50.37	50.54	50.49	50.09	49.26	50.48	52.13	52.59	51.55
28	51.39	50.99	50.55	50.36	50.42	50.44	50.09	49.23	50.55	52.11	52.53	51.44
29	51.39	50.97	50.58	50.35	---	50.46	50.03	49.21	50.63	52.13	52.49	51.36
30	51.38	50.96	50.52	50.35	---	50.48	49.99	49.22	50.71	52.19	52.54	51.30
31	51.38	---	50.49	50.34	---	50.48	---	49.23	---	52.15	52.64	---
MEAN	51.66	51.17	50.74	50.43	50.26	50.51	50.24	49.54	49.50	51.80	52.42	52.27
MAX	52.56	51.40	50.92	50.53	50.54	50.67	50.44	50.04	50.71	52.19	52.79	53.08
MIN	51.35	50.96	50.49	50.34	50.11	50.40	49.99	49.21	49.07	50.89	51.96	51.30

WTR YR 2002 MEAN 50.89 MAX 53.08 MIN 49.07

02266650 LAKE MARION NEAR HAINES CITY, FL

LOCATION.--Lat 28°05'56", long 81°31'51", in SE$^{1}/_{4}$ sec.29, T.27 S., R.28 E., Polk County, Hydrologic Unit 03090101, on northeast shore of lake, 4.5 mi east of Haines City.

SURFACE AREA.--2,968 acres (4.64 mi^2).

DRAINAGE AREA.--35.7 mi^2.

PERIOD OF RECORD.--February to August 1958 (weekly); September 1958 to current year (once daily).

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929 (South Florida Water Management District bench mark). July 21, 1959 to Sept. 8, 1963, at site 500 ft north and Sept. 9, 1963 to Jan. 29, 1974, at present site, at datum 63.22 ft higher.

REMARKS.--Lake is in the headwaters of Kissimmee River. Outflow from lake is through Lake Marion Creek to Lake Hatchineha.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 67.52 ft, Sept. 12, 15, 1960; minimum observed, 64.45 ft, June 21, 2000.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67.00	---	66.04	65.80	65.84	65.90	65.60	65.30	65.35	66.18	66.24	66.46
2	66.90	---	66.04	65.80	65.84	65.90	65.56	65.30	65.30	66.20	66.24	66.52
3	66.90	66.44	66.04	65.80	65.84	65.90	65.56	65.26	65.40	66.20	66.28	66.70
4	66.90	66.40	66.04	65.80	65.84	65.90	65.50	65.26	65.40	66.20	66.28	66.80
5	66.90	66.40	66.04	65.80	65.84	65.90	65.50	65.22	65.40	66.20	66.28	66.90
6	66.84	66.36	66.04	65.80	65.80	65.88	65.50	65.22	65.30	66.20	66.24	66.90
7	66.80	66.32	66.00	65.80	65.80	65.88	65.46	65.22	65.40	66.20	66.24	66.84
8	66.76	66.32	66.00	65.80	65.76	65.88	65.46	65.22	65.45	66.20	66.24	66.80
9	66.76	66.32	66.00	65.80	65.76	65.88	65.42	65.20	65.50	66.20	66.24	66.78
10	66.76	66.26	65.96	65.80	65.76	65.88	65.42	65.20	65.50	66.20	66.20	66.78
11	66.72	66.26	65.96	65.80	65.76	65.84	65.42	65.16	65.55	66.20	66.20	66.74
12	66.70	66.26	65.90	65.80	65.74	65.84	65.42	65.16	65.60	66.20	66.20	66.74
13	66.70	66.26	65.90	65.80	65.70	65.80	65.42	65.12	65.60	66.20	66.20	66.74
14	66.60	66.20	65.90	65.88	65.70	65.80	65.42	65.12	65.55	66.20	66.20	66.70
15	66.60	66.20	65.90	65.94	65.70	65.80	65.42	65.00	65.65	66.16	66.20	66.66
16	66.60	66.18	65.90	65.94	65.70	65.80	65.42	65.00	65.60	66.16	66.24	66.62
17	66.56	66.18	65.86	66.00	65.70	65.78	65.42	65.00	65.70	66.12	66.24	66.62
18	66.54	66.18	65.86	66.00	65.70	65.78	65.40	65.00	65.65	66.12	66.28	66.56
19	66.54	66.18	65.86	66.00	65.70	65.74	65.40	65.10	65.70	66.20	66.30	66.50
20	66.54	66.18	65.82	65.90	65.70	65.74	65.40	65.10	65.75	66.20	66.30	66.50
21	66.50	66.12	65.80	65.90	65.66	65.70	65.40	65.14	65.75	66.20	66.30	66.46
22	66.50	66.12	65.80	65.90	65.74	65.70	65.36	65.14	65.80	66.30	66.36	66.46
23	66.50	66.10	65.80	65.90	65.80	65.70	65.36	65.10	65.70	66.30	66.36	66.50
24	66.50	66.10	65.80	65.90	65.86	65.66	65.32	65.10	65.65	66.30	66.36	66.52
25	66.50	66.10	65.80	65.90	65.90	65.66	65.30	65.10	65.75	66.30	66.36	66.54
26	66.50	66.10	65.80	65.90	65.90	65.62	65.30	65.10	65.75	66.30	66.36	66.54
27	66.50	66.10	65.80	65.84	65.90	65.60	65.30	65.10	65.80	66.30	66.36	66.54
28	66.50	66.10	65.80	65.84	65.90	65.60	65.30	65.10	65.80	66.28	66.36	66.50
29	66.50	66.04	65.80	65.84	---	65.60	65.30	65.10	65.85	66.28	66.40	66.46
30	66.50	66.04	65.80	65.84	---	65.60	65.30	65.06	65.80	66.24	66.40	66.46
31	66.50	---	65.80	65.84	---	65.60	---	65.06	---	66.24	66.40	---
MEAN	66.65	---	65.90	65.86	65.78	65.77	65.41	65.14	65.60	66.22	66.29	66.63
MAX	67.00	---	66.04	66.00	65.90	65.90	65.60	65.30	65.85	66.30	66.40	66.90
MIN	66.50	---	65.80	65.80	65.66	65.60	65.30	65.00	65.30	66.12	66.20	66.46

02266900 LAKE PIERCE NEAR WAVERLY, FL

LOCATION.--Lat 27°58'37", long 81°32'33", in NW¼ sec.8, T.29 S., R.28 E., Polk County, Hydrologic Unit 03090101, on west shore of lake, at public boat landing, 4.5 mi east of Waverly, and 5.5 mi northeast of town of Lake Wales.

SURFACE AREA.--3,736 acres (5.84 mi^2).

DRAINAGE AREA.--58.9 mi^2.

PERIOD OF RECORD.--December 1947 to September 1971; October 1971 to current year (fragmentary). Prior to August 1959, records also for Catfish Creek near Lake Wales (station 02267000).

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Aug. 20, 1959, water-stage recorder on left bank of Catfish Creek 0.2 mi downstream from lake. Aug. 20, 1959, to Sept. 30, 1971, water-stage recorder, and Oct. 1, 1971, to July 13, 1981, nonrecording gage at present site at datum 72.13 ft higher.

REMARKS.--Outflow from lake is through Catfish Creek to Lake Hatchineha, one of the Kissimmee River headwater lakes. The observed reading made on March 26, 1998 has been changed to 77.90 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 78.91 ft Sept. 17,18, 1960; minimum observed, 74.60 ft, June 22, 2000.

ELEVATION, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	ELEVATION ABOVE NGVD (FEET) (72020)
NOV		
20...	1447	76.99
JAN		
17...	1723	76.50
MAR		
14...	0820	76.26
MAY		
06...	1215	74.85
16...	1253	75.26
JUL		
01...	1214	76.79
AUG		
29...	0658	76.87

02268400 LAKE WEOHYAKAPKA AT INDIAN LAKE ESTATES, FL

LOCATION.--Lat 27°48'50", long 81°23'16", in NE¼ sec.2, T.31 S., R.29 E., Polk County, Hydrologic Unit 03090101, on east shore of lake, on end of public pier at Indian Lake Estates, and 8.5 mi east of Babson Park.

SURFACE AREA.--7,555 acres (11.8 mi^2).

DRAINAGE AREA.--93.5 mi^2.

PERIOD OF RECORD.--February 1958 to September 1960 (weekly); October 1960 to September 1961 (fragmentary); October 1961 to current year (weekly).

GAGE.--Nonrecording gage. Prior to May 30, 2000, South Florida Water Management District bench mark, May 30, 2000 to present datum of gage is at NGVD of 1929 (Marion Engineer Associates, Inc. bench mark).

REMARKS.--Lake is at the headwater of Weohyakapka Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 63.43 ft on or about Sept. 30, 1960, from floodmark; minimum observed, 58.90 ft, July 4, 25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 62.22 ft, Aug. 13, Sept. 3; minimum observed, 60.40 ft, Apr. 30.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	62.04	---	---
2	---	---	---	---	---	---	61.20	---	---	61.90	---	---
3	---	---	---	---	---	---	---	60.79	---	---	---	62.22
4	---	---	---	---	---	---	---	---	60.52	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	62.04	---
7	---	---	---	---	---	---	---	60.52	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	60.94	---	---	61.98	---	---
10	---	---	---	---	---	---	---	---	---	---	---	62.14
11	---	---	---	---	---	---	---	---	60.64	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	62.22	---
14	---	---	---	---	---	61.42	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	60.80	61.32	---	62.14	---	---
17	---	---	---	61.53	---	---	---	---	---	---	---	62.10
18	---	---	---	---	---	---	---	---	60.72	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	61.70	---	---	---	---	---	---	---	---	62.16	---
21	---	---	---	---	---	---	---	60.87	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	60.70	---	---	62.12	---	---
24	---	---	---	---	---	---	---	---	---	---	---	62.06
25	---	---	---	---	---	---	---	---	61.60	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	62.18	---
28	---	---	---	---	---	---	---	60.60	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	61.97	---
30	---	---	---	---	---	---	60.40	---	---	62.02	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

02268600 LAKE ROSALIE NEAR LAKE WALES, FL

LOCATION.--Lat 27°56'23", long 81°25'14", in SE¼ sec.21, T.29 S., R.29 E., Polk County, Hydrologic Unit 03090101, on west side of lake, in boat basin at Monroeí Trailer Park, 10.5 mi northeast of town of Lake Wales.

SURFACE AREA.--4,592 acres (7.18 mi^2).

DRAINAGE AREA.--133 mi^2.

PERIOD OF RECORD.--December 1941 to February 1942 (weekly); March to July 1942; August 1942 to August 1943 (fragmentary); March 1958 to April 1967 (weekly); May 1967 to current year (once daily).

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Mar. 5, 1942, nonrecording gage at site 1.3 mi northeast at datum 53.19 ft higher. Mar. 5, 1942, to July 27, 1942, and Mar. 20, 1958, to Sept. 19, 1974, recording or nonrecording gages at several sites within 1.5 mi at datum 49.41 ft higher, and Sept. 19, 1974, to Oct. 17, 1979, nonrecording gage at site 400 ft west at present datum.

REMARKS.--Outflow from lake is through diversion canal to Lake Kissimmee, the most downstream of the Kissimmee River headwaters chain of lakes and also through Rosalie Creek to Tiger Lake, thence through Tiger Creek to Lake Kissimmee.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 55.93 ft, Oct. 3, 1960; minimum observed, 50.30 ft, June 2-4, 1967.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.47	54.00	53.84	53.58	53.56	53.60	53.18	52.76	52.26	53.73	54.37	54.70
2	53.48	54.02	53.83	53.59	53.54	53.58	53.19	52.75	52.28	53.83	54.36	54.71
3	53.50	54.03	53.82	53.62	53.52	53.60	53.18	52.73	52.26	53.88	54.46	54.69
4	53.53	54.05	53.81	53.62	53.50	53.60	53.17	52.71	52.24	53.92	54.46	54.67
5	53.57	54.03	53.80	53.60	53.48	53.58	53.16	52.67	52.23	53.95	54.43	54.69
6	53.59	54.05	53.79	53.58	53.48	53.58	53.14	52.67	52.22	53.98	54.40	54.71
7	53.60	54.03	53.78	53.58	53.46	53.57	53.12	52.65	52.18	54.01	54.38	54.71
8	53.65	54.02	53.87	53.57	53.46	53.56	53.08	52.62	52.25	54.03	54.39	54.68
9	53.67	54.01	53.86	53.56	53.45	53.56	53.02	52.58	52.28	54.08	54.35	54.64
10	53.67	54.00	53.88	53.56	53.45	53.54	53.00	52.54	52.26	54.10	54.35	54.62
11	53.68	53.99	53.87	53.55	53.46	53.54	53.00	52.51	52.25	54.15	54.30	54.59
12	53.69	53.98	53.86	53.55	53.46	53.52	52.98	52.48	52.25	54.18	54.28	54.61
13	53.70	53.97	53.85	53.54	53.45	53.50	---	52.46	52.25	54.21	54.40	54.50
14	53.70	53.99	53.84	53.56	53.43	53.49	---	52.42	52.26	54.29	54.40	54.56
15	53.73	53.98	53.82	53.66	53.43	53.48	---	52.41	52.26	54.31	54.39	54.60
16	53.73	53.96	53.82	53.66	53.41	53.46	---	52.40	52.36	54.31	54.45	54.60
17	53.73	53.96	53.81	53.64	53.40	53.46	---	52.36	52.56	54.31	54.45	54.55
18	53.72	53.95	53.81	53.64	53.38	53.44	---	52.39	52.57	54.30	54.43	54.50
19	53.72	53.95	53.79	53.63	53.36	53.42	---	52.48	52.66	54.30	54.42	54.48
20	53.73	53.95	53.76	53.64	53.35	53.40	52.89	52.46	52.69	54.28	54.39	54.58
21	53.79	53.94	53.74	53.64	53.34	53.39	52.87	52.39	52.72	54.30	54.40	54.65
22	53.96	53.94	53.72	53.63	53.41	53.38	52.84	52.36	52.83	54.36	54.40	54.65
23	53.98	53.94	53.70	53.63	53.51	53.36	52.82	52.34	52.86	54.41	54.38	54.62
24	53.99	53.93	53.70	53.62	53.65	53.34	52.80	52.30	53.13	54.43	54.36	54.60
25	54.02	53.92	53.68	53.62	53.66	53.32	52.78	52.28	53.32	54.45	54.32	54.60
26	54.04	53.90	53.68	53.62	53.66	53.30	52.76	52.28	53.40	54.45	54.30	54.58
27	54.02	53.90	53.66	53.61	53.64	53.29	52.73	52.26	53.52	54.43	54.28	54.58
28	54.00	53.88	53.64	53.60	53.61	53.28	52.71	52.22	53.56	54.41	54.26	54.56
29	53.99	53.86	53.62	53.60	---	53.26	52.68	52.20	53.58	54.40	54.23	54.52
30	53.99	53.86	53.61	53.59	---	53.24	52.66	52.20	53.58	54.40	54.35	54.48
31	54.00	---	53.60	53.58	---	53.23	---	52.28	---	54.39	54.65	---
MEAN	53.76	53.97	53.77	53.60	53.48	53.45	---	52.46	52.64	54.21	54.38	54.61
MAX	54.04	54.05	53.88	53.66	53.66	53.60	---	52.76	53.58	54.45	54.65	54.71
MIN	53.47	53.86	53.60	53.54	53.34	53.23	---	52.20	52.18	53.73	54.23	54.48

02268800 LAKE MARIAN NEAR KENANSVILLE, FL

LOCATION.--Lat 27°52'22", long 81°03'08", in NE¼ sec.18, T.30 S., R.33 E., Osceola County, Hydrologic Unit 03090101, on northeast shore of lake in canal at county boat ramp, 4.5 mi west of Kenansville.

SURFACE AREA.--5,727 acres (8.95 mi^2).

DRAINAGE AREA.--49.6 mi^2.

PERIOD OF RECORD.--February 1958 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929 (South Florida Water Management District bench mark). Prior to Nov. 16, 1972, at present site and other nearby sites at datum 57.02 ft higher. Nov. 16, 1972, to Oct. 28, 1980, at site 0.6 mi southeast at present datum.

REMARKS.--Lake is in the headwaters of the Kissimmee River. Outflow is through a canal to Lake Jackson, thence through Jackson Canal to Lake Kissimmee. During high water there is flow through Fodderstack Slough to Jackson Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.63 ft, Sept. 27, 1960; minimum observed, 55.86 ft, May 18,25, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 60.70 ft, July 12; minimum observed, 58.28 ft, May 24.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	59.30	59.40	---	---	---	---	---	---
2	---	60.42	---	---	---	---	---	---	---	---	60.06	---
3	---	---	---	---	---	---	---	58.60	58.29	---	---	---
4	---	---	---	59.42	---	---	---	---	---	---	---	---
5	60.08	---	---	---	---	---	59.08	---	---	59.90	---	---
6	---	---	---	---	---	---	---	---	---	---	---	59.86
7	---	---	59.76	---	---	---	---	---	58.36	---	---	---
8	---	---	---	---	59.36	59.36	---	---	---	---	---	---
9	---	60.28	---	---	---	---	58.91	---	---	---	59.88	---
10	---	---	---	---	---	---	---	58.50	---	---	---	---
11	---	---	---	59.38	---	---	---	---	---	---	---	---
12	59.80	---	---	---	59.35	---	---	---	---	60.70	---	---
13	---	---	---	---	---	---	---	---	---	---	---	59.80
14	---	---	59.60	---	---	---	---	---	58.34	---	---	---
15	---	---	---	---	59.30	59.30	58.90	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	59.64	---
17	---	---	59.64	---	---	---	---	58.32	---	---	---	59.80
18	---	---	---	59.48	---	---	---	---	---	60.63	---	---
19	---	60.06	---	---	---	---	58.86	---	---	60.56	---	---
20	---	---	---	---	---	---	---	---	---	---	---	59.76
21	---	---	59.58	---	---	---	---	---	58.88	---	---	---
22	59.88	---	---	---	59.28	59.20	---	---	---	---	---	---
23	---	59.94	---	---	---	---	---	---	---	---	59.58	---
24	59.98	---	---	---	---	---	---	58.28	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	60.28	---	---	---	---	---	58.76	---	---	60.22	---	---
27	---	---	---	---	---	---	---	---	---	---	---	59.80
28	---	---	59.46	---	---	---	---	---	59.58	---	---	---
29	---	---	---	---	---	59.12	---	---	---	---	---	---
30	---	59.82	---	---	---	---	---	---	---	---	59.70	---
31	---	---	---	---	---	---	---	58.30	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

02269600 LAKE ARBUCKLE NEAR AVON PARK, FL

LOCATION.--Lat 27°39'55", long 81°22'38", in SW¼ sec. 25, T.32 S., R.29 E., Polk County, Hydrologic Unit 03090101, on U.S. Air Force recreation pier on south shore of lake, 9.5 mi northeast of Avon Park.

SURFACE AREA.--3,787 acres (5.92 mi^2).

DRAINAGE AREA.--170 mi^2.

PERIOD OF RECORD.--December 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. June 27, 1945, to Nov. 15, 1950, May 9, 1956, to June 15, 1962, and May 11, 1967, to Dec. 11, 1975, nonrecording gage at site 500 ft northwest near head of Arbuckle Creek at datum 51.53 ft higher.

REMARKS.--Lake is the most downstream of the Arbuckle Creek headwater lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 58.3 ft, Sept. 24, 1948, from floodmark; minimum daily, 51.15 ft, June 10, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 58.7 ft, was reached in 1926 and 1928, from information by local residents.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56.04	---	---	---	---	---	52.88	52.33	51.89	55.20	54.82	55.21
2	55.99	---	---	---	---	---	52.85	52.30	51.88	55.25	54.79	55.24
3	55.95	---	---	---	---	---	52.86	52.26	51.86	55.34	54.80	55.28
4	55.90	---	---	---	---	---	52.88	52.24	51.82	55.34	54.80	55.27
5	55.85	---	---	---	---	---	52.86	52.22	51.81	55.31	54.80	55.21
6	55.81	---	---	---	---	---	52.83	52.19	51.81	55.25	54.78	55.17
7	55.78	---	---	---	---	---	52.76	52.17	51.81	55.19	54.77	55.13
8	55.75	---	---	---	---	---	52.71	52.14	51.84	55.13	54.78	55.09
9	55.68	---	---	---	---	---	52.69	52.10	51.84	55.11	54.75	55.04
10	55.62	---	---	---	---	---	52.68	52.08	51.86	55.13	54.70	55.00
11	55.57	---	---	---	---	---	52.66	52.05	51.92	55.19	54.66	54.95
12	55.52	---	---	---	---	---	52.65	52.02	51.95	55.25	54.63	54.90
13	55.46	---	---	---	---	---	52.65	52.01	51.96	55.29	54.69	54.86
14	55.42	---	---	---	---	---	52.64	52.00	52.00	55.30	54.73	54.83
15	55.39	---	---	---	---	---	52.66	51.96	52.02	55.27	54.76	54.79
16	55.35	---	---	---	---	---	52.66	51.92	52.04	55.21	54.79	54.77
17	55.31	---	---	53.62	---	---	52.68	51.91	52.23	55.14	54.83	54.75
18	55.24	---	---	53.63	---	---	52.66	51.95	52.40	55.11	54.97	54.70
19	55.20	---	---	---	---	---	52.64	52.02	52.66	55.14	55.03	54.64
20	55.18	---	---	---	---	---	52.61	52.08	52.85	55.12	55.05	54.62
21	55.22	---	---	---	---	---	52.59	52.06	53.14	55.12	55.09	54.59
22	55.33	---	---	---	---	---	52.58	52.04	53.57	55.17	55.18	54.55
23	55.33	---	---	---	---	---	52.55	51.98	53.88	55.16	55.20	54.52
24	55.32	---	---	---	---	---	52.51	51.94	54.16	55.14	55.17	54.49
25	55.34	---	---	---	---	---	52.47	51.92	54.50	55.09	55.12	54.50
26	55.62	---	---	---	---	---	52.46	51.91	54.78	55.05	55.06	54.55
27	---	---	---	---	---	---	52.42	51.89	54.92	55.04	55.00	54.57
28	---	---	---	---	---	52.99	52.40	51.89	55.04	55.01	54.98	54.56
29	---	---	---	---	---	52.95	52.39	51.87	55.11	54.97	55.01	54.54
30	---	---	---	---	---	52.91	52.36	51.85	55.15	54.92	55.01	54.53
31	---	---	---	---	---	52.89	---	51.89	---	54.87	55.17	---
MEAN	---	---	---	---	---	---	52.64	52.04	52.82	55.16	54.90	54.83
MAX	---	---	---	---	---	---	52.88	52.33	55.15	55.34	55.20	55.28
MIN	---	---	---	---	---	---	52.36	51.85	51.81	54.87	54.63	54.49

02271700 LAKE ISTOKPOGA NEAR DE SOTO CITY, FL

LOCATION.--Lat 27°26'27", long 81°15'42", in NE¼ sec.18, T.35 S., R.31 E., Highlands County, Hydrologic Unit 03090101, in canal on northeast corner of lake, at Palm Estates Retirement Community, 0.6 mi southwest of town of Lorida, and 9.1 mi east of De Soto City.

SURFACE AREA.--27,500 acres (43.0 mi^2).

DRAINAGE AREA.--607 mi^2.

PERIOD OF RECORD.--August 1936 to current year. July 1965 to September 1989, records for Canal 41A at S-68 at Lake Istokpoga, near Lake Placid (station 02273200).

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by South Florida Water Management District). Prior to May 19, 1937, nonrecording gage at datum 40.54 ft higher and May 19, 1937, to Aug. 17, 1942, at datum 38.54 ft higher, at site on northwest shore of lake 4.0 mi southwest of mouth of Arbuckle Creek. Aug. 20, 1942, to July 6, 1965, water-stage recorder near mouth of Arbuckle Creek at datum 34.07 ft higher. July 7, 1965, to Nov. 27, 1973, water-stage recorder at site 7.5 mi south at datum 30.00 ft higher. Nov. 28, 1973, to Mar. 27, 1990, at present datum at site 7.5 mi south.

REMARKS.--Lake controlled by dam with removable stoplogs in Istokpoga Canal from June 1949 to July 1962. Since July 21, 1962, lake controlled by operation of structure 68 on Canal 41A on southeast shore of lake. Dam on Istokpoga Canal is still in place. Flow occurs at times in this canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 42.9 ft, estimated, Sept. 17, 1945; minimum daily, 35.40 ft, May 30, 1962.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.11	39.41	39.46	39.34	39.46	39.31	39.18	38.71	37.97	38.93	38.32	38.79
2	39.19	39.42	39.46	39.40	39.44	39.44	39.16	38.66	37.98	38.91	38.34	38.83
3	39.27	39.40	39.46	39.39	39.44	39.47	39.16	38.64	37.95	38.91	38.36	38.83
4	39.32	39.38	39.45	39.36	39.39	39.34	39.16	38.60	37.91	38.82	38.39	---
5	39.39	39.32	39.44	39.39	39.35	39.26	39.11	38.54	37.88	38.75	38.40	---
6	39.44	39.30	39.45	39.44	39.42	39.35	39.06	38.47	37.85	38.71	38.39	---
7	39.43	39.32	39.47	39.39	39.45	39.39	39.07	38.46	37.86	38.62	38.37	---
8	39.41	39.35	39.50	39.37	39.35	39.42	39.09	38.41	37.88	38.52	38.32	---
9	39.30	39.36	39.50	39.40	39.37	39.43	39.09	38.37	37.83	38.45	38.32	---
10	39.30	39.38	39.51	39.41	39.42	39.42	39.05	38.31	37.83	38.42	38.32	---
11	39.34	39.39	39.49	39.40	39.40	39.42	39.03	38.22	37.86	38.38	38.33	---
12	39.38	39.37	39.47	39.41	39.34	39.46	39.02	38.20	37.92	38.48	38.42	---
13	39.43	39.35	39.45	39.40	39.26	39.49	39.08	38.18	37.92	38.62	38.45	---
14	39.48	39.34	39.44	39.43	39.20	39.44	39.09	38.13	37.95	38.62	38.48	---
15	39.45	39.32	39.42	39.53	39.22	39.43	39.09	38.00	38.01	38.65	38.51	---
16	39.44	39.25	39.41	39.51	39.21	39.44	39.08	38.04	38.05	38.68	38.53	---
17	39.30	39.22	39.44	39.51	39.19	39.42	39.07	38.08	38.11	38.68	38.59	---
18	39.23	39.26	39.42	39.49	39.16	39.41	39.08	38.15	38.16	38.69	38.67	---
19	39.23	39.29	39.41	39.48	39.21	39.40	39.05	38.20	38.14	38.67	38.69	---
20	39.25	39.33	39.38	39.47	39.23	39.38	39.04	38.13	38.20	38.61	38.70	---
21	39.30	39.35	39.32	39.45	39.22	39.39	39.04	38.10	38.37	38.56	38.74	---
22	39.38	39.38	39.34	39.42	39.22	39.26	39.00	38.03	38.67	38.56	38.76	---
23	39.42	39.42	39.38	39.45	39.26	39.23	38.95	38.09	38.78	38.58	38.76	---
24	39.44	39.42	39.37	39.47	39.30	39.23	38.90	38.10	38.88	38.52	38.76	---
25	39.46	39.43	39.33	39.46	39.32	39.24	38.91	38.07	39.06	38.47	38.76	---
26	39.41	39.44	39.31	39.45	39.36	39.24	38.89	38.03	39.10	38.43	38.76	---
27	39.34	39.45	39.34	39.45	39.32	39.25	38.84	38.02	39.10	38.42	38.74	---
28	39.30	39.45	39.35	39.45	39.30	39.22	38.78	37.97	39.07	38.40	38.72	---
29	39.33	39.47	39.40	39.45	---	39.21	38.74	37.99	39.00	38.39	38.71	---
30	39.36	39.48	39.36	39.46	---	39.22	38.72	37.98	38.93	38.38	38.67	---
31	39.40	---	39.36	39.47	---	39.20	---	37.97	---	38.37	38.72	---
MEAN	39.35	39.37	39.42	39.44	39.31	39.35	39.02	38.22	38.27	38.59	38.55	---
MAX	39.48	39.48	39.51	39.53	39.46	39.49	39.18	38.71	39.10	38.93	38.76	---
MIN	39.11	39.22	39.31	39.34	39.16	39.20	38.72	37.97	37.83	38.37	38.32	---

02276400 LAKE OKEECHOBEE, FL

LOCATION.--Center of lake, lat 26°57', long 80°50', in southern Florida, Hydrologic Unit 03090201.

SURFACE AREA.--436,000 acres (681 mi^2) at elevation 14 ft above sea level, from data provided by U.S. Army Corps of Engineers.

DRAINAGE AREA.--About 5,650 mi^2.

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

REVISED RECORDS.--WRD FL 1969: Surface area. WDR FL-77-1: capacity table.

GAGE.--Four water-stage recorders at various locations around the lake. From Oct. 1, 2000 to Mar. 14, 2001, ten water-stage recorders at various locations around the rim of the lake. Datum of gages is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). See WDR FL-00-1A for history of changes prior to Oct. 1, 2000.

REMARKS.--Lake is diked to form a reservoir and is regulated by control structure gates at several outlets. It is used for navigation, municipal water supply, irrigation, and flood control. Total usable capacity is 2,860,000 acre-ft between elevations 10.5 and 17.5 ft. Daily elevations are an average of the gage readings from around the lake.

COOPERATION.--Records of elevations and capacity table provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 18.77 ft, Nov. 2, 1947; minimum daily, 8.97 ft, May 23, 2001.

Capacity table, (elevation, in feet, and capacity, in acre-feet)

10.0	2,040,000	15.0	3,950,000
11.0	2,370,000	16.0	4,380,000
12.0	2,720,000	17.0	4,830,000
13.0	3,110,000	18.0	5,290,000
14.0	3,530,000		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.14	14.77	14.89	14.67	14.59	14.40	13.87	12.99	11.88	12.87	14.53	15.23
2	14.18	14.80	14.88	14.68	14.58	14.40	13.85	12.95	11.86	12.95	14.56	15.26
3	14.21	14.81	14.87	14.67	14.56	14.39	13.83	12.92	11.83	13.03	14.56	15.30
4	14.24	14.81	14.87	14.63	14.53	14.35	13.81	12.86	11.79	13.09	14.57	15.36
5	14.26	14.87	14.85	14.63	14.50	14.34	13.76	12.81	11.74	13.17	14.57	15.40
6	14.28	14.92	14.84	14.64	14.49	14.30	13.72	12.77	11.70	13.27	14.56	15.45
7	14.30	14.93	14.86	14.62	14.47	14.24	13.69	12.71	11.70	13.36	14.55	15.48
8	14.31	14.95	14.88	14.60	14.44	14.31	13.66	12.63	11.66	13.48	14.54	15.52
9	14.32	14.96	14.88	14.59	14.43	14.32	13.63	12.58	11.64	13.57	14.53	15.55
10	14.32	14.96	14.88	14.59	14.45	14.31	13.59	12.52	11.62	13.66	14.50	15.59
11	14.33	14.97	14.87	14.58	14.51	14.29	13.57	12.48	11.60	13.73	14.51	15.61
12	14.34	14.96	14.87	14.58	14.53	14.29	13.55	12.43	11.60	13.83	14.52	15.65
13	14.34	14.96	14.86	14.57	14.52	14.27	13.53	12.37	11.62	13.92	14.56	15.65
14	14.34	14.97	14.87	14.58	14.50	14.26	13.50	12.31	11.60	13.96	14.63	15.65
15	14.35	14.96	14.86	14.64	14.52	14.25	13.50	12.28	11.67	14.02	14.65	15.65
16	14.35	14.96	14.85	14.65	14.52	14.24	13.50	12.25	11.73	14.05	14.65	15.65
17	14.30	14.95	14.84	14.66	14.50	14.23	13.49	12.23	11.89	14.07	14.68	15.65
18	14.30	14.96	14.83	14.67	14.47	14.20	13.50	12.20	11.91	14.09	14.72	15.66
19	14.32	14.96	14.82	14.67	14.47	14.19	13.48	12.26	11.92	14.11	14.74	15.67
20	14.33	14.96	14.80	14.68	14.47	14.15	13.45	12.30	11.99	14.13	14.75	15.68
21	14.37	14.96	14.75	14.68	14.47	14.13	13.42	12.23	12.09	14.16	14.77	15.70
22	14.45	14.96	14.74	14.68	14.46	14.08	13.39	12.20	12.11	14.25	14.81	15.71
23	14.49	14.96	14.73	14.68	14.46	14.04	13.35	12.20	12.18	14.30	14.84	15.72
24	14.55	14.96	14.73	14.68	14.48	14.03	13.31	12.19	12.26	14.34	14.88	15.77
25	14.63	14.96	14.71	14.67	14.49	14.00	13.27	12.15	12.37	14.38	14.90	15.83
26	14.67	14.95	14.69	14.66	14.48	13.98	13.22	12.11	12.50	14.43	14.91	15.83
27	14.66	14.94	14.71	14.65	14.44	13.97	13.17	12.07	12.56	14.45	14.95	15.82
28	14.66	14.92	14.70	14.64	14.40	13.94	13.13	12.02	12.62	14.46	14.98	15.82
29	14.69	14.91	14.69	14.63	---	13.93	13.08	11.99	12.69	14.49	15.03	15.80
30	14.72	14.91	14.68	14.62	---	13.92	13.03	11.95	12.75	14.52	15.11	15.78
31	14.75	---	14.68	14.61	---	13.90	---	11.90	---	14.53	15.18	---
MEAN	14.40	14.93	14.81	14.64	14.49	14.18	13.49	12.38	11.97	13.89	14.72	15.61
MAX	14.75	14.97	14.89	14.68	14.59	14.40	13.87	12.99	12.75	14.53	15.18	15.83
MIN	14.14	14.77	14.68	14.57	14.40	13.90	13.03	11.90	11.60	12.87	14.50	15.23

CAL YR 2001 MEAN 11.56 MAX 14.97 MIN 8.97
WTR YR 2002 MEAN 14.12 MAX 15.83 MIN 11.60

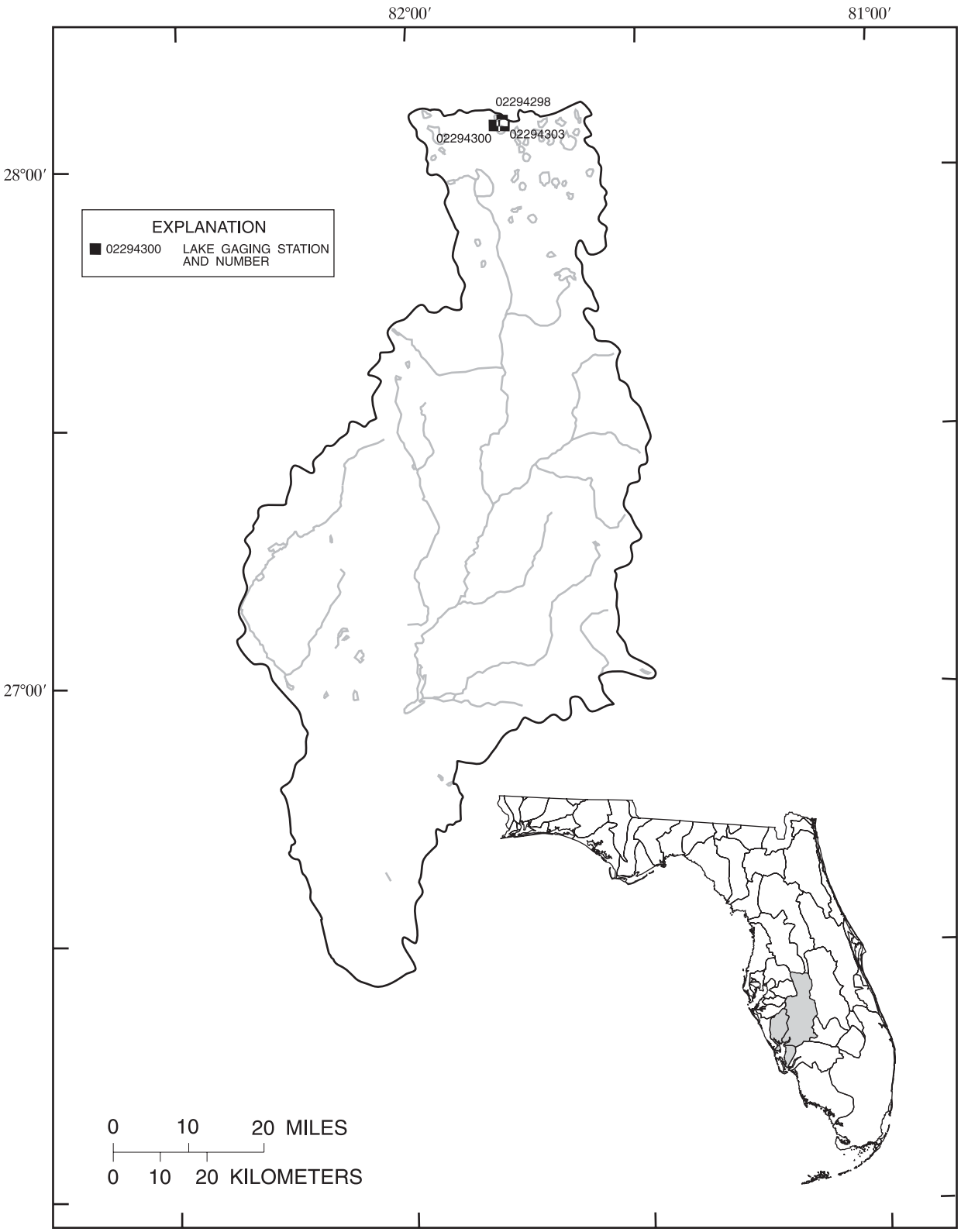

Figure 14.--Location of lake gaging stations in the Peace and Myakka River basins, Charlotte Harbor and coastal area.

02294298 LAKE ARIETTA NEAR AUBURNDALE, FL

LOCATION.--Lat 28°05'43", long 81°47'43", in NE$^{1}/_{4}$ sec.34, T.27 S., R.25 E., Polk County, Hydrologic Unit 03100101, on southeast shore of lake, 2.3 mi north of Auburndale.

SURFACE AREA.--764 acres (1.19 mi^2).

DRAINAGE AREA.--3.70 mi^2.

PERIOD OF RECORD.--August 1970 to September 1976 (once daily); October 1976 to September 1978 (thrice weekly); October 1978 to September 1992 (once daily); October 1992 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above NGVD of 1929; gage readings have been reduced to elevations above NGVD of 1929. Prior to Nov. 21, 1972 at site nearby at datum 0.10 ft lower and Nov. 22, 1972 to Sept. 8, 1980 at several sites nearby at present datum.

REMARKS.--Lake is in the Saddle Creek Branch area of Peace River headwaters and level is controlled by structure P-3.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 143.66 ft, Jan. 2, 1998; minimum observed, 136.50 ft, May 25, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 139.86 ft, Sept. 30; minimum observed, 138.06 ft, June 5.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	138.72	---	---	138.98	---	---
2	---	---	---	138.98	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	139.66
4	---	---	---	---	---	---	---	---	---	---	139.36	---
5	---	---	139.08	---	---	139.10	---	---	138.06	---	---	---
6	---	---	---	---	138.84	---	---	138.46	---	---	---	---
7	139.34	139.18	---	---	---	---	---	138.40	---	---	---	---
8	---	---	---	---	---	---	---	---	---	138.96	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	138.88	---	---	138.78	---	---	---	---	---
11	---	---	---	---	138.90	139.10	---	---	---	139.00	139.40	139.72
12	---	---	---	---	---	---	---	138.28	138.16	---	---	---
13	139.26	---	---	---	---	139.05	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	139.38	---	---	---	---	---	---	---	---	---	---	---
16	---	139.16	---	---	---	---	138.78	---	---	---	---	---
17	---	---	139.10	138.94	---	---	---	---	---	---	---	---
18	---	---	---	---	---	139.04	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	138.32	---	---	139.80
20	---	139.14	---	---	---	---	---	---	---	139.08	---	---
21	---	---	---	---	138.80	---	---	---	---	---	---	---
22	---	---	---	138.95	---	---	---	138.10	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	138.76	---	139.38	---
25	---	---	---	---	139.16	---	---	---	---	---	---	---
26	---	139.12	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	138.62	---	---	---	---	---
28	---	---	138.96	---	139.14	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	139.26	---	---
30	---	139.10	---	---	---	---	---	---	138.92	---	139.42	139.86
31	139.24	---	---	138.94	---	---	---	138.12	---	139.30	---	---

02294300 LAKE WHISTLER NEAR AUBURNDALE, FL

LOCATION.--Lat 28°05'18", long 81°48'54", in SE¼ sec.33, T.27 S., R.25 E., Polk County, Hydrologic Unit 03100101, on west shore of lake, on private pier, 2.2 mi northwest of Auburndale.

SURFACE AREA.--78.0 acres (0.12 mi^2).

DRAINAGE AREA.--4.33 mi^2.

PERIOD OF RECORD.--August 1970 to current year (weekly).

REVISED RECORDS.--WDR FL-80-3: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above NGVD of 1929; gage readings have been reduced to elevations above NGVD of 1929. Prior to Jan. 5, 1972, at site 0.4 mi south at datum 0.08 ft lower; Jan. 5, 1972, to Nov. 20, 1980, at site 0.4 mi south at present datum.

REMARKS.--Lake is in the Saddle Creek Branch area of Peace River headwaters.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 138.12 ft, Apr. 10, 1983; minimum observed, 134.50 ft, May 8, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 136.98 ft, Sept. 12,21; minimum observed, 135.68 ft, June 20.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	136.76	---
2	---	---	---	---	---	---	136.31	---	---	---	---	---
3	136.80	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	136.28	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	136.52	---	---	---	---	135.75	---	136.48	---	---
7	---	136.68	---	---	---	---	---	---	---	---	---	136.96
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	136.76	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	136.80	---	---	---	---	---	---	---	---	136.48	---	---
12	---	---	---	---	---	---	---	---	---	136.58	---	136.98
13	---	---	136.52	---	---	136.55	---	---	---	---	---	---
14	---	136.64	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	136.80	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	136.82	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	136.65	---	---
20	---	136.62	---	---	---	---	---	---	135.68	136.36	---	---
21	---	136.60	136.50	---	---	---	---	---	---	---	---	136.98
22	---	---	---	136.50	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	136.80	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	136.84	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	136.68	---	---
28	---	136.58	136.50	---	---	---	---	---	---	---	---	136.88
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	136.90	---
31	---	---	---	---	---	---	---	---	---	---	136.80	---

02294303 ARIANA LAKE AT AUBURNDALE, FL

LOCATION.--Lat 28°05'16", long 81°47'41", in SE¼ sec.34, T.27 S., R.25 E., Polk County, Hydrologic Unit 03100101, on north shore of lake, 1,650 ft west of State Highway 559, and 1.7 mi north of Auburndale.

SURFACE AREA.--1,019 acres (1.59 mi^2).

DRAINAGE AREA.--7.86 mi^2.

PERIOD OF RECORD.--June 1945 to January 1948 (weekly); February 1958 to February 1960 (fragmentary); November 1971 to September 1992 (twice weekly); October 1992 to current year (weekly).

REVISED RECORDS.--WDR FL-80-3: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above NGVD of 1929 (levels by Southwest Florida Water Management District); gage readings have been reduced to elevations above NGVD of 1929. Prior to Mar. 18, 1975, at site 1,000 ft east at datum 31.90 ft higher.

REMARKS.--Lake is in Saddle Creek Branch area of Peace River headwaters.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 137.90 ft, Aug. 28, 1946; minimum observed, 131.28 ft, May 6, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 133.80 ft, Sept. 29; minimum observed, 132.36 ft, May 1.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133.54	---	---	---	---	---	---	132.36	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	133.40
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	133.10	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	133.22	133.14	132.70	---	---	---	---
7	---	---	---	---	133.20	---	---	---	---	---	---	---
8	---	---	133.40	133.26	---	---	---	132.40	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	133.58
10	133.68	---	---	---	---	---	---	---	132.68	---	---	---
11	---	---	---	---	---	---	---	---	---	132.90	133.22	---
12	---	---	---	---	---	---	---	---	---	132.89	---	---
13	---	---	---	---	---	133.40	---	---	---	---	---	---
14	---	---	---	---	133.18	133.20	133.02	---	---	---	---	---
15	---	---	---	133.30	---	---	---	132.46	---	---	---	133.76
16	---	---	133.34	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	132.74	132.92	133.32	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	133.49	---	---	---	---	---	---	---	---	---	---
21	133.54	---	---	---	133.16	133.20	---	---	---	---	---	---
22	---	---	---	133.31	---	---	132.88	132.58	---	---	---	133.78
23	---	---	133.38	133.30	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	132.80	---	133.30	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	133.48	133.16	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	133.80
30	133.58	---	---	---	---	---	132.80	132.60	132.86	---	133.34	---
31	---	---	133.30	133.24	---	---	---	---	---	---	---	---

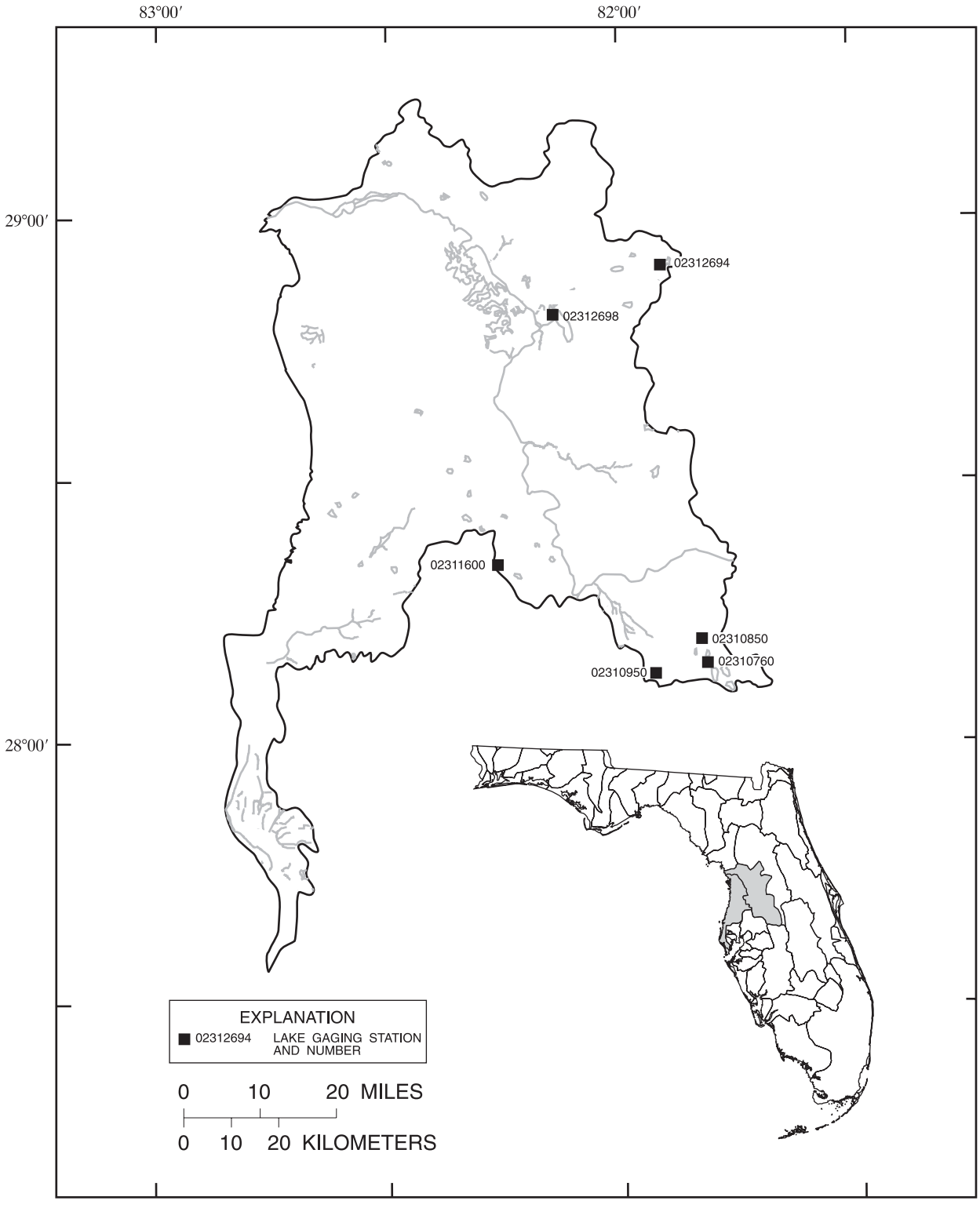

Figure 15.--Location of lake gaging stations in the Withlacoochee River basin and coastal areas.

02310760 LAKE JULIANA NEAR POLK CITY, FL

LOCATION.--Lat 28°07'51", long 81°47'45", in SE¼ sec.15, T.27 S., R.25 E., Polk County, Hydrologic Unit 03100208, on east shore of lake, near concrete-walled pumping station, 4 mi southeast of Polk City.

SURFACE AREA.--919 acres (1.44 mi^2).

DRAINAGE AREA.--5.4 mi^2, approximately.

PERIOD OF RECORD.--December 1961 to September 1975 (once daily); October 1975 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above NGVD of 1929; gage readings have been reduced to elevations above NGVD of 1929. Prior to June 8, 1984, at datum 26.49 ft higher.

REMARKS.--Lake is one of a group of lakes in the southern part of an extensive area of swampy flatlands and sandy ridges at a relatively high elevation, called the Green Swamp. Streams that flow into five major drainage systems originate in or near the Green Swamp area. Lake is connected to Lake Mattie by a canal which tends to equalize the lake elevations.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 134.10 ft, Mar. 21, 1998; minimum observed, 126.20 ft, May 7,14, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 130.46 ft, Sept. 28; minimum observed, 128.26 ft, May 29, June 8.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	128.29	---	---	---
2	---	---	---	---	---	---	---	---	---	---	129.50	---
3	---	129.51	---	---	---	129.28	---	---	---	---	---	---
4	---	---	---	---	---	---	---	128.66	---	---	---	---
5	---	---	---	---	---	---	---	---	---	129.17	---	---
6	129.41	---	---	129.17	---	---	129.03	128.60	---	---	---	---
7	---	---	---	---	129.17	---	---	---	---	---	---	130.27
8	---	---	129.32	---	---	---	---	---	128.26	---	---	---
9	---	---	---	---	129.13	129.29	---	---	---	---	129.57	---
10	---	129.46	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	128.49	---	129.23	---	---
12	---	---	---	---	---	---	---	---	---	129.17	---	---
13	129.47	---	---	129.17	---	129.20	128.92	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	130.37
15	---	---	129.33	---	---	---	---	---	128.28	---	---	---
16	---	---	---	---	129.11	129.26	---	---	---	---	129.60	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	129.42	---	---	---	---	---	128.36	---	129.32	---	---
19	---	---	---	---	---	---	---	---	---	129.29	---	---
20	129.53	129.42	---	129.22	---	---	128.88	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	130.41
22	---	---	129.32	129.22	---	---	---	---	---	---	---	---
23	---	---	---	---	---	129.16	---	---	---	---	129.59	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	129.41	---	---	129.36	---	---	---	---	---	---	---
26	---	---	---	129.22	---	---	---	---	---	129.49	---	---
27	---	---	---	---	---	---	128.74	---	---	---	---	---
28	129.56	---	---	---	---	---	---	---	---	---	---	130.46
29	---	---	129.17	---	---	---	---	128.26	---	---	---	---
30	---	129.37	---	---	---	129.08	---	---	---	---	129.85	---
31	---	---	---	---	---	---	---	---	---	---	129.99	---

02310850 LAKE HELENE NEAR POLK CITY, FL

LOCATION.--Lat 28°10'25", long 81°48'21", in SW¼ sec.34, T.26 S., R.25 E., Polk County, Hydrologic Unit 03100208, next to west shore of lake, on private pier at Camp Gilead, 1.3 mi southeast of Polk City.

SURFACE AREA.--54.4 acres (0.08 mi^2).

DRAINAGE AREA.--0.42 mi^2.

PERIOD OF RECORD.--March 1961 to April 1965; May 1965 to current year (thrice weekly).

REVISED RECORDS.--WRD FL 1962: Surface area.

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above NGVD of 1929; gage readings have been reduced to elevations above NGVD of 1929. Prior to Oct. 19, 1961, nonrecording gage, Oct. 19, 1961 to Apr. 13, 1965, water-stage recorder and since Apr. 13, 1965, nonrecording gage at same site at different datums.

REMARKS.--Lake is one of a group of lakes in the southern part of an extensive area of swampy flatlands and sandy ridges at a relatively high elevation, called the Green Swamp. Streams that flow into five major drainage systems originate in or near the Green Swamp area. Lake is landlocked.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 146.48 ft, Mar. 21, 1998; minimum observed, 137.40 ft, May 29, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation since 1948, 148.5 ft in September 1960, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 139.63 ft, Sept. 26; minimum observed, 137.40 ft, May 29.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139.29	---	---	---	138.73	---	---	137.97	---	138.46	---	---
2	---	---	---	---	---	---	138.46	---	---	---	---	---
3	139.28	---	---	---	138.70	---	---	137.92	137.46	138.48	138.95	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	139.28	139.23	139.05	---	---	138.80	138.44	---	137.41	138.48	138.96	---
6	---	---	---	---	---	---	---	137.86	---	---	---	139.50
7	---	139.23	139.03	138.85	---	---	---	---	---	---	138.95	---
8	139.34	---	---	---	138.66	---	138.36	137.81	137.57	138.51	---	---
9	---	139.22	---	---	---	---	---	---	---	---	---	139.49
10	---	---	139.01	138.81	---	---	138.33	137.77	137.53	---	---	---
11	---	---	---	---	138.69	---	---	---	---	138.56	---	139.50
12	---	139.21	139.01	138.79	---	138.73	---	---	137.57	---	---	---
13	---	---	---	---	---	138.75	138.29	137.69	---	---	138.98	139.55
14	139.30	139.19	---	138.84	138.64	---	---	---	---	---	---	---
15	---	---	139.01	---	---	138.73	138.30	137.63	---	---	---	---
16	139.31	---	---	138.87	138.62	---	---	---	---	---	139.12	139.56
17	---	---	139.01	---	---	138.71	138.28	137.56	137.80	---	---	---
18	---	---	---	138.86	138.59	---	---	---	---	138.68	---	---
19	---	---	---	---	---	138.69	---	---	137.97	---	139.16	---
20	---	139.17	---	---	138.56	---	---	137.63	---	138.67	---	139.56
21	---	---	---	---	---	---	---	---	---	---	---	---
22	139.34	---	---	138.84	138.72	---	138.19	137.57	138.00	---	---	---
23	---	---	---	138.85	---	---	---	---	---	138.69	---	139.58
24	139.35	---	---	---	---	138.61	138.14	---	138.18	---	---	---
25	---	---	---	138.83	138.88	---	---	137.51	---	---	139.10	---
26	139.35	139.12	138.97	---	---	138.57	138.09	---	138.35	---	---	139.63
27	---	---	---	---	---	---	---	137.44	---	---	139.16	---
28	---	139.11	---	138.80	138.83	138.52	---	---	---	---	---	---
29	139.28	---	---	---	---	---	138.03	137.40	138.37	138.97	139.20	---
30	---	139.09	---	138.76	---	---	---	---	---	---	139.31	139.59
31	139.25	---	---	---	---	---	---	---	---	138.96	---	---

02310950 LAKE DEESON NEAR LAKELAND, FL

LOCATION.--Lat 28°06'37", long 81°55'51", in NW¼ sec.29, T.27 S., R.24 E., Polk County, Hydrologic Unit 03100208, on south shore of lake, 5.0 mi northeast of intersection of U.S. Highways 92 and 98 in Lakeland.

SURFACE AREA.--116 acres (0.18 mi^2).

DRAINAGE AREA.--0.96 mi^2.

PERIOD OF RECORD.--July 1954 to March 1960 (fragmentary); May 1965 to June 1995; July 1995 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is 116.00 ft above NGVD of 1929; gage readings have been reduced to elevations above NGVD of 1929. Prior to Nov. 16, 2000, gage at same site at datum 2.21 ft higher. Prior to Oct. 17, 1957, nonrecording gage at same site at datum 20.25 ft higher and Oct. 17, 1957 to March 1960, at datum 20.79 ft higher. May 1965 to June 1995, water-stage recorder at present site and datum.

REMARKS.--Lake is landlocked except at extreme high stages when flow is to the northeast to the headwaters of Gator Creek. Since Dec. 14, 1973, elevation of lake affected by pumpage into lake from nearby deep well.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 135.49 ft, Sept. 28, 1954; minimum elevation observed, 117.60 ft, July 7, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 123.66 ft, Sept. 30; minimum observed, 119.86 ft, May 30.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	121.30	---	---
2	---	---	---	---	---	---	---	---	---	---	---	122.94
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	120.88	---	---	---	121.90	---
6	120.70	---	---	---	---	---	---	120.33	---	---	---	---
7	---	---	121.06	120.98	---	121.10	---	---	119.92	---	---	---
8	---	121.06	---	---	---	---	---	---	---	121.34	---	---
9	---	---	---	---	---	---	---	---	---	---	---	123.08
10	---	---	---	---	---	---	---	---	---	121.41	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	121.92	---
13	120.76	---	---	---	---	121.10	---	---	---	---	---	---
14	---	---	121.06	120.98	120.92	---	120.80	---	---	---	---	---
15	---	121.07	---	---	---	121.08	---	119.96	---	121.54	---	---
16	---	---	---	---	---	---	---	---	---	---	---	123.36
17	---	---	---	---	---	---	---	---	120.34	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	121.07	---	121.08	---	---	---	---	---	---	122.16	---
21	120.72	---	121.02	---	120.92	121.04	---	---	---	---	---	---
22	---	121.08	---	121.09	---	---	120.78	---	---	121.76	---	---
23	---	---	---	---	---	---	---	119.92	---	---	---	123.36
24	---	---	---	---	---	---	---	---	120.94	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	122.38	---
27	---	---	---	---	---	---	120.58	---	---	---	---	---
28	---	---	---	121.08	121.12	---	---	---	---	---	---	---
29	---	---	120.98	---	---	120.86	---	---	---	121.82	---	---
30	---	121.08	---	---	---	---	---	119.86	121.30	---	122.58	123.66
31	121.02	---	---	---	---	---	---	---	---	---	---	---

02311600 CLEAR LAKE AT SAN ANTONIO, FL

LOCATION.--Lat 28°20'20", long 82°16'02", in SW¼ sec.1, T.25 S., R.20 E., Pasco County, Hydrologic Unit 03100208, on southwest shore of lake, on public pier, 0.5 mi northeast of San Antonio, and 5.0 mi west of Dade City.

SURFACE AREA.--158 acres (0.25 mi^2).

DRAINAGE AREA.--0.92 mi^2.

PERIOD OF RECORD.--January 1965 to September 1966 (twice weekly); October 1966 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is 95.00 ft above NGVD of 1929 (Florida Department of Transportation bench mark); gage readings have been reduced to elevations above NGVD of 1929. Mar. 31, 1971 to Mar. 13, 1991, at datum 2.00 ft higher. Prior to Mar. 31, 1971, at site 30 ft northwest at same datum.

REMARKS.--Lake has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 128.36 ft, Feb. 21, 1998; minimum observed, 121.64 ft, June 8, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 124.88 ft, Sept. 28; minimum observed, 121.64 ft, June 8.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	123.12	---	---	---	---	---	121.72	---	---	---
2	---	---	---	---	122.93	122.88	---	---	---	---	---	---
3	---	123.40	---	---	---	---	---	---	---	---	123.71	---
4	---	---	---	---	---	---	---	122.23	---	---	---	---
5	---	---	---	123.03	---	---	---	---	---	---	---	---
6	123.79	---	---	---	---	---	122.57	---	---	122.69	---	---
7	---	---	---	---	---	---	---	122.17	---	---	---	124.70
8	---	---	123.18	---	---	---	---	---	121.64	---	---	---
9	---	---	---	---	122.85	122.84	---	---	---	122.63	---	---
10	---	123.32	---	---	---	---	---	---	---	---	123.75	---
11	---	---	---	---	---	---	---	122.09	---	---	---	---
12	---	---	---	123.01	---	122.85	---	---	---	---	---	---
13	123.73	---	---	---	---	---	122.49	---	---	123.01	---	---
14	---	123.38	---	---	---	---	---	---	---	---	---	124.84
15	---	---	123.16	---	---	---	---	---	121.86	---	---	---
16	---	---	---	---	122.84	122.80	---	---	---	---	---	---
17	---	123.30	---	---	---	---	---	---	---	---	124.33	---
18	---	---	---	---	---	---	---	122.05	---	---	---	---
19	---	---	---	123.09	---	---	---	---	---	122.97	---	---
20	123.65	123.38	---	---	---	---	122.43	---	---	122.99	---	---
21	---	---	---	---	---	---	---	---	---	---	---	124.80
22	---	---	123.10	122.99	---	---	---	---	121.98	---	---	---
23	---	---	---	---	122.94	122.68	---	---	---	---	---	---
24	---	123.24	---	---	---	---	---	---	---	---	124.31	---
25	---	---	---	---	---	---	---	121.70	---	---	---	---
26	---	---	---	122.95	---	---	---	---	---	---	---	---
27	123.57	---	---	---	---	---	122.35	---	---	123.57	---	---
28	---	---	---	---	---	---	---	---	---	---	---	124.88
29	---	---	122.96	---	---	---	---	---	122.58	---	124.31	---
30	---	---	---	---	---	122.64	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	124.40	---

02312694 LADY LAKE NEAR LADY LAKE, FL

LOCATION.--Lat 28°54'50", long 81°53'43", in NE$^{1}/_{4}$ sec.22, T.18 S., R.24 E., Lake County, Hydrologic Unit 03100208, on south shore of lake, 1.5 mi east of town of Lady Lake.

SURFACE AREA.--190 acres (0.30 mi^2).

DRAINAGE AREA.--4.67 mi^2.

PERIOD OF RECORD.--February 1970 to September 1973 (weekly); October 1973 to current year (fragmentary).

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

GAGE.--Nonrecording gage. Datum of gage is at NGVD of 1929.

REMARKS.--Lake is landlocked. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 66.60 ft, Apr. 16, 1984; minimum unknown, lake observed dry, July 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	ELEVATION ABOVE NGVD (FEET) (72020)
NOV		
16...	1108	61.42
JAN		
15...	1153	61.18
MAR		
15...	1450	61.24
JUL		
11...	1430	61.27
AUG		
22...	1130	62.78

02312698 LAKE PANASOFFKEE NEAR LAKE PANASOFFKEE, FL

LOCATION.--Lat 28°49'01", long 82°08'40", in SE¼ sec.19, T.19 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on west shore of lake, 0.8 mi north of outlet, 4.6 mi west of Coleman, and 5.1 mi northwest of town of Lake Panasoffkee.

SURFACE AREA.--4,821 acres (7.53 mi^2).

DRAINAGE AREA.--420 mi^2, approximately.

PERIOD OF RECORD.--April 1955 to November 1962 (about weekly); December 1962 to current year. Records for Outlet River at Panacoochee Retreats (station 02312700).

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

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (Florida Department of Transportation bench mark). Prior to Dec. 18, 1962, nonrecording gage and Dec. 18, 1962, to Oct. 7, 1975, water-stage recorder at sites within 0.8 mi south at same datum.

REMARKS.--Outflow from lake is through Outlet River to Withlacoochee River; lake level affected at times by the stage of Withlacoochee River. Prior to 1962, lake level partially controlled during low water by small rock dams and at times during 1962 to 1964 by a temporary sheet piling dam in Outlet River.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 44.28 ft, Apr. 5, 1960; minimum observed, 36.88 ft, May 31, 2001.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.14	38.81	38.11	37.82	37.87	37.86	37.72	37.42	---	38.16	39.59	39.75
2	39.21	38.78	38.08	37.88	37.86	37.87	37.70	37.40	---	38.22	39.63	39.74
3	39.28	38.75	38.07	37.87	37.84	37.84	37.71	37.39	---	38.25	39.71	39.74
4	39.34	38.70	38.05	37.90	37.80	37.89	37.70	37.38	---	38.26	39.77	39.72
5	39.39	38.65	38.04	37.92	37.81	37.93	37.70	37.37	---	38.29	39.79	39.75
6	39.43	38.63	38.03	37.91	37.82	37.96	37.69	37.36	---	38.30	39.78	39.75
7	39.46	38.60	38.02	37.88	37.81	37.95	37.69	37.34	36.96	38.31	39.78	39.73
8	39.49	38.57	38.01	37.89	37.82	37.95	37.69	37.33	37.09	38.30	39.77	39.71
9	39.51	38.54	38.00	37.89	37.83	37.94	37.64	37.31	37.05	38.28	39.74	39.69
10	39.51	38.51	38.00	37.89	37.81	37.93	37.62	37.30	37.01	38.29	39.72	39.67
11	39.51	38.49	37.98	37.88	37.80	37.93	37.63	37.30	36.99	38.27	39.69	39.66
12	39.50	38.45	37.98	37.88	37.79	37.92	37.67	37.28	37.00	38.26	39.67	39.65
13	39.50	38.42	37.97	37.87	37.78	37.91	37.65	37.25	37.00	38.34	39.72	39.66
14	39.48	38.39	37.96	37.91	37.78	37.92	37.66	37.21	36.99	38.58	39.74	39.74
15	39.45	38.34	37.95	37.96	37.77	37.91	37.65	37.23	36.95	38.66	39.75	39.76
16	39.42	38.34	37.95	37.97	37.77	37.91	37.65	37.21	36.97	38.71	39.77	39.76
17	39.38	38.34	37.93	37.97	37.75	37.91	37.63	37.19	37.05	38.72	39.74	39.76
18	39.35	38.32	37.90	37.96	37.76	37.89	37.62	37.20	37.17	38.74	39.72	39.75
19	39.31	38.30	37.91	37.96	37.77	37.89	37.61	---	37.23	38.75	39.73	39.74
20	39.28	38.28	37.88	37.95	37.74	37.87	37.58	---	37.30	38.81	39.77	39.73
21	39.25	38.27	37.88	37.94	37.72	37.84	37.57	---	37.28	39.01	39.76	39.72
22	39.22	38.26	37.88	37.94	37.73	37.83	37.55	---	37.42	39.19	39.79	39.71
23	39.19	38.25	37.89	37.93	37.77	37.82	37.55	---	37.65	39.30	39.81	39.70
24	39.15	38.23	37.87	37.93	37.87	37.82	37.55	---	37.72	39.34	39.79	39.74
25	39.12	38.22	37.86	37.91	37.88	37.80	37.52	---	37.80	39.37	39.75	39.84
26	39.05	38.19	37.82	37.92	37.87	37.79	37.50	---	37.90	39.39	39.71	39.87
27	38.99	38.18	37.85	37.91	37.80	37.76	37.50	---	37.93	39.45	39.68	39.85
28	38.94	38.17	37.85	37.90	37.83	37.76	37.47	---	37.97	39.48	39.64	39.85
29	38.89	38.15	37.83	37.91	---	37.76	37.44	---	38.04	39.54	39.61	39.84
30	38.86	38.12	37.84	37.90	---	37.75	37.45	---	38.09	39.55	39.63	39.83
31	38.84	---	37.82	37.90	---	37.74	---	---	---	39.56	39.75	---
MEAN	39.27	38.41	37.94	37.91	37.80	37.87	37.61	---	---	38.76	39.73	39.75
MAX	39.51	38.81	38.11	37.97	37.88	37.96	37.72	---	---	39.56	39.81	39.87
MIN	38.84	38.12	37.82	37.82	37.72	37.74	37.44	---	---	38.16	39.59	39.65

INDEX TO INTRODUCTORY TEXT

INDEX TO INTRODUCTORY TEXT---Continued

INDEX TO INTRODUCTORY TEXT---Continued