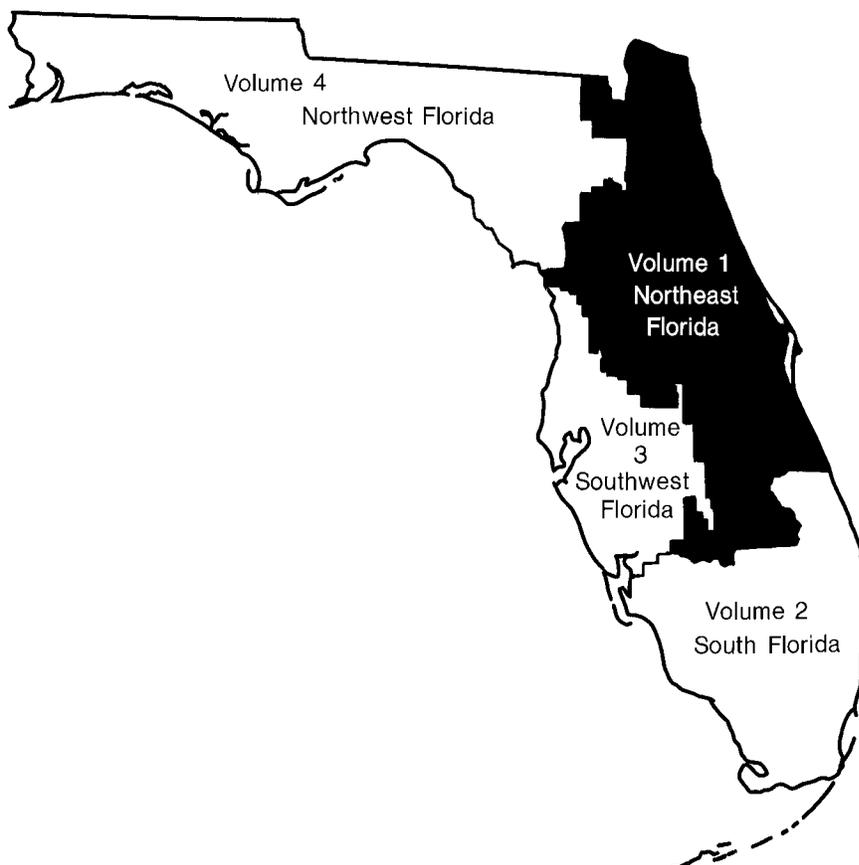


U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Florida Water Year 2001

Volume 1A. Northeast Florida Surface Water

Water-Data Report FL-01-1A



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



UNITED STATES DEPARTMENT OF THE INTERIOR

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U.S. GEOLOGICAL SURVEY

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

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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

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13. ABSTRACT (Maximum 200 words) Water resources data for the 2001 water year in Florida consist of continuous or daily discharge for 404 streams, periodic discharge for 17 streams, continuous or daily stage for 105 streams, periodic stage for 1 stream, peak stage and discharge for 41 streams; continuous or daily elevations for 11 lakes, periodic elevations for 45 lakes; continuous ground-water levels for 424 wells, periodic ground-water levels for 1,326 wells; quality-of-water data for 79 surface-water sites and 114 wells. The data for northeast Florida include 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 streams; continuous or daily elevations for 10 lakes, periodic elevations for 20 lakes; continuous ground water levels for 55 wells, periodic ground-water levels for 619 wells; quality-of-water data for 40 surface-water sites and 57 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.				
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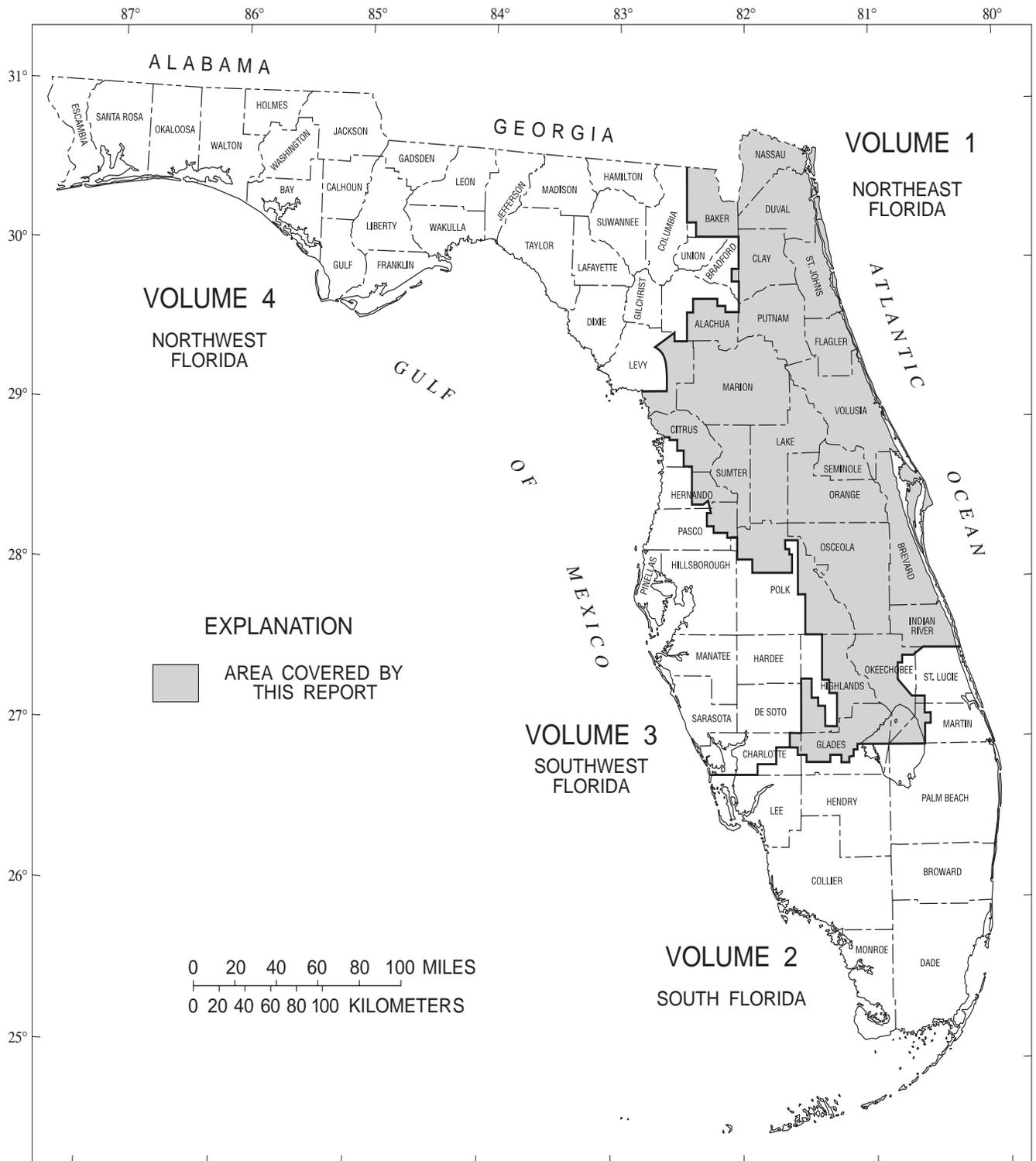


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STREAM AND LAKE GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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.]

	Station number	Page
<u>03070204 ST. MARYS RIVER BASIN</u>		
North Prong St. Marys River at Moniac, GA (d)	02228500	35
Middle Prong St. Marys River at Taylor (d)	02229000	36
Middle Prong St. Marys River near Taylor (d,e)	02229250	37
St. Marys River near Macclenny (d,e)	02231000	38
<u>03070205 COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS</u>		
Mills Creek near Italia:		
Alligator Creek at Callahan (d)	02231268	40
Thomas Creek near Crawford (d)	02231280	41
Nassau River near Hedges (d,e)	02231289	42
<u>03080101 ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER</u>		
St. Johns Headwaters:		
Fort Drum Creek at Sunshine State Parkway near Fort Drum (d)	02231342	45
St. Johns River:		
Bull Creek:		
Blue Cypress Creek near Fellsmere (d)	02231396	46
Sixmile Creek near Kenansville (d)	02231454	47
Wolf Creek near Kenansville (d)	02231458	48
Jane Green Creek near Deer Park (d)	02231600	49
St. Johns River near Melbourne (d,e)	02232000	50
Pennywash Creek near Deer Park (d)	02232155	52
Wolf Creek near Deer Park (d)	02232200	53
St. Johns River near Cocoa (d,e,c,t)	02232400	54
Taylor Creek near Cocoa (d)	02232415	60
St. Johns River near Christmas (d,e,c,t)	02232500	61
Econlockhatchee River at Magnolia Ranch near Bithlo (d)	02233001	69
Little Econlockhatchee River near Union Park (d)	02233200	70
Little Econlockhatchee River near State Highway 434 near Oviedo (d)	02233475	71
Econlockhatchee River near Chuluota (d)	02233500	72
St. Johns River above Lake Harney, near Geneva (d,e)	02234000	73
Lake Jesup:		
Howell Creek near Altamonte Springs (d)	02234308	75
Howell Creek near Slavia (d)	02234324	76
Howell Creek at State Highway 434 near Oviedo (d)	02234344	77
Soldier Creek near Longwood (d)	02234384	78
Gee Creek near Longwood (d)	02234400	79
Lake Jesup Outlet near Sanford (d)	02234435	80
St. Johns River near Sanford (d,e,c,t)	02234500	81
Wekiva River:		
Wekiva Springs near Apopka (d)	02234600	89
Rock Springs near Apopka (d)	02234610	90
Wekiva River near Apopka (d)	02234635	91
Little Wekiva River near Altamonte Springs (d)	02234990	92
Little Wekiva River near Longwood (d)	02234998	94
Wekiva River at Old RR Crossing near Sanford (d)	022349993	95
Wekiva River near Sanford (d,c,t)	02235000	96
Black Water Creek near Cassia (d,c,t)	02235200	98
Blue Springs near Orange City (d,c,t)	02235500	100
St. Johns River near De Land (d,e,c,t)	02236000	104
Lake Dexter (continuation of St. Johns River):		
Lake Woodruff (head of Tick Island Creek):		
Spring Garden Lake (head of Spring Garden Creek):		
St. Johns River at Astor (d,e)	02236125	112
<u>03080102 OCKLAWAHA RIVER BASIN</u>		
Green Swamp Run near Eva (d)	02236350	115
Big Creek near Clermont (d)	02236500	116
Little Creek near Clermont (d)	02236700	117
Lake Minnehaha at Clermont (e)	02236840	357
Palatlahaha River at Cherry Lake Outlet, near Groveland (d,e)	02236900	118

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Palatlakaha River below Structure M-6 near Mascotte (e)	02237011	122
Palatlakaha River at Structure M-5 near Okahumpka (e)	02237050	123
Palatlakaha River below Structure M-5 near Okahumpka (e)	02237051	124
Palatlakaha River at Structure M-4 near Okahumpka (e)	02237206	125
Palatlakaha River below Structure M-4 near Okahumpka (e)	02237207	126
Palatlakaha River at Structure M-1 near Okahumpka (d,e)	02237293	127
Little Lake Harris (part of Lake Harris): Church Lake near Groveland (e)	02237370	358
Lake Eustis: Apopka-Beauclair Canal: Apopka-Beauclair Canal near Astatula (d,e)	02237700	129
Apopka-Beauclair Canal below dam, near Astatula (e)	02237701	131
Wolf Branch at FCRR near Mount Dora (d)	02237734	132
Lake Dora: West Crooked Lake near Eustis (e)	02237753	359
Lake Umatilla at Umatilla (e)	02237865	360
Haines Creek (continuation of Palatlakaha River) at Lisbon (d,e)	02238000	133
Haines Creek below Burrell Dam at Lisbon (e)	02238001	135
Lake Griffin: Holly Lake near Umatilla (e)	02238180	361
Ocklawaha River above Moss Bluff Dam, at Moss Bluff (e)	02238499	136
Ocklawaha River at Moss Bluff (d,e)	02238500	137
Lake Weir at Ocklawaha (e)	02238800	362
Lake Weir Outlet: Silver Springs (head of Silver River) near Ocala (d,e,c,t)	02239500	139
Ocklawaha River near Conner (d,e)	02240000	142
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Prairie Creek near Gainesville (d,e)	02240902	145
Camps Canal (connection of Prairie Creek to River Styx): Paynes Prairie Hogtown Creek near Arredondo (d)	02240954	147
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St. Johns River at Buffalo Bluff, near Satsuma (d,c,t)	02244040	162
Crescent Lake (head of Dunns Creek): Haw Creek: Middle Haw Creek near Korona (d)	02244320	166
Little Haw Creek: Little Haw Creek near Seville (d)	02244420	167
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South Fork Black Creek (head of Black Creek) near Penney Farms (d)	02245500	186
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St. Johns River at Buckman Bridge at Jacksonville (c,t)	301124081395901	190
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Lehigh Canal near Flagler Beach (d)	02247258	218
Tomoka River:		
Tiger Bay Canal near Daytona Beach (d)	02247480	219
Thayer Canal near Daytona Beach (d)	02247496	220
Eleventh Street Canal at Holly Hill (d)	02247509	221
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Tomoka River near Ormond Beach (d)	02247598	223
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Reed Canal at South Daytona (d)	02248025	225
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Haulover Canal near Mims (d,c,t)	02248380	229
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Crane Creek at U.S. Highway 1 at Melbourne (d)	02249518	233
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Kissimmee River headwaters:		
Alligator Lake near Ashton (e)	02260800	365
Lake Mary Jane near Narcoossee (e)	02261900	366
East Lake Tohopekaliga:		
Boggy Creek near Taft (d)	02262900	250
Lake Tohopekaliga:		
Shingle Creek:		
C-2 Canal near Vineland (d)	02263130	251
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Black Lake Outlet at S-101A at Lake Buena Vista (d)	02264051	260
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Reedy Creek at S-46 near Vineland (d)	02266025	267
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Whittenhorse Creek at S-411 near Doctor Phillips (d)	02266205	271
Trout Lake near Clermont (e)	02266239	371
Lateral 405 at S-405A, near Doctor Phillips (d)	02266291	272
Lateral 405 below S-405, near Vineland (c,t)	02266294	273
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Lateral 405 below L-410 near Vineland (c,t)	282135081345500	275
Reedy Creek above U.S. Highway 192 near Vineland (c,t)	02266298	276
Reedy Creek near Vineland (d,c,t)	02266300	278
Reedy Creek at I-4 near Loughman (c,t)	02266320	283
Davenport Creek near Loughman (d,c,t)	02266480	285
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Lake Hatchineha:		
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Hillsborough River:		
Fox Branch near Socrum (d,e,c,t)	02301900	307

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	Station number	Page
<u>03100208 WITHLACOOCHEE RIVER BASIN</u>		
Lake Mattie (head of Withlacoochee River):		
Lake Juliana near Polk City (e)	02310760 . . . . .	.387
Pony Creek:		
Lake Helene near Polk City (e)	02310850 . . . . .	.388
Withlacoochee River near Cumpresso (d,e,c,t)	02310947 . . . . .	.311
Lake Deeson near Lakeland (e)	02310950 . . . . .	.389
Withlacoochee-Hillsborough overflow near Richland (d,e)	02311000 . . . . .	.313
Withlacoochee River near Dade City (d,e)	02311500 . . . . .	.316
Clear Lake at San Antonio (e)	02311600 . . . . .	.390
Dade City Canal near Dade City (d,e,c,t)	02311700 . . . . .	.318
Withlacoochee River at Trilby (d,e)	02312000 . . . . .	.319
Little Withlacoochee River:		
Bayroot Slough:		
Bayroot Slough Headwaters near Bay Lake (d)	02312140 . . . . .	.322
Little Withlacoochee River near Tarrytown (d,c,t)	02312180 . . . . .	.323
Little Withlacoochee River at Rerdell (d,c,t)	02312200 . . . . .	.325
Withlacoochee River at Croom (d,e,c,t)	02312500 . . . . .	.327
Withlacoochee River near Floral City (d,e,c,t)	02312600 . . . . .	.330
Jumper Creek Canal near Bushnell (d,e,c,t)	02312640 . . . . .	.332
Shady Brook near Sumterville (d)	02312667 . . . . .	.334
Lake Panasoffkee:		
Lady Lake near Lady Lake (e)	02312694 . . . . .	.391
Lake Panasoffkee near Lake Panasoffkee (e)	02312698 . . . . .	.392
Outlet River at Panachoochee Retreats (d,e,c,t)	02312700 . . . . .	.335
Withlacoochee River at Wysong Dam, at Carlson (d,e)	02312720 . . . . .	.337
Tsala Apopka outfall canal at S-353, near Hernando (d,e,c,t)	02312975 . . . . .	.340
Tsala Apopka outfall canal below S-353, near Hernando (e,c,t)	02312976 . . . . .	.341
Withlacoochee River near Holder (d,e)	02313000 . . . . .	.342
Rainbow Springs near Dunnellon (d)	02313100 . . . . .	.344
Withlacoochee River at Dunnellon (e,c,t)	02313200345
Withlacoochee River at Inglis Dam, near Dunnellon (d)	02313230347
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Discharge at miscellaneous sites351

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
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 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
St. Johns River near DeBary (e)	02234519	2,600	1987-89
Lake Brantley near Forest City (e)	02234638	1.56	1975-79

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			
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
Palatlahaha River near Mascotte (e)	02237000	182	1945-95
Palatlahaha 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
Lake Geneva 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
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
McCoy Creek at Jacksonville (e)	02246497	3.51	1975-77, 1978-83

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			
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
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
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 Pinycastle (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
Canoe Creek near St. Cloud (d)	02266000	86.5	1949-59

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

Station name	Station number	Drainage area (mi ²)	Period of record
KISSIMMEE RIVER BASIN--Continued			
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 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 Aphorpe 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
Withlacoochee 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-01-1A." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District 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	City of Cocoa
Florida Game and Fresh Water Fish Commission	City of Daytona Beach
St. Johns River Water Management District	City of Jacksonville
South Florida Water Management District	Jacksonville Electric Authority
Southern Division Naval Facilities Engineering	Lake County Water Authority
Command, Charleston, SC	Reedy Creek Improvement District
Southwest Florida Water Management District	

Organizations that provided data are acknowledged in station descriptions.

WATER RESOURCES DATA FOR FLORIDA, 2001
Volume 1A: Northeast Florida Surface Water

SUMMARY OF HYDROLOGIC CONDITIONS

RAINFALL: Rainfall during the 2001 water year was below normal. Based on rainfall data at six NOAA stations, the rainfall for the 12-month period, from October 2000 through September 2001, ranged from 11.32 in. above normal at Winter Haven to 6.95 in. below normal at Ocala. The following summary lists departure from the 30-year (1961-1990) normal for each of the stations.

Departure from the 30-year normal rainfall (1961-1990)

Station	October-December		January-March		April-June		July-September		Water Year	
	Total Rainfall	Departure	Total Rainfall	Departure	Total Rainfall	Departure	Total Rainfall	Departure	Total Rainfall	Departure
Jacksonville AP	3.15	-4.66	7.07	-3.85	8.77	-3.24	27.92	7.34	46.91	-4.41
Ocala	2.32	-4.79	11.15	.73	8.76	-5.36	22.41	2.47	44.64	-6.95
Daytona Beach	2.87	-6.69	11.24	2.48	7.31	-4.36	29.23	11.33	50.65	2.76
Orlando	4.01	-2.86	4.60	-3.93	15.58	-2.91	31.57	11.53	55.76	7.65
Winter Haven	4.73	-1.60	*6.63	-1.75	11.17	-1.36	36.62	16.03	59.15	11.32
Vero Beach	6.73	-4.49	6.14	-2.10	9.32	-3.92	*26.48	6.10	46.80	-4.41

*-Partial data - appended to average and/or total values computed with 1-9 daily values missing (March, Winter Haven), (September, Vero Beach).

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 below normal rainfall, discharges throughout the report area ranged from 24 to 87 percent below the period-of-record mean at nine of the ten sites shown. Discharge at one site, Fisheating Creek at Palmdale, was above the period-of-record mean. Overall, flow at the ten selected sites averaged 52 percent below the means for the period of record, and 144 percent above the means for the previous water year (2000).

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 three of the ten representative sites. A new minimum daily mean was observed at St. Johns River near Cocoa (02232400), Ocklawaha River near Conner (02240000), and Withlacoochee River near Holder (02313000). A new lowest annual mean discharge was observed for the current year at Ocklawaha River near Conner (02240000) and Withlacoochee River near Holder (02313000).

Generally, discharges of the 9 selected surface-water sites indicated an increase from 2000 levels. Of the 9 selected surface-water sites presented, discharges at 4 were above the previous water-year mean. The departure from the 30-year average rainfall in 2001 for the six rainfall stations presented in the table above averaged 1.0 inches above normal. The change in average departure for these six rainfall stations from 2000 to 2001 was 5.9 inches (from an average deficit of 5.1 inches in 2000 to an average surplus of 1.0 inches in 2001 from the 30-year average).

Table 1.--Mean discharge for the 2001 water year and mean annual discharges computed from base period discharges

Station number	Station name	Long-term mean annual discharge		Mean discharge 2001 water year (ft ³ /s)	Departure from long-term mean annual discharge (percent)	Change from previous year (percent)
		Base period	Discharge (ft ³ /s)			
02231000	<u>St. Marys River basin</u>					
	St. Marys River near Macclenny	1927-01	647	113	-82	-13
02232400 02236000 02240000	<u>St. Johns River basin</u>					
	St. Johns River near Cocoa	1954-01	998	753	-24	-33
	St. Johns River near De Land	1934-01	3,052	1,688	-45	-29
	Ocklawaha River near Conner	1931-46, 1978-01	1,075	491	-54	-19
02256500	<u>Fisheating Creek basin</u>					
	Fisheating Creek at Palmdale	1931-01	253	321	27	279
02266300 02268903	<u>Kissimmee River basin</u>					
	Reedy Creek near Vineland	1966-01	40.1	24.5	-39	11
	Kissimmee River at S-65, near Lake Wales	1970-01	902	314	-65	-58
02312000 02312200 02313000	<u>Withlacoochee River basin</u>					
	Withlacoochee River at Trilby	1928-01	324	115	-64	628
	Little Withlacoochee River at Rerdell	1958-01	73.7	14.4	-80	704
	Withlacoochee River near Holder	1928-01	1,005	127	-87	-28

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 hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

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

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

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

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

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

Additional information about the NAWQA Program is available through the world wide web at:

http://water.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 2001 water year that began October 1, 2000, and ended September 30, 2001. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

Downstream Order System

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

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

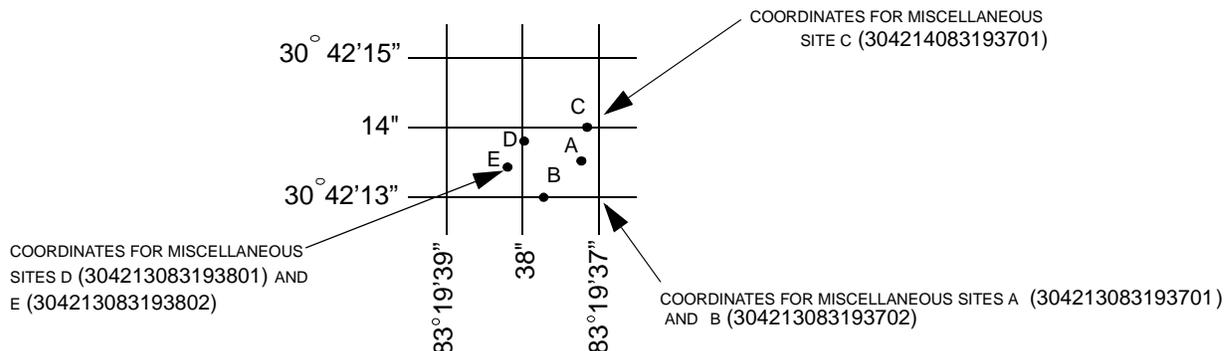


Figure 2.--System for numbering miscellaneous sites (latitude and longitude)

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

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

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

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 stream-flow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

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

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

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

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

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

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is 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 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the 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. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 6a and 6b.

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 [\leq , less than or equal to; \pm , plus or minus value shown; $^{\circ}\text{C}$, 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	$\leq \pm 0.2^{\circ}\text{C}$	$> \pm 0.2$ to 0.5°C	$> \pm 0.5$ to 0.8°C	$> \pm 0.8^{\circ}\text{C}$
Specific conductance	$\leq \pm 3\%$	$> \pm 3$ to 10%	$> \pm 10$ to 15%	$> \pm 15\%$
Dissolved oxygen	$\leq \pm 0.3$ mg/L	$> \pm 0.3$ to 0.5 mg/L	$> \pm 0.5$ to 0.8 mg/L	$> \pm 0.8$ mg/L
pH	$\leq \pm 0.2$ unit	$> \pm 0.2$ to 0.5 unit	$> \pm 0.5$ to 0.8 unit	$> \pm 0.8$ unit
Turbidity	$\leq \pm 5\%$	$> \pm 5$ to 10%	$> \pm 10$ to 15%	$> \pm 15\%$

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 to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

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

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

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

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

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

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

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

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

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

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hard-board) 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”)

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

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

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

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

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

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

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

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

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

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

Bottom material (See "Bed material")

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

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

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

π is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

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

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

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

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

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

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

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

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

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

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

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

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

Cubic foot per second-day (CFS-DAY, Cfs-day, [$\text{ft}^3/\text{s}/\text{d}$]) 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, ($\text{ft}^3/\text{s}/\text{mi}^2$)] 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 “Daily mean suspended-sediment concentration,” “Sediment,” and “Suspended-sediment concentration”)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

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

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

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

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

Horizontal datum (See “Datum”)

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

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

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

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

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

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

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

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

$$I = I_0 e^{-\lambda L},$$

where I_0 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

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_0}.$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Micrograms per kilogram (UG/KG, $\mu\text{g/kg}$) 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, $\mu\text{g/L}$) 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, $\mu\text{S/cm}$) 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 mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

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

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

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

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

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

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

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

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

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

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

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

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

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation/sieve
Gravel	2.0 - 64.0	Sieve

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Return period (See "Recurrence interval")

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

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

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

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

Seven-day 10-year low flow (7Q10) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also “Recurrence interval” and “Annual 7-day minimum”)

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

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

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

Stage (See “Gage height”)

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

Surficial bed material is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which is sampled using U.S. Series Bed-Material Samplers.

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

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

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

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

Suspended-sediment discharge (tons/day) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

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

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

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

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

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

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

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

Temperature preferences:

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

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

Cool – intermediate between cold and warm water temperature preferences.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Trophic group:

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

Herbivore – diet composed predominantly of plant material.

Invertivore – diet composed predominantly of invertebrates.

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

Piscivore – diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances.

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

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

Vertical datum (See “Datum”)

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

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

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

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2001, is called the “2001 water year.”

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

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

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

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

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

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

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

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

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement**Section D. Water Quality**

- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data**Section D. Surface Geophysical Methods**

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

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

Book 3. Applications of Hydraulics**Section A. Surface-Water Techniques**

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI book 3. chap. A5. 1967. 29 p.

- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.
- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation**Section A. Statistical Analysis**

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

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

Book 5. Laboratory Analysis**Section A. Water Analysis**

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

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

Book 6. Modeling Techniques**Section A. Ground Water**

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.

- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 p.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A5, 1996. 125 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

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

Book 9. Handbooks for Water-Resources Investigations

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

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.
- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999. 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

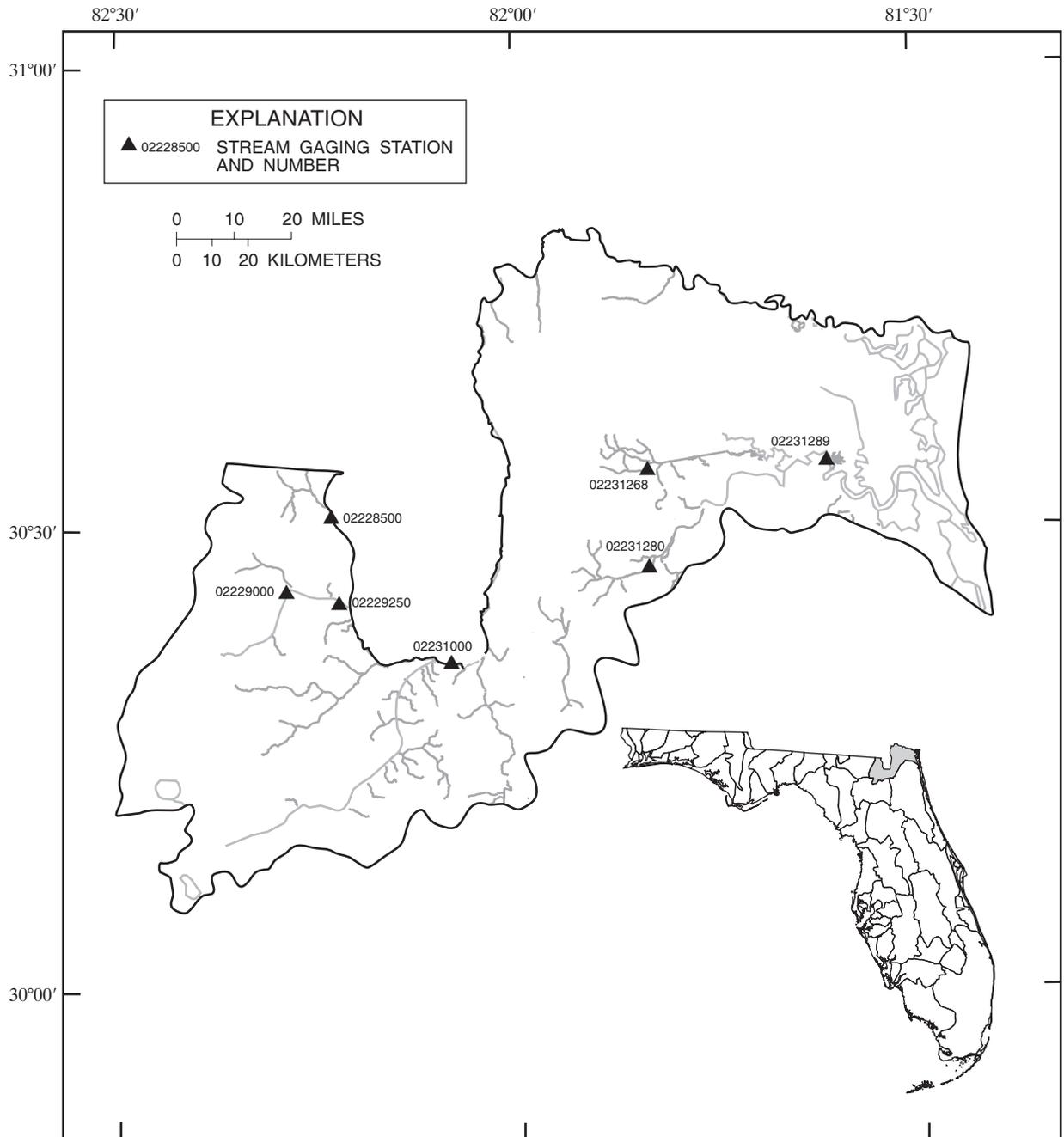


Figure 3.--Location of stream gaging stations in the St. Marys River basin and the coastal area between the St. Marys and St. Johns Rivers.

ST. MARYS RIVER BASIN

02229250 MIDDLE PRONG ST. MARYS RIVER NEAR TAYLOR, FL

LOCATION.--Lat 30°25'57", long 82°13'52", in SW¹/₄ 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 mi².

PERIOD OF RECORD.--April 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 68.80 ft above sea level.

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	7.3	3.6	5.0	4.1	2.3	40	3.1	.78	1.2	1.3	.39
2	150	6.8	3.5	4.7	4.1	2.1	36	2.9	.74	1.2	1.3	.39
3	134	6.4	3.3	4.4	4.0	1.5	32	2.8	.71	1.1	1.1	.51
4	120	5.9	3.2	4.2	4.3	4.3	29	2.6	.69	1.1	.96	1.2
5	110	5.5	2.9	4.1	5.0	8.1	26	2.4	.68	1.0	1.6	1.6
6	99	5.2	2.8	4.1	4.9	11	24	2.3	.67	.94	4.1	1.3
7	89	4.9	2.9	4.0	4.8	8.8	21	2.2	.74	.87	6.7	.96
8	81	4.7	2.8	3.8	4.6	7.7	17	2.1	1.1	.80	6.2	.81
9	73	4.5	2.9	3.7	4.2	7.1	17	2.0	1.2	.77	5.4	.72
10	65	4.2	2.9	3.7	3.8	6.8	16	1.9	1.6	.71	4.8	.68
11	58	4.0	2.9	3.4	3.2	6.5	14	1.8	2.0	.67	4.4	.70
12	52	3.9	2.9	3.6	2.8	6.2	12	1.7	2.1	.63	2.7	.74
13	46	3.7	2.9	3.7	2.7	18	11	1.7	1.7	.75	1.8	.88
14	41	3.7	2.9	3.7	3.2	23	9.6	1.6	1.3	1.0	1.4	1.3
15	37	3.5	2.9	3.6	3.2	18	8.8	1.5	.89	.78	1.3	1.9
16	33	3.4	2.9	3.5	2.8	31	8.4	1.5	.65	.78	1.1	2.2
17	30	3.3	2.8	3.4	2.1	35	7.6	1.4	.55	.71	.85	2.2
18	27	3.1	2.6	3.2	2.0	35	7.1	1.3	.64	.69	.85	1.9
19	23	3.1	2.5	2.9	1.9	43	6.7	1.2	1.7	.62	.92	1.7
20	21	3.0	2.3	3.0	1.7	72	6.2	1.2	2.8	.75	.72	1.4
21	19	2.9	2.4	2.9	1.6	81	5.8	1.1	2.8	.85	.63	1.2
22	17	2.8	2.4	3.1	1.7	73	5.4	1.1	2.6	.87	.59	1.2
23	16	2.7	2.4	3.6	1.8	64	5.0	1.0	2.2	.82	.54	1.5
24	14	2.7	2.4	3.8	1.8	56	4.6	.92	1.9	.77	.53	3.0
25	13	4.0	2.4	3.8	1.4	49	4.4	.89	1.6	.75	.47	3.0
26	12	4.2	2.4	3.7	1.4	47	4.2	.86	1.5	.68	.40	2.8
27	11	4.3	2.4	3.6	2.3	44	4.0	.81	1.5	.64	.36	2.8
28	10	4.4	3.1	3.4	2.2	40	3.7	.77	1.4	.64	.33	2.9
29	9.3	4.3	4.9	3.4	---	37	3.5	.82	1.3	.65	.30	2.5
30	8.6	4.0	5.5	3.7	---	41	3.3	.80	1.3	.88	.30	2.1
31	7.9	---	5.3	3.9	---	43	---	.75	---	1.5	.36	---
TOTAL	1593.8	126.4	94.0	114.6	83.6	922.4	393.3	49.02	41.34	26.12	54.31	46.48
MEAN	51.4	4.21	3.03	3.70	2.99	29.8	13.1	1.58	1.38	.84	1.75	1.55
MAX	167	7.3	5.5	5.0	5.0	81	40	3.1	2.8	1.5	6.7	3.0
MIN	7.9	2.7	2.3	2.9	1.4	1.5	3.3	.75	.55	.62	.30	.39

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

	1997	1998	1999	2000	2001							
MEAN	270	29.2	111	170	427	194	65.1	66.6	22.8	83.8	121	51.8
MAX	984	70.0	431	620	1616	723	178	318	109	412	560	184
(WY)	1999	1998	1998	1998	1998	1998	1997	1997	1997	1997	1997	2000
MIN	12.4	4.21	3.03	3.70	2.99	3.64	2.30	.94	.93	.84	1.75	1.55
(WY)	1998	2001	2001	2001	2001	2000	2000	2000	2000	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1997 - 2001

ANNUAL TOTAL	9045.82	3545.37	
ANNUAL MEAN	24.7	9.71	108
HIGHEST ANNUAL MEAN			295
LOWEST ANNUAL MEAN			9.71
HIGHEST DAILY MEAN	406	Sep 19	3860
LOWEST DAILY MEAN	.46	Jun 9,10	.30
ANNUAL SEVEN-DAY MINIMUM	.49	Jun 5	.35
MAXIMUM PEAK FLOW			175
MAXIMUM PEAK STAGE			5.25
INSTANTANEOUS LOW FLOW			.29
10 PERCENT EXCEEDS	58	29	333
50 PERCENT EXCEEDS	3.1	2.9	5.8
90 PERCENT EXCEEDS	.84	.74	1.1

ST. MARYS RIVER BASIN

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 mi², 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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	334	43	39	56	41	32	217	35	14	110	116	22
2	326	41	38	52	44	33	197	33	14	321	207	30
3	303	39	37	49	45	34	176	33	14	398	204	55
4	268	38	35	47	48	41	157	31	14	260	165	81
5	240	37	34	46	49	57	143	30	14	208	149	140
6	218	36	34	45	50	67	132	28	14	161	330	323
7	199	35	34	44	51	62	122	27	17	124	595	396
8	192	34	33	44	49	54	113	26	18	96	443	339
9	181	33	34	43	47	48	104	25	24	78	306	235
10	165	32	34	43	45	46	96	24	25	66	237	161
11	150	31	34	43	44	44	89	23	36	57	182	122
12	136	30	34	44	42	42	82	24	70	50	144	110
13	124	30	35	44	42	44	76	23	83	50	116	131
14	114	30	35	44	41	67	70	22	84	138	97	321
15	105	29	35	45	41	91	65	21	82	147	82	1080
16	97	28	35	45	40	105	62	20	65	123	69	1680
17	90	28	34	44	39	196	58	19	54	88	58	1620
18	84	28	33	43	38	233	58	18	68	70	53	1290
19	78	28	32	42	37	243	56	17	167	62	66	1010
20	74	29	32	40	36	328	53	16	308	60	69	786
21	70	28	32	39	36	477	51	16	438	155	63	557
22	66	28	33	40	35	474	48	15	346	267	47	379
23	62	28	33	42	34	396	46	14	211	267	39	297
24	59	29	33	42	34	334	44	14	154	212	34	291
25	57	38	34	41	33	286	42	14	122	197	30	304
26	54	42	34	41	33	255	41	14	98	144	27	323
27	52	48	33	40	32	236	40	14	85	101	24	315
28	49	47	38	40	31	218	39	13	74	79	21	288
29	48	44	45	39	---	202	38	13	71	73	19	248
30	46	41	55	39	---	203	37	14	78	69	18	207
31	44	---	59	40	---	219	---	14	---	75	19	---
TOTAL	4085	1032	1120	1346	1137	5167	2552	650	2862	4306	4029	13141
MEAN	132	34.4	36.1	43.4	40.6	167	85.1	21.0	95.4	139	130	438
MAX	334	48	59	56	51	477	217	35	438	398	595	1680
MIN	44	28	32	39	31	32	37	13	14	50	18	22
MED	97	32	34	43	41	105	64	20	70	110	69	300
CFSM	.19	.05	.05	.06	.06	.24	.12	.03	.14	.20	.19	.63
IN.	.22	.05	.06	.07	.06	.27	.14	.03	.15	.23	.21	.70

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

	MEAN	812	271	371	611	862	945	747	311	349	580	909	1006
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1927 - 2001

ANNUAL TOTAL	42802	41427	
ANNUAL MEAN	117	113	647
HIGHEST ANNUAL MEAN			2285
LOWEST ANNUAL MEAN			90.1
HIGHEST DAILY MEAN	1370	Sep 10	1680
LOWEST DAILY MEAN	*13		13
ANNUAL SEVEN-DAY MINIMUM	13	May 29	14
MAXIMUM PEAK FLOW			1740
MAXIMUM PEAK STAGE			9.90
INSTANTANEOUS LOW FLOW			13
ANNUAL RUNOFF (CFSM)	.17	.16	.92
ANNUAL RUNOFF (INCHES)	2.27	2.20	12.55
10 PERCENT EXCEEDS	207	275	1610
50 PERCENT EXCEEDS	52	48	220
90 PERCENT EXCEEDS	21	24	37

* May 29-31, Jun 1-4, 10, 2000

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231268 ALLIGATOR CREEK AT CALLAHAN, FL

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

DRAINAGE AREA.--14.0 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level.

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	.27	1.7	4.9	2.8	1.4	e7.0	.06	.03	e.14	7.1	e6.0
2	2.7	.28	1.5	3.6	3.1	e1.6	e5.2	.06	.03	e.14	e10	e18
3	1.9	.27	1.4	2.9	3.2	e2.5	e4.0	.06	.03	e.13	e12	e42
4	1.6	.26	1.4	2.6	3.4	e12	e3.3	.06	.03	e.12	e10	e60
5	1.4	.28	1.4	2.3	3.6	e14	e2.6	.06	.03	e.60	e8.0	e48
6	1.3	.31	e1.3	2.3	3.7	e7.5	e2.1	.06	.03	e.40	e15	e40
7	1.3	.36	e1.1	2.2	3.2	e5.5	1.8	.05	.07	e.30	e54	e27
8	1.3	.36	e1.0	2.2	2.8	e5.0	1.6	.06	.09	e.20	e22	e12
9	1.1	.38	e1.4	2.2	2.6	e5.2	1.4	.05	.20	e.10	e12	4.3
10	.91	.37	e1.6	2.2	2.5	e6.0	1.2	.05	.20	e.05	e9.0	3.1
11	.76	.43	e1.8	2.1	2.4	e5.8	1.0	.05	.17	e.03	e7.5	8.6
12	.57	.41	e1.9	2.3	2.3	e5.5	.81	.46	1.4	.02	e5.0	12
13	.42	.45	e2.0	2.3	2.3	e8.4	.60	.08	.10	1.3	e4.0	128
14	.33	.49	e1.8	2.4	2.3	e11	.44	.05	2.0	1.6	e3.0	158
15	.26	.52	e2.1	2.4	2.2	e10	.32	.05	1.7	3.0	e2.8	121
16	.22	.59	e2.0	2.3	2.2	e15	.58	.05	1.1	2.5	e2.5	97
17	.17	.67	e2.2	2.3	2.1	e16	.56	.05	.73	1.1	e2.0	31
18	.15	.74	e2.0	2.2	2.1	e15	.45	.05	1.9	.54	e2.5	15
19	.13	.81	e1.8	2.2	1.9	e21	.28	.05	2.2	1.3	e30	10
20	.13	1.0	e1.6	2.1	1.9	e29	.16	.05	2.6	4.1	e18	7.2
21	.16	1.0	e2.0	2.0	1.8	e19	.10	.05	1.8	3.7	e10	5.3
22	.18	1.0	e2.4	2.0	1.8	e14	.07	.05	1.1	7.0	e6.0	15
23	.17	1.0	e2.0	2.2	1.7	e11	.06	.05	.99	6.8	e5.0	24
24	.16	1.1	e1.8	2.4	1.6	e10	.06	.05	1.2	3.0	e4.0	14
25	.16	3.2	e1.7	2.5	1.6	e9.5	.06	.04	1.1	1.2	e3.0	8.7
26	.16	2.7	e1.6	2.4	1.6	e9.0	.06	.04	.66	1.1	e2.0	7.2
27	.18	3.1	e1.6	2.3	1.6	e8.0	.06	.04	.37	4.0	e1.5	6.6
28	.17	2.9	3.5	2.2	1.5	e7.5	.06	1.1	.23	6.6	e1.0	4.9
29	.19	2.4	5.3	2.1	---	e8.2	.06	.09	e.18	3.4	e.90	3.5
30	.21	1.9	11	2.0	---	e12	.09	.03	e.16	1.5	e.85	2.5
31	.23	---	8.1	2.3	---	e9.5	---	.03	---	2.6	e1.5	---
TOTAL	22.22	29.55	74.0	74.4	65.8	315.1	36.08	3.08	22.43	58.57	272.15	939.9
MEAN	.72	.99	2.39	2.40	2.35	10.2	1.20	.099	.75	1.89	8.78	31.3
MAX	3.6	3.2	11	4.9	3.7	29	7.0	1.1	2.6	7.0	54	158
MIN	.13	.26	1.0	2.0	1.5	1.4	.06	.03	.03	.02	.85	2.5
CFSM	.05	.07	.17	.17	.17	.73	.09	.01	.05	.13	.63	2.24
IN.	.06	.08	.20	.20	.17	.84	.10	.01	.06	.16	.72	2.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	17.4	4.78	10.2	19.5	22.6	17.6	9.73	2.78	5.66	7.17	17.1	17.3								
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	.028	.60	.98	2.40	2.35	2.10	1.20	.037	.023	.083	.11	.086								
(WY)	1982	1991	1991	2001	2001	2000	2001	1995	1993	1993	1990	1990								

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1982 - 2001

ANNUAL TOTAL	1137.42	1913.28	
ANNUAL MEAN	3.11	5.24	12.6
HIGHEST ANNUAL MEAN			36.9 1998
LOWEST ANNUAL MEAN			3.34 2000
HIGHEST DAILY MEAN	168	Sep 7	158 Sep 14 878 Oct 8 1996
LOWEST DAILY MEAN	.00	Many days	.02 Jul 12 .00 Some years
ANNUAL SEVEN-DAY MINIMUM	.00	May 23	.03 May 30 .00 Some years
MAXIMUM PEAK FLOW			209 Sep 13 931 Oct 8 1996
MAXIMUM PEAK STAGE			9.70 Sep 13 14.35 Oct 8 1996
ANNUAL RUNOFF (CFSM)	.22	.37	.90
ANNUAL RUNOFF (INCHES)	3.02	5.08	12.25
10 PERCENT EXCEEDS	5.6	11	26
50 PERCENT EXCEEDS	1.1	1.8	3.1
90 PERCENT EXCEEDS	.01	.06	.18

e Estimated

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231289 NASSAU RIVER NEAR HEDGES, FL

LOCATION.--Lat 30°34'28" long 81°36'32", in land grant 47, T.2 N., R.27 E., Nassau County, Hydrologic Unit 03070205, near left bank 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 mi², approximately, does not include Inconstation 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 current year.

GAGE.--Water-stage recorder, acoustic velocity meter and data-collection platform. Datum of gage is 10.00 ft below sea level. 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 fair. There is no record, Dec. 15, 2000 to Sept. 30, 2001 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 OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1640	e1280	642	---	---	---	---	---	---	---	---	---
2	2350	832	504	---	---	---	---	---	---	---	---	---
3	1410	828	542	---	---	---	---	---	---	---	---	---
4	643	549	410	---	---	---	---	---	---	---	---	---
5	342	-22	943	---	---	---	---	---	---	---	---	---
6	-33	-179	783	---	---	---	---	---	---	---	---	---
7	-1140	873	503	---	---	---	---	---	---	---	---	---
8	-1420	76	422	---	---	---	---	---	---	---	---	---
9	-392	-75	-174	---	---	---	---	---	---	---	---	---
10	693	655	-564	---	---	---	---	---	---	---	---	---
11	334	-1090	79	---	---	---	---	---	---	---	---	---
12	30	47	702	---	---	---	---	---	---	---	---	---
13	-14	454	46	---	---	---	---	---	---	---	---	---
14	477	1250	1210	---	---	---	---	---	---	---	---	---
15	749	627	---	---	---	---	---	---	---	---	---	---
16	523	946	---	---	---	---	---	---	---	---	---	---
17	602	1230	---	---	---	---	---	---	---	---	---	---
18	844	553	---	---	---	---	---	---	---	---	---	---
19	662	-590	---	---	---	---	---	---	---	---	---	---
20	242	267	---	---	---	---	---	---	---	---	---	---
21	50	1570	---	---	---	---	---	---	---	---	---	---
22	-117	2.2	---	---	---	---	---	---	---	---	---	---
23	-1550	81	---	---	---	---	---	---	---	---	---	---
24	-445	-623	---	---	---	---	---	---	---	---	---	---
25	177	988	---	---	---	---	---	---	---	---	---	---
26	124	996	---	---	---	---	---	---	---	---	---	---
27	817	677	---	---	---	---	---	---	---	---	---	---
28	e2870	594	---	---	---	---	---	---	---	---	---	---
29	605	764	---	---	---	---	---	---	---	---	---	---
30	828	923	---	---	---	---	---	---	---	---	---	---
31	989	---	---	---	---	---	---	---	---	---	---	---
TOTAL	12890	14483.2	6048	---	---	---	---	---	---	---	---	---
MEAN	416	483	432	---	---	---	---	---	---	---	---	---
MAX	2870	1570	1210	---	---	---	---	---	---	---	---	---
MIN	-1550	-1090	-564	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	986	1398	1375	1679	1508	1629	1274	823	1386	1230	1524	1282							
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1983 - 2001	
ANNUAL TOTAL	67966.5		33421.2			
ANNUAL MEAN	294		446		1338	
HIGHEST ANNUAL MEAN					3966	
LOWEST ANNUAL MEAN					266	
HIGHEST DAILY MEAN	2870	Oct 28	2870	Oct 28	11300	Sep 2 1985
LOWEST DAILY MEAN	-1830	May 30	-1550	Oct 23	-3370	May 26 1988
ANNUAL SEVEN-DAY MINIMUM	-692	Sep 21	-275	Oct 6	-692	Sep 21 2000
MAXIMUM PEAK STAGE			13.74	Oct 1	14.88	Oct 7 1996
10 PERCENT EXCEEDS	978		1240		3600	
50 PERCENT EXCEEDS	267		542		892	
90 PERCENT EXCEEDS	-585		-493		-300	

e Estimated

Note.--Negative figures indicate reverse flow.

02231289 NASSAU RIVER NEAR HEDGES, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
1	13.74	11.62	12.98	9.89	12.61	8.55	---	---	---	---	---	---
2	13.37	10.69	12.88	9.44	12.65	8.86	---	---	---	---	---	---
3	13.12	9.95	12.80	9.37	12.88	10.15	---	---	---	---	---	---
4	13.02	9.89	12.77	9.42	12.86	10.29	---	---	---	---	---	---
5	12.81	9.33	12.87	9.64	12.75	9.72	---	---	---	---	---	---
6	12.65	9.03	12.97	10.12	12.69	9.27	---	---	---	---	---	---
7	12.78	8.94	12.76	9.44	12.68	9.44	---	---	---	---	---	---
8	13.11	9.71	12.78	9.22	12.72	8.33	---	---	---	---	---	---
9	13.15	10.65	12.91	9.10	12.77	7.96	---	---	---	---	---	---
10	13.00	9.95	12.83	8.82	13.06	8.33	---	---	---	---	---	---
11	12.91	9.34	13.18	8.76	13.17	8.61	---	---	---	---	---	---
12	12.94	9.31	13.37	9.71	13.05	8.30	---	---	---	---	---	---
13	13.08	9.42	13.35	9.49	13.28	8.17	---	---	---	---	---	---
14	13.14	9.61	13.12	9.22	13.05	8.69	---	---	---	---	---	---
15	13.08	9.36	13.17	8.66	---	---	---	---	---	---	---	---
16	13.10	9.16	13.10	8.97	---	---	---	---	---	---	---	---
17	13.14	9.25	12.87	8.89	---	---	---	---	---	---	---	---
18	13.11	9.12	12.87	8.75	---	---	---	---	---	---	---	---
19	13.07	9.07	13.13	9.71	---	---	---	---	---	---	---	---
20	13.11	9.69	12.99	9.88	---	---	---	---	---	---	---	---
21	13.06	9.40	12.57	8.23	---	---	---	---	---	---	---	---
22	13.10	9.46	12.70	8.03	---	---	---	---	---	---	---	---
23	13.43	9.80	12.69	8.01	---	---	---	---	---	---	---	---
24	13.45	10.86	12.74	8.16	---	---	---	---	---	---	---	---
25	13.37	10.48	13.09	9.16	---	---	---	---	---	---	---	---
26	13.41	10.27	12.80	8.26	---	---	---	---	---	---	---	---
27	13.38	10.38	12.71	7.94	---	---	---	---	---	---	---	---
28	13.18	9.73	12.65	7.85	---	---	---	---	---	---	---	---
29	13.17	9.46	12.59	8.19	---	---	---	---	---	---	---	---
30	13.18	9.90	12.47	8.03	---	---	---	---	---	---	---	---
31	12.99	9.51	---	---	---	---	---	---	---	---	---	---
MAX	13.74	11.62	13.37	10.12	13.28	10.29	---	---	---	---	---	---
MIN	12.65	8.94	12.47	7.85	12.61	7.96	---	---	---	---	---	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

YEAR HIGH LOW MAXIMUM 13.74 MINIMUM 12.47
 LOW MAXIMUM 11.62 MINIMUM 7.85

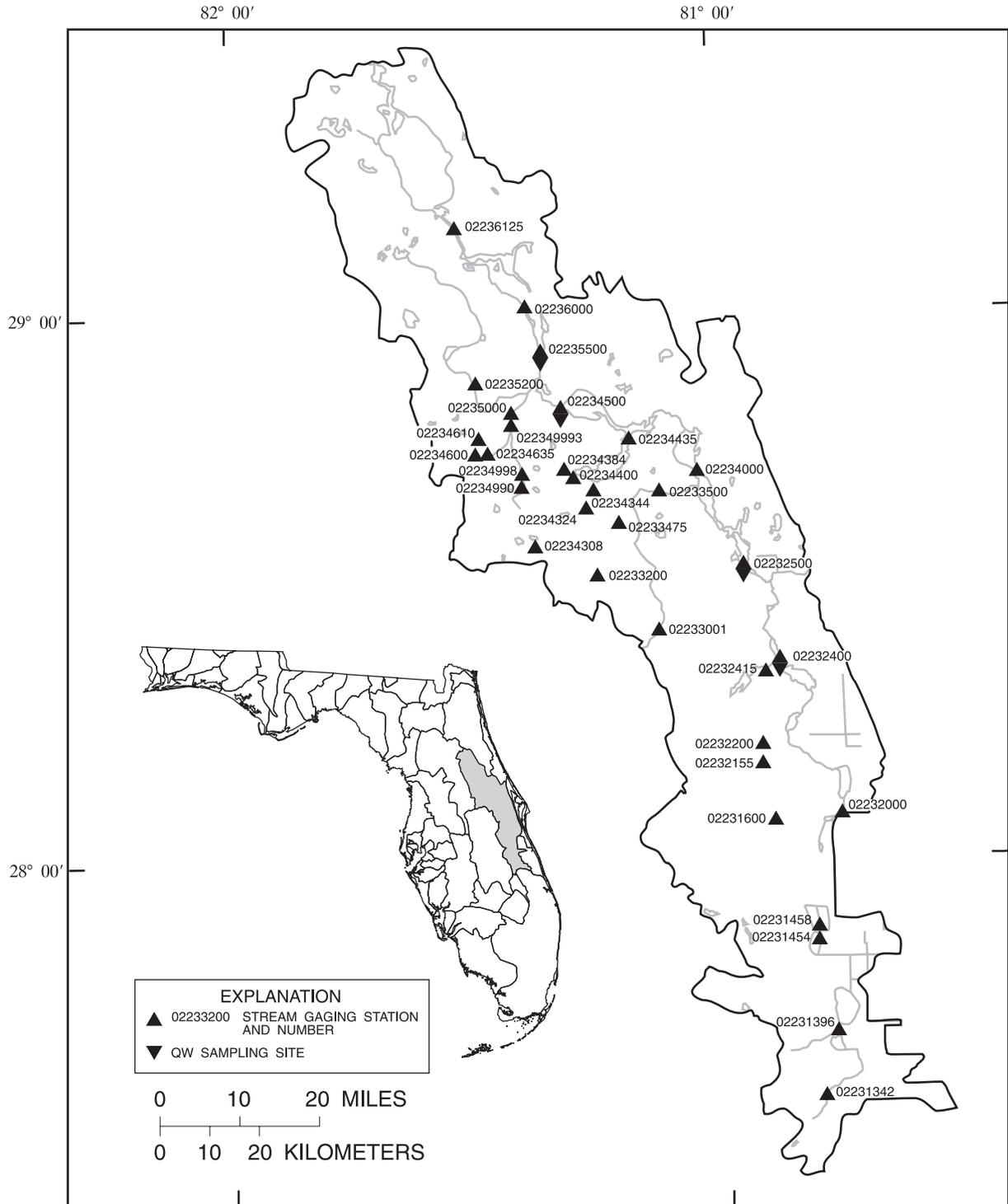


Figure 4.--Location of stream gaging stations in the St. Johns River basin above the Ocklawaha River.

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 mi².

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

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

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

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	1.2	.16	.52	.80	.00	36	.00	.50	20	59	38
2	21	1.1	.13	.56	.72	.00	25	.00	1.1	15	110	45
3	28	.91	.12	.58	.62	.00	19	.00	.79	11	166	39
4	63	.80	.13	.57	.59	.00	16	.24	.89	14	216	33
5	70	.73	.14	.52	.54	.00	13	.13	2.0	48	262	29
6	64	.62	.14	.53	.43	.00	9.5	.00	2.6	68	318	27
7	54	.59	.13	.44	.35	.00	5.8	.00	2.8	57	262	39
8	45	.56	.13	.45	.29	.00	3.7	.00	4.4	49	196	82
9	37	.49	.14	.51	.21	.00	2.5	.00	9.9	98	140	126
10	30	.44	.14	.60	.17	.00	1.7	.00	14	148	106	443
11	25	.44	.16	.44	.13	.00	1.5	.00	15	267	85	506
12	26	.41	.17	.51	.08	.00	1.3	.00	14	254	82	378
13	18	.32	.17	.47	.05	.00	1.8	.00	15	255	125	277
14	14	.23	.17	.48	.00	.00	2.0	.00	15	249	138	307
15	12	.20	.13	.57	.00	.00	1.5	.00	14	371	130	407
16	9.2	.17	.11	.59	.00	.00	.85	.00	22	443	125	382
17	7.4	.18	.10	.62	.00	.00	.33	.00	24	371	116	294
18	6.3	.24	.07	.66	.00	.00	.04	.00	22	298	114	223
19	5.3	.29	.07	.65	.00	.00	.00	.00	23	280	169	163
20	4.7	.26	.09	.76	.00	.00	.00	.00	27	227	137	119
21	4.4	.26	.12	.81	.00	.00	.00	.00	25	220	108	93
22	4.3	.20	.17	.95	.00	.00	.00	.00	26	268	109	74
23	3.7	.14	.18	1.4	.00	.00	.00	.19	27	258	126	64
24	3.6	.14	.20	1.3	.00	.00	.00	.69	29	217	97	58
25	3.4	.16	.18	1.2	.00	.00	.00	.21	28	169	72	56
26	3.0	.29	.15	1.1	.00	.00	.00	.06	26	128	57	53
27	2.6	.44	.11	.99	.00	.00	.00	.48	26	106	47	66
28	2.2	.36	.27	.97	.00	.00	.00	3.7	30	91	40	71
29	1.9	.31	.84	.90	---	.00	.00	2.1	29	84	36	91
30	1.6	.24	.79	.90	---	22	.00	1.1	24	79	42	100
31	1.3	---	.60	.90	---	46	---	.57	---	68	38	---
TOTAL	598.9	12.72	6.21	22.45	4.98	68.00	141.52	9.47	499.98	5231	3828	4683
MEAN	19.3	.42	.20	.72	.18	2.19	4.72	.31	16.7	169	123	156
MAX	70	1.2	.84	1.4	.80	46	36	3.7	30	443	318	506
MIN	1.3	.14	.07	.44	.00	.00	.00	.00	.50	11	36	27
CFSM	.37	.01	.00	.01	.00	.04	.09	.01	.32	3.21	2.35	2.97
IN.	.42	.01	.00	.02	.00	.05	.10	.01	.35	3.70	2.71	3.31

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

	79.2	34.6	20.7	27.9	31.3	43.3	16.6	12.1	37.8	67.3	81.5	107
MEAN	79.2	34.6	20.7	27.9	31.3	43.3	16.6	12.1	37.8	67.3	81.5	107
MAX	384	276	79.0	125	166	229	80.3	134	193	227	222	467
(WY)	2000	1988	1998	1979	1983	1998	1993	1979	1982	1991	1995	1979
MIN	.017	.42	.027	.72	.18	.26	.009	.000	.000	.096	2.69	1.83
(WY)	1989	1981	1982	2001	2001	1999	1999	1981	1981	1981	1980	1980

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1977 - 2001

ANNUAL TOTAL	4066.46	15106.23	
ANNUAL MEAN	11.1	41.4	47.3
HIGHEST ANNUAL MEAN			95.3
LOWEST ANNUAL MEAN			6.14
HIGHEST DAILY MEAN	97	Jul 31	506
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	May 19	.00
MAXIMUM PEAK FLOW			548
MAXIMUM PEAK STAGE			37.16
ANNUAL RUNOFF (CFSM)	.21		.79
ANNUAL RUNOFF (INCHES)	2.88		10.68
10 PERCENT EXCEEDS	31		133
50 PERCENT EXCEEDS	4.4		.90
90 PERCENT EXCEEDS	.01		.07

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02231396 BLUE CYPRESS CREEK NEAR FELLSMERE, FL

LOCATION.--Lat 27°43'40", long 80°48'19", in NW¹/₄ 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 mi².

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 sea level (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 except for period of estimated daily discharge, which is poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	1.3	.56	1.0	1.1	.00	1.6	.00	6.4	88	135	50
2	18	1.2	.46	1.0	1.1	.00	1.3	.00	6.5	69	218	46
3	20	1.1	.33	.97	1.0	.00	1.1	.00	6.4	53	e230	43
4	35	.94	.24	.94	1.0	.00	.97	.00	13	46	e420	44
5	39	.87	.17	.86	.95	.00	.80	.00	11	47	e460	46
6	36	.78	.12	.83	.95	.00	.55	.00	9.2	51	e380	122
7	33	.74	.10	.79	.97	.00	.38	.00	8.1	49	e325	249
8	25	.64	.08	.80	.90	.00	.26	.00	10	53	e405	419
9	17	.51	.01	.79	.81	.00	.09	.00	23	71	e572	582
10	13	.40	.00	.74	.76	.00	.00	.00	34	86	519	1460
11	10	.30	.00	.79	.74	.00	.00	.00	34	116	607	1260
12	8.7	.16	.00	.82	.74	.00	.00	.00	31	141	563	1080
13	7.4	.12	.00	.82	.80	.00	.00	.00	28	147	440	891
14	6.5	.10	.00	.87	.76	.00	.00	.00	21	151	364	954
15	5.5	.08	.02	.90	.73	.00	.00	.00	17	199	320	1160
16	4.8	.00	.08	.93	.67	.00	.00	.00	27	263	269	1080
17	4.3	.00	.17	.98	.53	.00	.00	.00	35	301	241	886
18	3.8	.00	.16	1.0	.31	.00	.00	.00	50	283	262	726
19	3.3	.00	.14	.96	.23	.00	.00	.00	116	273	326	598
20	3.0	.00	.10	1.0	.15	.00	.00	.00	82	284	393	504
21	2.9	.00	.13	1.1	.07	.00	.00	.00	57	329	359	426
22	2.9	.00	.21	1.1	.00	.00	.00	.00	51	337	320	362
23	2.6	.00	.22	1.2	.00	.00	.00	.00	44	338	285	310
24	2.4	.00	.21	1.3	.00	.00	.00	.00	58	280	245	269
25	2.1	.00	.21	1.3	.00	.00	.00	.00	81	233	221	251
26	2.0	.00	.15	1.4	.00	.00	.00	.00	112	188	188	242
27	2.0	.00	.14	1.3	.00	.00	.00	1.6	137	179	161	260
28	1.8	.29	.34	1.3	.00	.00	.00	8.7	143	185	129	283
29	1.7	.60	.90	1.3	---	.00	.00	15	132	191	103	354
30	1.6	.58	1.1	1.3	---	.00	.00	11	113	172	83	461
31	1.5	---	1.1	1.2	---	.51	---	6.8	---	146	64	---
TOTAL	338.8	10.71	7.45	31.59	15.27	0.51	7.05	43.10	1496.6	5349	9607	15418
MEAN	10.9	.36	.24	1.02	.55	.016	.23	1.39	49.9	173	310	514
MAX	39	1.3	1.1	1.4	1.1	.51	1.6	15	143	338	607	1460
MIN	1.5	.00	.00	.74	.00	.00	.00	.00	6.4	46	64	43
CFSM	.10	.00	.00	.01	.01	.00	.00	.01	.48	1.64	2.95	4.89
IN.	.12	.00	.00	.01	.01	.00	.00	.02	.53	1.90	3.40	5.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	224	187	102	102	125	105
MAX	821	760	435	519	711	553
(WY)	2000	1998	1998	1998	1998	1996
MIN	10.9	.36	.24	1.02	.55	.016
(WY)	2001	2001	2001	2001	2001	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1996 - 2001

ANNUAL TOTAL	3263.60	32325.08	
ANNUAL MEAN	8.92	88.6	121
HIGHEST ANNUAL MEAN			282
LOWEST ANNUAL MEAN			64.8
HIGHEST DAILY MEAN	95	Sep 12	1460
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	May 13	.00
MAXIMUM PEAK FLOW			1540
MAXIMUM PEAK STAGE			28.39
ANNUAL RUNOFF (CFSM)	.085	.84	a29.01
ANNUAL RUNOFF (INCHES)	1.16	11.45	15.67
10 PERCENT EXCEEDS	26	314	316
50 PERCENT EXCEEDS	2.2	1.0	19
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated
a At present datum

02231454 SIXMILE CREEK NEAR KENANSVILLE, FL

LOCATION.--Lat 27°52'00", long 80°48'18", in SE¹/₄ 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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level.

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	.39	.06	.00	.00	.00	.00	.00	3.1	9.5	30	11
2	1.7	.37	.06	.00	.00	.00	.00	.00	4.1	6.5	29	8.6
3	1.9	.34	.05	.00	.00	.00	.00	.01	5.0	4.1	46	6.2
4	2.1	.33	.05	.00	.00	.00	.00	.13	5.7	3.0	86	4.6
5	2.0	.30	.04	.00	.00	.00	.00	.14	4.9	2.3	77	3.5
6	1.9	.29	.04	.00	.00	.00	.00	.17	4.0	2.2	61	3.2
7	1.7	.27	.04	.00	.00	.00	.00	.19	3.8	2.4	59	4.6
8	1.6	.24	.04	.00	.00	.00	.00	.22	11	2.2	56	8.1
9	1.4	.23	.04	.00	.00	.00	.00	.22	18	4.4	51	14
10	1.3	.22	.03	.00	.00	.00	.00	.20	15	6.4	48	30
11	1.3	.19	.03	.00	.00	.00	.00	.17	12	9.1	49	36
12	1.2	.17	.03	.00	.00	.00	.00	.15	8.7	17	50	45
13	1.1	.16	.03	.00	.00	.00	.00	.11	6.5	15	48	54
14	1.1	.15	.02	.00	.00	.00	.00	.08	4.6	17	47	66
15	1.0	.12	.02	.00	.00	.00	.00	.05	3.7	58	46	82
16	.91	.11	.02	.00	.00	.00	.00	.03	4.7	59	44	85
17	.85	.11	.02	.00	.00	.00	.00	.01	9.8	37	43	84
18	.82	.10	.02	.00	.00	.00	.00	.00	9.6	22	43	83
19	.78	.10	.01	.00	.00	.00	.00	.00	7.1	18	44	81
20	.73	.09	.01	.00	.00	.00	.00	.00	5.2	22	41	79
21	.72	.08	.01	.00	.00	.00	.00	.00	3.7	20	38	77
22	.71	.08	.00	.00	.00	.00	.00	.00	3.5	41	35	75
23	.66	.07	.00	.00	.00	.00	.00	.08	4.5	56	32	72
24	.64	.07	.00	.00	.00	.00	.00	.19	7.6	46	30	70
25	.62	.07	.00	.00	.00	.00	.00	.26	13	41	30	71
26	.57	.07	.00	.00	.00	.00	.00	1.4	17	40	34	68
27	.54	.08	.00	.00	.00	.00	.00	2.1	13	40	31	70
28	.52	.08	.00	.00	.00	.00	.00	2.5	15	40	27	72
29	.48	.07	.01	.00	---	.00	.00	3.2	16	37	23	73
30	.45	.06	.01	.00	---	.00	.00	3.3	13	34	20	75
31	.43	---	.00	.00	---	.00	---	3.0	---	32	16	---
TOTAL	33.53	5.01	0.69	0.00	0.00	0.00	0.00	17.91	252.8	744.1	1314	1511.8
MEAN	1.08	.17	.022	.000	.000	.000	.000	.58	8.43	24.0	42.4	50.4
MAX	2.1	.39	.06	.00	.00	.00	.00	3.3	18	59	86	85
MIN	.43	.06	.00	.00	.00	.00	.00	.00	3.1	2.2	16	3.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001
MEAN	18.3	12.5	5.75	6.04	4.23	3.48	3.05
MAX	68.3	70.1	31.4	30.4	22.5	16.7	8.87
(WY)	1996	1998	1998	1998	1998	1998	1995
MIN	.77	.000	.000	.000	.000	.000	.000
(WY)	1998	1997	1997	1997	1997	1997	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1995 - 2001

ANNUAL TOTAL	680.85	3879.84	
ANNUAL MEAN	1.86	10.6	6.89
HIGHEST ANNUAL MEAN			14.9
LOWEST ANNUAL MEAN			.18
HIGHEST DAILY MEAN	68	Jul 31	86
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	May 31	.00
MAXIMUM PEAK FLOW			94
MAXIMUM PEAK STAGE			22.44
10 PERCENT EXCEEDS	2.7		44
50 PERCENT EXCEEDS	.52		.14
90 PERCENT EXCEEDS	.00		.00

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level.

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e9.2	e1.2	.52	.81	.75	.77	1.5	.84	2.7	3.8	e21	4.3
2	e8.8	e1.1	.52	.85	.75	.83	1.1	.72	4.8	2.7	e38	6.5
3	e8.5	e.98	.55	.85	.75	.84	.94	1.3	2.8	2.1	e80	9.0
4	e10	e.86	.55	.85	.74	.88	.88	2.5	2.1	1.8	e79	12
5	e12	e.80	.55	.88	.72	1.1	.87	1.6	1.9	2.0	e60	15
6	e13	e.74	.57	.91	.72	.86	.82	1.2	1.6	1.9	e56	16
7	e12	e.69	.57	.92	.70	.79	.82	.93	1.6	3.6	e52	14
8	e10	e.62	.56	.92	.69	.81	.92	1.2	5.7	3.5	e47	12
9	e9.5	e.56	.56	.97	.69	.80	.97	1.0	4.5	9.0	e41	9.9
10	e9.0	e.54	.59	.98	.67	.82	.99	.85	3.5	13	e38	7.7
11	e8.6	e.51	.63	.98	.66	.85	1.1	.77	2.5	14	e39	6.1
12	e8.0	e.48	.63	.95	.69	.85	1.1	.76	1.8	e15	e37	2.7
13	e7.2	e.46	.63	.95	.67	.86	1.0	.72	1.8	e17	e33	3.0
14	e6.5	e.45	.68	.95	.66	.94	1.1	.68	1.4	e35	e29	5.1
15	e6.0	e.43	.69	.92	.66	.97	.88	.67	1.2	e63	e26	7.6
16	e5.3	e.44	.69	.92	.64	.92	.72	.64	1.8	e46	e18	8.0
17	e4.8	.45	.67	.92	.63	.94	.66	.59	3.3	e28	e17	7.3
18	e4.3	.47	.69	.91	.64	.95	.60	.53	3.4	e18	e16	6.8
19	e4.0	.47	.69	.92	.64	1.0	.60	.50	2.4	e18	e17	6.6
20	e3.8	.45	.69	.92	.65	1.0	.61	.49	1.7	e19	e14	6.4
21	e3.6	.45	.70	.85	.70	.81	.60	.50	1.3	e28	e11	6.2
22	e3.3	.48	.72	.85	.69	.76	.57	.55	1.8	e49	e9.4	6.0
23	e3.1	.49	.72	.86	.70	.70	.56	1.7	3.4	e53	e7.7	5.8
24	e2.9	.49	.72	.81	.83	.69	.51	1.5	4.5	e40	e6.3	5.6
25	e2.6	.47	.74	.81	.79	.64	.48	1.7	7.6	e37	e5.0	5.8
26	e2.4	.49	.75	.81	.78	.63	.56	4.3	6.0	e36	e4.4	5.8
27	e2.1	.49	.74	.78	.80	.61	.47	2.3	4.9	e36	e3.6	6.2
28	e1.9	.49	.76	.78	.77	.63	.42	1.9	7.4	e34	e2.8	6.1
29	e1.6	.50	.78	.77	---	.79	.44	2.5	7.7	e33	e2.1	6.5
30	e1.4	.52	.78	.75	---	2.4	.68	2.3	5.6	e27	2.0	6.6
31	e1.2	---	.80	.75	---	1.6	---	1.8	---	e25	2.7	---
TOTAL	186.6	17.57	20.44	27.10	19.78	28.04	23.47	39.54	102.7	714.4	815.0	226.6
MEAN	6.02	.59	.66	.87	.71	.90	.78	1.28	3.42	23.0	26.3	7.55
MAX	13	1.2	.80	.98	.83	2.4	1.5	4.3	7.7	63	80	16
MIN	1.2	.43	.52	.75	.63	.61	.42	.49	1.2	1.8	2.0	2.7
CFSM	.70	.07	.08	.10	.08	.11	.09	.15	.40	2.68	3.06	.88
IN.	.81	.08	.09	.12	.09	.12	.10	.17	.44	3.09	3.53	.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001
MEAN	31.9	15.1	19.7	10.2	6.15	7.04	8.86
MAX	112	56.9	106	48.1	26.3	21.4	30.9
(WY)	1996	1998	1998	1998	1998	1998	1995
MIN	2.67	.59	.66	.87	.71	.36	.50
(WY)	1997	2001	2001	2001	2001	1997	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1995 - 2001

ANNUAL TOTAL	1792.85	2221.24		
ANNUAL MEAN	4.90	6.09	13.2	
HIGHEST ANNUAL MEAN			24.1	1998
LOWEST ANNUAL MEAN			2.40	1997
HIGHEST DAILY MEAN	84	Jul 31	e80	Aug 3
LOWEST DAILY MEAN	.30	Jun 22	.42	Apr 28
ANNUAL SEVEN-DAY MINIMUM	.36	Jun 16	.45	Nov 14
MAXIMUM PEAK FLOW			250	Nov 14 1997
MAXIMUM PEAK STAGE			21.59	Oct 19 1995
INSTANTANEOUS LOW FLOW			.42	Apr 27-29
ANNUAL RUNOFF (CFSM)	.57	.71		1.54
ANNUAL RUNOFF (INCHES)	7.76	9.61		20.90
10 PERCENT EXCEEDS	9.5	17		38
50 PERCENT EXCEEDS	1.1	.98		2.3
90 PERCENT EXCEEDS	.52	.56		.47

e Estimated
* Many days 1995, 1998 water years

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02232000 ST. JOHNS RIVER NEAR MELBOURNE, FL

LOCATION.--Lat 28°05'04", long 80°45'08", in NW $\frac{1}{4}$ sec.5, T.28 S., R.36 E., Brevard County, Hydrologic Unit 03080101, near center of span on upstream side of bridge on U.S. Highway 192, 1.1 mi downstream from Sawgrass Lake, 1.7 mi upstream from Lake Washington, 9.2 mi west of Melbourne, and 262 mi upstream from mouth.

DRAINAGE AREA.--968 mi².

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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	104	45	39	2.6	26	41	-31	.18	20	1080	2360
2	233	100	27	8.4	30	42	21	-10	3.6	20	1220	2310
3	255	e94	-32	34	18	41	53	-1.8	-.80	21	1370	2270
4	440	e89	19	44	37	35	28	-19	.32	39	1440	2150
5	505	e83	14	60	42	4.6	27	-3.5	1.3	31	1690	2080
6	611	e80	44	39	48	8.2	43	-11	7.1	25	1970	1990
7	585	e77	4.5	36	34	12	28	-15	4.5	50	2090	1870
8	519	75	46	29	43	26	44	-7.9	11	40	2300	1870
9	419	66	12	9.4	41	31	32	-8.4	14	34	2490	1970
10	678	38	21	30	20	-8.1	28	-3.8	16	93	2680	1890
11	644	20	47	41	23	33	26	-5.7	18	104	2810	1810
12	576	73	16	43	42	45	18	-7.2	30	88	2830	1890
13	581	60	52	3.8	53	16	25	-12	21	102	2820	1970
14	508	45	22	59	45	-6.4	3.4	-16	-4.5	75	2820	2140
15	465	32	53	24	38	37	36	1.3	10	128	2970	2240
16	413	50	58	27	45	24	.74	-7.5	5.3	176	2920	2320
17	365	-30	20	31	-13	6.6	9.6	3.6	.30	169	2830	2630
18	312	33	37	35	44	-11	-25	-8.1	2.5	187	2880	2980
19	282	41	40	63	72	37	-6.1	2.0	5.2	266	3020	3250
20	184	-9.4	26	16	47	17	-2.6	-2.8	-2.0	346	3070	3380
21	268	44	37	10	33	-4.2	-14	-8.1	6.0	397	3080	3390
22	161	44	.77	25	41	3.8	-12	.09	14	579	3090	3440
23	156	38	40	51	8.3	-13	-8.9	-17	11	734	3010	3400
24	183	48	-29	60	67	18	-11	-20	12	799	2950	3430
25	195	36	24	26	41	10	-14	-21	18	855	2880	3280
26	144	40	96	46	17	-3.7	-41	-10	20	873	2760	3250
27	157	47	51	53	20	-32	-7.9	2.7	11	864	2730	3290
28	149	5.5	40	31	30	24	-9.8	-4.3	24	886	2640	3290
29	141	15	6.8	57	---	14	-19	2.6	28	920	2560	3130
30	104	29	42	43	---	45	-.37	-5.6	25	1000	2490	3070
31	116	---	24	23	---	32	---	-9.3	---	1040	2420	---
TOTAL	10476	1467.1	904.07	1096.6	968.9	509.8	292.07	-253.71	312.00	10961	77910	78340
MEAN	338	48.9	29.2	35.4	34.6	16.4	9.74	-8.18	10.4	354	2513	2611
MAX	678	104	96	63	72	45	53	3.6	30	1040	3090	3440
MIN	104	-30	-32	3.8	-13	-32	-41	-31	-4.5	20	1080	1810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

MEAN	1646	979	556	417	420	471	358	164	320	616	864	1286
MAX	6377	3062	2753	2338	2782	2608	2161	852	3073	3007	2652	5424
(WY)	1954	1995	1988	1998	1998	1960	1998	1993	1968	1968	1960	1953
MIN	87.7	31.7	21.9	9.44	4.68	1.03	.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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	45685.32		182983.83			
ANNUAL MEAN	125		501		676	
HIGHEST ANNUAL MEAN					1756	
LOWEST ANNUAL MEAN					93.9	
HIGHEST DAILY MEAN	678	Oct 10	3440	Sep 22	18000	Oct 18 1956
LOWEST DAILY MEAN	-77	May 30	-41	Apr 26	-118	May 23 1984
ANNUAL SEVEN-DAY MINIMUM	-41	May 26	-18	Apr 25	-78	Jun 18 1984
MAXIMUM PEAK STAGE			6.56	Sep 26	9.66	Sep 30 1960
10 PERCENT EXCEEDS	372		2450		1740	
50 PERCENT EXCEEDS	75		39		305	
90 PERCENT EXCEEDS	-18		-7.3		50	

e Estimated

Note.--Negative figures indicate reverse flow

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.19	3.00	2.49	2.25	2.06	1.70	1.65	1.21	.90	1.71	4.23	5.57
2	3.18	2.97	2.49	2.26	2.06	1.67	1.67	1.18	.89	1.74	4.31	5.52
3	3.28	2.94	2.50	2.24	2.05	1.62	1.66	1.20	.90	1.75	4.42	5.48
4	3.51	---	2.49	2.23	2.03	1.61	1.68	1.27	.89	1.76	4.51	5.42
5	3.60	---	2.47	2.20	2.01	1.67	1.69	1.26	.90	1.80	4.64	5.33
6	3.63	---	2.43	2.20	2.00	1.63	1.68	1.25	.90	1.88	4.78	5.27
7	3.66	2.80	2.43	2.19	1.99	1.58	1.68	1.23	.89	2.01	4.90	5.27
8	3.68	2.79	2.41	2.17	1.97	1.55	1.67	1.23	.89	2.05	5.02	5.28
9	3.74	2.76	2.41	2.21	1.96	1.51	1.67	1.20	.91	2.17	5.14	5.27
10	3.69	2.74	2.40	2.17	1.96	1.53	1.65	1.17	.95	2.35	5.25	5.27
11	3.68	2.74	2.40	2.15	1.96	1.49	1.64	1.15	.99	2.49	5.36	5.22
12	3.68	2.71	2.40	2.15	1.95	1.46	1.62	1.14	1.08	2.58	5.42	5.26
13	3.66	2.69	2.39	2.18	1.94	1.43	1.61	1.12	1.12	2.65	5.46	5.32
14	3.64	2.67	2.39	2.15	1.92	1.48	1.61	1.08	1.17	2.75	5.51	5.50
15	3.61	2.67	2.38	2.14	1.90	1.42	1.58	1.04	1.25	2.85	5.62	5.64
16	3.56	2.64	2.37	2.14	1.87	1.42	1.57	1.01	1.26	2.90	5.65	5.75
17	3.52	2.62	2.37	2.14	1.89	1.44	1.54	.99	1.26	2.96	5.69	5.84
18	3.47	2.62	2.37	2.13	1.88	1.46	1.54	.97	1.26	3.12	5.73	5.94
19	3.42	2.59	2.35	2.10	1.81	1.39	1.45	.92	1.26	3.37	5.79	6.06
20	3.39	2.63	2.35	2.14	1.78	1.39	1.42	.89	1.25	3.47	5.82	6.13
21	3.37	2.59	2.32	2.15	1.77	1.38	1.40	.84	1.24	3.62	5.87	6.18
22	3.36	2.56	2.32	2.13	1.75	1.37	1.38	.81	1.27	3.91	5.90	6.22
23	3.32	2.54	2.31	2.15	1.76	1.35	1.35	.84	1.35	3.96	5.89	6.24
24	3.29	2.51	2.34	2.11	1.75	1.32	1.32	.89	1.42	3.99	5.88	6.28
25	3.24	2.50	2.32	2.11	1.75	1.30	1.31	.86	1.48	4.02	5.85	6.36
26	3.22	2.53	2.28	2.09	1.75	1.29	1.38	.98	1.51	4.05	5.82	6.43
27	3.18	2.54	2.27	2.08	1.74	1.30	1.26	.95	1.55	4.08	5.79	6.49
28	3.13	2.53	2.27	2.07	1.71	1.23	1.22	.94	1.62	4.10	5.76	6.50
29	3.10	2.53	2.30	2.05	---	1.23	1.20	.92	1.67	4.12	5.70	6.46
30	3.06	2.51	2.28	2.04	---	1.44	1.18	.94	1.69	4.14	5.65	6.48
31	3.03	---	2.27	2.05	---	1.54	---	.92	---	4.18	5.61	---
MEAN	3.42	2.66	2.37	2.15	1.89	1.46	1.51	1.05	1.19	2.98	5.39	5.80
MAX	3.74	3.00	2.50	2.26	2.06	1.70	1.69	1.27	1.69	4.18	5.90	6.50
MIN	3.03	2.50	2.27	2.04	1.71	1.23	1.18	.81	.89	1.71	4.23	5.22

CAL YR 2000	MEAN 2.62	MAX 3.74	MIN 1.26
WTR YR 2001	MEAN 2.66	MAX 6.50	MIN .81

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	1.4	.75	.46	.91	.34	14	.42	1.1	2.2	2.8	5.1
2	10	1.3	.76	.48	.90	.31	7.5	.37	1.5	1.6	4.4	4.4
3	15	1.3	.76	.50	.87	.30	3.3	1.9	1.2	1.2	13	3.5
4	76	1.2	.76	.52	.91	.45	2.0	3.0	1.0	.95	37	2.8
5	62	1.2	.70	.54	1.0	.75	1.4	2.7	.86	.93	102	2.7
6	32	1.1	.63	.60	.96	.60	1.1	1.6	.89	1.0	79	2.8
7	21	1.1	.61	.59	.88	.64	.87	1.1	2.6	.92	202	5.4
8	16	1.1	.64	.61	.80	.55	.71	.99	4.5	1.4	91	11
9	12	1.1	.68	.68	.72	.53	.59	.96	3.0	1.6	52	17
10	9.3	1.0	.68	.63	.68	.52	.51	.95	2.0	2.5	44	19
11	7.7	.99	.68	.67	.68	.54	.48	.95	2.2	2.9	96	15
12	6.5	.92	.95	.73	.65	.55	.46	.93	3.0	2.1	64	14
13	5.4	.86	.88	.73	.59	.59	.43	.85	2.0	1.6	41	20
14	4.7	.87	.82	.69	.60	.60	.40	.77	1.5	1.6	33	133
15	4.1	.85	.80	.69	.56	.60	.36	.70	1.3	2.1	36	209
16	3.6	.80	.79	.68	.53	.54	.32	.87	1.3	2.3	22	129
17	3.1	.81	.76	.71	.45	.52	.26	.49	1.5	3.7	16	83
18	2.8	.77	.66	.77	.38	.50	.22	.41	5.6	6.6	17	57
19	2.6	.76	.64	.77	.35	.60	.24	.35	5.7	4.9	35	41
20	2.3	.77	.63	1.4	.36	.69	.25	.29	4.0	3.4	51	29
21	2.1	.75	.62	2.0	.34	.55	.24	.25	2.6	2.6	36	21
22	2.1	.68	.62	1.8	.31	.49	.22	.23	2.2	3.7	34	17
23	2.0	.63	.57	2.5	.31	.48	.21	.35	4.4	7.4	36	14
24	1.8	.57	.54	1.9	.74	.46	.19	.40	9.0	5.3	28	12
25	1.7	.61	.51	1.4	.83	.43	.18	.51	8.1	3.6	21	12
26	1.7	.81	.49	1.2	.71	.39	.26	1.3	6.2	5.8	16	14
27	1.6	1.0	.50	1.1	.50	.38	.22	.73	4.2	11	13	16
28	1.6	.83	.57	1.0	.41	.36	.20	.56	3.7	8.3	11	15
29	1.6	.80	.62	.98	---	.81	.18	.70	3.7	5.6	8.4	14
30	1.6	.78	.51	.98	---	5.1	.20	1.3	2.8	3.9	6.6	14
31	1.5	---	.47	.97	---	9.9	---	1.0	---	3.0	5.7	---
TOTAL	330.4	27.66	20.60	29.28	17.93	30.07	37.50	27.93	93.65	105.70	1253.9	952.7
MEAN	10.7	.92	.66	.94	.64	.97	1.25	.90	3.12	3.41	40.4	31.8
MAX	76	1.4	.95	2.5	1.0	9.9	14	3.0	9.0	11	202	209
MIN	1.5	.57	.47	.46	.31	.30	.18	.23	.86	.92	2.8	2.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	46.2	16.6	20.6	12.1	17.8	19.8	6.47	1.19
MAX	126	65.4	82.6	45.1	87.8	64.8	30.8	3.72
(WY)	2000	1995	1998	1998	1998	1996	1996	1996
MIN	2.63	.92	.66	.94	.64	.76	.36	.10
(WY)	1999	2001	2001	2001	2001	2000	2000	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1994 - 2001

ANNUAL TOTAL	857.40	2927.32	
ANNUAL MEAN	2.34	8.02	16.1
HIGHEST ANNUAL MEAN			28.2
LOWEST ANNUAL MEAN			6.18
HIGHEST DAILY MEAN	76	Oct 4	501
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	May 26	.00
MAXIMUM PEAK FLOW			261
MAXIMUM PEAK STAGE			24.39
INSTANTANEOUS LOW FLOW			.00
10 PERCENT EXCEEDS	4.5	17	36
50 PERCENT EXCEEDS	.72	1.0	3.2
90 PERCENT EXCEEDS	.06	.41	.38

02232200 WOLF CREEK NEAR DEER PARK, FL

LOCATION.--Lat 28°12'46", long 80°54'40", in NW¹/₄ sec.22, T.26 S., R.34 E., Osceola County, Hydrologic Unit 03080101, near right bank on upstream side of bridge on State Highway 419, 2.9 mi upstream from mouth, and 8.5 mi north of Deer Park.

DRAINAGE AREA.--25.7 mi².

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

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

REMARKS.--Records good except for period of estimated daily discharge, which is poor. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	2.2	.79	1.4	2.0	.77	21	.01	2.2	3.8	e5.5	4.8
2	51	2.0	.69	1.4	2.0	.64	14	.01	17	e3.1	e6.0	4.2
3	110	1.7	.58	1.3	2.1	.54	7.6	.92	10	e2.8	e15	3.3
4	451	1.5	.51	1.3	2.2	.62	4.9	14	8.1	e2.5	e50	2.8
5	253	1.4	.46	1.3	2.3	1.4	3.6	9.8	5.8	e2.2	e120	2.5
6	139	1.3	.46	1.2	2.1	1.3	2.6	3.9	4.5	e2.3	e100	2.9
7	95	1.2	.44	1.2	1.9	.81	2.0	2.0	37	e2.2	e269	9.3
8	71	1.1	.40	1.2	1.8	.53	1.6	1.3	23	e2.8	143	25
9	52	1.0	.38	1.4	1.7	.40	1.2	.84	12	e3.0	91	44
10	38	.93	.40	1.5	1.6	.32	.89	.58	7.0	e3.7	78	53
11	30	.84	.40	1.5	1.5	.26	.64	.44	8.6	e3.9	56	38
12	24	.74	1.8	1.7	1.3	.19	.49	.38	11	e3.2	43	35
13	19	.69	3.7	1.9	1.3	.16	.37	.27	11	e3.0	33	38
14	16	.64	3.5	1.9	1.3	.15	.27	.17	7.2	e2.9	27	271
15	14	.59	2.9	1.9	1.3	.16	.17	.11	4.6	e2.9	23	381
16	11	.53	2.5	1.9	1.2	.14	.10	.06	3.7	e3.2	19	245
17	9.2	.46	2.2	2.0	1.1	.12	.05	.02	5.0	e4.5	48	163
18	7.8	.41	1.9	2.0	.92	.10	.01	.00	8.8	e9.0	36	115
19	6.8	.38	1.7	2.0	.87	.10	.00	.00	8.7	e8.4	51	84
20	6.1	.36	1.5	3.5	.82	.12	.00	.00	9.8	e7.1	52	64
21	5.7	.33	1.5	4.3	.74	.09	.00	.00	7.4	e6.5	44	49
22	5.5	.25	1.6	3.8	.68	.07	.00	.00	5.3	e5.9	44	38
23	5.2	.22	1.6	4.8	.59	.05	.00	.00	5.0	e8.8	34	29
24	4.6	.22	1.5	4.5	1.2	.03	.00	.00	7.3	e7.0	25	23
25	4.2	.23	1.4	3.6	2.4	.01	.00	.40	11	e6.2	19	29
26	3.9	.34	1.2	2.9	2.0	.00	.00	7.3	11	e5.4	15	38
27	3.7	.62	1.1	2.5	1.4	.00	.00	9.3	8.4	e12	12	34
28	3.3	.84	1.2	2.3	1.1	.00	.00	4.3	7.1	e10	9.9	29
29	3.0	1.0	1.5	2.2	---	.22	.00	2.4	6.8	e8.6	8.0	26
30	2.7	.94	1.7	2.3	---	19	.00	2.0	5.3	e7.0	6.5	27
31	2.4	---	1.5	2.1	---	29	---	1.2	---	e5.8	5.2	---
TOTAL	1518.1	24.96	43.01	68.8	41.42	57.30	61.49	61.71	279.6	159.7	1488.1	1907.8
MEAN	49.0	.83	1.39	2.22	1.48	1.85	2.05	1.99	9.32	5.15	48.0	63.6
MAX	451	2.2	3.7	4.8	2.4	29	21	14	37	12	269	381
MIN	2.4	.22	.38	1.2	.59	.00	.00	.00	2.2	2.2	5.2	2.5

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

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
	49.2	396	.29	1957	20.3	252	.47	1988	16.1	156	.71	1998
	20.0	76.5	1.39	1964	25.2	152	.76	1966	30.9	231	.15	1959
	11.1	77.7	.011	1984	7.25	77.9	.000	1966	11.1	303	.020	1974
	7.25	1966	.000	1967	31.1	1968	.000	2000	35.8	1974	.23	1960
	31.1	1968	.000	2000	45.6	1974	.020	1981	45.6	1974	.23	1960
	35.8	1974	.020	1981	64.6	1960	.23	1960	64.6	1960	1.40	1960

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1956 - 2001

ANNUAL TOTAL	3928.88	5711.99	
ANNUAL MEAN	10.7	15.6	29.8
HIGHEST ANNUAL MEAN			77.7
LOWEST ANNUAL MEAN			7.97
HIGHEST DAILY MEAN	451	451	5850
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		527	7700
MAXIMUM PEAK STAGE		7.06	e10.20
10 PERCENT EXCEEDS	21	38	66
50 PERCENT EXCEEDS	1.0	2.2	5.1
90 PERCENT EXCEEDS	.00	.11	.15

e Estimated

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.93	12.30	10.24	9.33	9.07	8.72	8.99	8.76	8.61	9.22	12.78	14.60
2	12.99	12.23	10.20	9.28	9.02	8.73	9.14	8.78	8.68	9.19	12.84	14.57
3	13.11	12.15	10.07	9.25	8.97	8.75	9.27	8.75	8.72	9.18	12.91	14.55
4	13.39	12.09	10.00	9.21	8.98	8.74	9.22	8.79	8.74	9.11	12.96	14.53
5	13.58	12.02	9.99	9.26	8.99	8.34	9.29	8.75	8.75	9.15	13.08	14.50
6	13.70	11.96	10.00	9.26	9.02	8.38	9.32	8.74	8.72	9.23	13.26	14.55
7	13.73	11.90	9.95	9.25	9.02	8.53	9.28	8.72	8.71	9.26	13.42	14.68
8	13.71	11.84	9.96	9.25	9.06	8.65	9.28	8.76	8.70	9.28	13.53	14.78
9	13.60	11.75	9.93	9.09	9.07	8.65	9.26	8.72	8.69	9.47	13.62	14.82
10	13.61	11.64	9.90	9.13	9.00	8.63	9.25	8.72	8.74	9.83	13.70	14.84
11	13.60	11.53	9.89	9.20	8.95	8.66	9.26	8.71	8.88	10.10	13.77	14.83
12	13.56	11.46	9.88	9.16	8.95	8.76	9.25	8.70	8.86	10.31	13.83	14.92
13	13.51	11.40	9.89	9.09	8.94	8.65	9.17	8.68	8.89	10.45	13.87	15.10
14	13.45	11.31	9.86	9.14	8.97	8.65	9.10	8.71	8.89	10.64	13.92	15.37
15	13.37	11.18	9.83	9.16	8.96	8.64	9.06	8.70	8.94	10.99	14.00	15.43
16	13.31	11.14	9.82	9.16	8.94	8.62	8.96	8.61	9.01	11.23	14.06	15.51
17	13.25	11.05	9.67	9.15	8.82	8.58	8.93	8.58	9.04	11.34	14.14	15.52
18	13.20	10.96	9.61	9.16	8.78	8.51	8.87	8.59	9.04	11.45	14.23	15.49
19	13.15	10.91	9.56	9.17	8.86	8.63	8.96	8.59	9.03	11.59	14.29	15.47
20	13.10	10.74	9.53	9.03	8.89	8.58	9.04	8.56	9.02	11.76	14.35	15.43
21	13.04	10.66	9.53	9.04	8.85	8.44	9.00	8.63	9.03	11.91	14.44	15.41
22	12.97	10.62	9.53	9.01	8.84	8.55	8.97	8.56	9.01	12.10	14.54	15.39
23	12.90	10.60	9.50	8.92	8.77	8.62	9.00	8.53	9.01	12.23	14.58	15.35
24	12.83	10.61	9.40	9.10	8.92	8.65	8.91	8.48	9.04	12.31	14.60	15.33
25	12.75	10.56	9.42	9.04	8.90	8.57	8.81	8.55	9.09	12.39	14.61	15.39
26	12.68	10.46	9.48	9.11	8.80	8.56	8.67	8.60	9.12	12.45	14.61	15.44
27	12.61	10.41	9.46	9.12	8.84	8.51	8.76	8.62	9.09	12.54	14.62	15.47
28	12.57	10.38	9.41	9.12	8.73	8.63	8.79	8.62	9.09	12.61	14.63	15.50
29	12.51	10.32	9.34	9.19	---	8.75	8.88	8.64	9.17	12.65	14.63	15.53
30	12.44	10.26	9.25	9.14	---	8.93	8.81	8.62	9.21	12.68	14.63	15.54
31	12.37	---	9.31	9.10	---	9.00	---	8.62	---	12.71	14.61	---
MEAN	13.15	11.21	9.72	9.15	8.93	8.63	9.05	8.66	8.92	10.95	13.97	15.13
MAX	13.73	12.30	10.24	9.33	9.07	9.00	9.32	8.79	9.21	12.71	14.63	15.54
MIN	12.37	10.26	9.25	8.92	8.73	8.34	8.67	8.48	8.61	9.11	12.78	14.50
CAL YR 2000	MEAN 10.16	MAX 13.73	MIN 7.93									
WTR YR 2001	MEAN 10.63	MAX 15.54	MIN 8.34									

ST. JOHNS RIVER ABOVE OCKLAWAHA RIVER

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

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 2000 to current year.

WATER TEMPERATURE: August 2000 to current year.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 2,640 $\mu\text{S}/\text{cm}$ @ 25 °C, June 9, 2001; minimum daily mean, 368 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 13, 14, 2001.

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, 2,640 $\mu\text{S}/\text{cm}$ @ 25 °C, June 9; minimum daily mean, 368 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 13, 14.

WATER TEMPERATURE: Maximum daily mean, 31.7 °C, July 30; minimum daily mean, 8.8 °C, Jan. 1.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	780	576	768	1060	1370	1700	1880	2260	2590	2230	1040	474
2	781	572	765	1070	1380	1720	1810	2250	2550	2200	1010	473
3	742	575	765	1080	1390	1730	1840	2250	2540	2190	923	472
4	681	581	789	1110	1400	1720	1820	2190	2550	2210	869	462
5	701	587	785	1130	1410	1730	1820	2190	2570	2180	891	455
6	666	589	791	1130	1440	1720	1850	2200	2590	2150	838	438
7	650	592	809	1130	1440	1740	1880	2220	2610	2130	826	427
8	642	591	809	1140	1450	1760	1870	2230	2630	2080	807	425
9	591	582	810	1140	1460	1770	1870	2280	2640	2080	771	419
10	581	598	831	1140	1470	1790	1880	2330	2560	2020	742	429
11	540	626	849	1150	1480	1800	1900	2330	2500	1960	706	417
12	528	646	853	1170	1490	1820	1940	2360	2520	1870	687	385
13	542	669	839	1180	1510	1840	2020	2390	2540	1790	669	368
14	548	666	867	1200	1530	1830	1980	2410	2550	1690	648	368
15	556	665	873	1220	1540	1840	1980	2430	2540	1570	618	401
16	549	662	889	1230	1550	1860	2000	2450	2490	1600	590	440
17	540	665	900	1240	1570	1860	2040	2470	2480	1500	584	420
18	530	662	932	1250	1580	1870	2060	2490	2420	1360	583	408
19	530	676	949	1260	1580	1850	2080	2500	2390	1360	569	395
20	527	676	967	1280	1590	1840	2100	2520	2400	1350	555	395
21	515	684	1020	1260	1600	1840	2130	2540	2430	1350	532	399
22	507	710	1010	1250	1620	1850	2140	2570	2430	1300	527	399
23	509	711	1020	1270	1630	1860	2170	2490	2410	1330	520	394
24	515	711	1030	1290	1630	1880	2180	2470	2360	1270	516	383
25	526	710	1030	1300	1640	1900	2200	2500	2300	1210	511	377
26	529	707	1020	1320	1660	1920	2190	2500	2300	1150	521	383
27	549	707	1030	1320	1670	1930	2190	2510	2290	1140	547	393
28	567	728	1030	1330	1690	1950	2210	2530	2270	1110	528	388
29	577	733	1030	1340	---	2000	2240	2560	2250	1110	502	383
30	571	787	1030	1360	---	1880	2260	2580	2270	1090	485	385
31	574	---	1050	1370	---	1980	---	2590	---	1060	475	---
MEAN	585	655	908	1220	1530	1830	2020	2410	2470	1630	664	412
MAX	781	787	1050	1370	1690	2000	2260	2590	2640	2230	1040	474
MIN	507	572	765	1060	1370	1700	1810	2190	2250	1060	475	368
CAL YR 2000	MEAN	907	MAX 2020	MIN 507								
WTR YR 2001	MEAN	1360	MAX 2640	MIN 368								

ST. JOHNS RIVER ABOVE OCKLAWAHA RIVER

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.8	23.0	17.4	8.8	21.0	24.4	23.1	21.9	29.3	29.6	29.5	30.8
2	26.6	22.8	18.5	9.5	20.6	24.8	21.5	22.8	28.0	29.7	27.5	30.9
3	26.4	22.6	18.6	9.4	17.2	24.7	22.1	23.5	29.1	30.1	26.5	31.0
4	26.0	22.7	15.7	9.9	15.8	23.0	21.8	22.7	30.2	30.6	26.9	30.9
5	26.4	23.2	15.0	9.1	16.2	19.9	23.8	23.4	30.5	29.4	27.4	30.7
6	27.3	23.2	14.7	10.8	15.4	16.3	23.6	23.9	29.6	28.6	27.9	30.0
7	27.6	23.5	15.2	11.5	16.2	14.8	23.9	23.6	29.3	29.6	28.4	29.0
8	26.8	24.2	16.2	13.0	17.9	15.1	25.1	23.9	29.6	30.1	29.4	28.4
9	23.9	24.3	18.1	14.1	19.7	17.1	25.8	23.8	30.0	28.5	29.7	28.0
10	21.6	24.1	19.5	11.2	20.4	19.0	25.6	24.0	30.1	27.8	29.2	28.0
11	21.6	22.9	20.8	11.5	21.5	20.1	26.3	24.1	29.0	28.6	29.7	28.2
12	22.0	21.9	22.0	14.1	22.3	22.2	26.7	23.7	29.8	29.1	30.2	27.5
13	22.3	22.0	22.2	15.4	23.0	23.6	27.1	24.8	29.9	28.5	30.7	26.8
14	22.5	22.1	22.9	15.4	23.5	23.2	28.2	26.2	30.0	28.0	30.5	26.1
15	22.6	20.5	23.5	17.1	23.7	22.8	28.4	26.7	29.9	27.1	30.3	25.3
16	22.5	19.8	23.5	18.3	23.9	23.3	27.5	25.6	29.1	27.5	30.5	25.0
17	22.5	21.2	22.6	19.2	23.7	23.3	25.5	26.7	29.5	28.7	30.6	25.7
18	22.7	21.5	17.8	20.8	21.2	22.0	21.6	28.0	28.6	29.4	30.6	26.3
19	23.1	21.9	16.5	21.7	19.0	20.3	19.5	28.1	29.1	29.5	30.8	26.8
20	23.5	20.6	13.0	21.0	20.1	21.2	21.1	28.1	29.0	29.4	31.2	27.3
21	23.7	17.1	11.0	15.3	20.6	20.0	22.4	28.4	29.5	28.9	30.4	27.8
22	23.6	15.0	11.6	12.8	21.3	17.6	23.0	28.9	29.5	28.3	30.2	28.2
23	23.5	14.5	12.6	12.4	22.0	18.6	24.5	28.3	28.4	27.8	29.9	28.2
24	23.3	15.5	14.5	12.2	22.1	20.7	25.3	28.5	27.4	27.2	30.0	28.4
25	23.2	18.4	15.3	12.9	23.1	22.2	25.4	28.4	26.6	28.7	29.8	28.2
26	23.3	20.2	15.6	12.2	23.7	22.4	24.6	27.7	28.3	29.5	29.5	28.0
27	23.3	19.3	16.2	13.4	24.1	21.4	21.5	28.8	29.6	29.8	29.2	27.7
28	23.3	18.2	17.1	14.9	24.6	20.0	21.9	28.5	27.6	30.5	29.8	27.2
29	23.7	17.9	15.5	16.9	---	20.9	22.0	27.9	27.4	31.4	30.1	26.5
30	23.7	17.6	12.7	18.1	---	20.5	21.1	28.1	29.1	31.7	30.7	25.7
31	23.4	---	9.7	19.8	---	22.4	---	29.5	---	31.0	30.7	---
MEAN	24.0	20.7	17.0	14.3	20.9	20.9	24.0	26.1	29.1	29.2	29.6	28.0
MAX	27.6	24.3	23.5	21.7	24.6	24.8	28.4	29.5	30.5	31.7	31.2	31.0
MIN	21.6	14.5	9.7	8.8	15.4	14.8	19.5	21.9	26.6	27.1	26.5	25.0

CAL YR 2000 MEAN 23.5 MAX 31.3 MIN 9.7
WTR YR 2001 MEAN 23.6 MAX 31.7 MIN 8.8

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	SPE-CIFIC CON-DUCT-ANCE WATER (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L CaCO3) (00900)	CALCIUM DIS-SOLVED AS CA (MG/L) (00915)
OCT													
10...	1132	13.62	1660	200	2.6	6.7	7.5	6.98	577	610	21.6	140	40
25...	1053	12.77	898	240	3.6	4.8	7.4	7.18	527	530	23.2	140	40
NOV													
07...	1150	11.92	484	240	2.5	6.0	7.6	7.30	580	454	24.2	150	43
21...	1415	10.67	564	240	4.0	7.6	7.6	7.47	680	691	17.2	180	51
DEC													
06...	1305	9.99	114	240	5.7	9.5	7.5	7.59	800	792	14.6	210	60
19...	1010	9.66	107	140	4.4	8.1	7.8	7.47	911	938	16.5	240	67
JAN													
04...	1247	9.10	153	140	12	9.7	7.9	7.69	1120	1120	9.9	300	83
18...	1410	9.19	-115	140	6.5	7.2	7.8	7.4	1230	1240	21.4	330	92
FEB													
28...	1430	8.70	92	80	6.3	7.2	7.9	7.51	1650	1710	27.9	440	120
MAR													
15...	0956	8.72	142	100	10	6.4	7.9	7.62	1820	1840	22.1	470	130
28...	1130	8.71	242	70	4.5	8.0	8.0	7.78	1940	1950	20.0	510	140
APR													
11...	1252	9.30	47	60	5.3	6.6	7.6	7.50	1900	1900	26.9	500	140
25...	1317	8.81	374	70	4.2	7.3	7.8	7.55	2200	2210	26.5	580	160
MAY													
09...	1210	8.74	746	60	7.5	7.9	8.7	8.03	2280	2310	24.6	590	160
23...	1100	8.47	17	60	9.0	5.0	8.4	7.07	2500	2490	28.1	630	170
JUN													
06...	1121	8.75	143	60	7.0	6.1	8.8	7.08	2560	2580	29.9	620	170
20...	1045	9.02	55	50	6.0	5.0	8.6	6.85	2380	2620	28.9	580	160
JUL													
03...	1201	9.21	70	50	7.6	6.1	8.9	6.95	2180	2200	30.4	510	140
18...	1213	11.46	513	70	13	8.6	8.6	6.9	1260	1300	31.8	300	80
AUG													
01...	1115	12.77	1080	120	4.5	6.5	7.2	7.1	1020	1060	29.5	250	68
16...	1245	14.07	2280	280	.45	2.4	7.0	7.2	577	588	30.9	150	42
28...	0949	14.63	3250	400	.46	10.2	6.9	7.0	511	525	29.5	140	40
SEP													
13...	1036	15.11	2940	240	.60	5.0	7.2	7.1	366	361	26.5	99	29
26...	1250	15.45	4500	240	1.7	3.2	7.0	7.5	380	381	28.1	100	29

Note.--Negative figures indicate reverse flow

ST. JOHNS RIVER ABOVE OCKLAWAHA RIVER

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

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

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE TOTAL (MG/L AS S) (00745)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT													
10...	40	10	10	4.5	58	42	.3	99	7.9	65	--	8	379
25...	40	9.1	9.1	5.1	51	48	.3	98	9.6	49	--	8	381
NOV													
07...	43	10	10	5.3	56	54	.4	112	11	47	--	6	421
21...	51	12	12	5.4	64	63	.56	130	11	55	<1.0	7	483
DEC													
06...	61	14	15	5.4	73	64	.61	150	11	82	<1.0	10	526
19...	69	17	17	5.1	86	63	.66	170	8.6	110	<1.0	11	631
JAN													
04...	82	21	21	5.5	100	66	.93	210	4.8	160	<1.0	19	798
18...	92	23	24	4.1	120	68	.84	231	.74	181	<1	15	886
FEB													
28...	130	32	34	6.5	170	75	2.6	320	.4	260	<1.0	13	1130
MAR													
15...	140	35	36	7.0	180	75	E17	370	.26	280	<1.0	22	1270
28...	140	37	36	7.3	200	77	12	390	.23	300	<1.0	11	1290
APR													
11...	140	35	36	6.6	190	65	6.1	370	.27	310	<1.0	13	1330
25...	160	43	42	7.4	220	72	<5.0	440	.32	350	<1.0	12	1420
MAY													
09...	170	44	45	8.0	230	72	1.6	470	.39	360	<1.0	17	1440
23...	170	48	48	8.7	260	71	1.9	520	.97	370	<1.0	23	1690
JUN													
06...	170	46	48	8.8	280	60	1.8	550	1.9	380	<1.0	25	1760
20...	150	43	43	8.0	260	54	1.7	530	5.1	340	<1.0	24	1620
JUL													
03...	140	37	37	7.9	230	59	1.8	470	8.7	270	<1.0	39	1420
18...	82	23	24	5.1	130	50	.84	263	6.2	159	<1	39	866
AUG													
01...	69	18	19	4.8	100	60	.66	207	5.9	113	<1	16	696
16...	43	9.6	9.6	5.8	53	65	.49	113	11	31	2	9	432
28...	41	9.0	9.2	5.6	45	68	.51	96	13	24	4	4	394
SEP													
13...	31	6.3	6.6	4.4	30	E59c1	.34	64	10	12	2	4	286
26...	--	6.6	--	4.1	33	54	.37	68	9.3	15	3	2	E259c1

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
OCT													
10...	.35	--	.35	.10	.10	.02	.02	.19	.20	.20	24	24	8.0
25...	.21	--	.22	.19	.19	.06	.06	.20	.22	.23	27	27	<.1
NOV													
07...	.18	--	.18	.23	.23	.02	.02	.16	.17	.18	29	30	4.9
21...	.114	--	.12	.30	.31	.02	.02	.11	.12	.16	31	32	<.1
DEC													
06...	.034	--	.05	.41	.41	.01	<.01	.06	.08	.10	27	28	7.3
19...	.036	--	.10	.35	.36	<.01	<.01	.04	.06	.07	26	29	11
JAN													
04...	.050	--	.12	.27	.28	<.01	<.01	.02	.04	.09	27	27	10
18...	<.01	--	.09	<.02	<.02	<.01	<.01	<.01	.01	.06	27	27	5.2
FEB													
28...	.116	--	.14	<.02	<.02	<.01	<.01	.03	.03	.03	25	25	12
MAR													
15...	.073	--	.11	<.02	<.02	<.01	<.01	.03	.03	.08	24	24	11
28...	.048	--	.07	<.02	<.02	<.01	<.01	<.01	<.01	.04	21	25	8.9
APR													
11...	.018	--	.02	<.02	<.02	<.01	<.01	.03	.03	.05	23	23	11
25...	.016	--	.02	<.02	<.02	<.01	<.01	<.01	<.01	.07	24	23	24
MAY													
09...	<.010	--	.05	<.02	<.02	<.01	<.01	<.01	<.01	.09	25	25	42
23...	.015	--	.07	<.02	<.02	<.01	<.01	.01	.02	.13	27	26	84
JUN													
06...	.014	--	.04	<.02	<.02	<.01	<.01	.01	.02	.07	9.7	10	62
20...	.018	--	.02	<.02	<.02	<.01	<.01	<.01	.02	.08	27	29	37
JUL													
03...	.020	--	.02	<.02	<.02	<.01	<.01	<.01	.01	.09	25	25	54
18...	.06	--	.08	<.02	.67	<.01	<.01	<.01	.02	.11	16	17	42
AUG													
01...	.01	--	.02	<.02	<.02	<.01	<.01	<.01	<.01	.06	20	26	38
16...	.38	--	.40	<.02	<.02	.01	.01	.33	.34	.39	23	23	13
28...	.32	--	.33	<.02	<.02	<.01	<.01	.25	.26	.32	26	26	25
SEP													
13...	.29	--	.30	<.02	<.02	.01	.01	.12	.13	.12	29	32	<.1
26...	.23	2.0	.23	<.02	--	.01	--	.10	.11	.14	30	--	5.6

< -- Less than
E -- Estimated value
cl-- Holding time exceeded by the laboratory

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

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

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)
OCT						
10...	28	28	270	454	1300	1300
25...	25	25	427	663	1100	1100
NOV						
07...	27	27	432	604	1300	1300
21...	31	33	436	628	1400	1500
DEC						
06...	36	37	359	620	1700	1800
19...	41	43	240	470	2100	2200
JAN						
04...	49	50	165	603	2600	2600
18...	56	57	94	425	2940	2950
FEB						
28...	76	82	52	264	4200	4300
MAR						
15...	84	89	40	324	4400	4600
28...	92	91	31	156	4900	4900
APR						
11...	88	88	26	231	4800	4800
25...	100	100	28	175	5900	5800
MAY						
09...	99	100	24	207	5900	5800
23...	120	120	22	223	6500	6300
JUN						
06...	110	120	19	185	6300	6500
20...	110	110	15	116	5900	5900
JUL						
03...	93	99	11	141	5300	5300
18...	56	61	67	561	3030	3160
AUG						
01...	47	50	143	328	2480	2510
16...	30	32	514	707	1250	1250
28...	28	30	536	687	1140	1130
SEP						
13...	21	23	500	601	760	800
26...	20	--	439	577	780	--

< -- Less than

E -- Estimated value

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

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 mi².

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

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

REMARKS.--Records fair except for periods of estimated daily discharge, which are poor. Flow regulated by structure 164.

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	1.7	.38	.35	.18	.09	.02	.76	.00	.00	.26	140	.75
2	1.3	.37	.35	.15	.09	.00	.38	.00	.00	.23	130	.83
3	13	.36	.35	.14	.09	.00	.19	.04	.00	.20	131	.92
4	152	.35	.35	.13	.10	.01	.12	.28	.00	.19	137	.98
5	272	.33	.35	.12	.11	.05	.10	.26	.00	.20	156	1.0
6	267	.33	.35	.12	.11	.05	.09	.23	.00	.24	191	1.1
7	262	.32	.35	.12	.10	.03	.08	.22	.00	.33	257	1.7
8	260	.31	.33	.12	.10	.01	.06	.25	.00	.60	248	2.4
9	255	.30	.31	.13	.08	.00	.05	.23	.00	.60	240	2.3
10	249	.31	.32	.13	.07	.00	.04	.20	.00	1.2	236	1.4
11	242	.30	.33	.11	.07	.00	.03	.21	.00	.68	234	.97
12	236	.30	.42	.11	.07	.00	.02	.22	.00	2.6	230	5.5
13	e120	.31	.38	.11	.07	.00	.00	.20	.00	108	228	e30
14	e20	.31	.34	.10	.07	.00	.00	.17	.00	286	225	e59
15	e5.0	.31	.33	.09	.07	.00	.00	.13	.00	288	224	e22
16	e60	.30	.33	.09	.07	.00	.00	.07	.00	282	225	4.8
17	e200	.30	.33	.08	.07	.00	.00	.04	.00	278	218	60
18	e120	.26	.29	.08	.06	.00	.00	.01	.00	271	204	232
19	87	.23	.24	.08	.06	.00	.00	.00	.00	264	190	229
20	2.4	.21	.20	.11	.05	.03	.00	.00	.00	261	174	226
21	.73	.19	.17	.12	.05	.05	.04	.00	.00	266	159	222
22	.53	.17	.16	.12	.04	.04	.06	.00	.00	256	146	218
23	.47	.16	.14	.12	.03	.02	.08	.00	.00	250	132	214
24	.46	.16	.13	.12	.04	.00	.07	.04	.00	249	120	210
25	.46	.17	.13	.11	.06	.00	.06	.05	.00	261	109	210
26	.45	.21	.13	.10	.05	.00	.06	.21	.00	250	98	204
27	.44	.28	.15	.08	.04	.02	.04	.16	.00	227	89	201
28	.42	.23	.21	.08	.03	.10	.02	.06	.00	203	56	198
29	.40	.24	.30	.08	---	.22	.00	.03	.14	184	1.8	196
30	.39	.36	.25	.08	---	1.4	.00	.00	.26	163	.88	197
31	.38	---	.20	.09	---	1.4	---	.00	---	150	.74	---
TOTAL	2830.53	8.36	8.57	3.40	1.94	3.45	2.35	3.31	0.40	4504.33	4930.42	2952.65
MEAN	91.3	.28	.28	.11	.069	.11	.078	.11	.013	145	159	98.4
MAX	272	.38	.42	.18	.11	1.4	.76	.28	.26	288	257	232
MIN	.38	.16	.13	.08	.03	.00	.00	.00	.00	.19	.74	.75
CFSM	1.68	.01	.01	.00	.00	.00	.00	.00	.00	2.68	2.93	1.81
IN.	1.94	.01	.01	.00	.00	.00	.00	.00	.00	3.09	3.38	2.02

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

	1997	1998	1999	2000	2001
MEAN	207	7.01	75.3	46.3	70.4
MAX	734	25.5	298	183	353
(WY)	2000	2000	1998	1998	1998
MIN	.053	.28	.28	.11	.000
(WY)	1998	2001	2001	2001	1997

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1997 - 2001

ANNUAL TOTAL	4401.77	15249.71	
ANNUAL MEAN	12.0	41.8	55.7
HIGHEST ANNUAL MEAN			93.7
LOWEST ANNUAL MEAN			18.8
HIGHEST DAILY MEAN	272	Oct 5	1110
LOWEST DAILY MEAN	.00	May 26-Jul 4	.00
ANNUAL SEVEN-DAY MINIMUM	.00	May 26	.00
MAXIMUM PEAK FLOW		319	1170
MAXIMUM PEAK STAGE		21.15	22.44
ANNUAL RUNOFF (CFSM)	.22	.77	1.03
ANNUAL RUNOFF (INCHES)	3.02	10.45	13.94
10 PERCENT EXCEEDS	2.6	220	173
50 PERCENT EXCEEDS	.31	.20	.70
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated

02232500 ST. JOHNS RIVER NEAR CHRISTMAS, FL

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

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

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	1050	272	132	101	51	192	76	18	116	1130	2520
2	1280	1050	287	131	88	47	140	70	14	105	1080	2550
3	1370	1030	297	123	90	32	153	135	29	99	1170	2580
4	1560	994	284	119	87	30	135	255	-2.7	98	1240	2490
5	1760	936	257	105	99	30	81	194	3.7	90	1430	2490
6	1890	923	234	111	81	31	121	151	4.4	99	1590	2520
7	1960	872	217	112	99	21	146	110	-2.2	97	1930	2740
8	1980	838	202	110	83	23	123	111	17	120	2100	2650
9	1990	808	203	129	89	31	117	91	28	163	2140	2910
10	1920	791	202	97	84	26	117	85	13	241	2180	3320
11	1810	777	186	81	81	34	101	65	12	237	2080	3480
12	1780	755	204	91	59	43	121	75	59	217	2060	3640
13	1740	708	225	103	63	32	137	68	74	272	1990	3820
14	1710	669	203	93	62	41	99	49	56	386	2000	4900
15	1680	645	179	83	64	39	100	38	62	806	2110	5470
16	1590	606	177	91	69	29	95	51	86	917	2000	5790
17	1590	575	178	72	50	25	83	55	97	939	2130	5250
18	1520	548	189	100	52	20	91	40	125	901	2110	4670
19	1520	535	177	103	38	17	73	48	125	894	2130	4570
20	1480	503	174	99	52	65	96	16	113	884	2200	4200
21	1450	473	176	111	39	43	96	12	112	830	2250	4100
22	1430	439	163	103	62	56	90	24	91	788	2380	4130
23	1380	393	149	122	45	72	86	17	89	810	2430	4110
24	1390	380	152	101	45	68	93	.04	77	1000	2440	4050
25	1340	358	136	103	51	56	82	16	102	1110	2490	4270
26	1290	387	129	98	42	52	88	79	91	1130	2540	3970
27	1280	411	137	102	52	42	60	60	89	1180	2540	4110
28	1210	368	152	91	31	33	67	29	85	1200	2460	4210
29	1190	342	149	104	---	63	37	36	143	1200	2570	4390
30	1140	318	161	112	---	228	45	36	121	1150	2580	4740
31	1090	---	137	104	---	241	---	32	---	1140	2590	---
TOTAL	47540	19482	5988	3236	1858	1621	3065	2124.04	1931.2	19219	64070	114640
MEAN	1534	649	193	104	66.4	52.3	102	68.5	64.4	620	2067	3821
MAX	1990	1050	297	132	101	241	192	255	143	1200	2590	5790
MIN	1090	318	129	72	31	17	37	.04	-2.7	90	1080	2490
MED	1520	626	179	103	62	39	96	55	76	806	2130	4080
CFSM	1.00	.42	.13	.07	.04	.03	.07	.04	.04	.40	1.34	2.48
IN.	1.15	.47	.14	.08	.04	.04	.07	.05	.05	.46	1.55	2.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001, BY WATER YEAR (WY)

	MEAN	2703	1951	1304	995	895	960	785	426	639	1166	1491	2088
MAX	10130	4928	4174	3949	4230	4739	4072	1715	5461	6809	4755	8062	
(WY)	1954	1957	1988	1998	1998	1960	1960	1998	1968	1968	1974	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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1934 - 2001

ANNUAL TOTAL		153728.48		284774.24									
ANNUAL MEAN		420		780						1286			
HIGHEST ANNUAL MEAN										2978			1960
LOWEST ANNUAL MEAN										84.4			1981
HIGHEST DAILY MEAN			1990	Oct 9		5790	Sep 16			11600		Oct 11	1953
LOWEST DAILY MEAN			-76	May 28		-2.7	Jun 4			-137		Apr 24	1999
ANNUAL SEVEN-DAY MINIMUM			-48	May 23		8.7	Jun 4			-82		Apr 24	1999
MAXIMUM PEAK FLOW										11700		Oct 12	1953
MAXIMUM PEAK STAGE						8.73	Sep 17			10.81		Sep 28	1960
ANNUAL RUNOFF (CFSM)		.27				.51				.84			
ANNUAL RUNOFF (INCHES)		3.72				6.88				11.35			
10 PERCENT EXCEEDS		1200				2470				3070			
50 PERCENT EXCEEDS		223				137				807			
90 PERCENT EXCEEDS		24				36				108			

Note.--Negative figures indicate reverse flow

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 current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 2000 to current year.

WATER TEMPERATURE: August 2000 to current year.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 5,310 $\mu\text{S}/\text{cm}$ @ 25 °C, June 18, 2001; minimum daily mean, 327 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 15, 2001.

WATER TEMPERATURE: Maximum daily mean, 31.4 °C, July 30, 2001; minimum daily mean, 9.7 °C, Jan. 3, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 5,310 $\mu\text{S}/\text{cm}$ @ 25 °C, June 18; minimum daily mean, 327 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 15.

WATER TEMPERATURE: Maximum daily mean, 31.4 °C, July 30; minimum daily mean, 9.7 °C, Jan. 3.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	732	1140	1690	1950	2180	4220	2600	3470	3110	1170	596
2	1070	739	1130	1800	1930	2200	4000	2690	3540	3110	1150	582
3	1040	745	1150	1760	1950	2250	3990	2580	3530	3120	1110	567
4	985	751	1160	1710	2000	2250	3750	2260	3530	3110	1080	560
5	988	758	1170	1680	2050	2240	3350	2660	3510	3030	1010	552
6	904	762	1230	1680	2120	2370	3020	3120	3430	2890	928	545
7	799	765	1230	1690	2170	2480	2860	3270	3360	2830	726	534
8	779	767	1200	1680	2170	2440	2710	3350	3300	2780	687	507
9	773	774	1170	1650	2120	2430	2620	3380	3240	4430	738	482
10	771	780	1170	1650	2080	2500	2570	3360	3190	3750	856	455
11	759	787	1150	1680	2030	2570	2560	3340	3090	3050	959	426
12	739	804	1160	1720	2030	2550	2560	3360	3020	2770	967	418
13	720	823	1210	1750	2050	2480	2520	3320	3070	2510	941	414
14	700	843	1290	1770	2110	2410	2470	3340	3150	2210	890	398
15	685	868	1340	1740	2130	2390	2400	3320	3350	1540	789	327
16	679	889	1340	1730	2140	2420	2390	3300	3370	1320	775	437
17	681	898	1340	1770	2130	2340	2460	3300	4500	1200	761	421
18	690	910	1350	1760	2120	2420	2580	3280	5310	1160	738	408
19	700	921	1380	1740	2160	2400	2660	3280	4520	1240	719	414
20	700	927	1420	1710	2150	2970	2630	3280	3800	1280	705	430
21	695	943	1460	1700	2180	3920	2560	3280	3590	1290	688	442
22	682	968	1450	1810	2180	3620	2480	3270	3470	1310	667	439
23	681	985	1460	1970	2200	4150	2450	3250	3380	1190	---	435
24	683	975	1450	2120	2230	4580	2460	3270	3390	885	---	445
25	682	973	1460	2320	2180	4380	2490	3280	3260	867	---	442
26	681	969	1490	2400	2170	4030	2430	3190	3230	975	---	439
27	686	975	1530	2370	2180	3830	2410	2950	3150	1040	---	438
28	693	1030	1530	2260	2180	3770	2440	3200	3160	1090	---	431
29	698	1100	1450	2170	---	3750	2500	3360	3230	1150	598	422
30	707	1130	1460	2080	---	---	2550	3440	3210	1170	604	411
31	721	---	1580	2020	---	5250	---	3440	---	1170	601	---
MEAN	770	876	1320	1860	2110	2990	2770	3170	3480	2020	834	461
MAX	1090	1130	1580	2400	2230	5250	4220	3440	5310	4430	1170	596
MIN	679	732	1130	1650	1930	2180	2390	2260	3020	867	598	327
CAL YR 2000	MEAN 1190	MAX 1800	MIN 679									
WTR YR 2001	MEAN 1900	MAX 5310	MIN 327									

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

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT													
10...	0840	6.55	1620	280	.63	2.8	7.5	7.19	771	779	19.3	170	45
25...	0828	6.02	1300	200	2.6	2.8	7.0	7.33	676	691	22.5	160	43
NOV													
07...	0910	5.22	877	200	4.3	3.3	7.3	7.29	746	763	22.5	180	48
21...	1003	3.80	527	240	7.1	6.5	7.4	7.39	923	946	17.2	210	58
DEC													
06...	1115	2.66	297	200	8.0	8.4	7.4	7.51	1220	1210	14.8	270	72
19...	1250	2.21	177	160	9.4	6.9	7.8	7.39	1380	1380	17.9	300	78
JAN													
04...	0933	1.73	147	140	7.4	9.7	7.7	7.72	1720	1720	9.3	370	95
18...	1045	1.55	87	100	4.3	5.4	7.4	7.36	1750	1750	20.5	380	99
31...	1030	1.56	131	80	.6	8.6	8.8	7.44	1990	2000	18.7	430	110
FEB													
13...	1010	1.34	106	80	1	6.4	7.5	7.40	1990	2020	22.0	450	120
28...	1050	1.16	-8.2	80	5.3	6.4	7.4	7.47	2040	1580	24.9	490	130
MAR													
15...	1307	.97	77	100	8.0	6.5	7.8	7.51	2340	2400	23.3	540	140
28...	0920	1.00	44	60	3.2	7.5	8.1	7.48	3790	3310	19.6	720	170
APR													
11...	0905	1.85	146	60	4.0	6.0	7.2	7.33	2520	2530	25.8	540	140
25...	1020	1.41	133	60	8.4	5.1	7.4	7.61	2450	2450	24.3	570	150
MAY													
09...	0909	1.95	149	60	6.2	6.4	7.5	7.4	3330	3360	24.1	670	159
23...	0815	1.09	79	60	6.5	5.1	7.4	7.25	3190	3180	27.9	650	160
JUN													
06...	0729	1.16	-52	60	4.1	6.6	7.9	7.19	3380	3420	29.8	650	160
20...	0800	2.21	108	70	3.7	4.4	7.5	6.87	3690	3690	28.5	690	160
JUL													
03...	0752	2.00	185	60	8.6	5.2	7.5	7.06	3020	3070	30.1	600	150
18...	0903	5.44	953	160	4.3	1.1	6.3	6.41	1140	1150	27.6	230	60
AUG													
01...	0740	5.78	1150	240	3.0	.1	6.6	6.9	1120	1140	29.0	250	66
16...	0950	6.78	1960	280	.46	.1	6.7	6.9	733	749	30.1	170	46
28...	1342	7.08	2300	320	.67	2.1	6.7	7.0	577	587	30.2	140	39
SEP													
13...	0745	7.79	3850	240	.86	1.1	6.8	7.0	399	404	26.4	100	29
26...	1040	8.53	3920	240	1.2	.1	6.6	7.5	428	442	27.6	100	28

Note.--Negative figures indicate reverse flow

ST. JOHNS RIVER ABOVE OCKLAWAHA RIVER

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

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

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE TOTAL (MG/L AS S) (00745)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEd (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT													
10...	45	14	14	5.4	80	46	.4	157	9.5	77	--	4	522
25...	42	12	12	5.0	69	44	.4	137	4.8	69	--	6	471
NOV													
07...	49	13	14	5.6	78	56	.6	151	6.0	65	--	10	510
21...	59	16	17	6.4	98	63	.71	190	8.4	85	<1.0	13	626
DEC													
06...	74	22	23	7.0	130	66	1.1	260	9.1	130	<1.0	11	753
19...	80	25	25	6.9	150	64	1.0	290	7.7	160	<1.0	18	881
JAN													
04...	94	32	32	7.8	190	72	1.3	370	5.2	200	<1.0	10	1110
18...	100	32	32	7.9	210	72	1.5	370	2.8	220	<1.0	6	1100
31...	120	37	39	8.4	230	74	1.3	430	.94	260	<1.0	12	1270
FEB													
13...	120	36	38	8.2	220	76	2.2	410	.94	250	<1.0	12	1350
28...	130	39	41	8.6	240	81	3.8	460	1.1	270	<1.0	6	1380
MAR													
15...	140	45	46	9.5	270	79	6.0	520	.64	300	<1.0	22	1580
28...	170	70	68	16	500	72	6.6	930	1.5	460	<1.0	10	2390
APR													
11...	140	46	46	10	290	65	3.6	540	.72	340	<1.0	10	1630
25...	150	47	46	9.5	280	76	<5.0	530	.44	320	<1.0	16	1550
MAY													
09...	159	64	64	14	420	41	2.4	758	1.6	434	<1	10	2080
23...	160	60	60	12	390	72	2.4	760	1.6	410	<1.0	14	2020
JUN													
06...	160	60	60	13	430	63	2.5	780	1.8	410	<1.0	12	2160
20...	160	70	69	14	490	43	3.2	890	3.9	430	<1.0	13	2270
JUL													
03...	150	53	52	11	370	62	2.7	690	6.7	340	<1.0	22	1930
18...	60	20	21	6.1	130	23	.78	240	5.8	150	1.8	9	781
AUG													
01...	66	20	20	5.7	120	58	.86	237	7.4	119	2	5	789
16...	47	12	12	5.8	73	64	.66	154	11	44	3	6	E509c1
28...	41	10	10	5.7	57	70	.53	116	14	23	4	4	427
SEP													
13...	30	7.1	7.1	4.2	38	E55c1	.36	75	11	14	2	2	E286c1
26...	--	7.4	--	4.1	42	54	.44	82	9.8	17	2	<1	E290c1

< -- Less than

E -- Estimated value

c1-- Holding time exceeded by the laboratory

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

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
OCT													
10...	.19	--	.21	<.02	<.02	<.01	.01	.10	.11	.11	28	30	<.1
25...	.09	--	.09	.04	.04	.01	.02	.10	.12	.13	26	26	<.1
NOV													
07...	.11	--	.11	.08	.09	.01	.01	.12	.12	.14	28	29	<.1
21...	.124	--	.13	.32	.33	.03	.03	.08	.09	.14	29	30	<.1
DEC													
06...	.202	--	.19	.40	.39	.02	.02	.06	.07	.08	26	26	<.1
19...	.222	--	.25	.35	.37	.02	.02	.04	.06	.07	25	25	<.1
JAN													
04...	.294	--	.33	.28	.28	<.01	<.01	.02	.04	.06	25	25	<.1
18...	.248	--	.28	.19	.22	.01	.03	<.01	.02	.05	25	26	4.7
31...	.186	--	.22	.10	.10	.01	.01	.03	.03	.04	23	22	3.6
FEB													
13...	.194	--	.22	.08	.09	<.01	<.01	.03	.04	.03	27	26	<.1
28...	.254	--	.28	.11	.11	.02	.02	.05	.05	<.02	24	24	6.6
MAR													
15...	.238	--	.26	.12	.12	.02	.02	.03	.04	.07	23	23	9.7
28...	.292	--	.34	.20	.20	.03	.03	.01	.02	.05	21	21	8.6
APR													
11...	.131	--	.13	.07	.08	.01	.01	.04	.04	.04	21	21	8.6
25...	.098	--	.10	.04	.05	<.01	<.01	<.01	.02	.06	22	21	9.6
MAY													
09...	.21	--	.24	.09	.09	.02	.02	<.01	.02	.05	18	19	4.1
23...	.012	--	.03	<.02	<.02	<.01	<.01	.02	.03	.09	24	25	17
JUN													
06...	.012	--	.02	<.02	<.02	<.01	<.01	.01	.03	.07	24	26	17
20...	.310	--	.33	.13	.13	.01	.01	.02	.04	.07	18	18	12
JUL													
03...	.016	--	.04	<.02	<.02	<.01	<.01	<.01	.02	.12	23	23	49
18...	.120	--	.22	.23	.23	.01	.01	.01	.02	.08	22	21	63
AUG													
01...	.08	--	.09	<.02	<.02	<.01	<.01	.12	.13	.19	23	24	<.1
16...	.07	--	.08	<.02	<.02	<.01	<.01	.20	.22	.28	26	26	<.1
28...	.03	--	.05	<.02	<.02	<.01	<.01	.20	.21	.27	26	29	19
SEP													
13...	.13	--	.13	<.02	<.02	<.01	<.01	.10	.11	.09	31	33	<.1
26...	.08	2.0	.09	<.02	--	<.01	--	.07	.08	.10	30	--	<.1

< -- Less than

ST. JOHNS RIVER ABOVE OCKLAWAHA RIVER

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

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

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)
OCT						
10...	30	30	720	935	1400	1400
25...	26	25	416	602	1300	1300
NOV						
07...	28	28	470	686	1400	1500
21...	34	35	592	889	1700	1800
DEC						
06...	41	41	556	888	2200	2300
19...	47	49	385	746	2500	2600
JAN						
04...	52	53	290	558	3100	3000
18...	58	59	155	413	3200	3200
31...	64	65	139	374	3800	3800
FEB						
13...	71	72	87	291	3900	3900
28...	74	80	61	265	4300	4300
MAR						
15...	81	85	39	247	4500	4700
28...	96	96	47	194	5700	5800
APR						
11...	79	79	59	263	4700	4700
25...	90	90	37	305	5200	5200
MAY						
09...	74	74	178	520	4910	4900
23...	93	92	65	378	5900	5700
JUN						
06...	95	97	44	310	6000	6300
20...	85	85	234	543	5600	5600
JUL						
03...	86	90	65	554	5500	5300
18...	30	36	399	932	1800	1900
AUG						
01...	44	45	916	1410	2270	2320
16...	33	34	761	1070	1400	1400
28...	28	30	461	763	1140	1150
SEP						
13...	21	22	418	556	780	800
26...	20	--	343	596	790	--

02233001 ECONLOCKHATCHEE RIVER AT MAGNOLIA RANCH, NEAR BITHLO, FL

LOCATION.--Lat 28°25'27", long 81°07'10", in SE¹/₄ sec.4, T.24 S., R.32 E., Orange County, Hydrologic Unit 03080101, near center of span on downstream side of bridge on Wewahootee Road, 250 ft downstream from Diston Canal, and 7 mi south of Bithlo.

DRAINAGE AREA.--32.9 mi².

PERIOD OF RECORD.--1960, 1964-67 (one discharge measurement each year), October 1972 to September 2001 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at sea level.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6	e4.0
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.5	e8.0
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.3	e13
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.9	e24
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	18	23
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	25	20
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	37	19
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	35	27
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	30	49
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	26	60
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	24	56
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	20	53
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	18	59
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.6	16	107
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	17	13	146
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.9	11	155
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.2	9.2	149
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.2	9.9	139
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.1	14	127
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	11	116
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	12	8.5	105
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	13	6.8	105
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	19	5.2	141
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	4.0	141
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.8	2.8	130
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.1	e2.4	118
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.5	e2.2	108
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.8	e2.0	98
29	.00	.00	.00	.00	---	.00	.00	.00	.00	4.5	e1.9	92
30	.00	.00	.00	.00	---	.00	.00	.00	.00	3.2	e1.8	89
31	.00	---	.00	.00	---	.00	---	.00	---	2.7	e2.2	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	155.60	378.2	2481.0
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	5.02	12.2	82.7
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	19	37	155
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	4.0
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.37	2.51
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.43	2.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2001, BY WATER YEAR (WY)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	45.1	21.1	20.2	22.8	21.6	22.1	17.5	4.06	17.9	27.6	43.0	56.3																	
MAX	223	123	198	103	122	124	91.7	23.7	181	109	162	168																	
(WY)	2000	1988	1998	1998	1998	1998	1983	1982	1982	1991	1992	1979																	
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000																	
(WY)	1981	2001	2001	2001	2001	1975	1975	1975	1977	1981	1981	1980																	

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1973 - 2001

ANNUAL TOTAL	341.67	3014.80		
ANNUAL MEAN	.93	8.26	26.6	
HIGHEST ANNUAL MEAN			55.7	1998
LOWEST ANNUAL MEAN			.60	1981
HIGHEST DAILY MEAN	21	Jan 1	471	Jun 21 1982
LOWEST DAILY MEAN	.00	Many days	.00	Most years
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 1	.00	Many days
MAXIMUM PEAK FLOW			156	Sep 16
MAXIMUM PEAK STAGE			61.96	Sep 16
ANNUAL RUNOFF (CFSM)	.028	.25	.81	
ANNUAL RUNOFF (INCHES)	.39	3.41	11.00	
10 PERCENT EXCEEDS	3.5	18	79	
50 PERCENT EXCEEDS	.00	.00	7.3	
90 PERCENT EXCEEDS	.00	.00	.00	

e Estimated

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 mi².

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

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

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	50	41	38	65	35	171	45	47	142	217	81
2	98	50	35	35	59	28	117	45	50	133	312	68
3	90	47	35	34	50	32	91	38	51	103	338	95
4	136	50	35	29	49	35	72	37	154	85	374	78
5	213	51	33	35	50	63	66	38	134	84	342	70
6	202	50	31	34	47	49	59	33	98	75	308	101
7	166	49	34	35	40	34	58	32	139	71	265	151
8	140	47	32	39	40	31	50	26	168	88	223	283
9	119	47	32	41	40	31	48	28	178	96	195	241
10	99	48	31	41	37	24	44	24	130	153	247	189
11	89	44	34	39	39	25	43	26	112	185	306	164
12	85	42	46	39	37	25	40	26	149	157	248	140
13	78	40	50	40	37	28	38	26	127	161	203	152
14	73	40	46	37	36	34	38	26	97	143	180	561
15	67	42	40	37	37	30	37	26	103	154	149	1150
16	66	40	39	37	36	28	35	27	84	226	132	952
17	58	42	39	38	33	28	29	23	67	205	127	757
18	57	37	39	38	34	24	30	20	69	272	119	601
19	53	39	40	38	33	30	28	19	84	668	171	489
20	52	37	37	39	32	188	28	17	179	715	167	404
21	49	36	35	41	29	139	29	21	162	724	152	335
22	48	33	35	39	33	87	26	19	275	1310	136	367
23	49	33	36	38	33	62	28	43	410	1000	126	448
24	45	36	34	35	29	49	26	50	353	740	112	410
25	45	35	31	37	31	43	28	42	301	581	101	349
26	56	41	34	36	36	40	35	147	269	481	98	288
27	56	76	32	35	34	37	38	166	212	395	91	249
28	52	66	39	34	34	33	29	104	189	316	80	222
29	50	55	50	33	---	40	28	88	168	253	74	203
30	48	52	42	37	---	197	25	69	144	211	69	192
31	48	---	40	45	---	217	---	53	---	189	98	---
TOTAL	2592	1355	1157	1153	1090	1746	1414	1384	4703	10116	5760	9790
MEAN	83.6	45.2	37.3	37.2	38.9	56.3	47.1	44.6	157	326	186	326
MAX	213	76	50	45	65	217	171	166	410	1310	374	1150
MIN	45	33	31	29	29	24	25	17	47	71	69	68
CFSM	1.16	.63	.52	.52	.54	.78	.65	.62	2.17	4.52	2.57	4.52
IN.	1.34	.70	.60	.59	.56	.90	.73	.71	2.42	5.21	2.97	5.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	169	96.0	135	98.7	116	105
MAX	415	170	438	282	390	346
(WY)	2000	2000	1998	1998	1998	1998
MIN	64.5	45.2	37.3	37.2	38.9	28.7
(WY)	1998	2001	2001	2001	1999	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1996 - 2001

ANNUAL TOTAL	21187	42260	
ANNUAL MEAN	57.9	116	130
HIGHEST ANNUAL MEAN			201
LOWEST ANNUAL MEAN			101
HIGHEST DAILY MEAN	252	Sep 23	1310
LOWEST DAILY MEAN	14	May 30	17
ANNUAL SEVEN-DAY MINIMUM	17	May 27	21
MAXIMUM PEAK FLOW			1480
MAXIMUM PEAK STAGE			36.49
INSTANTANEOUS LOW FLOW			14
ANNUAL RUNOFF (CFSM)	.80	1.60	1.80
ANNUAL RUNOFF (INCHES)	10.92	21.77	24.49
10 PERCENT EXCEEDS	106	267	341
50 PERCENT EXCEEDS	47	49	64
90 PERCENT EXCEEDS	23	29	29

a Dec 27, 1997, July 22, 2001.

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02233500 ECONLOCKHATCHEE RIVER NEAR CHULUOTA, FL

LOCATION.--Lat 28°40'40", long 81°06'51", in SW¹/₄ sec.10, T.21 S., R.32 E., Seminole County, Hydrologic Unit 03080101, near right bank on downstream side of bridge on State Highway 13, 2.6 mi northeast of Chuluota, and 10 mi upstream from mouth.

DRAINAGE AREA.--241 mi².

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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	60	67	55	59	47	222	40	68	209	414	224
2	240	61	60	53	70	47	180	49	64	192	465	228
3	205	59	56	51	67	44	135	52	63	167	582	262
4	218	58	54	49	62	46	107	49	93	135	685	332
5	288	60	53	47	63	52	91	46	164	113	847	307
6	426	61	52	49	62	64	82	44	181	104	1130	288
7	537	62	51	48	60	59	75	41	162	100	1290	368
8	489	61	51	49	56	50	70	39	221	101	1260	510
9	e380	60	50	52	54	47	64	35	259	108	1130	755
10	e290	60	49	53	54	46	61	35	250	126	969	1000
11	e215	61	49	53	52	43	57	33	195	164	862	1170
12	153	60	53	53	52	43	55	34	176	194	921	1120
13	138	58	62	52	51	43	52	34	188	196	1020	997
14	121	58	66	53	51	45	50	34	164	195	1020	1060
15	108	58	63	51	50	48	50	34	142	182	847	2020
16	98	59	58	51	50	46	48	34	137	194	626	3910
17	90	59	57	50	49	45	45	34	120	240	478	3600
18	81	60	56	50	47	44	41	33	104	294	438	2680
19	76	57	56	50	47	45	41	31	125	411	560	1920
20	72	57	55	52	47	70	39	31	141	731	814	1400
21	69	55	53	53	46	145	39	30	180	984	965	1120
22	66	53	51	55	45	130	39	32	179	1210	918	966
23	64	51	51	53	47	97	37	37	243	2130	821	979
24	63	51	50	52	47	78	37	47	340	2640	669	1160
25	60	52	49	50	45	67	36	52	353	2080	496	1240
26	60	52	47	50	46	61	38	70	325	1510	401	1090
27	65	61	49	49	48	57	41	131	290	1180	365	925
28	66	80	49	49	48	55	41	147	253	898	324	803
29	63	78	55	47	---	53	37	114	245	664	280	703
30	62	70	61	47	---	80	37	95	227	512	239	631
31	61	---	57	50	---	183	---	80	---	421	211	---
TOTAL	5186	1792	1690	1576	1475	1980	1947	1597	5652	18385	22047	33768
MEAN	167	59.7	54.5	50.8	52.7	63.9	64.9	51.5	188	593	711	1126
MAX	537	80	67	55	70	183	222	147	353	2640	1290	3910
MIN	60	51	47	47	45	43	36	30	63	100	211	224
CFSM	.69	.25	.23	.21	.22	.27	.27	.21	.78	2.46	2.95	4.67
IN.	.80	.28	.26	.24	.23	.31	.30	.25	.87	2.84	3.40	5.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2001, BY WATER YEAR (WY)

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	434	185	147	182	192	239	161	70.2	210	381	477	615	1668	1189	1324	948	1018	1901	962	379	1510	2082	1253	2182	1957	1995	1998	1986	1998	1960	1987	1991	1968	1960	1992	1960	46.5	12.5	20.4	18.6	18.9	12.6	12.4	9.18	14.1	20.7	31.9	51.6	1943	1943	1943	1939	1939	1939	1945	1945	1948	1937	1950	1938						

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1936 - 2001
ANNUAL TOTAL	32744	97095	
ANNUAL MEAN	89.5	266	275
HIGHEST ANNUAL MEAN			742
LOWEST ANNUAL MEAN			78.6
HIGHEST DAILY MEAN	537	3910	10100
LOWEST DAILY MEAN	33	30	*6.7
ANNUAL SEVEN-DAY MINIMUM	35	32	6.7
MAXIMUM PEAK FLOW		4080	11000
MAXIMUM PEAK STAGE		13.92	18.69
ANNUAL RUNOFF (CFSM)	.37	1.10	1.14
ANNUAL RUNOFF (INCHES)	5.05	14.99	15.50
10 PERCENT EXCEEDS	152	876	687
50 PERCENT EXCEEDS	64	62	111
90 PERCENT EXCEEDS	39	44	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 mi².

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 sea level (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 ft³/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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	1590	530	417	301	94	616	312	123	471	1650	2260
2	1090	1550	515	403	345	88	769	259	158	476	1690	2390
3	1170	1520	394	443	367	31	623	274	158	446	1770	2610
4	1360	1480	481	377	318	52	507	345	124	372	1830	2710
5	1460	1440	435	327	293	24	500	393	167	404	2280	2830
6	1530	1400	347	319	250	127	422	405	171	330	3040	2730
7	1610	1340	283	329	231	180	333	409	194	339	3550	2680
8	1690	1290	284	256	210	161	300	361	271	402	3840	3050
9	1740	1230	237	268	171	62	290	313	298	501	3660	3430
10	1790	1190	236	403	161	90	322	273	378	495	3620	3750
11	1850	1130	243	320	215	56	240	259	311	555	3760	4450
12	1880	1060	273	217	222	10	227	237	280	579	3490	4930
13	1910	1010	288	370	209	-25	194	224	303	656	3370	5120
14	1930	963	302	310	144	38	267	208	324	814	3270	6050
15	1940	894	336	289	116	5.8	227	175	317	1060	3120	5380
16	1940	770	288	237	111	5.2	254	152	324	1020	2790	7710
17	1940	692	159	278	139	128	205	168	327	1110	2610	8280
18	1920	741	402	255	243	162	331	169	377	1140	2580	7570
19	1900	592	322	193	192	223	244	155	386	1190	2900	7120
20	1870	679	404	184	96	118	175	141	374	1570	2970	6980
21	1850	647	405	360	93	35	179	121	381	1950	3070	6400
22	1820	659	366	350	96	198	188	104	379	2130	3250	6180
23	1780	596	356	380	141	301	167	171	451	2670	3050	6450
24	1750	478	355	409	144	243	178	218	567	3230	2850	6560
25	1730	427	408	301	68	168	145	212	608	3560	2630	6370
26	1720	466	301	295	78	228	230	162	629	3560	2540	6210
27	1700	520	235	259	123	255	213	153	598	3230	2540	6360
28	1680	524	158	248	69	260	137	220	504	2820	2460	6220
29	1660	581	270	250	---	135	228	226	500	2270	2340	6000
30	1640	530	248	131	---	238	227	220	470	1940	2300	6580
31	1620	---	369	189	---	504	---	263	---	1740	2390	---
TOTAL	52530	27989	10230	9367	5146	4195.0	8938	7302	10452	43030	87210	155360
MEAN	1695	933	330	302	184	135	298	236	348	1388	2813	5179
MAX	1940	1590	530	443	367	504	769	409	629	3560	3840	8280
MIN	1060	427	158	131	68	-25	137	104	123	330	1650	2260
CFSM	.83	.46	.16	.15	.09	.07	.15	.12	.17	.68	1.38	2.53
IN.	.96	.51	.19	.17	.09	.08	.16	.13	.19	.78	1.59	2.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	3186	2644	2167	1804	1485	1375	1459	770	1006	1506	2104	2802		
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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR WATER YEARS 1982 - 2001
ANNUAL TOTAL	190387.77	421749.0	
ANNUAL MEAN	520	1155	1860
HIGHEST ANNUAL MEAN			3784
LOWEST ANNUAL MEAN			858
HIGHEST DAILY MEAN	2170	Jan 1	8280
LOWEST DAILY MEAN	-77	Apr 25	-77
ANNUAL SEVEN-DAY MINIMUM	-43	May 31	26
MAXIMUM PEAK FLOW			13800
MAXIMUM PEAK STAGE		8.65	Sep 22
ANNUAL RUNOFF (CFSM)	.25	.57	.91
ANNUAL RUNOFF (INCHES)	3.47	7.68	12.37
10 PERCENT EXCEEDS	1540	3090	4760
50 PERCENT EXCEEDS	278	386	1230
90 PERCENT EXCEEDS	18	143	265

* Measured

Note.--Negative figures indicate reverse flow

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.34	3.02	1.55	1.08	.48	.38	1.28	.35	.49	.79	3.44	4.86
2	2.38	2.98	1.47	1.03	.45	.36	1.28	.41	.48	.79	3.52	4.85
3	2.47	2.94	1.42	.98	.42	.33	1.20	.47	.45	.76	3.61	4.87
4	2.70	2.90	1.41	.92	.39	.33	1.13	.54	.44	.72	3.70	4.86
5	2.83	2.86	1.46	.84	.38	.43	1.05	.60	.40	.69	3.86	4.89
6	2.91	2.81	1.51	.77	.36	.50	.95	.64	.40	.67	4.12	4.93
7	3.01	2.74	1.53	.70	.32	.43	.87	.68	.43	.65	4.36	5.05
8	3.11	2.68	1.52	.61	.28	.35	.80	.72	.44	.63	4.51	5.16
9	3.17	2.61	1.48	.61	.23	.26	.74	.77	.45	.63	4.61	5.25
10	3.22	2.55	1.43	.58	.21	.26	.69	.86	.44	.66	4.75	5.38
11	3.29	2.49	1.38	.51	.22	.29	.61	.90	.42	.68	4.91	5.54
12	3.33	2.41	1.38	.47	.22	.36	.55	.88	.40	.72	4.94	5.72
13	3.37	2.35	1.36	.51	.25	.45	.49	.84	.40	.75	4.96	5.99
14	3.39	2.29	1.33	.51	.29	.54	.48	.79	.39	.92	4.97	6.48
15	3.40	2.23	1.30	.54	.31	.54	.48	.70	.37	1.03	4.98	7.03
16	3.40	2.17	1.26	.59	.29	.55	.51	.66	.37	1.06	4.99	7.53
17	3.40	2.12	1.28	.60	.29	.50	.50	.64	.40	1.18	4.95	8.01
18	3.38	2.08	1.26	.59	.29	.43	.53	.62	.45	1.36	4.96	8.34
19	3.36	2.03	1.21	.56	.24	.48	.50	.62	.46	1.55	5.10	8.50
20	3.33	2.00	1.18	.61	.23	.76	.46	.63	.50	1.79	5.13	8.58
21	3.30	1.97	1.10	.66	.26	1.01	.41	.59	.54	2.07	5.16	8.61
22	3.27	1.94	1.02	.65	.28	1.18	.36	.57	.58	2.32	5.19	8.61
23	3.23	1.90	.94	.72	.30	1.22	.30	.60	.61	2.64	5.20	8.58
24	3.19	1.85	.91	.70	.26	1.19	.25	.57	.66	2.97	5.17	8.53
25	3.17	1.80	.89	.72	.26	1.15	.23	.54	.68	3.23	5.13	8.49
26	3.16	1.78	.89	.71	.31	1.11	.37	.58	.66	3.40	5.07	8.45
27	3.14	1.80	.93	.69	.34	1.06	.34	.57	.65	3.48	5.02	8.40
28	3.12	1.76	.97	.66	.35	.98	.33	.58	.68	3.48	4.98	8.33
29	3.10	1.71	1.06	.60	---	.93	.28	.58	.70	3.44	4.93	8.30
30	3.08	1.64	1.10	.54	---	1.09	.26	.57	.76	3.38	4.88	8.30
31	3.06	---	1.13	.52	---	1.18	---	.53	---	3.37	4.86	---
MEAN	3.12	2.28	1.25	.67	.30	.67	.61	.63	.50	1.67	4.71	6.88
MAX	3.40	3.02	1.55	1.08	.48	1.22	1.28	.90	.76	3.48	5.20	8.61
MIN	2.34	1.64	.89	.47	.21	.26	.23	.35	.37	.63	3.44	4.85

CAL YR 2000	MEAN 1.41	MAX 4.45	MIN .14
WTR YR 2001	MEAN 1.95	MAX 8.61	MIN .21

02234308 HOWELL CREEK NEAR ALTAMONTE SPRINGS, FL

LOCATION.--Lat 28°37'56", long 81°19'24", in NW¹/₄ 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 mi².

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.57	e.10	e.10	.10	.12	.14	4.4	.09	.08	.13	1.4	.97
2	e.59	e.10	e.09	.10	.12	.16	.84	.08	.07	.11	3.3	.69
3	e.35	e.10	e.09	.10	.12	.12	.44	.09	.33	.11	3.5	.60
4	e.20	e.10	e.09	.10	.12	.20	.21	.08	.10	.10	1.9	.56
5	e.20	e.10	e.09	.10	.12	.14	.15	.08	.09	.10	1.6	8.4
6	e.41	e.10	e.09	.11	.12	.14	.15	.08	.35	.10	.84	32
7	e.32	e.10	e.09	.11	.12	.13	.13	.07	.28	.11	.67	60
8	e.24	e.10	e.09	.11	.12	.17	.12	.07	.15	.11	.60	87
9	e.18	e.11	e.09	.11	.12	.22	.11	.07	.13	.11	5.0	105
10	e.14	e.10	e.09	.10	.12	.13	.10	.07	.11	.11	6.1	89
11	e.10	e.10	e.10	.10	.12	.12	.10	.07	.11	.11	2.3	77
12	e.10	e.10	e.12	.11	.12	.12	.09	.07	.10	.76	.99	69
13	e.10	e.10	e.10	.10	.12	.12	.09	.07	.09	.34	1.8	75
14	e.10	e.10	e.10	.10	.12	.12	.09	.07	.10	3.4	1.2	137
15	e.10	e.10	e.10	.11	.12	.12	.09	.06	.10	2.2	.62	158
16	e.10	e.10	e.11	.11	.12	.12	.09	.06	.10	.32	.60	132
17	e.10	e.10	e.11	.11	.12	.12	.09	.06	.09	.23	.56	115
18	e.12	e.10	e.11	.11	.12	.12	.09	.06	.16	13	3.1	101
19	e.11	e.11	e.10	.12	.12	1.2	.08	.07	.38	20	4.2	90
20	e.11	e.11	e.10	.12	.12	.87	.08	.07	.24	4.3	1.2	80
21	e.10	e.11	e.10	.11	.12	.25	.07	.07	.47	37	.72	70
22	e.10	e.11	.10	.11	.15	.12	.07	.07	.69	79	.62	69
23	e.10	e.10	.10	.12	.12	.09	.07	.07	.46	68	.56	64
24	e.10	e.10	.10	.11	.12	.09	.07	.07	.24	31	.52	59
25	e.10	e.10	.10	.11	.12	.09	.11	.12	.13	14	.43	52
26	e.10	e.14	.10	.12	.12	.09	.09	.07	.12	7.7	.41	48
27	e.10	e.13	.10	.12	.27	.08	.08	.07	.12	5.0	.41	44
28	e.10	e.11	.11	.12	.19	.08	.07	.08	.11	2.8	.41	40
29	e.10	e.11	.10	.12	---	3.9	.07	.08	.11	1.6	.35	39
30	e.10	e.11	.10	.12	---	9.4	.09	.08	.18	.93	4.7	36
31	e.10	---	.10	.14	---	4.0	---	.08	---	1.2	6.3	---
TOTAL	5.34	3.15	3.07	3.43	3.61	22.77	8.33	2.30	5.79	293.98	56.91	1939.22
MEAN	.17	.11	.099	.11	.13	.73	.28	.074	.19	9.48	1.84	64.6
MAX	.59	.14	.12	.14	.27	9.4	4.4	.12	.69	79	6.3	158
MIN	.10	.10	.09	.10	.12	.08	.07	.06	.07	.10	.35	.56
CFSM	.01	.00	.00	.01	.01	.03	.01	.00	.01	.43	.08	2.94
IN.	.01	.01	.01	.01	.01	.01	.01	.00	.01	.50	.10	3.28

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

	1997	1998	1999	2000	2001
MEAN	21.4	8.50	11.8	7.81	8.96
MAX	54.1	23.5	44.8	34.1	41.2
(WY)	2000	2000	1998	1998	1998
MIN	.17	.11	.099	.11	.13
(WY)	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1997 - 2001

ANNUAL TOTAL	150.21	2347.90	
ANNUAL MEAN	.41	6.43	9.95
HIGHEST ANNUAL MEAN			18.8
LOWEST ANNUAL MEAN			6.43
HIGHEST DAILY MEAN	14	Sep 24	158
LOWEST DAILY MEAN	e.05	Jun 9-15	.06
ANNUAL SEVEN-DAY MINIMUM	e.05	Jun 9	.06
MAXIMUM PEAK FLOW			204
MAXIMUM PEAK STAGE			58.92
INSTANTANEOUS LOW FLOW			.06
ANNUAL RUNOFF (CFSM)	.019	.29	.45
ANNUAL RUNOFF (INCHES)	.25	3.97	6.15
10 PERCENT EXCEEDS	.59	6.2	31
50 PERCENT EXCEEDS	.16	.12	.98
90 PERCENT EXCEEDS	.08	.08	.10

e Estimated

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

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 mi².

PERIOD OF RECORD.--January 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 sea level (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. Some regulation by retention ponds in urban areas upstream from station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	1.4	1.3	1.3	1.3	1.1	8.5	2.0	1.8	12	28	9.0
2	8.9	1.4	1.2	1.3	1.2	1.1	14	1.4	2.0	5.0	26	11
3	6.6	1.3	1.2	1.3	1.2	1.1	12	1.5	4.2	7.0	24	7.9
4	6.8	1.3	1.3	1.3	1.3	1.4	11	1.7	4.6	11	24	7.0
5	5.1	1.3	1.3	1.3	1.2	1.4	5.9	1.4	2.1	13	20	8.9
6	3.9	1.3	1.2	1.3	1.2	1.3	3.9	1.3	2.2	3.7	19	15
7	3.3	1.3	1.2	1.3	1.2	1.3	3.5	1.2	3.9	2.4	22	21
8	3.5	1.3	1.2	1.3	1.1	1.2	4.2	1.2	7.2	4.9	17	19
9	8.0	1.3	1.2	1.3	1.1	1.2	4.7	1.2	4.6	11	20	48
10	4.5	1.6	1.1	1.3	1.1	1.2	4.4	1.2	3.1	10	32	60
11	3.8	1.3	1.3	1.3	1.2	1.2	3.8	1.2	2.7	9.0	29	55
12	3.3	1.4	2.0	1.3	1.2	1.1	3.4	1.1	2.8	11	19	59
13	3.0	1.3	1.7	1.3	1.1	1.1	2.8	1.1	2.2	11	34	74
14	2.7	1.3	1.5	1.3	1.1	1.2	2.3	1.0	2.4	9.9	34	163
15	2.4	1.4	1.4	1.3	1.1	1.1	2.4	1.0	3.2	11	23	202
16	2.2	1.3	1.4	1.3	1.1	1.1	2.1	.94	4.3	11	22	218
17	2.1	1.3	1.6	1.3	1.1	1.0	1.6	.91	3.5	9.4	21	199
18	2.1	1.3	1.5	1.2	1.1	.95	1.4	.93	9.1	11	22	184
19	3.2	1.3	1.5	1.2	1.1	1.8	1.2	.83	13	31	21	149
20	2.4	1.4	1.5	1.3	1.1	3.4	1.1	.83	9.4	27	14	126
21	2.2	1.4	1.5	1.3	1.1	1.9	1.1	.84	7.7	167	12	110
22	2.1	1.4	1.4	1.3	1.1	1.5	1.1	.87	9.5	153	10	106
23	2.0	1.4	1.4	1.2	1.1	1.4	1.0	1.1	13	153	15	101
24	1.8	1.3	1.3	1.2	1.1	1.3	1.0	1.6	10	131	14	97
25	1.8	1.4	1.3	1.2	1.1	1.2	1.0	2.3	9.1	98	13	90
26	1.8	2.2	1.3	1.2	1.1	1.1	1.1	2.7	7.2	74	9.6	76
27	1.7	2.6	1.3	1.2	1.1	1.1	1.1	1.7	8.3	58	7.3	63
28	1.6	1.8	1.4	1.1	1.1	1.1	.99	1.5	6.2	42	6.4	57
29	1.5	1.6	1.5	1.1	---	2.2	1.0	1.7	4.6	48	8.7	51
30	1.4	1.5	1.4	1.0	---	9.0	1.3	1.8	10	33	7.7	34
31	1.4	---	1.4	1.2	---	9.8	---	1.4	---	30	8.9	---
TOTAL	103.9	43.4	42.8	38.8	31.9	57.85	104.89	41.45	173.9	1208.3	583.6	2420.8
MEAN	3.35	1.45	1.38	1.25	1.14	1.87	3.50	1.34	5.80	39.0	18.8	80.7
MAX	8.9	2.6	2.0	1.3	1.3	9.8	14	2.7	13	167	34	218
MIN	1.4	1.3	1.1	1.0	1.1	.95	.99	.83	1.8	2.4	6.4	7.0
CFSM	.11	.05	.05	.04	.04	.06	.12	.05	.20	1.33	.64	2.76
IN.	.13	.06	.05	.05	.04	.07	.13	.05	.22	1.54	.74	3.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	34.0	22.2	20.2	21.8	20.9	20.5	19.2	11.8	21.9	45.1	46.8	51.3																		
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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1972 - 2001
ANNUAL TOTAL	1358.57	4851.59	
ANNUAL MEAN	3.71	13.3	28.5
HIGHEST ANNUAL MEAN			54.1
LOWEST ANNUAL MEAN			9.55
HIGHEST DAILY MEAN	37	Aug 3	417
LOWEST DAILY MEAN	.66	Jun 3	.66
ANNUAL SEVEN-DAY MINIMUM	.69	May 28	.69
MAXIMUM PEAK FLOW		679	679
MAXIMUM PEAK STAGE		36.29	37.98
INSTANTANEOUS LOW FLOW		.79	*.64
ANNUAL RUNOFF (CFSM)	.13	.46	.98
ANNUAL RUNOFF (INCHES)	1.73	6.18	13.26
10 PERCENT EXCEEDS	7.6	30	64
50 PERCENT EXCEEDS	2.3	1.7	18
90 PERCENT EXCEEDS	1.1	1.1	3.4

* 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 mi².

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 sea level.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	8.2	9.9	9.7	11	6.9	66	16	12	31	79	28
2	18	8.2	9.6	9.5	10	6.8	42	12	12	23	78	32
3	18	8.2	9.4	9.3	10	6.6	34	10	26	21	106	30
4	26	8.0	9.4	9.1	9.8	9.1	28	11	84	21	94	27
5	25	7.9	9.2	9.0	11	10	23	9.5	57	25	79	45
6	20	7.9	9.6	8.9	11	8.6	19	8.6	42	18	88	76
7	17	7.9	9.1	8.7	10	7.9	16	8.0	37	15	76	113
8	15	7.9	8.8	8.8	9.4	7.5	16	7.8	54	15	60	84
9	17	7.9	8.8	9.1	9.0	7.2	16	7.5	36	21	54	96
10	15	7.9	8.8	8.9	8.7	7.1	15	7.3	27	24	69	99
11	13	7.8	9.2	8.8	8.5	7.0	13	7.1	21	22	113	86
12	12	7.7	14	9.3	8.5	6.8	13	6.9	20	21	86	81
13	12	7.6	12	9.1	8.5	6.8	12	6.8	19	33	71	124
14	12	7.7	11	8.9	8.4	7.0	12	6.7	19	30	165	362
15	12	7.9	10	8.8	8.3	6.7	13	6.6	22	28	105	517
16	11	7.7	10	8.8	8.0	6.6	11	6.4	23	25	81	423
17	11	7.7	11	8.7	7.9	6.3	9.5	6.3	20	23	70	290
18	10	7.6	9.8	8.5	7.8	6.3	8.9	6.2	29	27	67	234
19	11	7.5	9.6	8.4	7.7	12	8.5	6.1	86	65	89	196
20	10	7.5	9.6	9.8	7.5	48	8.1	6.0	77	63	61	167
21	10	7.5	9.4	9.3	7.5	39	7.8	5.9	53	154	49	154
22	9.6	7.5	9.4	9.1	7.3	24	7.7	6.1	48	549	44	147
23	9.4	7.9	9.2	8.9	7.2	17	7.5	11	56	560	45	180
24	9.2	7.9	9.0	8.6	7.5	14	7.4	15	52	418	41	156
25	9.1	8.1	8.9	8.4	7.4	13	7.7	18	40	268	42	144
26	9.1	12	8.8	8.2	7.1	12	12	39	30	162	40	128
27	8.9	17	8.8	8.1	7.1	11	8.3	28	27	124	33	117
28	8.7	12	11	8.0	7.0	9.9	7.6	18	29	95	29	108
29	8.5	11	12	8.0	---	17	7.3	15	26	89	29	118
30	8.5	10	11	8.0	---	63	9.6	15	26	73	27	103
31	8.4	---	10	9.5	---	66	---	13	---	73	29	---
TOTAL	401.4	257.6	306.3	274.2	239.1	477.1	466.9	346.8	1110	3116	2099	4465
MEAN	12.9	8.59	9.88	8.85	8.54	15.4	15.6	11.2	37.0	101	67.7	149
MAX	26	17	14	9.8	11	66	66	39	86	560	165	517
MIN	8.4	7.5	8.8	8.0	7.0	6.3	7.3	5.9	12	15	27	27
CFSM	.25	.17	.19	.17	.16	.30	.30	.22	.71	1.93	1.30	2.86

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

	1999	2000	2001	2000	2001	2000	2001	2000	2001	1999	2000	2001
MEAN	97.4	56.9	31.0	17.1	13.8	13.9	12.9	9.01	23.7	60.7	37.8	97.0
MAX	182	105	52.1	25.3	18.9	15.4	15.6	11.2	37.0	101	67.7	149
(WY)	2000	2000	2000	2000	2000	2001	2001	2001	2001	2001	2001	2001
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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1999 - 2001
ANNUAL TOTAL	5499.8	13559.4	
ANNUAL MEAN	15.0	37.1	39.0
HIGHEST ANNUAL MEAN			40.8
LOWEST ANNUAL MEAN			37.1
HIGHEST DAILY MEAN	96 Jul 27	560 Jul 23	560 Jul 23 2001
LOWEST DAILY MEAN	3.1 May 4	5.9 May 21	3.1 May 4 2000
ANNUAL SEVEN-DAY MINIMUM	5.0 May 28	6.1 May 16	5.0 May 28 2000
MAXIMUM PEAK FLOW		639 Jul 22	*800 Jun 28 1974
MAXIMUM PEAK STAGE		10.26 Jul 22	10.26 Jul 22 2001
INSTANTANEOUS LOW FLOW		5.6 May 21	2.6 May 4 2000
ANNUAL RUNOFF (CFSM)	.29	.71	.75
10 PERCENT EXCEEDS	26	88	110
50 PERCENT EXCEEDS	12	11	17
90 PERCENT EXCEEDS	7.5	7.5	7.6

* Measured

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02234384 SOLDIER CREEK NEAR LONGWOOD, FL

LOCATION.--Lat 28°43'07", long 81°18'32", in SW¹/₄ 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 mi².

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 sea level (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 good. Since about 1980, some regulation by retention ponds in headwaters.

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	5.2	1.8	.50	.71	.97	1.3	3.1	1.9	.18	3.8	8.8	30
2	4.4	1.7	.49	.71	.91	1.4	2.4	1.8	.21	2.6	11	60
3	6.1	1.7	.47	.74	.90	1.4	2.1	1.5	.94	2.2	12	37
4	7.3	1.7	.50	.77	.98	2.8	2.0	1.5	1.2	2.0	16	67
5	5.5	1.7	.51	.82	1.1	2.0	1.9	1.4	.38	2.0	25	106
6	4.9	1.7	.52	.83	1.1	1.8	1.9	1.4	7.2	1.9	18	87
7	4.5	1.6	.53	.74	1.1	1.6	1.9	1.4	6.0	9.3	13	99
8	4.3	1.5	.50	.76	1.0	1.5	2.1	1.1	3.6	5.6	9.6	136
9	4.0	1.5	.52	.73	1.1	1.4	1.8	1.1	2.7	20	45	97
10	3.7	1.5	.53	.71	1.0	1.4	1.9	1.1	2.3	13	32	68
11	3.5	1.5	.57	.71	1.0	1.4	1.8	1.2	2.7	6.9	20	54
12	3.2	1.4	.68	.79	1.0	1.4	1.8	1.2	3.1	4.8	15	46
13	3.0	1.4	.62	.79	1.0	1.5	1.7	1.1	1.9	4.9	15	113
14	2.9	1.4	.62	.78	1.0	1.5	2.0	1.1	1.7	8.0	14	246
15	2.7	1.4	.58	.83	1.1	1.4	1.6	.96	2.7	8.1	11	143
16	2.5	1.3	.64	.91	1.3	1.5	1.4	.99	2.3	4.6	15	103
17	2.4	1.3	.62	.83	1.4	1.3	1.3	.99	2.4	3.4	12	87
18	2.3	1.3	.60	.82	1.4	1.2	1.3	1.3	3.0	38	14	76
19	2.2	1.3	.62	.80	1.3	6.6	1.2	1.4	4.3	25	11	66
20	2.2	1.3	.62	1.0	1.3	8.6	1.2	1.4	5.5	14	11	58
21	2.1	1.2	.73	.84	1.4	3.2	1.1	1.2	4.2	44	11	52
22	2.1	.54	.70	.85	1.3	2.4	1.1	1.4	4.3	44	8.6	49
23	2.1	.54	.65	.89	1.3	2.2	1.2	1.2	4.8	30	6.4	45
24	2.0	.51	.65	.85	1.2	1.9	1.1	1.3	6.4	20	5.6	39
25	1.9	.50	.71	.85	1.3	1.8	2.1	2.2	5.2	16	9.4	35
26	1.9	1.4	.71	.88	1.3	1.7	4.1	2.3	3.7	16	9.8	31
27	1.9	.91	.75	.93	1.3	1.6	1.7	1.9	3.6	17	7.2	30
28	1.9	.67	.99	.92	1.4	1.6	1.5	2.1	3.4	12	7.1	27
29	1.8	.57	.89	.92	---	5.0	1.4	.86	3.6	9.9	5.2	35
30	1.8	.52	.79	.95	---	9.8	1.5	.41	4.2	8.2	7.4	34
31	1.8	---	.74	1.0	---	4.2	---	.11	---	11	8.5	---
TOTAL	98.1	37.36	19.55	25.66	32.46	78.4	53.2	40.82	97.71	408.2	414.6	2156
MEAN	3.16	1.25	.63	.83	1.16	2.53	1.77	1.32	3.26	13.2	13.4	71.9
MAX	7.3	1.8	.99	1.0	1.4	9.8	4.1	2.3	7.2	44	45	246
MIN	1.8	.50	.47	.71	.90	1.2	1.1	.11	.18	1.9	5.2	27
CFSM	.15	.06	.03	.04	.05	.12	.08	.06	.15	.62	.63	3.39
IN.	.17	.07	.03	.05	.06	.14	.09	.07	.17	.72	.73	3.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	12.4	10.4	9.18	10.9	10.2
MAX	46.3	51.0	35.2	31.5	41.8
(WY)	1996	1995	1998	1996	1998
MIN	1.73	1.25	.63	.83	1.13
(WY)	1973	2001	2001	2001	1991

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1972 - 2001

ANNUAL TOTAL	1488.61	3462.06	
ANNUAL MEAN	4.07	9.49	11.6
HIGHEST ANNUAL MEAN			21.7
LOWEST ANNUAL MEAN			3.23
HIGHEST DAILY MEAN	38	246	411
LOWEST DAILY MEAN	e.23	.11	.11
ANNUAL SEVEN-DAY MINIMUM	.24	.49	.23
MAXIMUM PEAK FLOW		414	605
MAXIMUM PEAK STAGE		12.96	14.41
INSTANTANEOUS LOW FLOW		.05	.05
ANNUAL RUNOFF (CFSM)	.19	.45	.55
ANNUAL RUNOFF (INCHES)	2.61	6.07	7.46
10 PERCENT EXCEEDS	10	26	28
50 PERCENT EXCEEDS	2.3	1.7	5.0
90 PERCENT EXCEEDS	.52	.71	1.1

e Estimated

02234400 GEE CREEK NEAR LONGWOOD, FL

LOCATION.--Lat 28°42'14", long 81°17'27", in SE $\frac{1}{4}$ sec.38, T.20 S., R.30 E., Seminole County, Hydrologic Unit 03080101, on left bank at downstream side of box culvert on State Highway 419, 700 ft upstream from CSX railroad bridge, 1.0 mi upstream from mouth, and 3.5 mi east of Longwood.

DRAINAGE AREA.--12.8 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level (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 except for periods of estimated daily discharge, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	e1.7	1.6	2.5	2.8	1.3	19	e1.9	e1.0	5.5	e6.4	e19
2	4.1	e1.7	1.5	2.5	2.7	1.2	e10	e1.9	e1.1	4.1	e8.2	e37
3	e6.1	e1.7	1.5	2.5	2.3	1.2	e7.5	e1.9	e5.1	3.3	e8.8	e32
4	e7.7	e1.7	1.4	2.5	2.2	4.4	e5.9	e1.9	e6.5	2.6	e12	e45
5	e6.4	e1.6	1.4	2.5	3.2	3.0	e4.9	e1.6	3.5	2.2	e18	e67
6	e5.7	e1.6	1.4	2.5	2.6	2.1	e5.1	e1.5	19	2.0	e16	e65
7	e5.1	e1.5	1.4	2.5	2.3	1.8	e4.8	e1.4	18	1.9	e12	e77
8	e4.8	e1.5	1.3	2.6	2.2	1.6	e4.7	e1.1	15	2.1	e9.0	e92
9	e4.3	e1.5	1.3	2.7	2.1	1.6	e3.7	e1.1	8.0	3.8	e22	e88
10	e4.0	e1.5	1.3	2.6	2.2	1.6	e3.5	e1.0	4.9	3.8	e24	e72
11	e3.8	e1.4	1.6	2.6	2.7	1.6	e3.1	e1.1	3.7	3.0	e21	e56
12	e3.5	e1.4	3.3	3.2	2.4	1.4	e2.8	e1.1	2.7	2.6	e17	e50
13	e3.1	e1.4	2.3	2.9	2.2	1.7	e2.6	e1.0	2.0	3.0	e16	e94
14	e2.9	e1.2	1.9	2.9	2.1	1.8	e3.0	e1.0	1.9	4.2	e14	e162
15	e2.6	e1.2	1.7	2.6	2.0	1.5	e2.3	e.90	4.6	e5.6	e10	e135
16	e2.4	1.1	1.7	2.5	1.9	1.4	e1.9	e.90	3.6	7.0	e12	e109
17	e2.2	1.2	1.9	2.5	1.9	1.3	e1.8	e.90	3.7	4.5	e12	e88
18	e2.1	1.2	2.0	2.4	1.9	1.3	e1.7	e.70	5.4	3.2	e15	e69
19	e2.0	1.2	2.1	2.5	1.8	7.2	e1.4	e.62	4.6	43	e12	54
20	e1.9	1.2	2.1	4.3	1.8	8.9	e1.3	e.54	3.2	18	e11	46
21	e1.9	1.2	1.9	3.4	1.7	4.6	e.99	e.46	2.7	10	e10	46
22	e1.9	1.1	1.9	2.8	1.5	3.9	e.96	e.40	5.5	120	e7.7	44
23	e1.9	1.1	1.8	2.7	1.5	2.8	e1.0	e.45	8.1	96	e4.7	38
24	e1.8	1.1	1.9	2.5	1.6	2.1	e.90	e.53	7.8	54	e3.6	33
25	e1.8	1.2	2.0	2.2	1.5	1.7	e2.6	e.60	5.7	28	e7.9	29
26	e1.8	5.2	2.0	2.1	1.5	1.8	e4.9	e.60	3.9	15	e8.6	25
27	e1.8	3.7	2.0	1.9	1.4	2.6	e2.3	e.60	3.2	10	e6.5	23
28	e1.7	2.2	3.7	1.6	1.6	2.0	e1.9	e2.4	2.9	8.5	e6.0	21
29	e1.7	2.0	3.5	1.6	---	9.5	e1.5	e2.7	3.4	6.7	e3.2	31
30	e1.7	1.8	2.8	1.7	---	18	e1.5	e1.8	6.9	e5.6	e6.1	31
31	e1.7	---	2.6	2.7	---	21	---	e1.0	---	e7.1	e6.6	---
TOTAL	99.2	49.1	60.8	79.0	57.6	117.9	109.55	35.60	167.6	486.3	347.3	1778
MEAN	3.20	1.64	1.96	2.55	2.06	3.80	3.65	1.15	5.59	15.7	11.2	59.3
MAX	7.7	5.2	3.7	4.3	3.2	21	19	2.7	19	120	24	162
MIN	1.7	1.1	1.3	1.6	1.4	1.2	.90	.40	1.0	1.9	3.2	19
CFSM	.25	.13	.15	.20	.16	.30	.29	.09	.44	1.23	.88	4.63
IN.	.29	.14	.18	.23	.17	.34	.32	.10	.49	1.41	1.01	5.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)
1972	17.6	47.4	1976	2.05	1991	14.1	67.1	1995	1.64	2001	60.8	43.3	1995	1.83	1991
1973	13.5	34.8	1986	1.85	1991	11.4	34.8	1988	1.83	1991	79.0	62.2	1998	1.83	1991
1974	12.0	57.1	1998	1.42	2000	13.6	57.1	1998	1.43	1990	57.6	41.3	1991	1.43	2000
1975	8.97	41.3	1991	1.09	2000	8.97	41.3	1991	.85	2000	117.9	21	1991	1.09	1998
1976	5.63	35.6	1996	1.88	1998	5.63	35.6	1996	1.88	1998	109.55	19	1996	1.88	1999
1977	13.2	47.9	1978	2.01	1999	13.2	47.9	1978	2.01	1999	35.60	103	1978	2.01	1999
1978	23.5	103	1978	2.01	1999	23.5	103	1978	2.01	1999	167.6	120	1978	2.01	1999
1979	23.4	72.6	1995	1.58	1990	23.4	72.6	1995	1.58	1990	486.3	72.6	1995	1.58	1990
1980	29.7	64.4	1979	1.58	1990	29.7	64.4	1979	1.58	1990	347.3	64.4	1979	1.58	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1972 - 2001
ANNUAL TOTAL	1341.58	3387.95	
ANNUAL MEAN	3.67	9.28	15.7
HIGHEST ANNUAL MEAN			40.7
LOWEST ANNUAL MEAN			4.63
HIGHEST DAILY MEAN	45	e162	377
LOWEST DAILY MEAN	e.35	e.40	e.35
ANNUAL SEVEN-DAY MINIMUM	.37	.51	.37
MAXIMUM PEAK FLOW			459
MAXIMUM PEAK STAGE			16.16
ANNUAL RUNOFF (CFSM)	.29	.73	1.22
ANNUAL RUNOFF (INCHES)	3.90	9.85	16.61
10 PERCENT EXCEEDS	6.8	21	37
50 PERCENT EXCEEDS	2.0	2.5	8.1
90 PERCENT EXCEEDS	.75	1.2	2.0

e Estimated

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02234435 LAKE JESUP OUTLET NEAR SANFORD, FL

LOCATION.--Lat 28°47'09", long 81°10'50", in NW $\frac{1}{4}$ sec.1, T.20 S., R.31 E., Seminole County, Hydrologic Unit 03080101, on left bank of outlet at State Highway 46 and 5.4 mi east of Sanford.

DRAINAGE AREA.--156 mi².

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 sea level (U. S. Coast and Geodetic Survey bench mark). 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.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-678	73	375	334	74	-162	311	-355	182	-33	-149	-198
2	-623	145	295	232	110	189	46	-251	-39	-72	-26	-63
3	-287	164	-367	310	117	396	391	-174	365	60	214	23
4	-121	256	-407	326	144	287	98	-331	523	180	79	-85
5	-41	144	-321	538	107	-114	134	-138	380	105	-273	-66
6	-21	299	-192	186	87	-333	237	-214	442	127	-244	-57
7	-161	212	107	347	52	34	58	-226	599	152	-591	-30
8	-451	234	168	352	122	76	110	-400	412	191	-729	194
9	-564	242	286	-249	174	84	142	-326	142	280	-699	348
10	-233	75	188	145	60	-568	103	-182	139	62	-670	84
11	-227	1.2	317	257	-160	-110	261	69	-75	90	-791	-111
12	-220	198	95	189	-152	39	159	147	237	142	-707	-406
13	-300	200	138	-444	-189	-105	38	204	-154	-122	-599	-220
14	-170	-17	113	-96	105	-397	-67	129	-111	-677	-294	-332
15	-13	-276	-10	-155	159	591	256	300	2.9	-687	-41	e-1590
16	7.0	168	419	-51	232	190	-250	54	-63	-598	39	e-2190
17	34	67	7.4	37	-11	-129	-116	19	82	-490	179	e-2910
18	72	-24	125	219	-382	-156	-561	-187	-68	-52	-44	e-2940
19	69	184	357	312	60	-292	-103	-220	-297	-145	-247	e-2800
20	-17	-360	176	-62	15	-128	198	-15	-184	2.6	-205	e-2350
21	11	-258	417	-417	-63	-355	78	125	-19	33	-138	-1600
22	-35	51	323	74	122	-270	117	212	138	689	-457	-1030
23	-162	273	136	-19	-301	-70	204	-74	242	1060	-429	-463
24	-142	390	-289	112	101	223	270	68	76	170	-379	-233
25	-456	450	-34	-288	81	172	-51	298	-23	87	-300	-273
26	-529	133	-72	83	-197	95	-375	298	-154	-201	-331	119
27	-363	261	62	161	-64	-49	81	227	-233	-162	80	155
28	-135	281	185	129	227	272	-18	80	-267	-13	10	185
29	-46	317	-171	419	---	405	11	170	-196	.04	-39	636
30	-62	298	-153	461	---	183	-52	-57	-100	-23	-178	816
31	80	---	-38	47	---	166	---	-16	---	-629	-226	---
TOTAL	-5784.0	4181.2	2235.4	3489	630	164	1710	-766	1978.9	-473.36	-8185	-17387
MEAN	-187	139	72.1	113	22.5	5.29	57.0	-24.7	66.0	-15.3	-264	-580
MAX	80	450	419	538	232	591	391	300	599	1060	214	816
MIN	-678	-360	-407	-444	-382	-568	-561	-400	-297	-687	-791	-2940

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

	1993	1994	1995	1996	1997	1998	1999	2000	2001			
MEAN	53.7	239	223	241	192	162	155	93.1	181	239	30.5	49.5
MAX	316	434	589	525	395	579	514	356	667	779	519	488
(WY)	1995	1996	1995	1995	1996	1998	1998	1993	1993	1993	1994	1994
MIN	-442	125	-131	-59.4	-62.0	5.29	-89.6	-37.2	-24.5	-24.0	-264	-580
(WY)	2000	1998	1998	1993	1999	2001	1999	1999	1999	1997	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1993 - 2001

ANNUAL TOTAL	28189.92	-18206.86	
ANNUAL MEAN	77.0	-49.9	155
HIGHEST ANNUAL MEAN			*398
LOWEST ANNUAL MEAN			-49.9
HIGHEST DAILY MEAN	914	1060	1890
LOWEST DAILY MEAN	-678	e-2940	e-2940
ANNUAL SEVEN-DAY MINIMUM	-384	e-2340	e-2340
MAXIMUM PEAK STAGE		6.22	7.30
10 PERCENT EXCEEDS	384	298	500
50 PERCENT EXCEEDS	70	11	179
90 PERCENT EXCEEDS	-277	-398	-220

e Estimated

Note.--Negative figures indicate reverse flow

* Highest annual mean based on partial water year record

02234500 ST. JOHNS RIVER NEAR SANFORD, FL

LOCATION.--Lat 28°50'16", long 81°19'28", in SW¹/₄ sec.16, T.19 S., R.30 E., Seminole County, Hydrologic Unit 03080101, near center of channel on bridge pile under U.S. Highway 17 and 92, at outlet of Lake Monroe, 4 mi northwest of Sanford, and 161 mi upstream from mouth.

DRAINAGE AREA.--2,582 mi².

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 sea level.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-840	1830	1480	1240	1050	-14	487	-748	264	577	2450	3920
2	-322	1950	1500	1300	758	296	785	-509	107	792	2320	3800
3	511	1940	301	1160	735	723	870	-457	609	1090	2400	3760
4	756	2030	-912	1050	342	968	699	-329	1210	939	2400	3600
5	1290	2010	-552	1260	341	-134	599	-291	1320	728	2520	3730
6	1490	1990	296	1270	708	-619	485	-136	1230	941	2580	3500
7	1560	2010	712	1330	812	-47	415	-332	1340	1170	2670	3480
8	1420	2090	1060	1210	880	358	475	-842	1110	853	2650	3850
9	-27	1980	1390	89	925	80	346	-939	468	826	2570	4070
10	622	1860	1260	734	596	-583	174	-269	446	587	2730	4040
11	1160	1650	1230	947	432	-822	670	365	534	617	3020	4170
12	1630	1620	962	593	-.22	-138	352	611	834	836	3340	4140
13	1650	1580	1020	-232	-25	-338	-112	504	303	885	3440	4180
14	1660	1460	1090	-141	440	123	-201	845	402	101	3590	3800
15	1870	923	1050	-41	766	840	133	640	527	-46	3530	2370
16	1920	1420	1350	440	963	701	-746	208	281	276	3710	2930
17	2010	1480	671	764	631	601	-674	-195	410	446	3690	3840
18	1960	1330	938	1010	55	-242	-1350	-582	329	394	3700	4810
19	2170	1390	1270	1030	258	-681	-100	-359	-54	545	3740	5710
20	2000	193	866	191	109	-1310	314	183	164	1040	3780	6840
21	2030	246	1380	198	243	-1370	308	421	232	1200	3740	7280
22	1910	1000	1340	567	563	-383	272	592	278	1270	3670	7760
23	1810	1400	973	-546	90	585	228	422	743	1570	3640	8110
24	1520	1730	-20	206	641	821	211	183	745	1920	3590	8300
25	1180	1830	36	-506	232	711	-174	567	662	2130	3490	8480
26	1030	1420	-128	484	-143	464	-854	528	788	2130	3420	8570
27	989	1500	500	686	618	330	-161	214	185	2310	3680	8530
28	1540	1620	782	947	154	675	-230	234	-92	2460	3730	8630
29	1710	1500	-71	1260	---	614	45	542	247	2510	3650	8450
30	1670	1510	-216	1360	---	507	-620	254	283	2310	3640	8350
31	1770	---	584	1130	---	479	---	207	---	2650	3810	---
TOTAL	41649	46492	22142	20990	13173.78	3195	2646	1532	15905	36057	100890	163000
MEAN	1344	1550	714	677	470	103	88.2	49.4	530	1163	3255	5433
MAX	2170	2090	1500	1360	1050	968	870	845	1340	2650	3810	8630
MIN	-840	193	-912	-546	-143	-1370	-1350	-939	-92	-46	2320	2370
CFSM	.52	.60	.28	.26	.18	.04	.03	.02	.21	.45	1.26	2.10
IN.	.60	.67	.32	.30	.19	.05	.04	.02	.23	.52	1.45	2.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	3425	3434	2634	2554	1995	1929	1588	1056	831	1178	1663	2509			
MAX	7102	7981	4908	7189	6278	8408	5599	3016	1865	2483	3965	5710			
(WY)	1996	2000	2000	1998	1998	1998	1998	1998	1996	1996	1997	1995			
MIN	1344	1550	714	457	214	-26.0	-383	-244	381	212	192	517			
(WY)	2001	2001	2001	1997	1999	1997	1997	1997	2000	2000	2000	2000			

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1987 - 2001
ANNUAL TOTAL	277722.4	467671.78	
ANNUAL MEAN	759	1281	2003
HIGHEST ANNUAL MEAN			3509
LOWEST ANNUAL MEAN			951
HIGHEST DAILY MEAN	3940	Jan 1	8630
LOWEST DAILY MEAN	-1210	Sep 10	-1370
ANNUAL SEVEN-DAY MINIMUM	-781	Mar 20	-475
MAXIMUM PEAK FLOW			*17500
MAXIMUM PEAK STAGE		5.84	Sep 25
ANNUAL RUNOFF (CFSM)	.29	.50	.78
ANNUAL RUNOFF (INCHES)	4.00	6.74	10.54
10 PERCENT EXCEEDS	1900	3640	4730
50 PERCENT EXCEEDS	648	792	1460
90 PERCENT EXCEEDS	-348	-182	56

* Measured

Note.--Negative figures indicate reverse flow

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

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT													
11...	1130	2.54	1510	50	4.0	9.0	8.1	7.22	1850	1880	21.5	280	61
24...	1037	2.43	1960	80	6.8	6.7	7.8	7.28	1770	1820	23.4	310	69
NOV													
06...	1325	2.26	2350	120	2.9	8.0	8.0	7.18	1590	1580	24.5	270	63
20...	1321	1.87	-735	140	2.1	7.0	7.8	7.26	1420	1460	20.8	260	61
DEC													
05...	1220	1.72	-1780	120	2.8	7.3	7.7	7.48	1240	1240	16.1	250	59
20...	1000	1.15	-167	140	2.9	7.6	8.0	7.31	1420	1430	15.1	250	59
JAN													
03...	1243	1.02	545	140	4.9	10.8	8.2	7.74	1500	1490	10.1	270	63
17...	1300	.90	1040	80	3.5	13	8.2	7.46	1360	1340	20.0	260	63
FEB													
12...	1403	.49	131	80	1.1	9.4	8.3	7.2	1740	1760	23.3	310	72
27...	1530	.67	815	80	4.5	10.6	7.5	7.30	1680	1700	26.1	300	71
MAR													
13...	1340	.97	38	30	5.8	6.6	7.7	7.55	1310	1330	20.8	260	65
27...	1520	1.20	39	60	6.3	10.9	8.8	7.24	1690	1700	21.9	280	67
APR													
10...	1315	.84	236	60	6.9	8.0	8.7	7.64	1780	1780	27.7	310	71
26...	1130	.56	-1180	60	7.8	5.4	7.8	7.57	1920	1920	27.3	340	78
MAY													
08...	1212	1.15	-612	20	5.9	8.4	8.1	8.0	1050	1070	24.5	240	61
22...	1100	.87	203	50	10	8.1	8.7	7.24	1960	1970	29.1	350	80
JUN													
05...	1228	.62	681	40	15	10.4	9.2	7.21	2190	2220	31.1	360	82
19...	1045	.67	588	40	8.2	5.0	8.8	6.87	2260	2290	32.3	380	86
JUL													
02...	1238	1.00	914	40	8.1	8.3	9.3	7.39	2350	2380	31.7	390	89
17...	1150	1.18	39	20	45	6.2	8.2	7.10	1910	1810	29.5	360	86
31...	1227	2.14	2360	40	7.2	8.1	8.8	6.8	2140	2160	29.8	350	80
AUG													
15...	1020	2.51	3560	140	.95	3.0	7.1	7.0	1350	1390	30.0	230	53
30...	1126	2.68	3610	280	2.8	3.0	7.0	7.0	1000	1010	30.6	180	42
SEP													
12...	1000	3.21	3920	240	3.2	4.7	7.3	7.2	795	808	27.8	160	39
25...	1300	5.82	8280	320	2.4	1.7	6.8	7.5	460	462	27.3	93	24

Note.--Negative figures indicate reverse flow

ST. JOHNS RIVER ABOVE OCKLAWAHA RIVER

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

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

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE TOTAL (MG/L AS S) (00745)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT													
11...	62	31	31	10	250	51	1.4	455	4.7	133	--	17	1060
24...	68	32	31	10	230	48	1.2	435	6.0	157	--	21	1080
NOV													
06...	65	28	28	9.4	210	48	1.2	370	6.6	150	--	12	968
20...	62	26	26	8.8	180	51	1.2	330	7.4	130	<1.0	8	884
DEC													
05...	61	24	24	6.8	140	71	1.2	270	7.1	110	<1.0	6	738
20...	62	24	24	8.2	180	60	1.3	320	6.5	120	<1.0	10	864
JAN													
03...	62	26	26	8.7	180	65	1.1	350	5.4	120	<1.0	12	941
17...	64	25	25	7.3	170	76	1.0	300	3.3	120	<1.0	9	795
FEB													
12...	72	30	31	9.3	220	73	1.7	407	.15	140	<1	18	1110
27...	71	30	32	9.1	220	80	3.0	380	.57	140	<1.0	13	1000
MAR													
13...	66	24	25	6.0	150	105	3.7	280	4.3	100	<1.0	15	782
27...	69	28	30	8.9	210	78	8.0	390	.37	140	<1.0	23	1010
APR													
10...	73	31	31	9.4	220	77	8.3	410	1.1	140	<1.0	20	1090
26...	77	34	33	9.6	240	76	<5.0	460	2.8	160	<1.0	24	1140
MAY													
08...	61	21	21	4.4	110	108	.68	207	5.4	94	<1	12	615
22...	79	35	34	10	240	84	1.6	460	3.1	170	<1.0	36	1160
JUN													
05...	85	38	39	11	300	79	1.7	510	3.5	180	<1.0	110	1280
19...	84	40	39	11	290	72	1.8	540	5.8	190	<1.0	55	1340
JUL													
02...	87	39	39	12	300	75	2.0	560	8.7	200	<1.0	38	1400
17...	86	34	36	9.2	240	68	1.6	440	9.3	190	<1.0	140	1140
31...	81	37	38	11	290	49	2.0	517	8.7	200	<1	48	1320
AUG													
15...	53	24	24	8.8	170	46	1.2	316	7.9	116	1	18	850
30...	44	17	18	6.9	120	53	1.0	229	9.6	64	3	6	666
SEP													
12...	40	14	14	6.1	90	61	.88	177	12	37	2	7	E516c1
25...	--	7.9	--	4.3	50	42	.50	97	9.3	19	<1	3	E306c1

< -- Less than

E -- Estimated value

c1-- Holding time exceeded by the laboratory

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

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
OCT													
11...	.02	--	.01	<.02	<.02	<.01	<.01	.01	.01	.04	16	16	38
24...	.03	--	.04	<.02	<.02	<.01	<.01	<.01	.01	.07	19	20	41
NOV													
06...	.102	--	.15	.04	.05	<.01	<.01	.02	.02	.05	22	22	30
20...	.178	--	.23	.14	.14	.02	.02	<.01	<.01	.06	25	25	22
DEC													
05...	.090	--	.10	.28	.28	.01	.01	.03	.04	.04	17	18	8.9
20...	.096	--	.25	.22	.22	.01	.01	<.01	.03	.04	24	24	25
JAN													
03...	.012	--	.18	.26	.26	<.01	<.01	<.01	.01	.06	22	22	28
17...	.012	--	.29	.14	.13	<.01	<.01	<.01	<.01	.09	19	19	39
FEB													
12...	.01	--	.25	<.02	<.02	<.01	<.01	<.01	.01	.04	23	24	36
27...	.016	--	.12	<.02	<.02	<.01	<.01	<.01	.01	<.08	19	19	79
MAR													
13...	.044	--	.12	.21	.21	<.01	<.01	.04	.06	.08	9.9	11	21
27...	.012	--	.06	<.02	<.02	<.01	<.01	<.01	<.01	.08	16	16	64
APR													
10...	.012	--	.02	<.02	<.02	<.01	<.01	.03	.03	.07	18	19	9.2
26...	<.010	--	<.01	<.02	<.02	<.01	<.01	<.01	<.01	.09	19	21	--
MAY													
08...	<.01	--	.02	.02	<.02	<.01	<.01	<.01	<.01	.07	5.3	5.5	33
22...	<.010	--	<.01	<.02	<.02	<.01	<.01	<.01	.01	.10	16	16	59
JUN													
05...	<.010	--	<.01	<.02	<.02	<.01	<.01	<.01	.02	.15	18	21	120
19...	.014	--	.02	<.02	<.02	<.01	<.01	<.01	.04	.13	18	23	120
JUL													
02...	.032	--	.04	<.02	<.02	<.01	<.01	.01	.03	.07	18	20	77
17...	.023	--	.81	.03	.10	<.01	<.01	<.01	<.01	.24	8.5	9.2	60
31...	<.01	--	.02	<.02	<.02	<.01	<.01	<.01	.03	.09	13	15	93
AUG													
15...	.25	--	.26	.05	.05	.04	.04	<.01	.02	.09	18	18	68
30...	.29	--	.31	.21	.21	.20	.21	.16	.18	.22	23	24	21
SEP													
12...	.33	--	.32	.25	.27	.19	.21	.21	.22	.24	31	33	<.1
25...	.15	1.9	.15	.14	--	.04	--	.15	.16	.18	32	--	<.1

< -- Less than

ST. JOHNS RIVER ABOVE OCKLAWAHA RIVER

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

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

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)
OCT						
11...	42	42	13	105	1800	1800
24...	41	42	73	245	2000	2000
NOV						
06...	38	38	129	230	1900	1900
20...	35	35	151	243	1800	1800
DEC						
05...	26	26	107	169	1500	1500
20...	33	35	142	229	1700	1700
JAN						
03...	33	34	113	177	1700	1700
17...	29	30	66	133	1500	1500
FEB						
12...	39	40	35	146	1900	1900
27...	37	38	25	119	1900	1900
MAR						
13...	22	23	12	120	1300	1300
27...	34	36	9.1	116	1700	1800
APR						
10...	39	40	11	124	1800	1800
26...	44	44	14	192	2000	2000
MAY						
08...	18	19	5.3	94	1020	1020
22...	42	43	5.6	207	2000	2000
JUN						
05...	45	51	5.4	776	2200	2300
19...	44	51	4.4	264	2300	2200
JUL						
02...	43	46	3.1	89	2400	2300
17...	31	49	13	1200	2000	2100
31...	39	47	8.2	190	2260	2290
AUG						
15...	27	33	170	325	1470	1470
30...	22	24	390	506	1160	1180
SEP						
12...	23	28	426	598	990	1040
25...	16	--	427	611	600	--

02234600 WEKIVA SPRINGS NEAR APOPKA, FL

LOCATION.--Lat 28°42'43", long 81°27'36", in NE¼ sec.36, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080101, at head of Wekiva River, 4.1 mi northeast of Apopka 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 current year.

GAGE.--Water-stage recorder. Datum of gage is at sea level.

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

EXTREMES FOR PERIOD MARCH 1932 TO SEPTEMBER 1999.--Maximum discharge measured, 91.7 ft³/s, Oct. 17, 1960; minimum measured, 51.6 ft³/s, May 25, 1990.

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	60	55	54	52	54	55	57	49	49	53	57	49
2	60	55	54	51	55	54	56	48	49	53	58	47
3	61	55	54	51	55	54	54	48	48	53	61	50
4	63	55	54	51	55	54	53	48	49	52	60	48
5	63	54	53	51	55	56	52	48	49	51	60	52
6	62	54	54	50	55	56	52	48	52	51	62	52
7	61	54	53	51	55	55	52	47	52	52	59	57
8	60	54	53	51	55	54	52	47	52	52	58	e62
9	60	54	53	51	55	54	51	47	51	52	58	e62
10	59	54	52	52	55	53	51	47	50	53	60	e59
11	59	54	53	51	55	53	51	47	50	52	67	e57
12	58	54	54	51	55	52	51	47	51	52	63	e52
13	58	53	54	51	54	52	51	47	51	53	61	e60
14	58	53	53	52	55	52	50	47	52	54	60	e70
15	57	53	53	52	55	53	50	47	54	54	59	e95
16	57	53	53	52	54	52	50	47	54	53	58	e77
17	57	53	53	52	55	53	50	47	51	53	58	e59
18	57	53	53	52	55	52	49	47	52	55	59	e59
19	57	53	53	52	55	52	49	46	53	59	63	e59
20	57	53	53	52	54	55	49	46	53	57	65	e59
21	57	53	e53	53	54	58	49	47	52	58	87	53
22	56	53	e51	53	55	55	48	47	52	69	81	48
23	56	53	51	53	55	53	48	47	53	68	71	45
24	56	53	51	53	55	53	48	46	53	65	63	42
25	56	53	51	53	55	52	48	47	54	62	58	41
26	56	55	51	53	55	51	49	49	54	60	55	40
27	56	56	51	54	55	51	48	48	53	59	53	40
28	56	55	51	54	55	51	48	47	53	57	51	40
29	56	54	52	54	---	50	48	47	54	57	50	41
30	56	54	52	53	---	53	48	47	54	56	48	42
31	55	---	52	54	---	60	---	48	---	56	49	---
TOTAL	1800	1615	1632	1615	1535	1658	1512	1465	1554	1731	1872	1617
MEAN	58.1	53.8	52.6	52.1	54.8	53.5	50.4	47.3	51.8	55.8	60.4	53.9
MAX	63	56	54	54	55	60	57	49	54	69	87	95
MIN	55	53	51	50	54	50	48	46	48	51	48	40

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

	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
MEAN	73.2	63.2	59.9	58.1	60.4	58.7	54.5	50.9	53.9	55.4	58.5	56.9
MAX	88.4	72.6	67.1	64.2	65.8	63.9	58.6	54.5	56.1	55.8	60.4	59.9
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2001	2001	2000
MIN	58.1	53.8	52.6	52.1	54.8	53.5	50.4	47.3	51.8	55.0	56.6	53.9
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 2000 - 2001

ANNUAL TOTAL	21311	19606		
ANNUAL MEAN	58.2	53.7	58.6	
HIGHEST ANNUAL MEAN			63.6	2000
LOWEST ANNUAL MEAN			53.7	2001
HIGHEST DAILY MEAN	67	Jan 25	e95	Sep 15
LOWEST DAILY MEAN	51	Dec 22-28	40	Sep 26-28
ANNUAL SEVEN-DAY MINIMUM	51	Dec 22	41	Sep 24
MAXIMUM PEAK STAGE			*13.76	Sep 20
10 PERCENT EXCEEDS	65		59	
50 PERCENT EXCEEDS	57		53	
90 PERCENT EXCEEDS	53		48	

e Estimated
* Stage may have been higher during period of lost record

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02234610 ROCK SPRINGS NEAR APOPKA, FL

LOCATION.--Lat 28°45'20", long 81°29'58", in NE¹/₄ 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 current year.

GAGE.--Nonrecording gage. Datum of gage is 27.54 ft above sea level (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 fair except for periods of estimated daily discharge, which are 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 ft³/s, Oct. 17, 1960; minimum measured, 48 ft³/s, May 22, 1991.

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	43	43	45	44	45	44	43	40	38	41	45	e48
2	43	43	45	44	45	43	42	40	38	41	46	e48
3	42	43	45	44	45	43	43	40	38	41	e46	e48
4	43	43	45	44	46	43	43	40	38	41	e46	e48
5	43	43	45	44	46	43	42	40	38	41	e47	e48
6	43	43	45	44	46	43	42	39	e39	41	e47	e47
7	43	43	45	44	46	43	42	39	39	40	e47	e48
8	43	43	45	44	45	43	42	39	40	40	e47	e48
9	43	43	45	44	45	43	42	39	40	41	e47	e48
10	43	43	45	43	45	43	42	39	40	41	e47	e48
11	43	43	45	44	45	42	42	39	40	42	e47	e47
12	43	43	45	44	45	42	41	39	40	42	e47	e47
13	43	43	45	44	45	42	41	38	40	42	e47	e47
14	43	43	45	44	45	42	41	38	39	42	e48	e47
15	43	43	45	44	45	43	41	39	39	42	e48	e47
16	43	43	45	45	45	42	41	39	40	42	e48	e47
17	43	43	45	45	45	42	41	38	40	43	e48	e47
18	43	43	45	45	44	42	40	37	39	43	e48	e47
19	43	43	45	45	44	42	40	37	40	43	e48	e47
20	42	43	45	45	44	43	39	37	40	44	e48	e50
21	42	43	44	45	45	43	39	37	40	44	e48	e54
22	42	43	44	45	44	43	39	37	41	45	e48	55
23	42	43	44	45	44	43	39	37	41	45	e48	55
24	42	44	44	45	44	43	39	37	41	45	e48	55
25	43	44	44	45	44	42	39	37	41	46	e48	55
26	43	44	45	45	44	42	39	37	41	45	e47	55
27	43	45	45	45	44	42	39	37	41	46	e48	55
28	43	45	45	44	44	42	39	37	41	46	e47	56
29	43	45	45	45	---	42	39	38	41	46	e47	56
30	43	45	45	45	---	42	39	38	41	45	e47	56
31	43	---	45	45	---	43	---	37	---	45	e47	---
TOTAL	1327	1301	1390	1378	1254	1320	1220	1185	1194	1331	1465	1504
MEAN	42.8	43.4	44.8	44.5	44.8	42.6	40.7	38.2	39.8	42.9	47.3	50.1
MAX	43	45	45	45	46	44	43	40	41	46	48	56
MIN	42	43	44	43	44	42	39	37	38	40	45	47

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

	1999	2000	2000	2000	2000	1999	1999	1999	1999	1999	1999	1999
MEAN	52.4	51.9	51.4	50.8	50.3	47.3	44.1	43.5	43.9	45.3	46.5	48.2
MAX	57.4	57.5	56.3	55.1	53.5	50.7	47.4	49.5	46.9	50.9	49.5	51.4
(WY)	1999	2000	2000	2000	2000	1999	1999	1999	1999	1999	1999	1999
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL	16711	15869	
ANNUAL MEAN	45.7	43.5	48.0
HIGHEST ANNUAL MEAN			51.4
LOWEST ANNUAL MEAN			43.5
HIGHEST DAILY MEAN	56	Jan 1	*59
LOWEST DAILY MEAN	40	Jul 18-25	37 May 18-28,31
ANNUAL SEVEN-DAY MINIMUM	40	Jul 18	37 May 18
MAXIMUM PEAK STAGE			30.30 Sep 29
INSTANTANEOUS LOW FLOW			36 May 25
10 PERCENT EXCEEDS	54		47
50 PERCENT EXCEEDS	44		43
90 PERCENT EXCEEDS	42		39

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 SE¼ 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 mi².

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

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

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

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	134	120	116	112	109	104	130	104	94	106	121	138
2	132	120	116	111	109	104	124	103	93	105	129	141
3	132	121	117	111	108	104	121	103	92	104	139	156
4	138	119	117	110	109	110	119	102	93	103	136	151
5	136	120	116	110	109	110	118	101	92	102	135	169
6	133	120	115	110	108	107	117	101	101	101	142	170
7	132	120	115	110	108	107	115	100	106	104	133	186
8	131	120	116	110	107	107	114	100	98	104	127	195
9	129	118	115	111	107	107	114	99	96	105	128	193
10	128	119	115	110	107	108	113	98	95	108	136	189
11	128	119	115	109	107	107	113	98	96	108	157	179
12	127	118	118	110	107	107	112	98	98	106	146	169
13	127	118	117	110	107	108	111	97	95	110	140	184
14	126	117	116	109	107	110	109	97	98	114	135	197
15	126	116	116	109	106	109	108	97	105	114	132	235
16	125	116	116	109	106	109	107	95	109	109	130	219
17	124	117	115	109	106	109	107	94	100	110	128	195
18	123	117	114	108	106	109	106	94	98	117	133	193
19	123	116	114	108	105	118	106	94	100	134	145	193
20	123	116	114	110	105	130	105	93	100	123	153	193
21	123	116	114	109	105	119	105	93	100	130	204	193
22	122	115	113	108	105	115	104	92	102	170	194	192
23	122	114	113	107	105	113	104	91	104	168	174	183
24	122	115	113	107	105	113	104	90	105	154	155	172
25	123	115	112	107	105	113	104	93	106	142	143	163
26	122	121	112	107	104	112	106	100	103	135	140	159
27	122	126	112	107	105	112	103	93	103	130	135	157
28	122	119	114	107	105	112	102	93	104	124	131	155
29	122	118	115	106	---	120	102	93	103	121	129	156
30	121	118	114	106	---	146	103	92	105	118	130	157
31	120	---	113	108	---	135	---	92	---	118	138	---
TOTAL	3918	3544	3558	3375	2982	3494	3306	2990	2994	3697	4398	5332
MEAN	126	118	115	109	106	113	110	96.5	99.8	119	142	178
MAX	138	126	118	112	109	146	130	104	109	170	204	235
MIN	120	114	112	106	104	104	102	90	92	101	121	138

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2000	2001	2000	2000	2000
MEAN	181	153	159	169	160	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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1995 - 2001

ANNUAL TOTAL	44033	43588		
ANNUAL MEAN	120	119		156
HIGHEST ANNUAL MEAN				205
LOWEST ANNUAL MEAN				119
HIGHEST DAILY MEAN	e162	Jan 1	235	Sep 15
LOWEST DAILY MEAN	100	May 3-5,8	90	May 24
ANNUAL SEVEN-DAY MINIMUM	100	May 2	92	May 19
MAXIMUM PEAK FLOW			239	Sep 15
MAXIMUM PEAK STAGE			4.54	Sep 15
INSTANTANEOUS LOW FLOW			89	May 24,25
10 PERCENT EXCEEDS	144		152	215
50 PERCENT EXCEEDS	117		113	149
90 PERCENT EXCEEDS	102		100	109

* Mar. 31, Apr. 1, 1996

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02234990 LITTLE WEKIVA RIVER NEAR ALTAMONTE SPRINGS, FL

LOCATION.--Lat 28°41'13", long 81°23'50", in SE 1/4 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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level (levels by Seminole County Engineer). 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	2.8	2.7	5.0	3.7	4.7	28	5.2	6.2	7.4	35	40
2	11	3.8	2.7	1.1	6.4	4.6	28	4.1	5.5	10	44	39
3	9.2	1.8	2.7	.68	5.7	5.1	23	4.6	5.5	9.9	46	34
4	11	1.8	2.5	.73	3.0	9.6	17	3.4	5.3	3.8	44	31
5	10	1.8	2.3	.54	6.7	7.1	12	4.0	9.0	1.7	39	27
6	9.0	1.8	7.0	.55	11	7.5	12	1.8	51	2.3	38	28
7	8.3	1.8	15	.70	8.2	7.3	9.3	2.3	42	2.7	32	87
8	7.6	1.9	2.4	.43	4.4	5.8	8.1	4.0	35	.83	25	135
9	8.6	3.0	1.6	.26	3.0	5.6	7.8	3.7	26	3.8	22	155
10	5.8	1.2	1.4	.24	3.0	6.9	7.5	1.5	22	7.7	42	147
11	5.5	1.1	2.6	.88	3.2	5.8	5.9	1.5	25	1.9	73	124
12	7.0	1.1	3.7	.18	3.9	5.7	5.8	2.1	24	6.3	98	92
13	5.7	.96	2.7	.29	3.7	8.0	3.8	1.0	14	2.6	93	96
14	5.7	1.0	3.0	.40	3.9	4.9	3.2	1.1	11	6.1	79	234
15	5.6	.99	2.7	.21	5.1	5.4	3.1	1.7	27	2.3	53	287
16	6.1	1.7	2.6	.15	4.3	5.8	3.2	2.2	13	3.9	41	290
17	3.8	1.0	2.8	.14	4.9	7.3	1.9	.85	6.6	6.2	35	253
18	3.5	1.0	2.4	.13	4.5	6.4	1.9	.77	15	16	35	210
19	5.2	1.0	2.2	.50	5.0	24	1.2	.64	20	15	38	156
20	3.3	1.1	2.1	1.8	4.9	21	.83	.64	8.7	17	50	122
21	3.2	1.0	1.7	.68	5.0	14	.62	.95	20	58	51	107
22	3.0	1.0	1.5	1.6	5.4	9.9	.91	1.3	19	107	41	95
23	3.3	1.0	1.1	2.1	5.9	8.7	2.5	2.7	19	118	34	80
24	3.2	1.1	.78	3.3	5.6	9.8	1.8	1.1	14	106	30	76
25	3.4	1.3	1.9	1.6	5.8	5.8	1.9	27	16	78	25	68
26	2.9	7.4	.60	1.6	6.1	5.5	3.4	10	17	60	21	55
27	2.1	3.8	.66	1.3	8.8	10	1.3	7.7	12	56	19	51
28	2.1	3.1	2.9	1.3	11	4.4	1.5	11	7.5	40	23	50
29	2.1	3.9	1.8	1.7	---	33	2.0	18	9.5	34	16	51
30	2.2	3.3	1.7	3.2	---	28	6.7	8.3	12	30	30	45
31	2.5	---	3.3	6.6	---	28	---	4.4	---	38	28	---
TOTAL	171.1	59.55	85.04	39.89	152.1	315.6	206.16	139.55	517.8	846.76	1280	3265
MEAN	5.52	1.99	2.74	1.29	5.43	10.2	6.87	4.50	17.3	27.3	41.3	109
MAX	11	7.4	15	6.6	11	33	28	27	51	118	98	290
MIN	2.1	.96	.60	.13	3.0	4.4	.62	.64	5.3	.63	16	27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	38.6	27.0	23.9	27.9	26.9	29.7	24.3	17.2	31.7	52.7	61.0	59.7																		
MAX	123	160	129	79.9	137	108	89.8	57.4	113	157	171	122																		
(WY)	1996	1995	1998	1986	1998	1987	1991	1994	1974	1994	1994	1994																		
MIN	5.52	1.99	2.74	1.29	5.23	2.45	2.50	3.90	4.25	11.2	12.0	11.8																		
(WY)	2001	2001	2001	2001	2000	2000	2000	2000	1998	2000	1999	1997																		

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1972 - 2001

ANNUAL TOTAL	2998.12	7078.55	
ANNUAL MEAN	8.19	19.4	35.4
HIGHEST ANNUAL MEAN			60.4
LOWEST ANNUAL MEAN			18.4
HIGHEST DAILY MEAN	117	Sep 8	290
LOWEST DAILY MEAN	.44	Mar 25	.13
ANNUAL SEVEN-DAY MINIMUM	.55	Mar 24	.21
MAXIMUM PEAK FLOW			354
MAXIMUM PEAK STAGE			28.22
INSTANTANEOUS LOW FLOW			.11
10 PERCENT EXCEEDS	17	50	78
50 PERCENT EXCEEDS	4.7	5.5	21
90 PERCENT EXCEEDS	1.1	1.0	7.2

* From floodmark

02234990 LITTLE WEKIVA RIVER NEAR ALTAMONTE SPRINGS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-77, 1981-83, 1984, 1993-94, 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2001

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
APR 2000 11...	1000	8.9	6.6	319	17.9	100	33.0	4.90	3.80	18.0	86	30.0	.1
AUG 29...	1300	5.7	6.8	279	26.7	96	31.0	4.40	3.40	15.0	80	23.0	.1
FEB 2001 14...	1300	5.6	7.0	453	21.0	140	44.0	6.50	4.90	31.0	102	52.0	.2
APR 19...	1300	7.8	7.2	375	19.9	--	--	--	--	--	--	--	--

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
APR 2000 11...	3.7	20.0	190	.62	.130	6.9	60	<1.00	11.0	97.0
AUG 29...	4.4	18.0	176	.50	.110	9.8	110	<2.00	10.0	94.0
FEB 2001 14...	3.6	30.0	273	1.5	.270	5.7	40	<2.00	25.0	120

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02234998 LITTLE WEKIVA RIVER NEAR LONGWOOD, FL

LOCATION.--Lat 28°42'12", long 81°23'32", in SW¹/₄ 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 mi².

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at sea level (levels by Seminole County Engineer).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	23	24	25	21	18	34	21	19	27	90	77
2	31	24	24	22	22	18	33	19	20	27	102	97
3	30	22	23	e22	24	19	33	19	19	27	100	84
4	33	23	23	e22	21	21	30	20	21	23	97	80
5	31	23	23	e21	22	21	28	19	21	20	93	76
6	30	23	24	e22	23	21	27	18	39	20	88	73
7	29	23	30	e22	23	20	26	17	45	22	80	115
8	29	23	24	e21	20	20	24	18	44	19	71	e160
9	29	23	22	21	19	20	23	18	36	22	66	e180
10	26	22	22	21	19	20	23	17	32	25	74	e169
11	26	22	23	21	19	20	22	17	32	23	119	e160
12	26	23	26	21	19	20	21	17	36	19	131	134
13	25	23	25	20	19	21	21	16	29	20	131	141
14	25	22	25	20	19	20	20	16	26	26	122	359
15	25	23	24	20	19	20	20	17	30	23	103	489
16	25	23	24	21	19	20	20	17	34	22	89	502
17	24	22	24	21	19	20	20	15	24	24	79	438
18	23	22	24	20	18	20	19	15	26	25	80	373
19	24	22	24	20	18	25	18	15	36	35	83	303
20	23	22	24	22	18	34	18	14	28	32	91	261
21	22	22	24	21	18	26	17	14	31	44	98	239
22	23	22	23	21	18	23	16	15	36	128	88	226
23	23	21	23	21	18	21	17	15	34	164	74	208
24	23	22	23	22	18	23	18	14	31	152	66	201
25	24	21	23	21	18	20	19	20	31	132	63	192
26	24	26	22	20	18	20	18	26	32	115	57	177
27	23	26	21	20	19	22	18	19	30	110	55	167
28	23	25	24	19	21	20	18	21	26	96	57	161
29	23	25	24	20	---	32	17	25	26	84	53	165
30	23	24	23	20	---	40	18	22	29	79	61	157
31	23	---	23	24	---	32	---	18	---	85	82	---
TOTAL	798	687	735	654	549	697	656	554	903	1670	2643	6164
MEAN	25.7	22.9	23.7	21.1	19.6	22.5	21.9	17.9	30.1	53.9	85.3	205
MAX	33	26	30	25	24	40	34	26	45	164	131	502
MIN	22	21	21	19	18	18	16	14	19	19	53	73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001
MEAN	112	66.8	78.3	75.2	70.8	79.7	53.5
MAX	208	99.4	206	142	195	195	119
(WY)	1996	1996	1998	1998	1998	1996	1996
MIN	25.7	22.9	23.7	21.1	19.6	22.5	21.9
(WY)	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1995 - 2001

ANNUAL TOTAL	12294	16710	
ANNUAL MEAN	33.6	45.8	77.9
HIGHEST ANNUAL MEAN			122 1996
LOWEST ANNUAL MEAN			45.8 2001
HIGHEST DAILY MEAN	71 Sep 8	502 Sep 16	648 Dec 29 1997
LOWEST DAILY MEAN	*21	14 May 20,21,24	14 May 20,21,24 2001
ANNUAL SEVEN-DAY MINIMUM	22 Nov 19	15 May 18	15 May 18 2001
MAXIMUM PEAK FLOW		634 Sep 14	661 Dec 29 1997
MAXIMUM PEAK STAGE		22.24 Sep 14	22.47 Sep 18 1999
INSTANTANEOUS LOW FLOW		13 May 24	13 May 24 2001
10 PERCENT EXCEEDS	46	101	167
50 PERCENT EXCEEDS	33	23	57
90 PERCENT EXCEEDS	23	18	24

e Estimated
* Jun 3, Nov 25, Dec 27, 2000

022349993 WEKIVA RIVER AT OLD R.R. CROSSING NEAR SANFORD, FL

LOCATION.--Lat 28°47'33", long 81°24'49", in SE $\frac{1}{4}$ 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 mi².

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 6.75 ft above sea level (Seminole County bench mark).

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

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	203	151	150	146	132	128	218	136	127	154	201	226
2	199	150	149	146	133	126	200	139	128	151	209	233
3	196	151	149	144	134	125	185	137	127	148	238	263
4	207	150	148	141	134	132	177	137	128	145	248	275
5	209	150	148	139	134	144	170	137	128	140	245	330
6	200	149	147	139	134	136	168	136	137	140	254	358
7	192	150	148	139	133	131	159	132	170	140	246	371
8	188	147	149	139	132	129	155	130	179	141	228	422
9	186	145	147	141	131	129	154	131	173	151	232	424
10	181	146	145	138	128	130	152	131	162	162	270	403
11	177	147	145	137	127	131	150	130	152	164	277	379
12	174	145	150	137	129	131	146	129	159	159	279	353
13	171	145	154	138	129	132	144	129	155	157	271	358
14	170	145	154	137	129	136	144	129	143	178	264	580
15	169	144	151	137	130	137	143	129	147	201	258	944
16	167	142	150	135	129	134	138	129	167	185	247	968
17	163	143	146	135	128	133	137	128	160	183	235	864
18	161	143	145	135	128	135	137	127	148	209	225	742
19	159	142	144	134	125	151	134	124	149	272	233	630
20	157	141	145	134	125	201	132	122	159	251	237	533
21	156	141	145	135	126	190	131	121	155	245	305	456
22	156	141	143	134	125	170	131	121	165	325	343	392
23	155	139	143	133	125	154	130	121	172	349	330	339
24	154	139	143	132	126	148	131	121	172	346	291	300
25	155	139	143	131	126	144	132	120	172	325	255	275
26	158	148	143	131	125	141	143	141	166	300	235	257
27	160	167	143	130	125	141	139	136	159	280	216	247
28	153	160	145	129	129	141	137	127	155	257	203	241
29	153	154	150	127	---	149	134	128	150	234	196	240
30	154	152	149	127	---	222	131	134	148	213	190	240
31	153	---	148	129	---	231	---	129	---	199	210	---
TOTAL	5336	4406	4559	4209	3611	4562	4482	4021	4612	6504	7671	12643
MEAN	172	147	147	136	129	147	149	130	154	210	247	421
MAX	209	167	154	146	134	231	218	141	179	349	343	968
MIN	153	139	143	127	125	125	130	120	127	140	190	226

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
MEAN	323	232	253	271	248	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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1995 - 2001
ANNUAL TOTAL	60149	66616	
ANNUAL MEAN	164	183	
HIGHEST ANNUAL MEAN			248
LOWEST ANNUAL MEAN			183
HIGHEST DAILY MEAN	293	Sep 23	1070
LOWEST DAILY MEAN	131	Jul 19	120
ANNUAL SEVEN-DAY MINIMUM	135	Jun 2	121
MAXIMUM PEAK FLOW			997
MAXIMUM PEAK STAGE		4.98	4.98
INSTANTANEOUS LOW FLOW			119
10 PERCENT EXCEEDS	200		413
50 PERCENT EXCEEDS	160		217
90 PERCENT EXCEEDS	139		146

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 2000 TO SEPTEMBER 2001

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 08...	1355	2.16	189	5	.52	11.8	8.3	8.3	515	524	24.6	170	47
JAN 19...	1222	2.02	186	<5	.83	11.1	8.3	8.3	510	484	22.8	170	47
MAY 10...	1108	1.61	149	10	.9	10.9	8.5	8.6	493	566	25.2	170	45
AUG 15...	0815	2.07	313	100	1.1	5.1	7.3	7.6	482	471	26.8	170	47

DATE	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SULFIDE TOTAL (MG/L AS S) (00745)	RESIDUE TOTAL AT 105 DEG. C, PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV 08...	47	13	13	2.1	35	116	.2	63	9.0	46	--	3	295
JAN 19...	48	13	13	2.0	32	115	.19	58	7.1	47	<1	2	284
MAY 10...	45	13	13	2.1	32	115	.20	58	6.9	44	<1.0	3	276
AUG 15...	48	12	12	2.4	30	95	.23	52	8.7	62	<1	8	336

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO-PLANK- TON CHROMO FLUOROM (UG/L) (70953)	BARIIUM, DIS-SOLVED (UG/L AS BA) (01005)
NOV 08...	.04	.04	.51	.51	<.01	<.01	.09	.09	.09	2.1	2.3	<.1	E9
JAN 19...	<.01	.03	.38	.39	<.01	<.01	.09	.09	.09	2.3	1.9	<.1	9.3
MAY 10...	<.010	<.01	.24	.24	<.01	<.01	.09	.09	.10	2.6	2.7	5.0	9
AUG 15...	.02	.02	.27	.27	<.01	<.01	.08	.09	.10	13	13	<.1	12

DATE	BARIIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	STRON-TIUM, TOTAL DIS-SOLVED (UG/L AS SR) (01080)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)
NOV 08...	9.4	3.7	22	480	470
JAN 19...	9.4	4.4	23	470	460
MAY 10...	9	3.5	13	440	440
AUG 15...	12	114	186	580	580

< -- Less than
E -- Estimated value

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 2000 TO SEPTEMBER 2001

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS Ca) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)
NOV 06...	0820	4.45	4.2	50	2.7	5.4	7.9	480	19.5	220	66	66	14
JAN 19...	1025	4.48	4.4	40	.45	5.1	7.4	586	18.7	280	82	83	19
MAY 10...	0854	4.82	10	80	1.2	6.1	7.3	440	20.7	190	56	57	12
AUG 14...	1100	6.54	80	480	1.2	1.6	5.4	720	25.3	350	105	106	21

DATE	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS Mg) (00927)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CaCO3) (90410)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV 06...	15	1.3	8.3	63	<.05	13	9.6	151	8	342	.03	.05	.45
JAN 19...	19	1	7.9	61	<.05	12	10	209	<1	450	<.01	.01	.38
MAY 10...	12	1.4	11	34	.08	18	5.9	150	<1	332	<.010	<.01	.23
AUG 14...	21	2.4	11	8.2	.07	17	11	318	6	703	.72	.71	.03

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	BARIUM, DIS-SOLVED (UG/L AS Ba) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS Ba) (01007)	IRON, DIS-SOLVED (UG/L AS Fe) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS Fe) (01045)
NOV 06...	.45	<.01	<.01	.03	.04	.05	13	13	<.1	17	17	117	392
JAN 19...	.39	<.01	<.01	.02	.02	.02	9.3	9.3	<.1	20	20	64	97
MAY 10...	.23	<.01	<.01	.01	.01	.03	20	20	<.1	24	24	123	212
AUG 14...	.04	<.01	<.01	.02	.02	.04	49	49	<.1	52	52	1620	2030

DATE	STRON-TIUM, DIS-SOLVED (UG/L AS Sr) (01080)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS Sr) (01082)
NOV 06...	1100	1100
JAN 19...	1310	1330
MAY 10...	760	760
AUG 14...	1630	1630

< -- Less than

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02235500 BLUE SPRINGS NEAR ORANGE CITY, FL

LOCATION.--Lat 28°56'38", long 81°20'24", in NE $\frac{1}{4}$ sec.8, T.18 S., R.30 E., Volusia County, Hydrologic Unit 03080101, on right bank of Blue Springs Run, 800 ft upstream from St. Johns River, 0.2 mi downstream from head of springs, and 2.5 mi west of Orange City.

DRAINAGE AREA.--Indeterminate.

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 sea level. 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 poor. Discharge affected by backwater from St. Johns River. Discharge record for April 1 to Sept. 30, 2001 not published due to bad velocity meter 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	99	103	106	113	104	106	---	---	---	---	---	---
2	97	71	103	98	83	108	---	---	---	---	---	---
3	106	80	91	110	121	131	---	---	---	---	---	---
4	104	85	96	109	112	117	---	---	---	---	---	---
5	86	85	108	111	104	127	---	---	---	---	---	---
6	79	61	108	109	103	122	---	---	---	---	---	---
7	113	49	100	94	113	110	---	---	---	---	---	---
8	113	65	94	102	110	102	---	---	---	---	---	---
9	110	75	96	109	103	88	---	---	---	---	---	---
10	98	89	58	96	103	83	---	---	---	---	---	---
11	117	83	104	92	127	88	---	---	---	---	---	---
12	121	81	89	101	118	101	---	---	---	---	---	---
13	124	98	86	106	106	121	---	---	---	---	---	---
14	88	100	92	90	116	91	---	---	---	---	---	---
15	75	98	83	88	121	98	---	---	---	---	---	---
16	85	124	80	87	113	118	---	---	---	---	---	---
17	85	94	94	89	119	129	---	---	---	---	---	---
18	73	92	84	112	128	123	---	---	---	---	---	---
19	86	97	98	112	105	139	---	---	---	---	---	---
20	126	88	105	130	112	117	---	---	---	---	---	---
21	87	118	117	107	99	137	---	---	---	---	---	---
22	84	111	120	111	103	127	---	---	---	---	---	---
23	107	111	109	129	105	129	---	---	---	---	---	---
24	116	101	109	97	109	101	---	---	---	---	---	---
25	96	118	109	112	102	100	---	---	---	---	---	---
26	112	107	102	97	126	108	---	---	---	---	---	---
27	116	84	104	95	116	112	---	---	---	---	---	---
28	95	102	111	104	99	108	---	---	---	---	---	---
29	111	87	91	115	---	132	---	---	---	---	---	---
30	91	98	108	124	---	135	---	---	---	---	---	---
31	68	---	101	116	---	124	---	---	---	---	---	---
TOTAL	3068	2755	3056	3265	3080	3532	---	---	---	---	---	---
MEAN	99.0	91.8	98.6	105	110	114	---	---	---	---	---	---
MAX	126	124	120	130	128	139	---	---	---	---	---	---
MIN	68	49	58	87	83	83	---	---	---	---	---	---

02235500 BLUE SPRINGS NEAR ORANGE CITY, FL--Continued

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

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	16...	1051	115	1.61	1910	6.4	23.1	<5	1.9	.18	<.01	<.20	.3	.080
JAN	24...	1330	136	.65	1810	--	23.3	--	--	--	--	--	--	--
MAR	19...	1250	113	.58	1900	--	22.8	<5	--	.12	<.01	.43	.2	<.020
MAY	17...	1037	124	.56	1760	--	23.8	--	--	--	--	--	--	--
JUL	17...	1215	132	.84	2120	6.8	23.5	<5	1.1	.12	<.01	.25	.2	.070
SEP	04...	1325	131	1.88	2110	7.4	23.4	<5	1.1	.12	<.01	<.20	.2	.050

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	16...	.080	300	69.0	30.0	260	9.30	142	73.0	480	<.1	8.6	1090	1100
MAR	19...	.080	300	69.0	30.0	260	9.20	142	71.0	480	<.1	8.4	1060	1100
JUL	17...	.070	310	71.0	33.0	290	10.0	146	79.0	510	<.1	8.5	1170	1200
SEP	04...	.070	320	72.0	34.0	290	11.0	147	79.0	520	<.1	8.5	1180	1150

< -- Less than

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

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 mi².

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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-1680	2670	2100	1780	1380	355	1300	-219	856	860	2780	3770
2	-1340	2680	1770	1700	1030	729	1770	79	679	1040	2520	3760
3	435	2820	306	1330	854	1160	2060	196	991	1200	2610	3750
4	1210	2850	-1750	1150	711	1410	1830	416	1360	1070	2620	3470
5	2030	2880	-938	1610	729	-3.2	1420	425	1410	1050	2790	3410
6	2660	2670	474	1570	883	-120	1230	503	1350	1280	2840	3500
7	2560	2590	926	1600	1020	704	974	-53	1510	1390	2830	3530
8	2080	2820	1380	1530	988	824	1150	-410	1360	1150	2920	3610
9	-284	3130	1670	286	1200	661	1220	-533	e600	1200	3000	3630
10	534	2540	1610	952	798	-753	1180	162	e460	1030	3160	3770
11	1510	2060	1520	1120	689	-381	1590	831	e700	1180	3300	3990
12	2060	1930	1220	690	366	270	1390	1110	e890	1180	3500	4160
13	2030	1760	1330	-73	53	276	1210	1160	e540	1290	3660	4010
14	2200	1680	1320	159	558	494	e900	1250	e650	779	3720	3600
15	2280	1080	1240	172	998	1640	e385	1070	886	394	3810	969
16	2880	1640	1800	692	1310	1470	-140	861	819	464	3620	2410
17	2970	1680	1070	829	900	1060	-71	709	951	1010	3510	3510
18	2960	876	1370	1070	87	466	-764	76	654	1300	3400	4340
19	3020	1550	1740	1560	388	-125	640	277	168	1950	3480	5580
20	2710	414	1230	525	489	-777	1120	735	484	1870	3450	6750
21	2480	305	1890	525	685	-1150	1090	1170	637	1680	3520	7490
22	2490	1110	1800	811	968	470	879	1020	805	1930	3540	8290
23	1980	1980	1040	-545	320	1280	951	870	1190	2250	3480	9210
24	1630	2610	246	548	608	1340	1100	604	1090	2540	3410	9690
25	1200	2700	208	-37	593	1280	724	877	903	2560	3500	10200
26	1360	1900	62	803	273	1190	22	909	953	2610	3430	10500
27	1460	2210	669	984	862	910	513	828	520	2670	3360	11800
28	2200	2330	1070	1160	430	1030	675	946	488	2710	3420	11800
29	2490	2200	370	1690	---	1460	802	1100	573	2670	3490	11400
30	2450	2070	-40	2210	---	1420	164	885	652	2600	3590	10800
31	2470	---	1030	1610	---	1690	---	792	---	2830	3550	---
TOTAL	55035	61735	29733	30011	20170	20279.8	27314	18646	25129	49737	101810	176699
MEAN	1775	2058	959	968	720	654	910	601	838	1604	3284	5890
MAX	3020	3130	2100	2210	1380	1690	2060	1250	1510	2830	3810	11800
MIN	-1680	305	-1750	-545	53	-1150	-764	-533	168	394	2520	969
CFSM	.58	.67	.31	.32	.23	.21	.30	.20	.27	.52	1.07	1.92
IN.	.67	.75	.36	.36	.24	.25	.33	.23	.30	.60	1.23	2.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001, BY WATER YEAR (WY)

MEAN	4848	4353	3276	2773	2515	2559	2405	1545	1768	2905	3417	3983
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	61.6	229	316	234	405
(WY)	1982	1981	1981	1939	1982	2000	1999	1962	1962	2000	2000	1958

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1934 - 2001

ANNUAL TOTAL	362720.20	616298.8	
ANNUAL MEAN	991	1688	3032
HIGHEST ANNUAL MEAN			6433
LOWEST ANNUAL MEAN			743
HIGHEST DAILY MEAN	e4290	Jan 2	11800
LOWEST DAILY MEAN	-3260	Sep 10	-1750
ANNUAL SEVEN-DAY MINIMUM	-2130	Sep 7	73
MAXIMUM PEAK STAGE			4.32
ANNUAL RUNOFF (CFSM)	.32		.55
ANNUAL RUNOFF (INCHES)	4.40		7.47
10 PERCENT EXCEEDS	2710		3500
50 PERCENT EXCEEDS	892		1200
90 PERCENT EXCEEDS	-668		231
			6.06
			.99
			13.42
			6200
			2420
			820

e Estimated

Note.--Negative figures indicate reverse flow

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

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02236000 ST. JOHNS RIVER NEAR DE LAND, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.94	1.99	.97	.75	.23	.33	.82	.48	.35	.63	1.26	1.55
2	2.08	1.93	.94	.62	.20	.34	.75	.54	.34	.60	1.37	1.54
3	2.13	1.87	1.06	.60	.18	.26	.62	.57	.28	.54	1.44	1.54
4	2.13	1.80	1.33	.54	.21	.13	.56	.62	.26	.49	1.45	1.56
5	2.10	1.75	1.46	.46	.24	.07	.57	.63	.20	.47	1.47	1.64
6	2.02	1.71	1.47	.38	.26	.08	.63	.64	.17	.40	1.52	1.70
7	1.95	1.69	1.43	.29	.25	.09	.65	.66	.14	.33	1.52	1.79
8	1.89	1.67	1.37	.26	.25	.14	.59	.81	.14	.30	1.54	1.87
9	2.04	1.59	1.29	.31	.23	.23	.54	.93	.17	.31	1.56	1.93
10	2.15	1.51	1.23	.32	.20	.38	.49	.94	.20	.32	1.57	1.96
11	2.15	1.50	1.23	.32	.19	.55	.41	.88	.23	.31	1.58	1.98
12	2.13	1.51	1.23	.32	.24	.62	.37	.78	.19	.28	1.50	2.00
13	2.10	1.53	1.23	.43	.32	.70	.37	.68	.19	.26	1.43	2.12
14	2.08	1.55	1.21	.52	.35	.66	.33	.61	.17	.42	1.38	2.67
15	2.05	1.59	1.19	.61	.29	.49	.30	.59	.17	.66	1.33	3.66
16	2.02	1.55	1.11	.61	.22	.35	.34	.56	.14	.76	1.31	4.07
17	1.96	1.49	1.01	.57	.16	.28	.39	.54	.14	.84	1.36	4.21
18	1.90	1.48	.93	.53	.20	.34	.59	.61	.23	.97	1.42	4.28
19	1.86	1.47	.76	.50	.31	.66	.53	.66	.35	1.03	1.49	4.31
20	1.84	1.56	.73	.48	.36	1.08	.45	.62	.41	1.00	1.55	4.30
21	1.86	1.61	.62	.50	.34	1.21	.37	.58	.41	1.05	1.52	4.27
22	1.86	1.59	.54	.41	.27	1.13	.32	.51	.40	1.24	1.53	4.25
23	1.89	1.47	.59	.53	.28	1.03	.26	.50	.36	1.35	1.54	4.22
24	1.97	1.36	.69	.59	.36	.98	.19	.51	.36	1.34	1.57	4.17
25	2.07	1.26	.76	.64	.39	.91	.14	.50	.37	1.31	1.57	4.13
26	2.13	1.28	.90	.64	.39	.87	.30	.50	.40	1.26	1.57	4.09
27	2.16	1.26	.94	.61	.36	.86	.36	.48	.46	1.23	1.59	4.06
28	2.15	1.18	.88	.55	.32	.85	.37	.44	.53	1.18	1.61	4.00
29	2.10	1.08	.92	.48	---	.86	.34	.40	.59	1.16	1.59	3.99
30	2.06	1.02	.99	.37	---	.93	.37	.38	.63	1.14	1.54	4.04
31	2.04	---	.91	.29	---	.89	---	.38	---	1.19	1.53	---
MEAN	2.03	1.53	1.03	.48	.27	.59	.44	.60	.30	.79	1.49	3.06
MAX	2.16	1.99	1.47	.75	.39	1.21	.82	.94	.63	1.35	1.61	4.31
MIN	1.84	1.02	.54	.26	.16	.07	.14	.38	.14	.26	1.26	1.54

CAL YR 2000	MEAN	.96	MAX	2.16	MIN	.07
WTR YR 2001	MEAN	1.05	MAX	4.31	MIN	.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 current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 2000 to September 2001.

WATER TEMPERATURE: October 2000 to September 2001.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 2,010 $\mu\text{S}/\text{cm}$ @ 25 °C, July 10; minimum daily mean, 488 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 30.

WATER TEMPERATURE: Maximum daily mean, 30.7 °C, July 31, Aug. 14; minimum daily mean, 11.6 °C, Jan. 5.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1650	1360	1480	1420	1450	1480	1610	1590	1640	1940	1030
2	---	1650	1360	1180	1450	1450	1490	1550	1660	1700	1880	1020
3	---	1640	1370	1200	1450	1330	1500	1540	1630	1570	1840	995
4	---	1590	1360	1340	1460	1160	1560	1530	1560	1260	1820	995
5	---	1580	1370	1380	1470	1080	1580	1520	1640	1480	1780	995
6	---	1550	1360	1400	1450	1120	1590	1520	1830	1710	1630	952
7	---	1550	1360	1430	1460	1110	1580	1530	1860	1810	1590	918
8	---	1540	1440	1440	1410	1170	1570	1440	1890	1910	1640	891
9	---	1530	1410	1450	1380	1310	1540	1350	1880	1990	1660	892
10	---	1500	1310	1450	1410	1230	1530	1330	1850	2010	1590	902
11	---	1470	1310	1470	1430	1180	1550	1330	1830	1980	1490	908
12	---	1430	1310	1450	1420	1210	1540	1460	1760	1960	1470	897
13	---	1400	1280	1470	1440	1190	1550	1590	1690	1970	1430	853
14	---	1390	1310	1480	1440	1210	1570	1450	1640	1950	1450	770
15	---	1380	1320	1480	1450	1230	1580	1450	1640	1940	1420	666
16	---	1440	1340	1470	1580	1380	1600	1430	1670	1900	1380	726
17	---	1400	1330	1440	1400	1260	1620	1440	1620	1790	1300	674
18	---	1380	1310	1490	1310	1260	1620	1440	1630	1760	1250	671
19	---	1380	1360	1450	1400	1230	1610	1440	1630	1580	1220	671
20	---	1380	1330	1270	1370	1180	1620	1450	1630	1360	1170	665
21	---	1380	1390	1310	1320	1170	1620	1470	1640	1290	1140	662
22	---	1400	1360	1280	1330	1190	1470	1590	1680	1330	1160	652
23	---	1460	1380	1300	1460	1190	1430	1460	1700	1510	1160	632
24	---	1310	1380	1300	1420	1300	1420	1350	1510	1440	1150	603
25	---	1390	1350	1300	1450	1250	1500	1350	1260	1570	1120	563
26	---	1380	1370	1300	1430	1260	1500	1420	1360	1750	1090	533
27	1710	1330	951	1380	1420	1320	1480	1500	1470	1850	1060	507
28	1690	1330	998	1430	1450	1390	1520	1450	1490	1880	1050	496
29	1670	1340	1080	1190	---	1440	1600	1550	1520	1920	1030	494
30	1700	1360	1030	1150	---	1420	1700	1590	1570	1950	1050	488
31	1700	---	1330	1340	---	1450	---	1550	---	1940	1050	---
MEAN	---	1450	1310	1370	1420	1260	1550	1470	1640	1730	1390	757
MAX	---	1650	1440	1490	1580	1450	1700	1610	1890	2010	1940	1030
MIN	---	1310	951	1150	1310	1080	1420	1330	1260	1260	1030	488
CAL YR 2000	MEAN	1400	MAX	1710	MIN	951						
WTR YR 2001	MEAN	1400	MAX	2010	MIN	488						

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED AS CA (MG/L AS CA) (00915)
OCT													
11...	0858	2.16	867	50	2.9	5.7	7.5	7.39	1550	1580	22.9	260	59
24...	0757	1.96	2330	70	3.2	5.0	7.2	7.36	1700	1740	23.5	300	68
NOV													
06...	1100	1.71	2370	100	2.0	4.6	7.9	7.35	1540	1580	23.0	280	65
20...	1013	1.57	123	120	2.0	5.3	7.6	7.40	1340	1380	20.4	250	60
DEC													
05...	1015	1.46	-724	120	2.5	6.1	7.5	7.43	1340	1360	15.9	250	59
20...	1345	.73	2380	100	2.0	6.7	7.6	7.41	1320	1320	17.0	250	60
JAN													
03...	0933	.62	1490	50	3.0	7.1	7.5	7.82	1160	1150	11.9	250	64
17...	1025	.56	1680	80	3.0	7.8	7.8	7.42	1450	1440	15.5	270	65
FEB													
12...	1111	.21	544	60	2.8	7.0	7.8	7.4	1400	1410	19.9	270	67
27...	1230	.40	735	30	2.5	9.3	7.2	7.53	1430	1440	23.7	280	67
MAR													
14...	1026	.64	805	20	3.7	7.2	7.8	7.66	1230	1230	20.6	240	60
28...	1000	.80	1000	40	2.8	7.4	7.2	7.63	1310	1320	20.5	280	72
APR													
10...	0937	.49	863	50	6.3	5.7	7.6	7.34	1540	1540	25.0	290	71
26...	0845	.25	-253	40	5.8	5.5	7.5	7.64	1510	1500	24.4	290	71
MAY													
08...	0908	.80	-764	40	4.9	5.8	7.7	7.70	1430	1460	24.5	280	67
22...	0800	.50	926	20	6.0	6.3	7.8	7.66	1600	1610	27.4	290	70
JUN													
05...	0831	.22	1100	30	4.5	6.6	8.0	7.48	1560	1580	29.4	290	70
19...	0815	.38	-749	30	4.1	4.5	7.9	7.31	1620	1640	29.3	300	71
JUL													
02...	0920	.65	932	30	6.7	6.6	8.1	7.50	1690	1720	28.6	300	71
17...	0859	.84	1190	60	4.1	4.3	7.5	7.12	1770	1800	28.2	330	80
31...	0823	1.19	2820	50	8.7	5.2	7.8	6.9	1990	2010	30.6	350	80
AUG													
14...	1310	1.39	3630	120	.45	3.1	7.0	7.0	1410	1450	30.5	250	59
30...	0838	1.56	3790	280	1.3	1.1	6.9	7.1	1020	1050	29.7	190	46
SEP													
11...	0933	1.98	4330	240	1.9	1.9	7.0	7.2	883	896	28.1	170	43
25...	1010	4.13	10300	280	2.2	.5	6.6	7.5	543	550	26.7	120	31

Note.--Negative figures indicate reverse flow

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

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

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SULFIDE TOTAL (MG/L AS S) (00745)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT													
11...	59	26	26	7.9	200	67	1.0	328	5.1	105	--	11	819
24...	68	31	30	9.3	220	62	1.1	421	6.1	143	--	12	1030
NOV													
06...	66	28	28	8.6	200	61	1.2	358	7.4	135	--	10	954
20...	62	24	24	8.0	160	68	1.0	310	8.2	120	<1.0	7	821
DEC													
05...	61	24	26	7.6	160	68	.96	310	7.4	110	<1.0	5	796
20...	63	24	24	6.8	160	79	.97	290	7.1	110	<1.0	6	800
JAN													
03...	63	22	23	5.2	120	98	.82	240	7.6	100	--	6	691
17...	65	26	26	8.2	190	85	1.3	330	4.4	110	<1.0	5	839
FEB													
12...	68	25	26	7.5	160	93	1.4	304	2.7	117	<1	10	879
27...	67	26	28	7.3	180	110	2.5	310	3.9	100	<1.0	7	818
MAR													
14...	61	22	23	5.9	140	105	3.2	260	4.3	91	<1.0	6	724
28...	71	25	24	5.6	150	97	8.7	270	4.9	130	<1.0	10	761
APR													
10...	72	28	28	7.4	180	88	8.2	330	2.8	130	<1.0	18	925
26...	69	27	27	7.1	180	97	5.8	330	4.5	120	<1.0	16	874
MAY													
08...	67	26	26	6.8	170	99	1.0	320	3.8	120	<1.0	10	809
22...	67	28	27	8.0	190	118	1.3	360	5.5	97	<1.0	16	890
JUN													
05...	71	27	29	7.4	190	98	1.1	340	5.2	130	<1.0	22	892
19...	71	29	29	7.5	200	97	1.2	360	6.0	130	<1.0	23	932
JUL													
02...	70	30	29	8.0	210	103	1.5	390	7.8	120	<1.0	18	962
17...	80	31	32	8.7	220	75	1.5	400	8.7	160	<1.0	13	1120
31...	81	36	36	10	260	60	1.6	459	9.5	187	<1	38	1240
AUG													
14...	59	25	25	8.6	170	52	1.2	322	8.5	128	<1	26	924
30...	47	18	18	6.7	130	59	1.0	234	9.9	69	1	9	672
SEP													
11...	44	16	16	6.1	100	64	.97	193	11	49	2	9	602
25...	--	10	--	4.6	60	48	.50	114	10	35	3	5	E368c1

< -- Less than

E -- Estimated value

c1-- Holding time exceeded by the laboratory

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED TOTAL (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE DIS- SOLVED TOTAL (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO, DIS- SOLVED TOTAL (MG/L AS P) (00671)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED TOTAL (MG/L AS C) (00681)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
OCT													
11...	.03	--	.04	.03	.02	<.01	<.01	.02	.03	.04	13	14	20
24...	.07	--	.09	.05	.05	<.01	<.01	<.01	.01	.06	16	17	20
NOV													
06...	.15	--	.18	.09	.10	.01	.01	.03	.03	.06	19	20	7.8
20...	.236	--	.26	.24	.24	.03	.03	.03	.03	.07	20	20	5.2
DEC													
05...	.092	--	.10	.26	.25	.01	.01	.03	.03	.05	18	18	<.1
20...	.110	--	.18	.22	.22	.01	<.01	.03	.04	.04	17	17	11
JAN													
03...	.094	--	.13	.44	.43	<.01	<.01	.05	.05	.08	8.9	8.5	<.1
17...	.038	--	.19	.25	.25	.02	.02	<.01	.02	.05	16	17	21
FEB													
12...	.16	--	.29	.27	.27	.06	.05	.04	.06	.06	16	15	23
27...	.166	--	.26	.15	.17	.02	.04	.05	.07	<.10	9.0	9.1	23
MAR													
14...	.110	--	.16	.15	.15	.04	.04	.05	.06	.08	7.1	7.3	16
28...	.026	--	.07	.20	.20	<.01	<.01	.04	.05	.06	7.8	8.2	11
APR													
10...	.012	--	.04	.05	.05	<.01	<.01	.03	.03	.09	14	14	49
26...	<.010	--	.04	.03	.03	<.01	<.01	<.01	<.01	.09	13	13	40
MAY													
08...	<.010	--	.04	<.02	<.02	<.01	<.01	.02	.03	.08	11	11	25
22...	<.010	--	.02	<.02	<.02	<.01	<.01	.02	.03	.10	6.2	6.1	33
JUN													
05...	<.010	--	<.01	<.02	<.02	<.01	<.01	<.01	<.01	.07	11	12	56
19...	.012	--	.02	<.02	<.02	<.01	<.01	<.01	.01	.08	11	12	66
JUL													
02...	.022	--	.02	<.02	<.02	<.01	<.01	<.01	.01	.06	9.7	9.6	48
17...	.078	--	.50	.06	.07	<.01	<.01	<.01	.04	.10	9.9	10	<.1
31...	<.01	--	.02	<.02	<.02	<.01	<.01	<.01	.02	.09	15	20	150
AUG													
14...	.12	--	.15	.02	.02	<.01	<.01	<.01	<.01	.08	16	16	57
30...	.32	--	.33	.22	.23	.16	.16	.16	.16	.20	22	23	3.9
SEP													
11...	.27	--	.26	.27	.29	.16	.17	.21	.21	.22	29	30	<.1
25...	.06	1.8	.07	.07	--	.02	--	.13	.14	.16	34	--	<.1

< -- Less than

02236000 ST. JOHNS RIVER NEAR DELAND, FL--Continued

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

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR) (01082)
OCT						
11...	32	31	23	98	1400	1400
24...	37	38	56	137	1800	1800
NOV						
06...	35	35	114	206	1700	1700
20...	30	30	125	191	1500	1600
DEC						
05...	28	28	109	152	1500	1500
20...	27	28	84	140	1400	1500
JAN						
03...	20	20	40	84	1200	1200
17...	28	28	58	107	1500	1500
FEB						
12...	27	27	27	94	1440	1450
27...	24	25	13	56	1300	1300
MAR						
14...	18	19	7.9	58	1100	1100
28...	23	24	16	70	1300	1300
APR						
10...	31	31	14	112	1500	1500
26...	30	30	11	107	1500	1500
MAY						
08...	27	28	8.5	67	1400	1400
22...	27	27	3.6	87	1300	1300
JUN						
05...	27	30	25	104	1400	1500
19...	15	30	4.1	75	1500	1500
JUL						
02...	20	26	3.0	54	1400	1400
17...	21	33	49	127	1700	1700
31...	39	43	31	216	2070	2090
AUG						
14...	26	30	129	336	1490	1500
30...	22	25	360	504	1150	1170
SEP						
11...	23	27	376	557	1020	1080
25...	16	--	348	572	690	--

< -- Less than

ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER

02236125 ST. JOHNS RIVER AT ASTOR, FL

LOCATION.--Lat 29°10'00", long 81°31'20", in NW¹/₄ 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 mi².

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 sea level.

REMARKS.--Records fair. No daily discharge and stage record for Jan. 23-July 19, when the gage was removed for bridge repairs.

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	-3450	3170	2420	2870	---	---	---	---	---	---	2120	4550
2	-1850	3270	1970	2100	---	---	---	---	---	---	1610	4380
3	913	3280	-1020	1990	---	---	---	---	---	---	1950	4300
4	1220	3420	-2790	1760	---	---	---	---	---	---	2510	3880
5	2860	3070	-1460	2130	---	---	---	---	---	---	2920	3650
6	3540	2590	345	2340	---	---	---	---	---	---	3090	3680
7	3320	2560	1430	2090	---	---	---	---	---	---	2850	4320
8	1190	3120	2030	1920	---	---	---	---	---	---	2950	4000
9	-2740	3690	2460	-236	---	---	---	---	---	---	3860	4150
10	-380	2360	1920	1590	---	---	---	---	---	---	4810	4540
11	1590	2000	1690	1420	---	---	---	---	---	---	5070	5000
12	2050	1350	1900	505	---	---	---	---	---	---	5220	4760
13	2070	1650	1790	-193	---	---	---	---	---	---	5210	4230
14	2400	1070	1700	-502	---	---	---	---	---	---	5200	749
15	2910	1070	2010	-90	---	---	---	---	---	---	4950	-5540
16	3160	2260	2380	918	---	---	---	---	---	---	4140	3070
17	3250	2290	1390	1470	---	---	---	---	---	---	4240	5480
18	3040	1600	2760	1580	---	---	---	---	---	---	4470	7040
19	3060	1700	2040	2070	---	---	---	---	---	---	4290	8080
20	2230	-829	1960	405	---	---	---	---	---	2180	5050	8920
21	2130	-542	2450	1200	---	---	---	---	---	2200	5010	9520
22	1820	2110	1780	542	---	---	---	---	---	1850	4980	9950
23	657	3100	741	---	---	---	---	---	---	2340	4510	10100
24	-38	3510	-179	---	---	---	---	---	---	2770	4370	10100
25	-424	2710	-369	---	---	---	---	---	---	2780	4540	9950
26	310	2440	-510	---	---	---	---	---	---	2850	3890	9950
27	661	2850	1100	---	---	---	---	---	---	2990	3840	10100
28	2670	2830	1670	---	---	---	---	---	---	2810	4170	9870
29	2980	2730	28	---	---	---	---	---	---	2970	4620	8310
30	2250	2370	-72	---	---	---	---	---	---	2510	4700	7410
31	2810	---	1930	---	---	---	---	---	---	2630	4510	---
TOTAL	46209	68799	35494	27879	---	---	---	---	---	30880	125650	178499
MEAN	1491	2293	1145	1267	---	---	---	---	---	2573	4053	5950
MAX	3540	3690	2760	2870	---	---	---	---	---	2990	5220	10100
MIN	-3450	-829	-2790	-502	---	---	---	---	---	1850	1610	-5540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	5023	5411	4274	4426	3029	3131	2787	1510	1732	2546	2649	3801
MAX	9026	8974	9206	9123	6591	10760	7498	3601	2609	3833	5056	7498
(WY)	1996	2000	1995	1998	1998	1998	1998	1994	1994	1994	1994	1995
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1994 - 2001

ANNUAL TOTAL	448199	513410	
ANNUAL MEAN	1225	2746	3352
HIGHEST ANNUAL MEAN			5211
LOWEST ANNUAL MEAN			1706
HIGHEST DAILY MEAN	5990	10100	11700
LOWEST DAILY MEAN	-3780	-5540	-6180
ANNUAL SEVEN-DAY MINIMUM	-2270	72	-2270
MAXIMUM PEAK STAGE		3.91	3.91
10 PERCENT EXCEEDS	3130	5050	8000
50 PERCENT EXCEEDS	1210	2450	2700
90 PERCENT EXCEEDS	-714	-76	297

Note.--Negative figures indicate reverse flow

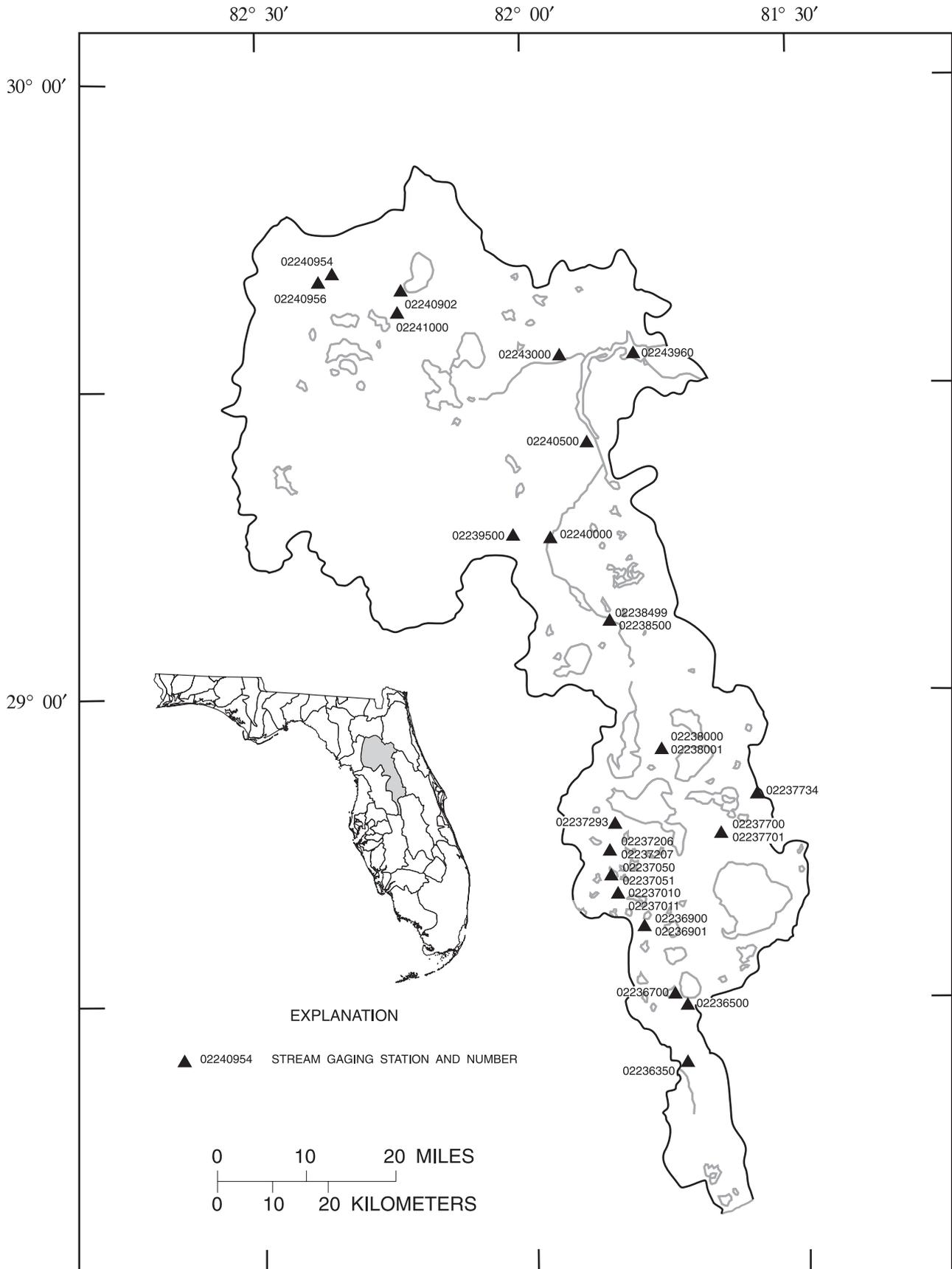


Figure 5.--Location of stream gaging stations in the Ocklawaha River basin.

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 mi², approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 116.16 ft above sea level.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	21
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	45
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	51
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	49
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	46
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	43
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	39
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	35
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	32
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	29
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	26
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	24
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	22
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	20
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	19
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	17
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	520.60
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	17.4
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	51
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.40
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

	14.5	9.36	10.4	12.2	12.3	15.6	13.8	2.23	3.78	8.18	12.1	12.0
MEAN	14.5	9.36	10.4	12.2	12.3	15.6	13.8	2.23	3.78	8.18	12.1	12.0
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1981	1981	1981	1981	1981	1981	1981	1980	1980	1979	1980	1980

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1979 - 2001

ANNUAL TOTAL		109.31		520.60		
ANNUAL MEAN		.30		1.43		10.5
HIGHEST ANNUAL MEAN						50.9
LOWEST ANNUAL MEAN						.11
HIGHEST DAILY MEAN		5.9	Jan 1	51	Sep 17	194
LOWEST DAILY MEAN		.00	Many days	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM		.00	Mar 1	.00	Oct 1	.00
MAXIMUM PEAK FLOW				51	Sep 17	195
MAXIMUM PEAK STAGE				4.63	Sep 17	5.78
ANNUAL RUNOFF (CFSM)		.007		.033		.24
ANNUAL RUNOFF (INCHES)		.09		.45		3.33
10 PERCENT EXCEEDS		1.3		.00		36
50 PERCENT EXCEEDS		.00		.00		.22
90 PERCENT EXCEEDS		.00		.00		.00

OCKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL

LOCATION.--Lat 28°26'51", long 81°44'25", in NE¹/₄ sec.31, T.23 S., R.26 E., Lake County, Hydrologic Unit 03080102, near left bank 40 ft downstream from log bridge, 1 mi upstream from mouth at Lake Louisa, and 7.5 mi southeast of Clermont.

DRAINAGE AREA.--68 mi², approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 98.97 ft above sea level.

REMARKS.--Records fair. Some interconnection at high stages with Little Creek and Withlacoochee River basin.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.42
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.0
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.7
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.8
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.8
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.5
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.2
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.8
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.4
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	2.0
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	1.8
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	1.7
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.6
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	1.2
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	1.1
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	44.91
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	1.50
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	6.7
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

	30.5	20.0	18.1	23.0	23.5	33.3	23.6	7.05	7.59	20.2	29.3	36.8
MEAN	30.5	20.0	18.1	23.0	23.5	33.3	23.6	7.05	7.59	20.2	29.3	36.8
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.003
(WY)	1981	1981	1994	1981	2001	1999	1994	1977	1981	1981	2001	2000

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1958 - 2001

ANNUAL TOTAL	55.50	44.96	
ANNUAL MEAN	.15	.12	22.8
HIGHEST ANNUAL MEAN			137
LOWEST ANNUAL MEAN			.12
HIGHEST DAILY MEAN	2.4	6.7	684
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		7.5	691
MAXIMUM PEAK STAGE		2.08	6.23
ANNUAL RUNOFF (CFSM)	.002	.002	.33
ANNUAL RUNOFF (INCHES)	.03	.02	4.55
10 PERCENT EXCEEDS	.70	.00	61
50 PERCENT EXCEEDS	.00	.00	5.5
90 PERCENT EXCEEDS	.00	.00	.02

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 mi².

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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	15.6	10.1	13.3	19.0	17.2	20.9	15.3	3.43	4.44	9.78	14.0	16.8												
MAX	88.3	42.8	123	154	119	127	87.8	15.2	41.8	64.0	110	63.7												
(WY)	1996	1996	1998	1998	1998	1998	1987	1998	1991	1984	1984	1995												
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000												
(WY)	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1980												

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1979 - 2001
ANNUAL MEAN			13.2
HIGHEST ANNUAL MEAN			51.9
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN			261
LOWEST DAILY MEAN	.00	.00	Many days
ANNUAL SEVEN-DAY MINIMUM	.00	.00	Oct 1
MAXIMUM PEAK FLOW			*850
MAXIMUM PEAK STAGE			*10.85
ANNUAL RUNOFF (CFSM)			.90
ANNUAL RUNOFF (INCHES)			12.22
10 PERCENT EXCEEDS	.00	.00	40
50 PERCENT EXCEEDS	.00	.00	1.8
90 PERCENT EXCEEDS	.00	.00	.00

*From floodmark

OCKLAWAHA RIVER BASIN

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

LOCATION.--Lat 28°35'32", long 81°49'22", in NE $\frac{1}{4}$ sec.8, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, near left bank 20 ft downstream from spillway at outlet of Cherry Lake, and 3 mi northeast of Groveland.

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--September 1956 to July 1957 (fragmentary), August 1957 to current year (gage heights only). Prior to October 1968, published as Palatlahaha Creek at Cherry Lake Outlet, near Groveland (auxiliary).

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

GAGE.--Water-stage recorder. Datum of gage is at sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90.57	89.89	89.62	89.28	89.08	88.78	89.11	88.71	---	---	---	---
2	90.55	89.87	89.61	89.26	89.08	88.78	89.10	88.71	---	---	---	---
3	90.53	89.85	89.59	89.25	89.06	88.77	89.10	88.71	---	---	---	---
4	90.52	89.83	89.58	89.23	89.07	88.79	89.09	88.71	---	---	---	---
5	90.52	89.81	89.56	89.22	89.06	88.81	89.08	88.71	---	---	---	---
6	90.51	89.80	89.54	89.21	89.04	88.78	89.08	88.70	---	---	---	---
7	90.49	89.78	89.52	89.19	89.02	88.77	89.07	88.70	---	---	---	---
8	90.47	89.77	89.51	89.19	89.01	88.76	89.05	88.70	---	---	---	---
9	90.42	89.75	89.50	89.19	88.99	88.75	89.04	88.70	---	---	---	---
10	90.38	89.73	89.50	89.17	88.98	88.75	89.03	88.70	---	---	---	---
11	90.35	89.71	89.49	89.16	88.97	88.74	89.01	88.70	---	---	---	---
12	90.33	89.69	89.49	89.16	88.96	88.74	88.99	88.70	---	---	---	---
13	90.29	89.68	89.49	89.14	88.95	88.73	88.97	88.69	---	---	---	---
14	90.26	89.67	89.48	89.14	88.94	88.73	88.95	88.69	---	---	---	---
15	90.23	89.67	89.47	89.12	88.94	88.73	88.93	88.69	---	---	---	---
16	90.20	89.64	89.46	89.12	88.92	88.73	88.90	88.69	---	---	---	---
17	90.17	89.64	89.45	89.11	88.91	88.72	88.87	88.69	---	---	---	---
18	90.15	89.64	89.42	89.10	88.90	88.72	88.82	88.69	---	---	---	---
19	90.13	89.62	89.42	89.09	88.88	88.77	88.79	88.69	---	---	---	---
20	90.11	89.61	89.40	89.13	88.87	88.91	88.78	88.68	---	---	---	93.06
21	90.09	89.59	89.39	89.12	88.86	88.89	88.77	88.68	---	---	---	92.93
22	90.07	89.56	89.38	89.11	88.85	88.86	88.75	88.68	---	---	---	92.80
23	90.05	89.54	89.36	89.09	88.84	88.83	88.74	88.68	---	---	---	92.67
24	90.03	89.53	89.35	89.07	88.83	88.80	88.74	88.68	---	---	---	92.56
25	90.02	89.58	89.34	89.06	88.82	88.78	88.73	88.68	---	---	---	92.46
26	90.00	89.75	89.32	89.04	88.82	88.76	88.73	---	---	---	---	92.38
27	89.98	---	89.31	89.02	88.80	88.74	88.72	---	---	---	---	92.32
28	89.96	---	89.32	89.01	88.80	88.74	88.72	---	---	---	---	92.27
29	89.95	---	89.33	89.00	---	88.78	88.71	---	---	---	---	92.27
30	89.93	---	89.31	88.99	---	89.02	88.71	---	---	---	---	92.28
31	89.91	---	89.30	89.04	---	89.06	---	---	---	---	---	---
MEAN	90.23	89.70	89.45	89.13	88.94	88.79	88.90	88.69	---	---	---	---
MAX	90.57	89.89	89.62	89.28	89.08	89.06	89.11	88.71	---	---	---	---
MIN	89.91	89.53	89.30	88.99	88.80	88.72	88.71	88.68	---	---	---	---
CAL YR 2000	MEAN	91.07	MAX	92.92	MIN	89.30						
WTR YR 2001	MEAN	89.39	MAX	93.06	MIN	88.68						

OCKLAWAHA RIVER BASIN

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

LOCATION.--Lat 28°40'45", long 81°53'05", in NW $\frac{1}{4}$ sec.11, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 150 ft downstream from control structure M-5, 125 ft upstream from Bridges Road, 1.9 mi west of U.S. Highway 27, and 4.8 mi south of Okahumpka.

DRAINAGE AREA.--193 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.28	82.17	81.66	81.24	81.14	80.89	---	81.06	80.69	80.58	81.19	81.28
2	83.25	82.14	81.65	81.23	81.17	80.89	---	81.04	80.70	80.56	81.19	81.25
3	83.22	82.12	81.63	81.21	81.17	80.87	---	81.05	80.71	80.53	81.21	81.23
4	83.21	82.10	81.61	81.20	81.20	80.91	---	81.07	80.68	80.50	81.25	81.22
5	83.18	82.08	81.59	81.18	81.20	80.96	---	81.05	80.66	80.47	81.30	81.27
6	83.16	82.03	81.57	81.17	81.20	80.93	---	81.03	80.68	80.47	81.39	81.35
7	83.13	81.93	81.55	81.16	81.19	80.91	---	81.00	80.68	---	81.47	81.63
8	83.10	81.88	81.53	81.17	81.18	80.90	---	80.98	80.66	---	81.49	81.72
9	83.06	81.87	81.52	81.18	81.18	80.89	---	80.95	80.64	---	81.51	81.80
10	83.02	81.86	81.50	81.16	81.17	80.89	---	80.93	80.61	---	81.52	81.83
11	82.99	81.84	81.49	81.15	81.17	80.88	---	80.91	80.58	---	81.53	81.84
12	82.96	81.82	81.51	81.14	81.17	80.87	---	80.88	80.55	---	81.53	81.86
13	82.93	81.81	81.50	81.13	81.16	80.87	---	80.87	80.52	---	81.54	81.88
14	82.90	81.77	81.49	81.12	81.15	80.89	---	80.86	80.50	---	81.55	82.24
15	82.87	81.74	81.48	81.11	81.14	80.88	---	80.84	80.49	---	81.55	83.51
16	82.84	81.68	81.46	81.10	81.13	80.88	---	80.83	80.46	---	81.55	83.85
17	82.81	81.61	81.44	81.09	81.11	---	---	80.81	80.43	---	81.55	83.88
18	82.78	81.58	81.41	81.08	81.10	---	81.40	80.80	80.41	---	81.57	83.88
19	82.70	81.57	81.39	81.06	81.07	---	81.37	80.78	80.42	---	81.58	83.88
20	82.61	81.57	81.38	81.06	81.05	---	81.35	80.76	80.39	---	81.57	83.88
21	82.57	81.55	81.36	81.04	81.04	---	81.32	80.76	80.39	---	81.55	83.89
22	82.55	81.53	81.34	81.02	81.02	---	81.30	80.75	80.46	---	81.54	83.89
23	82.53	81.51	81.33	81.01	81.01	---	81.26	80.82	80.52	---	81.52	83.89
24	82.51	81.50	81.31	80.99	80.98	---	81.19	80.80	80.55	---	81.49	83.88
25	82.48	81.50	81.29	80.98	80.97	---	81.16	80.78	80.55	---	81.47	83.91
26	82.46	81.58	81.28	80.96	80.96	---	81.14	80.78	80.53	---	81.44	83.90
27	82.43	81.68	81.26	80.95	80.94	---	81.12	80.76	80.54	---	81.41	83.89
28	82.40	81.69	81.28	80.94	80.92	---	81.10	80.75	80.57	---	81.38	83.88
29	82.38	81.68	81.29	80.92	---	---	81.08	80.75	80.56	---	81.36	83.91
30	82.27	81.67	81.28	80.91	---	---	81.07	80.74	80.55	---	81.33	83.90
31	82.18	---	81.26	81.04	---	---	---	80.69	---	---	81.31	---
MEAN	82.80	81.77	81.44	81.09	81.10	80.89	81.22	80.87	80.56	---	81.45	82.81
MAX	83.28	82.17	81.66	81.24	81.20	80.96	81.40	81.07	80.71	---	81.58	83.91
MIN	82.18	81.50	81.26	80.91	80.92	80.87	81.07	80.69	80.39	---	81.19	81.22
CAL YR 2000	MEAN 82.82	MAX 84.45	MIN 81.18									
WTR YR 2001	MEAN 81.48	MAX 83.91	MIN 80.39									

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 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is at sea level.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.8
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.7
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.6
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.4
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.3
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.2
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.1
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.0
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.9
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.7
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.4
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.3
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.1
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	2.3
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	2.6
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.10
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.64
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.8
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	MEAN	20.2	8.38	13.6	46.1	47.6	61.1	49.7	8.72	6.35	18.6	18.8	25.4
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1979	1979	1979	1981	1981	1981	1981	1977	1977	1977	2000	1977	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1970 - 2001

ANNUAL TOTAL		256.75		49.10									
ANNUAL MEAN		.70		.13						27.1			
HIGHEST ANNUAL MEAN										194			1970
LOWEST ANNUAL MEAN										.13			2001
HIGHEST DAILY MEAN		3.7	Jan 1-4		4.8	Sep 15				727			Feb 20 1998
LOWEST DAILY MEAN		.00	Many days		.00	Oct 1-Sep 13				.00			Some years
ANNUAL SEVEN-DAY MINIMUM		.00	May 1		.00	Oct 1				.00			Some years
MAXIMUM PEAK STAGE					71.28	Sep 15				74.18			Apr 3 1970
ANNUAL RUNOFF (CFSM)		.003			.001					.12			
ANNUAL RUNOFF (INCHES)		.04			.01					1.66			
10 PERCENT EXCEEDS		3.1			.00					57			
50 PERCENT EXCEEDS		.00			.00					2.3			
90 PERCENT EXCEEDS		.00			.00					.00			

OCKLAWAHA RIVER BASIN

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.14	69.46	69.04	68.71	68.52	68.19	68.53	67.99	67.44	67.18	68.20	68.46
2	70.13	69.44	69.02	68.69	68.52	68.18	68.53	67.97	67.43	67.15	68.21	68.44
3	70.12	69.41	69.01	68.68	68.51	68.17	68.51	67.96	67.41	67.12	68.24	68.42
4	70.12	69.39	68.99	68.67	68.52	68.19	68.51	67.96	67.39	67.08	68.26	68.43
5	70.12	69.37	68.98	68.66	68.51	68.21	68.50	67.94	67.37	67.07	68.29	68.61
6	70.11	69.35	68.97	68.65	68.49	68.18	68.50	67.92	67.41	67.09	68.34	68.76
7	70.10	69.34	68.95	68.64	68.47	68.15	68.48	67.90	67.41	67.09	68.36	69.28
8	70.08	69.32	68.94	68.65	68.45	68.13	68.46	67.88	67.38	67.06	68.37	69.56
9	70.05	69.29	68.93	68.65	68.43	68.12	68.45	67.86	67.36	67.04	68.39	69.69
10	70.02	69.28	68.92	68.63	68.41	68.12	68.43	67.84	67.33	67.04	68.43	69.77
11	70.00	69.25	68.91	68.62	68.40	68.11	68.41	67.82	67.31	67.04	68.48	69.84
12	69.97	69.23	68.91	68.61	68.39	68.09	68.39	67.79	67.29	67.04	68.53	69.91
13	69.94	69.21	68.90	68.60	68.37	68.11	68.37	67.78	67.26	67.11	68.55	69.98
14	69.92	69.20	68.89	68.59	68.37	68.18	68.35	67.76	67.24	67.19	68.57	70.39
15	69.88	69.18	68.88	68.58	68.36	68.16	68.33	67.74	67.22	67.20	68.58	71.21
16	69.85	69.16	68.87	68.57	68.35	68.15	68.31	67.72	67.20	67.16	68.62	71.12
17	69.82	69.15	68.85	68.56	68.33	68.14	68.28	67.69	67.19	67.14	68.66	71.07
18	69.78	69.13	68.83	68.55	68.32	68.12	68.24	67.67	67.19	67.16	68.68	71.02
19	69.75	69.11	68.82	68.54	68.31	68.19	68.22	67.64	67.17	67.21	68.69	70.98
20	69.72	69.09	68.81	68.53	68.29	68.36	68.20	67.62	67.15	67.26	68.69	70.95
21	69.70	69.07	68.80	68.51	68.28	68.37	68.17	67.60	67.14	67.36	68.69	70.90
22	69.67	69.05	68.79	68.50	68.27	68.37	68.15	67.59	67.16	67.51	68.69	70.86
23	69.64	69.04	68.78	68.49	68.26	68.36	68.13	67.59	67.18	67.84	68.68	70.85
24	69.62	69.02	68.77	68.48	68.25	68.35	68.11	67.56	67.18	67.95	68.66	70.80
25	69.60	69.01	68.75	68.46	68.24	68.33	68.09	67.54	67.16	68.00	68.64	70.78
26	69.60	69.05	68.74	68.45	68.23	68.32	68.08	67.53	67.13	68.02	68.62	70.74
27	69.57	69.11	68.73	68.44	68.22	68.29	68.05	67.51	67.11	68.05	68.59	70.71
28	69.55	69.10	68.75	68.42	68.20	68.28	68.03	67.49	67.11	68.08	68.57	70.68
29	69.52	69.08	68.76	68.41	---	68.33	68.01	67.49	67.10	68.10	68.54	70.72
30	69.50	69.06	68.74	68.41	---	68.51	68.00	67.48	67.14	68.10	68.51	70.76
31	69.48	---	68.73	68.47	---	68.53	---	67.45	---	68.13	68.49	---
MEAN	69.84	69.20	68.86	68.56	68.37	68.24	68.29	67.72	67.25	67.41	68.51	70.12
MAX	70.14	69.46	69.04	68.71	68.52	68.53	68.53	67.99	67.44	68.13	68.69	71.21
MIN	69.48	69.01	68.73	68.41	68.20	68.09	68.00	67.45	67.10	67.04	68.20	68.42
CAL YR 2000	MEAN	69.75	MAX	71.13	MIN	68.62						
WTR YR 2001	MEAN	68.53	MAX	71.21	MIN	67.04						

02237700 APOPKA-BEAUCLAIR CANAL NEAR ASTATULA, FL

LOCATION.--Lat 28°43'20", long 81°41'06", in NW¹/₄ 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 mi².

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

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	20	24	22	20	11	7.8	.90	2.4	9.6	2.9
2	19	22	21	24	22	20	12	7.5	1.7	1.0	12	5.1
3	19	22	20	24	21	21	13	7.6	2.3	1.7	12	6.5
4	19	22	19	23	21	22	12	7.6	2.2	.70	12	5.9
5	19	22	23	24	22	11	12	7.4	2.6	.10	14	5.9
6	19	22	25	24	23	9.5	13	7.5	.70	.10	15	8.4
7	19	22	25	24	23	12	13	7.2	.80	.20	11	11
8	18	22	26	24	23	18	12	7.1	.70	.00	9.3	17
9	17	22	26	23	24	18	12	7.0	.00	.10	8.4	20
10	18	21	26	23	23	16	10	6.9	.30	.00	9.5	19
11	20	21	26	24	22	16	10	7.4	1.1	.00	12	17
12	23	21	26	24	22	17	9.7	6.9	2.7	.00	12	22
13	23	21	26	23	22	11	9.1	6.4	.00	.00	11	18
14	23	21	26	24	22	11	8.4	9.4	.00	.00	9.1	28
15	23	20	26	24	22	11	8.4	12	2.1	.40	9.3	21
16	23	21	26	24	22	10	7.6	10	.00	.00	11	47
17	23	21	25	24	21	9.7	7.4	9.2	.00	.30	12	40
18	23	20	24	24	20	9.3	7.1	9.5	.30	.70	13	22
19	23	21	24	25	22	10	8.5	9.2	.80	.10	12	23
20	23	20	24	24	22	10	8.8	8.8	1.1	.00	12	23
21	23	19	24	23	22	9.1	8.6	8.8	.10	.40	10	22
22	23	20	24	22	21	9.8	8.5	9.7	.00	6.9	11	23
23	23	20	24	20	20	10	8.6	4.6	.00	23	9.8	23
24	22	21	24	22	22	11	8.4	2.8	.00	14	6.6	22
25	22	21	24	21	22	10	7.5	5.2	.60	9.9	5.3	22
26	22	20	24	22	20	9.9	6.5	4.4	2.5	6.6	2.5	21
27	22	20	24	22	21	9.7	7.6	2.6	1.8	6.4	5.8	22
28	22	21	25	22	20	11	7.6	3.8	.10	5.2	6.8	21
29	22	20	24	23	---	12	8.4	2.4	.20	4.2	5.4	19
30	22	20	23	24	---	13	7.6	.30	.70	2.0	4.2	20
31	22	---	23	23	---	12	---	.10	---	3.1	4.3	---
TOTAL	658	628	747	721	609	400.0	284.3	207.10	26.30	89.50	297.9	577.7
MEAN	21.2	20.9	24.1	23.3	21.8	12.9	9.48	6.68	.88	2.89	9.61	19.3
MAX	23	22	26	25	24	22	13	12	2.7	23	15	47
MIN	17	19	19	20	20	9.1	6.5	.10	.00	.00	2.5	2.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

MEAN	67.3	49.3	55.7	84.2	85.4	108	106	42.9	56.8	59.7	76.9	91.2
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	.000	.000	.000	.000	.000	.065	.10	.19	.000	.000	.000	.000
(WY)	1972	1972	1972	1965	1968	1968	1968	1968	1971	1971	1971	1971

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1958 - 2001

ANNUAL TOTAL	8461	5245.80	
ANNUAL MEAN	23.1	14.4	73.5
HIGHEST ANNUAL MEAN			224
LOWEST ANNUAL MEAN			5.00
HIGHEST DAILY MEAN	29	Jan 1-4	47
LOWEST DAILY MEAN	17	Oct 9	.00
ANNUAL SEVEN-DAY MINIMUM	18	Oct 4	.01
MAXIMUM PEAK STAGE			64.91
10 PERCENT EXCEEDS	28		24
50 PERCENT EXCEEDS	22		16
90 PERCENT EXCEEDS	19		.70

02237701 APOKA-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 mi².

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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61.35	60.98	60.82	60.71	60.78	60.65	60.83	60.27	59.88	60.05	60.38	60.51
2	61.31	60.95	60.82	60.70	60.78	60.64	60.84	60.25	59.90	59.90	60.43	60.63
3	61.29	60.94	60.84	60.71	60.76	60.64	60.75	60.24	59.90	59.88	60.46	60.62
4	61.29	60.95	60.84	60.70	60.75	60.66	60.79	60.26	59.89	59.84	60.45	60.88
5	61.29	60.95	60.83	60.69	60.75	60.63	60.78	60.23	59.89	59.82	60.52	60.98
6	61.28	60.93	60.83	60.69	60.75	60.61	60.73	60.19	59.81	59.83	60.65	60.83
7	61.29	60.92	60.83	60.71	60.73	60.60	60.71	60.18	59.81	59.84	60.51	60.94
8	61.30	60.92	60.81	60.70	60.71	60.68	60.70	60.17	59.81	59.84	60.48	60.89
9	61.31	60.89	60.80	60.71	60.71	60.76	60.69	60.14	59.77	59.83	60.53	60.90
10	61.21	60.89	60.81	60.71	60.72	60.75	60.71	60.11	59.78	59.82	60.66	60.89
11	61.19	60.91	60.81	60.70	60.74	60.76	60.68	60.12	59.80	59.80	60.64	60.86
12	61.16	60.88	60.83	60.71	60.74	60.65	60.65	60.15	59.82	59.78	60.61	60.92
13	61.15	60.85	60.84	60.71	60.73	60.54	60.64	60.14	59.72	59.81	60.65	60.90
14	61.15	60.85	60.83	60.68	60.75	60.59	60.65	60.18	59.72	59.92	60.65	61.66
15	61.12	60.86	60.84	60.64	60.75	60.52	60.63	60.17	59.83	59.90	60.60	62.21
16	61.10	60.82	60.84	60.63	60.73	60.56	60.63	60.14	59.76	59.85	60.68	61.93
17	61.10	60.82	60.81	60.65	60.73	60.57	60.59	60.09	59.76	59.85	60.78	61.75
18	61.10	60.84	60.82	60.65	60.75	60.57	60.57	60.07	59.77	59.97	60.77	61.49
19	61.09	60.81	60.80	60.62	60.72	60.62	60.50	60.05	59.80	60.21	60.76	61.48
20	61.10	60.83	60.79	60.66	60.68	60.74	60.45	60.06	59.81	60.01	60.76	61.49
21	61.09	60.81	60.77	60.71	60.67	60.69	60.44	60.08	59.75	59.97	60.73	61.47
22	61.07	60.78	60.76	60.68	60.65	60.69	60.42	60.13	59.72	60.13	60.74	61.44
23	61.07	60.77	60.76	60.67	60.66	60.68	60.39	60.04	59.74	61.14	60.72	61.44
24	61.05	60.74	60.76	60.64	60.64	60.67	60.37	60.03	59.75	60.74	60.66	61.43
25	61.03	60.74	60.77	60.64	60.62	60.67	60.39	59.99	59.86	60.48	60.63	61.50
26	61.04	60.81	60.75	60.62	60.61	60.66	60.42	59.97	59.81	60.33	60.60	61.52
27	61.02	60.88	60.72	60.65	60.64	60.65	60.36	59.94	59.77	60.35	60.61	61.51
28	61.00	60.86	60.73	60.67	60.64	60.60	60.31	59.94	59.76	60.42	60.61	61.49
29	61.00	60.84	60.76	60.67	---	60.59	60.28	59.91	59.74	60.32	60.57	61.49
30	61.00	60.83	60.73	60.67	---	60.83	60.28	59.86	59.84	60.27	60.53	61.46
31	60.99	---	60.73	60.73	---	60.81	---	59.85	---	60.29	60.52	---
MEAN	61.15	60.86	60.80	60.68	60.71	60.65	60.57	60.10	59.80	60.07	60.61	61.25
MAX	61.35	60.98	60.84	60.73	60.78	60.83	60.84	60.27	59.90	61.14	60.78	62.21
MIN	60.99	60.74	60.72	60.62	60.61	60.52	60.28	59.85	59.72	59.78	60.38	60.51
CAL YR 2000	MEAN 61.63	MAX 62.76	MIN 60.72									
WTR YR 2001	MEAN 60.60	MAX 62.21	MIN 59.72									

OCKLAWAHA RIVER BASIN

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 mi².

PERIOD OF RECORD.--July to September 1991 (discharge measurements only), January 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is at sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
2	1.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23
3	.97	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.26
4	.99	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.73
5	.95	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	1.0
6	.87	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	1.2
7	.79	.00	.00	.00	.00	.00	.00	.00	.00	.00	.72	1.8
8	.71	.00	.00	.00	.00	.00	.00	.00	.00	.00	.83	2.0
9	.63	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.90	2.0
10	.53	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.1	2.2
11	.47	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.3	2.1
12	.40	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.4	2.0
13	.34	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.5	2.3
14	.30	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.7	5.5
15	.25	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.7	18
16	.21	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.7	26
17	.18	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.7	22
18	.15	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.6	19
19	.13	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.5	16
20	.11	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.4	14
21	.10	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.3	12
22	.08	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.1	10
23	.06	.00	e.00	.00	.00	.00	.00	.00	.00	.00	1.0	9.2
24	.04	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.89	8.9
25	.03	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.77	8.2
26	.02	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.66	7.5
27	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.54	6.9
28	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.43	6.3
29	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.34	6.0
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.27	5.4
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	.00
TOTAL	11.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.96	218.92
MEAN	.37	.000	.000	.000	.000	.000	.000	.000	.000	.000	.87	7.30
MAX	1.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.7	26
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
CFSM	.08	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	1.56
IN.	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	1.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	2.74	1.61	1.94	2.48	1.61	1.80	.96	.21	.65	1.60	1.75	3.27
MAX	7.47	7.04	7.51	6.83	6.18	7.80	4.25	1.45	2.04	4.28	9.01	7.30
(WY)	1996	1995	1995	1996	1998	1998	1996	1996	1994	1998	1995	2001
MIN	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004	.006
(WY)	1998	2001	2001	2001	1992	1992	1992	1992	1992	2000	1992	1997

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 2001 WATER YEAR	FOR 2002 WATER YEAR
ANNUAL TOTAL	72.36	257.29	72.36	257.29	72.36	257.29
ANNUAL MEAN	.20	.70	.20	.70	.20	.70
HIGHEST ANNUAL MEAN			1.83	4.02	4.44	1995
LOWEST ANNUAL MEAN						1997
HIGHEST DAILY MEAN	2.3	Sep 23	26	Sep 16	28	Nov 17 1994
LOWEST DAILY MEAN	.00	Many days	.00	Many days	.00	Many days
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 29	.00	Oct 27	.00	Many days
MAXIMUM PEAK FLOW			26	Sep 16	28	Nov 17 1994
MAXIMUM PEAK STAGE			77.34	Sep 16	77.34	Sep 16 2001
ANNUAL RUNOFF (CFSM)	.042	.15	.042	.15	.042	.15
ANNUAL RUNOFF (INCHES)	.58	2.05	.58	2.05	.58	2.05
10 PERCENT EXCEEDS	.54	1.1	.54	1.1	.54	1.1
50 PERCENT EXCEEDS	.00	.00	.00	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00	.00	.00	.00

e Estimated

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 mi².

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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	24	21	25	34	26	9.0	8.8	24	27	26	25
2	25	25	22	23	34	28	6.1	9.0	26	24	25	25
3	30	25	17	21	32	30	7.5	10	27	24	25	24
4	32	24	17	25	34	29	6.7	9.6	24	26	27	21
5	35	24	26	29	32	23	6.1	13	25	24	27	21
6	35	25	29	30	27	16	7.3	15	24	24	25	21
7	32	33	28	29	28	14	9.7	11	24	26	26	21
8	29	32	31	30	28	24	8.7	11	24	25	26	25
9	10	34	32	28	28	12	6.5	11	27	23	26	25
10	11	28	32	26	27	14	31	12	26	23	26	22
11	19	26	31	29	28	15	7.7	13	24	24	30	21
12	28	25	36	30	27	13	6.7	15	23	24	30	21
13	26	24	34	31	27	8.7	8.4	15	23	23	23	21
14	28	30	36	30	26	12	11	13	24	25	22	21
15	31	26	32	32	28	9.4	9.6	14	24	24	22	3.7
16	27	27	31	32	29	8.8	7.4	14	26	24	21	5.8
17	26	28	29	31	28	12	7.8	15	26	23	22	4.3
18	24	24	20	32	20	8.5	6.6	17	23	24	24	4.1
19	24	26	19	36	26	7.0	6.7	22	23	24	25	6.0
20	27	23	16	32	32	5.2	9.1	22	23	24	21	4.0
21	31	24	20	27	32	5.9	9.1	24	23	25	22	60
22	29	23	23	23	34	6.6	11	24	23	25	23	48
23	28	23	20	20	28	8.5	8.4	27	23	25	22	50
24	29	26	17	26	29	11	8.0	25	24	25	22	46
25	42	27	17	23	31	9.5	6.8	25	23	25	25	44
26	45	30	17	23	29	8.0	7.1	28	23	26	25	43
27	45	27	27	24	29	7.9	8.0	29	23	25	21	92
28	34	24	33	26	28	8.0	12	26	23	27	22	30
29	34	22	32	25	---	4.7	9.1	24	23	29	22	28
30	27	20	29	28	---	4.2	8.2	24	25	25	21	26
31	27	---	25	30	---	7.2	---	24	---	25	22	---
TOTAL	890	779	799	856	815	397.1	267.3	550.4	723	767	746	808.9
MEAN	28.7	26.0	25.8	27.6	29.1	12.8	8.91	17.8	24.1	24.7	24.1	27.0
MAX	45	34	36	36	34	30	31	29	27	29	30	92
MIN	10	20	16	20	20	4.2	6.1	8.8	23	23	21	3.7

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

MEAN	161	144	133	201	227	339	321	173	191	216	224	234
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	.000	.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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1957 - 2001
ANNUAL TOTAL	14263	8398.7	
ANNUAL MEAN	39.0	23.0	214
HIGHEST ANNUAL MEAN			892
LOWEST ANNUAL MEAN			23.0
HIGHEST DAILY MEAN	161	Apr 1	*1560
LOWEST DAILY MEAN	10	Oct 9	.00
ANNUAL SEVEN-DAY MINIMUM	19	Dec 20	6.5
MAXIMUM PEAK STAGE			61.72
10 PERCENT EXCEEDS	73	Sep 22	64.50
50 PERCENT EXCEEDS	32		802
90 PERCENT EXCEEDS	23		57
		8.5	21

* Feb 26, Mar 9, 1998

OCKLAWAHA RIVER BASIN

02238000 HAINES CREEK AT LISBON, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61.47	61.15	60.98	60.84	60.86	60.80	60.96	60.46	60.06	60.05	60.56	60.71
2	61.48	61.15	60.98	60.82	60.86	60.81	60.95	60.44	60.05	60.05	60.56	60.70
3	61.47	61.14	60.94	60.81	60.84	60.82	60.95	60.44	60.03	60.04	60.58	60.69
4	61.49	61.13	60.90	60.81	60.86	60.84	60.92	60.43	60.03	60.02	60.60	60.69
5	61.50	61.13	60.92	60.83	60.88	60.79	60.91	60.41	60.02	60.02	60.63	60.74
6	61.50	61.12	60.93	60.82	60.88	60.73	60.92	60.40	60.02	60.03	60.65	60.77
7	61.47	61.12	60.92	60.82	60.88	60.71	60.92	60.37	60.02	60.03	60.65	60.82
8	61.44	61.12	60.93	60.84	60.88	60.70	60.91	60.35	60.01	60.02	60.64	60.85
9	61.31	61.12	60.93	60.82	60.89	60.69	60.90	60.33	60.00	60.02	60.64	60.86
10	61.32	61.09	60.93	60.81	60.89	60.67	60.89	60.34	59.98	60.00	60.70	60.87
11	61.32	61.05	60.94	60.82	60.88	60.67	60.89	60.33	59.96	60.00	60.80	60.86
12	61.31	61.04	60.97	60.83	60.88	60.70	60.86	60.32	59.95	60.00	60.83	60.87
13	61.30	61.05	60.96	60.82	60.87	60.73	60.85	60.31	59.93	60.03	60.86	60.86
14	61.29	61.05	60.97	60.82	60.88	60.74	60.83	60.30	59.90	60.03	60.84	61.01
15	61.30	60.99	60.97	60.83	60.89	60.76	60.82	60.28	59.89	60.01	60.84	61.38
16	61.30	61.00	60.99	60.83	60.89	60.75	60.78	60.27	59.87	60.00	60.84	61.56
17	61.29	61.01	60.98	60.83	60.89	60.73	60.74	60.25	59.85	60.00	60.87	61.60
18	61.28	60.97	60.92	60.83	60.82	60.68	60.67	60.23	59.87	60.06	60.89	61.62
19	61.28	60.98	60.91	60.86	60.82	60.74	60.67	60.21	59.90	60.08	60.89	61.64
20	61.26	60.93	60.88	60.85	60.85	60.88	60.66	60.19	59.89	60.09	60.89	61.64
21	61.25	60.91	60.87	60.81	60.84	60.88	60.64	60.19	59.88	60.15	60.87	61.64
22	61.23	60.90	60.87	60.78	60.84	60.86	60.61	60.21	59.88	60.32	60.86	61.63
23	61.21	60.90	60.84	60.76	60.81	60.85	60.61	60.17	59.89	60.50	60.84	61.63
24	61.19	60.91	60.82	60.79	60.82	60.85	60.60	60.15	59.89	60.54	60.82	61.66
25	61.18	60.93	60.82	60.77	60.83	60.84	60.59	60.13	59.89	60.52	60.80	61.67
26	61.19	60.95	60.81	60.77	60.82	60.82	60.53	60.12	59.88	60.51	60.77	61.65
27	61.19	61.00	60.86	60.78	60.82	60.79	60.52	60.09	59.88	60.52	60.77	61.65
28	61.20	61.00	60.90	60.77	60.81	60.77	60.52	60.10	59.94	60.51	60.77	61.63
29	61.19	60.99	60.89	60.78	---	60.86	60.51	60.10	59.96	60.51	60.75	61.59
30	61.17	60.98	60.87	60.81	---	60.98	60.46	60.08	60.01	60.49	60.74	61.57
31	61.16	---	60.84	60.84	---	60.97	---	60.07	---	60.49	60.73	---
MEAN	61.31	61.03	60.91	60.81	60.86	60.79	60.75	60.26	59.94	60.18	60.76	61.24
MAX	61.50	61.15	60.99	60.86	60.89	60.98	60.96	60.46	60.06	60.54	60.89	61.67
MIN	61.16	60.90	60.81	60.76	60.81	60.67	60.46	60.07	59.85	60.00	60.56	60.69
CAL YR 2000	MEAN 61.83	MAX 62.97	MIN 60.81									
WTR YR 2001	MEAN 60.74	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 NW¹/₄ sec.2, T.19 S., R.25 E., Lake County, Hydrologic Unit 03080102, on left bank at downstream side of Burrell lock and dam, 750 ft upstream from bridge on State Highway 44, 0.2 mi south of Lisbon, and 7 mi northeast of Leesburg.

DRAINAGE AREA.--648 mi².

PERIOD OF RECORD.--March 1957 to current year (gage heights only). Prior to October 1967, published as Haines Creek at Lisbon (auxiliary).

GAGE.--Water-stage recorder. Datum of gage is at sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.73	57.32	57.02	56.89	56.90	56.76	57.29	56.72	56.18	55.84	55.80	55.94
2	57.72	57.30	57.02	56.87	56.90	56.73	57.25	56.72	56.18	55.84	55.81	55.92
3	57.71	57.29	56.99	56.86	56.89	56.74	57.26	56.71	56.13	55.82	55.81	55.70
4	57.74	57.28	56.96	56.87	56.91	56.75	57.27	56.69	56.10	55.82	55.74	55.88
5	57.72	57.28	56.98	56.87	56.93	56.78	57.26	56.68	56.09	55.81	55.75	55.94
6	57.72	57.26	56.97	56.86	56.92	56.71	57.27	56.65	56.10	55.79	55.82	55.94
7	57.70	57.25	56.95	56.86	56.91	56.66	57.27	56.64	56.08	55.80	56.04	55.96
8	57.66	57.23	56.96	56.89	56.90	56.63	57.26	56.61	56.07	55.80	56.00	56.02
9	57.58	57.24	56.96	56.91	56.92	56.64	57.26	56.61	56.07	55.78	55.99	56.00
10	57.56	57.23	56.94	56.87	56.91	56.61	57.24	56.59	56.04	55.77	56.15	56.01
11	57.55	57.18	56.95	56.87	56.90	56.62	57.22	56.57	55.99	55.75	56.18	55.99
12	57.53	57.17	57.00	56.90	56.89	56.63	57.21	56.56	56.00	55.74	56.15	56.01
13	57.52	57.14	57.00	56.88	56.89	56.68	57.19	56.56	55.96	55.74	56.19	56.02
14	57.51	57.15	57.01	56.88	56.89	56.68	57.19	56.53	55.92	55.78	56.20	56.10
15	57.52	57.11	57.00	56.88	56.90	56.71	57.17	56.53	55.89	55.76	56.16	57.04
16	57.50	57.10	57.01	56.88	56.89	56.70	57.13	56.52	55.88	55.76	56.12	57.06
17	57.50	57.12	57.06	56.88	56.89	56.70	57.11	56.49	55.85	55.72	56.10	57.10
18	57.48	57.08	56.98	56.89	56.82	56.67	57.02	56.46	55.84	55.74	56.13	57.12
19	57.47	57.10	56.99	56.90	56.81	56.79	57.00	56.43	55.82	55.74	56.15	57.16
20	57.45	57.07	56.95	56.94	56.82	57.04	56.99	56.42	55.81	55.72	56.13	57.18
21	57.44	57.06	56.93	56.86	56.81	57.05	56.97	56.37	55.82	55.74	56.12	57.16
22	57.44	57.03	56.92	56.86	56.82	57.01	56.94	56.37	55.80	55.84	56.12	57.39
23	57.41	57.02	56.89	56.87	56.79	56.99	56.93	56.35	55.78	55.89	56.08	57.38
24	57.40	57.01	56.88	56.86	56.77	56.99	56.93	56.31	55.78	55.92	56.06	57.40
25	57.40	57.03	56.86	56.85	56.78	56.99	56.92	56.29	55.75	55.89	56.06	57.45
26	57.39	57.07	56.86	56.82	56.79	56.99	56.87	56.29	55.75	55.82	56.04	57.45
27	57.39	57.09	56.87	56.82	56.76	56.96	56.84	56.26	55.73	55.84	56.02	57.48
28	57.37	57.07	56.94	56.82	56.77	56.95	56.82	56.24	55.78	55.84	56.00	57.49
29	57.36	57.05	56.95	56.82	---	57.03	56.77	56.24	55.82	55.82	55.98	57.59
30	57.35	57.04	56.96	56.84	---	57.21	56.75	56.23	55.84	55.82	55.98	57.65
31	57.33	---	56.92	56.87	---	57.26	---	56.19	---	55.80	55.96	---
MEAN	57.52	57.15	56.96	56.87	56.86	56.83	57.09	56.48	55.93	55.80	56.03	56.68
MAX	57.74	57.32	57.06	56.94	56.93	57.26	57.29	56.72	56.18	55.92	56.20	57.65
MIN	57.33	57.01	56.86	56.82	56.76	56.61	56.75	56.19	55.73	55.72	55.74	55.70
CAL YR 2000	MEAN 57.79	MAX 58.83	MIN 56.86									
WTR YR 2001	MEAN 56.68	MAX 57.74	MIN 55.70									

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 mi².

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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	20	20	18	18	23	34	19	18	e18	26	35
2	35	25	23	18	18	e24	23	19	25	18	24	37
3	38	23	24	18	18	e18	24	18	36	e18	24	36
4	33	32	18	18	18	e18	22	20	18	e18	32	26
5	36	32	18	18	18	e18	18	30	18	e18	28	26
6	36	20	18	18	18	18	21	36	20	18	24	26
7	44	22	18	18	18	e18	37	20	19	e25	26	26
8	46	28	20	18	18	18	28	20	18	34	24	24
9	33	25	31	18	18	e21	25	20	18	18	25	30
10	33	20	26	18	18	e20	23	22	31	18	24	25
11	38	30	19	18	18	e18	25	27	18	18	34	30
12	37	30	22	18	18	e20	28	34	18	18	38	26
13	42	24	20	18	18	18	28	33	18	18	26	18
14	37	20	18	18	18	25	41	18	18	e20	26	18
15	57	19	19	18	18	18	34	18	18	37	29	18
16	33	12	20	18	18	18	24	24	e18	18	26	24
17	36	12	28	18	18	32	23	18	e18	18	29	19
18	38	12	18	18	18	18	19	20	e18	20	35	20
19	39	10	18	18	18	18	25	30	18	18	36	18
20	37	20	18	18	18	18	27	30	e18	18	24	18
21	49	20	18	18	18	18	35	18	e20	23	26	18
22	49	18	18	18	18	23	46	22	e20	28	26	23
23	38	20	18	18	18	23	20	22	e22	20	29	26
24	38	28	18	18	18	29	20	23	e20	20	26	23
25	38	23	18	18	18	18	18	20	e18	25	38	19
26	44	23	20	18	18	20	22	28	e18	20	37	21
27	35	18	20	18	18	23	19	37	18	20	24	21
28	74	20	18	18	18	20	39	40	18	23	31	20
29	76	20	19	18	---	18	27	18	e20	33	28	19
30	66	22	18	18	---	20	18	20	e20	18	24	24
31	71	---	18	18	---	22	---	18	---	18	25	---
TOTAL	1349	648	619	558	504	633	793	742	595	654	874	714
MEAN	43.5	21.6	20.0	18.0	18.0	20.4	26.4	23.9	19.8	21.1	28.2	23.8
MAX	76	32	31	18	18	32	46	40	36	37	38	37
MIN	33	10	18	18	18	18	18	18	18	18	24	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2001, BY WATER YEAR (WY)

MEAN	224	170	191	278	300	367	357	183	196	224	235	248
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	.50	.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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1944 - 2001

ANNUAL TOTAL	20780	8683	
ANNUAL MEAN	56.8	23.8	
HIGHEST ANNUAL MEAN			777 1970
LOWEST ANNUAL MEAN			23.8 2001
HIGHEST DAILY MEAN	e110 Jun 5	76 Oct 29	2340 Feb 20 1983
LOWEST DAILY MEAN	10 Nov 19	10 Nov 19	*.00
ANNUAL SEVEN-DAY MINIMUM	15 Nov 16	15 Nov 16	*.00
MAXIMUM PEAK STAGE		38.54 Sep 15	50.71 Sep 12 1960
10 PERCENT EXCEEDS	83	36	678
50 PERCENT EXCEEDS	58	20	64
90 PERCENT EXCEEDS	20	18	22

e Estimated
* Many days 1973-74

02239500 SILVER SPRINGS NEAR Ocala, FL

LOCATION.--Lat 29°12'44", long 82°03'15", in SE 1/4 sec.1, T.15 S., R.23 E., Marion County, Hydrologic Unit 03080102, in canal at glass bottom boat docking shed, 1,400 ft downstream from head of springs, and 5.3 mi northeast of Ocala.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is 38.96 ft above sea level. 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 except for period of estimated daily discharge, which is poor. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	482	462	442	e431	417	411	431	413	367	360	382	423
2	483	461	441	e431	415	410	424	410	368	358	385	424
3	481	461	439	e431	413	409	425	405	365	354	393	423
4	480	460	437	e432	417	409	427	404	359	354	397	423
5	483	462	439	e434	418	405	427	406	357	356	395	421
6	480	462	440	e432	415	403	427	401	359	354	395	424
7	480	461	441	e430	412	399	428	396	363	353	399	429
8	479	456	441	e430	409	395	428	395	364	355	403	432
9	479	453	440	e428	412	403	432	395	363	360	406	431
10	474	456	439	e426	416	403	432	393	359	360	408	430
11	472	455	439	e427	412	397	430	393	359	359	409	431
12	474	451	438	e427	409	400	425	391	361	356	408	433
13	475	450	e438	e428	409	410	426	392	356	357	413	438
14	476	448	e438	e426	413	410	429	389	352	362	419	460
15	476	448	e439	e427	416	415	432	390	353	358	417	461
16	477	445	439	e428	413	411	431	391	355	355	413	459
17	476	448	439	e429	412	404	425	387	356	352	413	469
18	476	443	438	e428	404	405	415	381	354	353	418	483
19	475	448	439	e428	404	414	411	382	353	356	419	495
20	472	438	e438	e428	407	424	412	380	354	359	418	505
21	469	435	e437	e429	410	419	413	377	355	366	420	513
22	469	435	e436	e428	412	417	414	377	359	370	421	521
23	465	440	e435	e429	407	417	418	378	361	367	420	527
24	464	448	e434	e428	404	418	419	370	360	364	421	535
25	464	454	e435	e429	406	420	419	369	357	365	420	542
26	469	449	e436	e428	407	420	415	370	353	368	420	544
27	472	445	e437	e427	407	418	412	370	350	368	422	551
28	469	442	e436	e426	411	422	410	367	355	372	419	557
29	467	441	e435	e426	---	432	407	367	357	379	422	561
30	466	442	e434	425	---	436	408	365	359	383	423	559
31	464	---	e432	422	---	435	---	364	---	381	422	---
TOTAL	14688	13499	13571	13278	11507	12791	12652	11968	10743	11214	12740	14304
MEAN	474	450	438	428	411	413	422	386	358	362	411	477
MAX	483	462	442	434	418	436	432	413	368	383	423	561
MIN	464	435	432	422	404	395	407	364	350	352	382	421

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2001, BY WATER YEAR (WY)

	838	824	798	779	771	774	780	764	748	754	778	816
MEAN	838	824	798	779	771	774	780	764	748	754	778	816
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1933 - 2001

ANNUAL TOTAL	180084	152955	
ANNUAL MEAN	492	419	
HIGHEST ANNUAL MEAN			1058
LOWEST ANNUAL MEAN			419
HIGHEST DAILY MEAN	614	Jan 24	561
LOWEST DAILY MEAN	e432	Dec 31	350
ANNUAL SEVEN-DAY MINIMUM	434	Jul 22	354
MAXIMUM PEAK STAGE			1.29
10 PERCENT EXCEEDS	594		469
50 PERCENT EXCEEDS	469		420
90 PERCENT EXCEEDS	438		359
			5.50
			Sep 6 1933

e Estimated
* Oct 7,13-17,20, 1960

OCKLAWAHA RIVER BASIN

02239500 SILVER SPRINGS NEAR OCALA, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.00	-.19	-.39	-.50	-.64	-.23	-.32	-.56	-.51	-.26	.09
2	.15	-.01	-.20	-.39	-.51	-.65	-.23	-.32	-.56	-.52	-.25	.10
3	.15	-.01	-.21	-.40	-.53	-.65	-.24	-.33	-.57	-.52	-.23	.11
4	.15	-.02	-.22	-.40	-.53	-.65	-.24	-.33	-.57	-.52	-.21	.12
5	.14	-.02	-.22	-.41	-.55	-.66	-.25	-.34	-.57	-.52	-.18	.12
6	.14	-.03	-.23	-.42	-.56	-.66	-.25	-.35	-.57	-.53	-.16	.15
7	.14	-.04	-.23	-.42	-.56	-.67	-.25	-.36	-.57	-.53	-.14	.19
8	.15	-.05	-.24	-.43	-.57	-.68	-.25	-.35	-.57	-.53	-.13	.19
9	.14	-.06	-.25	-.43	-.57	-.68	-.25	-.36	-.58	-.52	-.11	.20
10	.13	-.06	-.25	-.44	-.58	-.68	-.25	-.37	-.58	-.52	-.10	.20
11	.13	-.07	-.25	-.45	-.58	-.69	-.26	-.38	-.59	-.51	-.08	.21
12	.13	-.07	-.26	-.46	-.58	-.69	-.27	-.38	-.59	-.51	-.07	.23
13	.12	-.08	-.26	-.47	-.59	-.60	-.27	-.39	-.60	-.50	-.05	.26
14	.12	-.09	-.27	-.47	-.59	-.55	-.26	-.40	-.59	-.47	-.04	.46
15	.11	-.10	-.27	-.47	-.60	-.55	-.26	-.40	-.59	-.47	-.04	1.18
16	.10	-.10	-.29	-.48	-.60	-.55	-.26	-.42	-.60	-.48	-.03	1.28
17	.09	-.12	-.29	-.49	-.60	-.55	-.27	-.43	-.60	-.48	-.02	1.24
18	.09	-.13	-.29	-.49	-.60	-.55	-.28	-.44	-.59	-.48	-.01	1.19
19	.08	-.14	-.30	-.49	-.61	-.47	-.28	-.45	-.57	-.48	-.01	1.16
20	.08	-.15	-.31	-.50	-.61	-.28	-.29	-.46	-.56	-.46	.00	1.14
21	.07	-.16	-.31	-.50	-.61	-.24	-.29	-.47	-.57	-.42	.01	1.13
22	.07	-.16	-.32	-.50	-.61	-.26	-.30	-.47	-.56	-.39	.02	1.12
23	.06	-.17	-.32	-.51	-.62	-.27	-.30	-.48	-.55	-.37	.02	1.12
24	.05	-.16	-.33	-.51	-.62	-.28	-.30	-.49	-.55	-.36	.03	1.12
25	.05	-.17	-.34	-.52	-.63	-.28	-.30	-.50	-.55	-.36	.03	1.14
26	.05	-.16	-.34	-.52	-.63	-.29	-.30	-.51	-.56	-.35	.04	1.13
27	.04	-.17	-.35	-.52	-.63	-.29	-.30	-.52	-.55	-.33	.04	1.14
28	.03	-.18	-.35	-.52	-.64	-.29	-.31	-.53	-.54	-.29	.05	1.14
29	.03	-.18	-.36	-.52	---	-.27	-.31	-.53	-.53	-.28	.07	1.14
30	.02	-.19	-.37	-.52	---	-.23	-.32	-.55	-.52	-.27	.08	1.13
31	.01	---	-.38	-.51	---	-.23	---	-.56	---	-.26	.09	---
MEAN	.10	-.10	-.28	-.47	-.59	-.48	-.27	-.43	-.57	-.44	-.05	.70
MAX	.16	.00	-.19	-.39	-.50	-.23	-.23	-.32	-.52	-.26	.09	1.28
MIN	.01	-.19	-.38	-.52	-.64	-.69	-.32	-.56	-.60	-.53	-.26	.09
CAL YR 2000	MEAN	.01	MAX	.81	MIN	-.38						
WTR YR 2001	MEAN	-.24	MAX	1.28	MIN	-.69						

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 2000 TO SEPTEMBER 2001

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)
NOV													
29...	0915	-.19	450	<5	2.1	6.8	8.01	458	472	22.9	240	79	9.5
MAR													
14...	0956	-.55	436	<5	2.3	6.9	7.86	450	460	23.0	220	74	8.8
APR													
10...	0800	-.25	432	--	--	7.6	--	--	468	22.9	--	--	--
24...	0830	-.30	419	--	3.4	7.3	--	--	461	23.1	--	--	--
MAY													
08...	0700	-.35	396	--	1.3	6.9	--	--	422	23.0	--	--	--
22...	0810	-.47	377	--	2.5	7.4	--	--	465	23.2	--	--	--
JUN													
05...	0715	-.57	359	--	--	7.3	--	--	457	23.0	--	--	--
19...	0740	-.57	352	--	--	7.4	--	--	458	23.1	--	--	--
JUL													
02...	0650	-.52	358	--	1.6	7.3	--	--	462	23.1	--	--	--
17...	0640	-.48	349	--	1.6	7.4	--	--	465	23.1	--	--	--
SEP													
05...	1340	.12	419	<5	3.0	7.3	8.3	441	475	23.3	230	75	9.7

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)
NOV													
29...	.6	6.5	187	10	.19	10	42	279	<.20	.02	.94	<.01	.03
MAR													
14...	.5	6.1	188	9.9	.20	9.9	35	266	<.20	<.01	.87	<.01	.07
APR													
10...	--	--	--	--	--	--	--	--	<.20	.002	.89	--	.04
24...	--	--	--	--	--	--	--	--	<.20	.002	.91	--	.03
MAY													
08...	--	--	--	--	--	--	--	--	<.20	.005	.85	--	.05
22...	--	--	--	--	--	--	--	--	<.20	.006	.92	--	.03
JUN													
05...	--	--	--	--	--	--	--	--	<.20	<.002c1	.92	--	.04
19...	--	--	--	--	--	--	--	--	<.20	E.031c1	.87	--	.05
JUL													
02...	--	--	--	--	--	--	--	--	<.20	E.004c1	.85	--	.04
17...	--	--	--	--	--	--	--	--	<.20	<.002c1	.87	--	.03
SEP													
05...	.6	6.3	184	10	.2	10	45	281	<.2	<.01	.91	<.01	.02

CHLOR-A
PHYTO-
PLANK-
TON
DIS-
SOLVED
DATE
TOTAL
(MG/L
AS P)
(00665)

STRON-
TIUM,
DIS-
SOLVED
(UG/L
AS SR)
(01080)

PHOS-
PHORUS
TOTAL
(MG/L
AS P)
(00665)

CHROMO
FLUOROM
(UG/L)
(70953)

NOV													
29...	.05	--	590										
MAR													
14...	.05	--	500										
APR													
10...	.03	<.1	--										
24...	.03	<.1	--										
MAY													
08...	.02	<.1	--										
22...	<.02	<.1	--										
JUN													
05...	.02	<.1	--										
19...	.04	<.1	--										
JUL													
02...	.04	<.1	--										
17...	.04	<.1	--										
SEP													
05...	<.02	--	570										

< -- Less than
E -- Estimated value
c1-- Holding time exceeded by the laboratory

OCKLAWAHA RIVER BASIN

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 mi².

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 sea level.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	484	473	446	e429	e440	543	495	446	e442	e448	493
2	516	485	464	445	e427	e440	539	492	446	e437	e451	504
3	510	493	470	445	e425	e441	533	491	448	e431	e453	513
4	508	496	473	445	e426	e443	526	488	447	e426	e458	512
5	504	498	475	444	e427	e440	519	485	444	e422	e460	502
6	502	499	475	444	e426	e439	515	485	444	e418	e465	506
7	504	497	474	442	e426	e450	518	487	443	e417	e473	519
8	506	497	472	442	e424	e460	525	483	441	e433	e478	522
9	503	497	474	438	e427	e458	529	480	440	e438	479	523
10	498	496	476	e438	e431	e457	529	477	441	e438	479	524
11	496	494	475	e437	e426	e466	529	476	441	e435	481	527
12	496	495	473	e437	e426	e470	529	478	e441	e431	484	532
13	496	495	471	e435	e430	e478	529	477	e438	e435	485	537
14	496	492	468	e436	e436	484	531	475	e435	e442	491	662
15	496	488	465	e437	e441	472	537	471	e437	e440	487	1400
16	496	480	465	e438	e438	465	533	465	e437	e435	484	1330
17	489	463	465	e439	e436	462	526	463	e438	e431	486	1170
18	487	454	466	e438	e435	463	521	466	e435	e433	496	1050
19	487	449	465	e437	439	501	519	469	e432	e438	494	942
20	486	449	465	e436	442	663	519	473	e430	e442	489	878
21	487	457	465	e437	441	639	518	471	e430	e448	487	836
22	490	465	464	e437	438	594	520	466	e439	e449	493	807
23	489	466	463	e438	e435	562	518	464	e443	e443	491	792
24	487	472	461	e437	e430	543	509	461	e441	e440	497	777
25	485	476	457	e434	e435	529	506	458	e438	e440	495	775
26	485	479	457	e430	e436	518	504	456	e433	e440	504	770
27	488	477	458	e425	e440	510	503	458	e429	e440	500	758
28	490	472	458	e424	e441	503	502	462	e436	e443	494	745
29	491	469	454	e425	---	511	502	460	e438	e444	494	735
30	489	472	452	e422	---	536	499	452	e440	e448	491	736
31	485	---	449	e430	---	542	---	448	---	e450	493	---
TOTAL	15364	14406	14442	13538	12113	15379	15630	14632	13171	13549	14960	21877
MEAN	496	480	466	437	433	496	521	472	439	437	483	729
MAX	522	499	476	446	442	663	543	495	448	450	504	1400
MIN	485	449	449	422	424	439	499	448	429	417	448	493
CFSM	.41	.40	.39	.36	.36	.41	.43	.39	.37	.36	.40	.61
IN.	.48	.45	.45	.42	.38	.48	.48	.45	.41	.42	.46	.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	1105	994	996	1088	1072	1189	1192	969	992	1043	1085	1172																																																												
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	521	472	439	437	483	506																																																												
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000																																																												

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1930 - 2001
ANNUAL TOTAL	198643	179061	
ANNUAL MEAN	543	491	1075
HIGHEST ANNUAL MEAN			1654
LOWEST ANNUAL MEAN			491
HIGHEST DAILY MEAN	681	Jan 24, 31	1400
LOWEST DAILY MEAN	449	Nov 19, 20, Dec 31	e417
ANNUAL SEVEN-DAY MINIMUM	455	Dec 25	426
MAXIMUM PEAK FLOW			1460
MAXIMUM PEAK STAGE			5.89
ANNUAL RUNOFF (CFSM)	.45	.41	1.14
ANNUAL RUNOFF (INCHES)	6.16	5.55	12.17
10 PERCENT EXCEEDS	660	529	1650
50 PERCENT EXCEEDS	506	470	945
90 PERCENT EXCEEDS	472	435	665

e Estimated

OCKLAWAHA RIVER BASIN

02240000 OCKLAWAHA RIVER NEAR CONNER, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.41	2.12	2.04	1.81	---	---	2.62	2.23	1.79	---	---	2.19
2	2.37	2.13	1.97	1.80	---	---	2.60	2.20	1.79	---	---	2.30
3	2.32	2.20	2.02	1.80	---	---	2.54	2.19	1.82	---	---	2.38
4	2.30	2.22	2.05	1.79	---	---	2.49	2.17	1.81	---	---	2.37
5	2.27	2.25	2.06	1.79	---	---	2.43	2.14	1.78	---	---	2.30
6	2.25	2.25	2.06	1.79	---	---	2.40	2.14	1.78	---	---	2.33
7	2.26	2.24	2.05	1.77	---	---	2.42	2.16	1.77	---	---	2.45
8	2.28	2.24	2.04	1.77	---	---	2.48	2.13	1.74	---	2.06	2.48
9	2.26	2.24	2.05	1.74	---	---	2.52	2.10	1.73	---	2.05	2.49
10	2.22	2.24	2.07	---	---	---	2.52	2.08	1.74	---	2.06	2.51
11	2.21	2.22	2.06	---	---	---	2.51	2.07	1.75	---	2.07	2.54
12	2.21	2.23	2.04	---	---	---	2.51	2.08	---	---	2.10	2.59
13	2.21	2.23	2.02	---	---	2.05	2.52	2.08	---	---	2.10	2.64
14	2.21	2.20	1.99	---	---	2.14	2.53	2.06	---	---	2.16	3.34
15	2.21	2.17	1.97	---	---	2.03	2.58	2.02	---	---	2.12	5.78
16	2.20	2.10	1.97	---	---	1.97	2.54	1.98	---	---	2.10	5.67
17	2.15	1.95	1.97	---	---	1.94	2.49	1.95	---	---	2.11	5.34
18	2.13	1.88	1.98	---	---	1.95	2.45	1.97	---	---	2.20	5.03
19	2.13	1.83	1.97	---	1.75	2.28	2.43	2.00	---	---	2.18	4.78
20	2.13	1.83	1.97	---	1.77	3.51	2.43	2.03	---	---	2.14	4.56
21	2.14	1.90	1.97	---	1.76	3.37	2.42	2.01	---	---	2.12	4.40
22	2.17	1.97	1.97	---	1.74	3.04	2.44	1.97	---	---	2.17	4.29
23	2.16	1.98	1.95	---	---	2.79	2.42	1.96	---	---	2.16	4.23
24	2.14	2.03	1.94	---	---	2.63	2.35	1.93	---	---	2.20	4.18
25	2.12	2.07	1.91	---	---	2.52	2.32	1.90	---	---	2.19	4.18
26	2.12	2.09	1.90	---	1.74	2.42	2.31	1.89	---	---	2.27	4.16
27	2.15	2.07	1.91	---	---	2.35	2.30	1.90	---	---	2.23	4.12
28	2.16	2.03	1.91	---	---	2.29	2.29	1.93	---	---	2.18	4.07
29	2.17	2.01	1.88	---	---	2.36	2.29	1.92	---	---	2.19	4.04
30	2.16	2.04	1.86	---	---	2.57	2.26	1.85	---	---	2.16	4.05
31	2.13	---	1.84	---	---	2.62	---	1.81	---	---	2.19	---
MEAN	2.20	2.10	1.98	1.78	---	2.46	2.45	2.03	1.77	---	2.15	3.59
MAX	2.41	2.25	2.07	1.81	---	3.51	2.62	2.23	1.82	---	2.27	5.78
MIN	2.12	1.83	1.84	1.74	---	1.94	2.26	1.81	1.73	---	2.05	2.19
CAL YR 2000	MEAN 2.21	MAX 3.07	MIN 1.71									
WTR YR 2001	MEAN 2.31	MAX 5.78	MIN 1.73									

OCKLAWAHA RIVER BASIN

02240500 OCKLAWAHA RIVER AT EUREKA, FL

LOCATION.--Lat 29°22'18", long 81°54'07", in SW¹/₄ 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 mi².

PERIOD OF RECORD.--February 1930 to June 1934, September 1943 to December 1952, January 1981 to current year.

REVISED RECORDS.--WDR FL-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is at sea level (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 periods of estimated daily discharge, which are fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	643	518	660	509	463	493	686	559	461	442	550	500
2	626	515	667	510	469	498	679	552	457	437	542	503
3	612	e514	676	512	460	497	674	524	451	431	541	509
4	603	e515	688	513	450	504	665	e524	451	426	547	512
5	589	e514	693	511	442	508	666	e523	463	422	566	519
6	575	e514	695	510	436	502	662	e522	477	418	619	526
7	565	e513	691	512	433	499	653	e521	474	417	667	533
8	558	e514	678	519	431	e477	650	e519	468	445	677	538
9	554	e514	662	521	430	e478	647	e518	465	464	659	539
10	545	e515	651	513	428	e479	643	520	466	461	653	540
11	540	e515	642	506	428	e494	640	517	466	464	624	542
12	537	e515	630	504	430	e518	636	514	465	462	605	547
13	536	e516	624	499	427	e540	630	511	457	464	596	559
14	535	e516	615	494	428	e560	625	506	457	488	588	721
15	534	524	605	490	430	e533	624	499	457	497	579	1230
16	532	531	596	486	434	544	619	487	452	488	574	1790
17	531	537	584	482	440	542	614	477	453	492	565	2160
18	532	544	577	476	449	543	607	468	471	494	555	2100
19	532	549	572	467	454	603	597	462	483	487	545	1890
20	534	557	564	466	458	746	592	457	485	510	538	1700
21	533	561	559	461	462	784	587	455	479	521	528	1470
22	532	569	555	457	465	797	584	453	477	585	520	1250
23	533	577	553	451	468	782	580	453	477	604	522	1130
24	535	586	552	441	473	749	573	454	473	587	519	1040
25	534	600	545	434	476	716	574	454	456	570	512	1010
26	533	619	541	430	479	695	582	452	443	575	511	986
27	531	632	533	425	485	676	577	450	442	581	511	939
28	526	639	528	424	489	666	571	451	450	582	505	903
29	524	646	522	425	---	665	566	452	449	581	502	875
30	524	653	515	422	---	682	565	451	445	572	502	850
31	522	---	511	434	---	689	---	457	---	562	499	---
TOTAL	17040	16532	18684	14804	12617	18459	18568	15162	13870	15529	17421	28911
MEAN	550	551	603	478	451	595	619	489	462	501	562	964
MAX	643	653	695	521	489	797	686	559	485	604	677	2160
MIN	522	513	511	422	427	477	565	450	442	417	499	500
CFSM	.40	.40	.44	.35	.33	.44	.45	.36	.34	.37	.41	.70
IN.	.46	.45	.51	.40	.34	.50	.51	.41	.38	.42	.47	.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	1248	1107	1101	1204	1176	1302	1317	1006	1068	1140	1192	1335																																																												
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	595	597	489	462	488	489	632																																																												
(WY)	2001	2001	1991	2001	2001	2001	1992	2001	2001	2000	2000	1990																																																												

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1930 - 2001

ANNUAL TOTAL	210407	207597	
ANNUAL MEAN	575	569	1180
HIGHEST ANNUAL MEAN			1720
LOWEST ANNUAL MEAN			569
HIGHEST DAILY MEAN	859	Sep 11	6110
LOWEST DAILY MEAN	450	Sep 3	417
ANNUAL SEVEN-DAY MINIMUM	454	Aug 30	428
MAXIMUM PEAK FLOW			2180
MAXIMUM PEAK STAGE			22.55
INSTANTANEOUS LOW FLOW			411
ANNUAL RUNOFF (CFSM)	.42	.42	.86
ANNUAL RUNOFF (INCHES)	5.73	5.65	11.73
10 PERCENT EXCEEDS	665	675	1900
50 PERCENT EXCEEDS	584	524	1040
90 PERCENT EXCEEDS	482	450	650

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 mi².

PERIOD OF RECORD.--1947-48, 1956, 1965-67 (miscellaneous discharge measurements and gage heights only), August 1978 to current year.

REVISED RECORDS.--WDR FL-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 61.79 ft above sea level (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 poor. Some regulation by stoplogs in control structure at outlet of Newnans Lake.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.00	.39	.00
2	.00	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.20	.95	.00
3	.00	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.39	.94	.00
4	.00	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.00	.56	.00
5	.00	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.00	.59	.00
6	.00	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.00	1.2	.00
7	.00	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.00	1.0	.00
8	.00	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.00	.45	.00
9	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00	.27	.00
10	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00	.20	.00
11	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.32	.14	.00
12	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.89	.10	.00
13	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.41	.09	.00
14	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.07	.07	.10
15	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00	.04	.89
16	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00	.04	.15
17	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.00	.04	.01
18	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.15	.01	.00
19	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	1.3	.00	.00
20	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	3.1	.00	.00
21	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	2.1	.00	.00
22	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.46	.00	.06
23	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.21	.00	.26
24	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.16	.00	.07
25	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.11	.00	.61
26	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.08	.00	.22
27	.00	.00	.00	.00	.00	e.00	e.00	e.00	.00	.06	.00	.09
28	.00	.00	.00	.00	e.00	e.00	e.00	e.00	.00	.73	.00	.05
29	.00	.00	.00	.00	---	e.00	e.00	e.00	.00	1.0	.00	.02
30	.00	.00	.00	.00	---	e.00	e.00	e.00	.00	.25	.00	.01
31	.00	---	.00	.00	---	e.00	---	e.00	---	.23	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.22	7.08	2.54
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.39	.23	.085
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.1	1.2	.89
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	62.5	37.8	36.7	55.7	87.6	106	98.2	59.3	37.2	35.9	37.5	69.1												
MAX	277	170	161	330	564	554	323	241	117	134	106	355												
(WY)	1993	1986	1998	1998	1998	1998	1987	1983	1991	1996	1991	1985												
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.027	.010	.085												
(WY)	2001	2001	2001	2001	2001	2000	2000	2000	2001	2000	2000	2001												

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1978 - 2001

ANNUAL TOTAL	6.11	21.84	
ANNUAL MEAN	.017	.060	59.8
HIGHEST ANNUAL MEAN			177 1998
LOWEST ANNUAL MEAN			.053 2000
HIGHEST DAILY MEAN	1.0 Sep 18	3.1 Jul 20	1290 Feb 25 1998
LOWEST DAILY MEAN	.00 Many days	.00 Many days	.00 Many days
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Many days
MAXIMUM PEAK FLOW		11 Jul 20	1290 Feb 25 1998
MAXIMUM PEAK STAGE		2.40 Jul 20	8.77 Feb 25 1998
ANNUAL RUNOFF (CFSM)	.000	.001	.52
ANNUAL RUNOFF (INCHES)	.00	.01	7.13
10 PERCENT EXCEEDS	.00	.09	153
50 PERCENT EXCEEDS	.00	.00	33
90 PERCENT EXCEEDS	.00	.00	.73

e Estimated

02240954 HOGTOWN CREEK NEAR ARREDONDO, FL

LOCATION.--Lat 29°38'17", long 82°23'33", in NE¹/₄ sec.10, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080102, near right bank at downstream side of bridge on County Road 30, 2.5 mi northeast of Arredondo, and 4.2 mi west of Gainesville.

DRAINAGE AREA.--41.2 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level.

REMARKS.--Records fair except for period of estimated daily discharge, which is poor. Flow affected at times by backwater from Haile Sink.

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	6.3	1.8	2.6	2.9	6.6	2.9	23	e2.4	e2.2	28	49	9.2
2	5.6	1.7	2.5	2.7	8.8	4.8	15	e2.4	e2.2	18	34	7.4
3	5.0	1.7	2.5	2.5	9.0	5.0	10	e2.3	e2.2	12	39	3.9
4	4.5	1.7	2.4	2.5	7.2	6.8	8.0	e2.3	e2.3	8.8	31	3.2
5	4.2	1.8	2.4	2.5	7.3	14	6.8	e2.3	e2.3	15	21	3.0
6	4.2	1.7	2.3	2.5	5.7	9.8	6.0	e2.3	e2.3	11	48	6.9
7	6.6	1.7	2.3	2.4	4.4	5.4	e5.1	e2.3	6.8	6.4	34	11
8	10	1.7	2.3	2.5	3.9	4.0	e4.3	e2.2	23	4.4	22	13
9	7.5	1.7	2.3	2.6	3.5	3.7	e4.1	e2.2	12	7.3	16	9.3
10	5.1	2.2	2.3	2.4	3.4	3.5	e4.1	e2.2	16	8.4	11	4.8
11	4.1	2.1	2.4	2.4	3.3	3.2	e4.0	e2.2	22	21	8.5	3.2
12	3.6	1.9	2.5	2.9	3.2	3.0	e4.0	e2.1	14	23	6.8	3.8
13	3.2	1.8	2.5	2.9	3.2	4.1	e4.0	e2.1	14	18	6.4	3.9
14	2.9	1.8	2.4	2.7	3.2	6.5	e4.0	e3.0	10	13	5.4	10
15	2.7	1.8	2.5	2.6	3.2	4.9	e3.9	e3.0	10	9.0	4.7	80
16	2.5	1.7	2.5	2.5	3.2	10	e3.8	e2.9	8.1	5.8	5.8	67
17	2.4	1.7	3.3	2.4	3.4	21	e3.8	e2.9	4.5	4.1	5.2	33
18	2.3	1.6	4.4	2.4	3.9	16	e3.8	e2.8	4.2	3.7	4.6	19
19	2.2	1.5	3.9	2.4	3.4	25	e3.7	e2.8	11	8.6	4.4	13
20	2.2	1.7	3.4	2.7	3.3	53	e3.6	e2.8	10	28	4.2	9.3
21	2.2	1.7	3.0	3.3	3.1	37	e3.5	e2.7	17	159	3.1	7.1
22	2.2	1.6	2.9	3.1	3.2	26	e3.3	e2.7	18	100	2.6	6.6
23	2.1	1.6	2.7	2.8	3.1	19	e3.3	e2.7	19	47	2.3	100
24	2.1	1.7	2.6	2.6	3.1	13	e3.2	e2.6	22	48	2.0	62
25	2.2	3.7	2.5	2.4	3.1	11	e3.3	e2.6	14	35	1.8	54
26	2.1	9.3	2.5	2.3	3.0	9.9	e3.4	e2.6	8.2	26	1.7	56
27	2.1	11	2.5	2.3	3.0	8.2	e3.2	e2.4	11	21	1.6	35
28	2.0	6.5	2.8	2.3	2.9	6.8	e3.0	e2.4	11	36	1.5	24
29	2.0	3.9	4.3	2.3	---	7.9	e2.4	e2.1	13	29	1.4	17
30	1.9	3.0	4.3	2.5	---	21	e2.4	e2.1	47	20	1.4	13
31	1.9	---	3.4	3.7	---	31	---	e2.1	---	18	4.4	---
TOTAL	109.9	79.3	87.2	81.0	117.6	397.4	156.0	76.5	359.3	792.5	384.8	688.6
MEAN	3.55	2.64	2.81	2.61	4.20	12.8	5.20	2.47	12.0	25.6	12.4	23.0
MAX	10	11	4.4	3.7	9.0	53	23	3.0	47	159	49	100
MIN	1.9	1.5	2.3	2.3	2.9	2.9	2.4	2.1	2.2	3.7	1.4	3.0
CFSM	.09	.06	.07	.06	.10	.31	.13	.06	.29	.62	.30	.56
IN.	.10	.07	.08	.07	.11	.36	.14	.07	.32	.72	.35	.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	14.4	9.60	15.2	19.8	24.8	24.8	20.4	9.07	18.9	20.1	26.2	24.8																		
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	.89	2.64	2.81	2.61	4.09	4.67	2.23	.63	1.21	1.83	4.99	3.51																		
(WY)	1988	2001	2001	2001	1996	2000	1999	2000	1988	1988	1993	1995																		

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1972 - 2001

ANNUAL TOTAL	3231.84	3330.1	
ANNUAL MEAN	8.83	9.12	18.6
HIGHEST ANNUAL MEAN			36.7
LOWEST ANNUAL MEAN			9.08
HIGHEST DAILY MEAN	121	Sep 7	860
LOWEST DAILY MEAN	.10	Jun 10	.10
ANNUAL SEVEN-DAY MINIMUM	.14	Jun 5	.14
MAXIMUM PEAK FLOW			173
MAXIMUM PEAK STAGE			57.96
INSTANTANEOUS LOW FLOW			1.3
ANNUAL RUNOFF (CFSM)	.21	.22	.45
ANNUAL RUNOFF (INCHES)	2.92	3.01	6.14
10 PERCENT EXCEEDS	23	22	38
50 PERCENT EXCEEDS	3.3	3.5	9.8
90 PERCENT EXCEEDS	.79	2.1	3.1

e Estimated

02241000 CAMPS CANAL NEAR ROCHELLE, FL

LOCATION.--Lat 29°34'33", long 82°15'00", in SW¼ sec.31, Moses Levy Land Grant, Alachua County, Hydrologic Unit 03080102, near left bank on downstream side of bridge on County Road 234, 2.2 mi southwest of Rochelle, and 5.0 mi upstream from Orange Lake.

DRAINAGE AREA.--775 mi², includes Paynes Prairie, a diked sinkhole area of 650 mi², approximately, which is noncontributing except by pumpage.

PERIOD OF RECORD.--March 1948 to November 1952 (discharge measurements only), August 1957 to September 1960, March 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 53.44 ft above sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

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

	MEAN	52.8	35.7	29.2	41.4	63.8	108	101	60.1	41.3	38.6	62.0	71.5
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	2001	2000	2000	2000	2000	2000	2000	2000	1999	2000	2000	2000	

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1957 - 2001

ANNUAL MEAN										56.9		
HIGHEST ANNUAL MEAN										193		1959
LOWEST ANNUAL MEAN										.000		2001
HIGHEST DAILY MEAN										1040		Mar 24 1959
LOWEST DAILY MEAN				.00	Many days		.00	Many days		.00		Many days
ANNUAL SEVEN-DAY MINIMUM				.00	Jan 1		.00	Oct 1		.00		Many days
MAXIMUM PEAK FLOW										1040		Mar 24 1959
MAXIMUM PEAK STAGE							5.27	Aug 6,7		13.21		Mar 24 1959
ANNUAL RUNOFF (CFSM)										.073		
ANNUAL RUNOFF (INCHES)										1.00		
10 PERCENT EXCEEDS				.00			.00			168		
50 PERCENT EXCEEDS				.00			.00			24		
90 PERCENT EXCEEDS				.00			.00			.60		

OCKLAWAHA RIVER BASIN

02241000 CAMPS CANAL NEAR ROCHELLE, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.04	4.65	4.61	4.53	4.52	4.47	4.60	4.46	4.38	4.36	4.63	4.53
2	5.01	4.65	4.60	4.53	4.53	4.47	4.56	4.45	4.38	4.37	4.64	4.51
3	4.98	4.64	4.60	4.53	4.53	4.47	4.55	4.45	4.38	4.37	4.67	4.53
4	4.96	4.64	4.60	4.52	4.53	4.48	4.54	4.45	4.38	4.37	4.70	4.57
5	4.93	4.64	4.59	4.52	4.53	4.48	4.54	4.44	4.38	4.36	4.83	4.57
6	4.90	4.64	4.59	4.52	4.53	4.48	4.53	4.44	4.38	4.36	5.15	4.57
7	4.90	4.63	4.59	4.52	4.52	4.48	4.53	4.44	4.37	4.36	5.24	4.56
8	4.87	4.63	4.58	4.52	4.52	4.47	4.53	4.43	4.37	4.36	5.16	4.56
9	4.82	4.63	4.58	4.52	4.52	4.47	4.52	4.43	4.37	4.36	5.11	4.55
10	4.78	4.63	4.58	4.51	4.51	4.47	4.52	4.43	4.37	4.36	5.08	4.54
11	4.75	4.63	4.58	4.51	4.51	4.47	4.51	4.43	4.37	4.36	5.05	4.53
12	4.72	4.62	4.57	4.51	4.51	4.47	4.51	4.42	4.37	4.37	5.01	4.52
13	4.70	4.62	4.57	4.51	4.50	4.48	4.50	4.42	4.37	4.37	4.98	4.52
14	4.70	4.63	4.57	4.51	4.50	4.48	4.50	4.42	4.37	4.37	4.94	4.60
15	4.70	4.62	4.56	4.51	4.50	4.47	4.50	4.42	4.37	4.36	4.91	4.65
16	4.70	4.62	4.56	4.51	4.50	4.48	4.49	4.42	4.37	4.36	4.89	4.62
17	4.70	4.62	4.57	4.51	4.50	4.48	4.49	4.41	4.36	4.36	4.85	4.58
18	4.70	4.61	4.56	4.50	4.49	4.49	4.48	4.41	4.36	4.40	4.80	4.59
19	4.69	4.61	4.56	4.50	4.49	4.54	4.48	4.41	4.36	4.60	4.76	4.58
20	4.69	4.60	4.55	4.51	4.49	4.68	4.48	4.40	4.36	4.55	4.72	4.57
21	4.69	4.60	4.55	4.50	4.49	4.63	4.47	4.40	4.36	4.68	4.67	4.56
22	4.69	4.59	4.55	4.50	4.48	4.58	4.47	4.40	4.36	4.70	4.63	4.62
23	4.69	4.59	4.54	4.50	4.48	4.54	4.47	4.40	4.36	4.68	4.62	4.84
24	4.69	4.58	4.54	4.50	4.48	4.53	4.46	4.39	4.36	4.68	4.61	4.89
25	4.68	4.62	4.54	4.49	4.48	4.53	4.47	4.39	4.36	4.66	4.61	5.13
26	4.68	4.63	4.53	4.49	4.48	4.53	4.47	4.39	4.36	4.65	4.59	5.15
27	4.68	4.63	4.53	4.49	4.47	4.53	4.47	4.39	4.36	4.66	4.59	5.12
28	4.67	4.62	4.53	4.49	4.47	4.52	4.47	4.39	4.36	4.70	4.58	5.10
29	4.67	4.62	4.54	4.49	---	4.53	4.46	4.38	4.37	4.66	4.57	5.07
30	4.66	4.61	4.54	4.49	---	4.59	4.46	4.38	4.36	4.64	4.56	5.04
31	4.66	---	4.53	4.50	---	4.62	---	4.38	---	4.64	4.54	---
MEAN	4.76	4.62	4.56	4.51	4.50	4.51	4.50	4.42	4.37	4.49	4.80	4.69
MAX	5.04	4.65	4.61	4.53	4.53	4.68	4.60	4.46	4.38	4.70	5.24	5.15
MIN	4.66	4.58	4.53	4.49	4.47	4.47	4.46	4.38	4.36	4.36	4.54	4.51
CAL YR 2000	MEAN 4.80	MAX 5.46	MIN 4.48									
WTR YR 2001	MEAN 4.56	MAX 5.24	MIN 4.36									

02243000 ORANGE CREEK AT ORANGE SPRINGS, FL

LOCATION.--Lat 29°30'34", long 81°56'47", in NE¹/₄ 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 .45 mi upstream from Little Orange Creek.

DRAINAGE AREA.--1,119 mi², includes Paynes Prairie, a diked sinkhole area of 650 mi², approximately, which is noncontributing except by pumpage.

PERIOD OF RECORD.--November 1941 to June 1942 (discharge measurements only), July 1942 to December 1952, October 1955 to September 1971, October 1971 to April 1975 (discharge measurements only), May 1975 to current year.

REVISED RECORDS.--WDR FL-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 19.81 ft above sea level. Prior to Oct. 18, 1955, and Oct. 13, 1971 to May 6, 1975, nonrecording gage at same site and datum. Feb. 4, 1980 to May 7, 1981, temporary gage 125 ft downstream at same datum.

REMARKS.--Records good. Records include some flow diverted, during periods of high stages, from Santa Fe Lake in Suwannee River basin through Lochloosa Creek. Since April 1963, concrete dam at outlet of Orange Lake, 11 mi upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1941 reached a stage of 10.6 ft, from information by local resident, discharge 2,400 ft³/s, from rating curve extended above 1,500 ft³/s.

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	10	4.1	6.9	5.2	13	4.5	17	2.5	1.8	4.4	11	38
2	9.3	4.0	6.7	5.1	20	4.9	15	2.4	1.9	3.5	16	32
3	8.6	3.9	6.5	5.0	17	5.3	12	2.7	1.6	3.0	18	26
4	8.2	3.9	6.3	4.8	14	7.2	11	2.2	1.6	2.6	40	20
5	7.9	3.9	6.1	4.8	12	9.5	9.8	2.4	1.9	2.3	63	17
6	7.4	3.8	5.9	4.9	10	7.6	8.8	2.3	1.9	2.2	111	16
7	7.5	3.8	5.6	4.8	9.0	6.2	7.9	2.7	2.3	2.1	72	16
8	7.3	3.7	5.5	5.3	8.2	5.6	7.4	2.9	2.0	4.2	56	16
9	6.5	3.7	5.2	5.6	7.7	5.2	7.0	2.7	2.2	7.5	37	13
10	5.9	3.9	5.0	5.1	7.2	5.0	5.9	2.6	2.7	7.9	27	11
11	5.6	3.9	5.0	4.9	6.9	5.2	5.3	2.3	3.3	11	21	9.8
12	5.4	3.8	5.1	5.3	6.5	4.9	4.6	2.1	3.2	8.3	17	9.3
13	5.1	3.9	5.0	5.4	6.3	7.6	4.5	2.1	3.3	7.7	14	11
14	4.9	4.3	4.9	5.2	6.3	10	4.2	2.0	2.6	7.0	12	103
15	4.6	4.8	4.9	5.0	6.2	7.8	3.9	1.9	2.4	5.4	10	265
16	4.4	4.8	4.9	4.9	5.9	7.4	3.9	1.9	2.1	4.3	19	192
17	4.2	4.6	7.9	4.8	5.7	8.3	3.3	1.7	4.2	3.7	14	126
18	4.1	4.4	8.3	4.7	5.6	8.5	3.0	1.6	8.0	4.1	11	93
19	4.0	4.4	6.9	4.7	5.4	35	2.9	1.7	6.3	15	9.3	72
20	4.1	4.8	6.4	5.0	5.3	75	2.4	1.7	4.7	16	11	59
21	4.3	5.1	6.1	5.0	5.2	45	2.4	1.6	4.1	19	19	48
22	4.2	4.8	5.9	4.9	5.0	33	2.4	1.6	4.1	17	11	43
23	4.5	4.7	5.7	4.8	5.1	26	2.3	1.6	4.7	12	8.8	43
24	4.9	4.7	5.6	4.7	5.0	21	2.1	1.5	5.5	11	7.4	37
25	5.2	7.0	5.5	4.5	5.0	18	3.3	1.4	4.4	13	6.5	75
26	6.5	11	5.4	4.4	4.8	16	5.3	1.5	3.5	18	6.4	73
27	5.9	12	5.3	4.3	4.7	14	4.0	1.4	3.4	12	5.9	64
28	5.2	9.2	5.5	4.3	4.7	12	3.2	1.4	3.7	11	5.6	55
29	4.7	7.9	5.7	4.3	---	14	2.8	1.4	4.5	13	29	47
30	4.5	7.5	5.5	4.3	---	25	2.7	1.7	5.2	11	59	40
31	4.3	---	5.3	6.8	---	21	---	2.0	---	13	48	---
TOTAL	179.2	156.3	180.5	152.8	217.7	475.7	170.3	61.5	103.1	272.2	795.9	1670.1
MEAN	5.78	5.21	5.82	4.93	7.78	15.3	5.68	1.98	3.44	8.78	25.7	55.7
MAX	10	12	8.3	6.8	20	75	17	2.9	8.0	19	111	265
MIN	4.0	3.7	4.9	4.3	4.7	4.5	2.1	1.4	1.6	2.1	5.6	9.3
CFSM	.01	.00	.01	.00	.01	.01	.01	.00	.00	.01	.02	.05
IN.	.01	.01	.01	.01	.01	.02	.01	.00	.00	.01	.03	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	166	118	99.4	113	141	191	171	94.6	72.0	82.3	133	175	934	652	536	522	1003	1095	909	504	558	627	790	1001	1965	1948	1948	1970	1970	1998	1970	1959	1959	1959	1959	1965	1964	3.00	3.04	3.59	4.93	5.09	4.83	4.64	1.98	2.31	3.44	2.52	2.59	1991	1991	1991	2001	1991	2000	1994	2001	2000	1992	1993	1990
MAX	934	652	536	522	1003	1095	909	504	558	627	790	1001	1965	1948	1948	1970	1970	1998	1970	1959	1959	1959	1965	1964	3.00	3.04	3.59	4.93	5.09	4.83	4.64	1.98	2.31	3.44	2.52	2.59	1991	1991	1991	2001	1991	2000	1994	2001	2000	1992	1993	1990													
MIN	1965	1948	1948	1970	1970	1998	1970	1959	1959	1959	1965	1964	3.00	3.04	3.59	4.93	5.09	4.83	4.64	1.98	2.31	3.44	2.52	2.59	1991	1991	1991	2001	1991	2000	1994	2001	2000	1992	1993	1990																									
(WY)	1965	1948	1948	1970	1970	1998	1970	1959	1959	1959	1965	1964	3.00	3.04	3.59	4.93	5.09	4.83	4.64	1.98	2.31	3.44	2.52	2.59	1991	1991	1991	2001	1991	2000	1994	2001	2000	1992	1993	1990																									
(WY)	1991	1991	1991	2001	1991	2000	1994	2001	2000	1992	1993	1990																																																	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1942 - 2001
ANNUAL TOTAL	2607.6	4435.3	
ANNUAL MEAN	7.12	12.2	131
HIGHEST ANNUAL MEAN			500
LOWEST ANNUAL MEAN			6.39
HIGHEST DAILY MEAN	112	Sep 7	1940
LOWEST DAILY MEAN	1.0	Jun 19	1.0
ANNUAL SEVEN-DAY MINIMUM	1.3	Jun 16	1.3
MAXIMUM PEAK FLOW		285	2170
MAXIMUM PEAK STAGE		5.83	9.86
ANNUAL RUNOFF (CFSM)	.006	.011	.12
ANNUAL RUNOFF (INCHES)	.09	.15	1.59
10 PERCENT EXCEEDS	12	23	377
50 PERCENT EXCEEDS	5.0	5.3	46
90 PERCENT EXCEEDS	2.0	2.3	5.6

OCKLAWAHA RIVER BASIN

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

LOCATION.--Lat 29°30'30", long 81°48'15", in NW $\frac{1}{4}$ 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 mi², includes Paynes Prairie, a diked sinkhole area of 650 mi², approximately, which is noncontributing except for pumpage.

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

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

GAGE.--Water-stage recorder. Datum of gage is at sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720	307	312	575	554	353	449	444	292	407	595	442
2	643	308	312	573	679	354	448	444	292	363	594	441
3	611	308	312	572	828	354	448	445	292	362	594	442
4	610	308	311	572	641	355	448	445	292	362	595	442
5	610	308	312	572	484	357	448	444	292	363	596	442
6	571	308	676	571	483	357	448	444	292	362	735	443
7	533	308	927	570	483	356	448	444	292	319	1030	444
8	494	308	923	570	482	356	448	444	292	291	868	444
9	388	308	919	569	482	357	449	444	293	330	601	444
10	304	309	915	567	482	357	448	444	293	367	601	443
11	304	309	911	566	481	357	448	444	293	367	600	443
12	305	309	811	567	447	358	448	444	294	368	600	443
13	305	309	756	565	522	359	448	517	294	368	600	443
14	305	309	754	564	619	395	447	551	293	367	599	448
15	306	309	826	564	621	432	448	514	293	367	597	3910
16	306	310	898	563	622	432	447	514	293	367	596	2450
17	306	311	899	562	623	431	447	512	293	367	595	1210
18	307	310	893	562	622	430	445	511	295	368	594	1220
19	306	310	891	562	623	352	445	466	444	368	593	1230
20	306	310	888	563	624	579	444	364	444	590	592	1570
21	307	310	885	560	626	881	444	291	588	371	525	1750
22	307	310	882	558	628	639	444	291	587	371	443	1270
23	307	310	878	558	627	442	444	291	586	372	443	1380
24	307	310	877	557	628	443	444	291	584	373	443	1600
25	307	311	874	556	630	444	445	291	510	373	443	1930
26	307	311	871	471	631	444	445	291	437	374	442	1900
27	307	312	870	416	632	444	445	291	436	412	442	1360
28	307	312	724	416	633	444	445	291	436	450	442	1230
29	307	312	579	450	---	356	444	292	436	525	441	1030
30	307	312	578	485	---	380	444	291	436	598	441	752
31	307	---	569	519	---	448	---	291	---	589	441	---
TOTAL	11917	9286	23033	16895	16437	13046	13393	12481	11340	12011	17721	31996
MEAN	384	310	743	545	587	421	446	403	378	387	572	1067
MAX	720	312	927	575	828	881	449	551	590	598	1030	3910
MIN	304	307	311	416	447	352	444	291	292	291	441	441
IN.	.16	.13	.31	.23	.22	.18	.18	.17	.15	.16	.24	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

MEAN	1269	1097	1220	1448	1466	1544	1478	1039	1094	1225	1338	1460
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1969 - 2001	
ANNUAL TOTAL	182528		189556			
ANNUAL MEAN	499		519		1306	
HIGHEST ANNUAL MEAN					3245	
LOWEST ANNUAL MEAN					519	
HIGHEST DAILY MEAN	1830		3910		9560	
LOWEST DAILY MEAN	304		a291		.00	
ANNUAL SEVEN-DAY MINIMUM	305		291		207	
MAXIMUM PEAK STAGE			7.73		9.64	
ANNUAL RUNOFF (INCHES)	2.47		2.57		6.46	
10 PERCENT EXCEEDS	721		827		2560	
50 PERCENT EXCEEDS	445		444		1050	
90 PERCENT EXCEEDS	309		306		448	

a May 21-28,30,31, July 8

02243960 OCKLAWAHA RIVER AT RODMAN DAM, NEAR ORANGE SPRINGS, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.75	---	2.62	3.37	3.37	2.33	2.71	2.53	2.19	2.68	3.35	---
2	3.72	---	2.62	3.33	3.51	2.32	2.67	2.54	2.17	2.40	3.40	---
3	3.76	---	2.57	3.31	3.87	2.30	2.65	2.54	2.14	2.36	3.44	---
4	3.74	---	2.62	3.31	3.64	2.29	2.63	2.55	2.12	2.35	3.43	---
5	3.72	---	2.76	3.30	3.15	2.19	2.65	2.54	2.11	2.34	3.43	---
6	3.63	---	3.36	3.29	3.09	2.12	2.68	2.54	2.10	2.32	3.63	---
7	3.44	---	4.20	3.28	3.06	2.12	2.68	2.55	2.08	2.15	4.16	---
8	3.28	---	4.28	---	3.05	2.15	2.66	2.61	2.07	2.02	4.17	---
9	2.93	---	4.30	---	3.05	2.17	2.63	---	2.06	2.14	3.66	---
10	---	---	4.31	---	3.05	2.19	2.64	---	2.08	2.35	3.48	---
11	---	---	4.22	---	3.05	2.23	2.71	---	2.09	2.36	3.37	3.07
12	---	---	3.97	---	2.98	2.25	2.70	---	2.09	2.35	3.33	3.07
13	---	---	4.03	---	2.74	2.24	2.67	---	2.07	2.34	3.37	3.12
14	---	2.56	4.03	---	2.58	2.45	2.64	---	2.07	2.37	3.41	3.51
15	---	2.49	4.02	3.30	2.53	2.89	2.62	3.04	2.07	2.42	3.39	5.73
16	---	2.47	4.00	3.28	2.43	2.88	2.59	3.01	2.04	2.43	3.41	6.69
17	---	2.48	3.95	3.22	2.40	2.85	2.58	3.00	2.06	2.45	3.40	5.49
18	---	2.53	3.86	3.20	2.37	2.85	2.58	3.01	2.09	2.45	3.40	5.28
19	---	2.46	3.82	3.06	2.38	2.85	2.59	2.92	2.49	2.45	3.39	5.22
20	---	2.50	3.79	3.27	2.38	3.00	2.57	2.61	3.13	2.46	3.38	5.34
21	---	2.50	3.77	3.26	2.36	3.82	2.55	2.24	3.16	2.47	3.14	5.55
22	---	2.56	3.76	3.25	2.36	3.59	2.54	2.20	3.18	2.53	2.51	5.33
23	---	2.71	3.74	3.26	2.36	3.02	2.52	2.18	3.18	2.60	2.63	5.13
24	---	2.67	3.75	3.29	2.39	2.94	2.51	2.18	3.17	2.59	2.86	5.44
25	---	2.67	3.75	3.29	2.39	2.91	2.52	2.18	3.01	2.52	2.88	5.66
26	---	2.67	3.76	3.15	2.37	2.86	2.44	2.17	2.76	2.50	2.88	5.78
27	---	2.64	3.78	2.91	2.35	2.85	2.25	2.15	2.77	2.50	2.89	5.40
28	---	2.63	4.01	2.88	2.34	2.85	2.36	2.14	2.77	2.54	2.88	5.10
29	---	2.64	3.71	2.92	---	2.74	2.52	2.12	2.77	2.89	---	4.89
30	---	2.63	3.62	3.06	---	2.63	2.52	2.14	2.78	3.33	---	4.60
31	---	---	3.51	3.19	---	2.75	---	2.19	---	3.34	---	---
MEAN	3.55	2.58	3.69	3.21	2.77	2.63	2.59	2.48	2.43	2.48	3.31	4.97
MAX	3.76	2.71	4.31	3.37	3.87	3.82	2.71	3.04	3.18	3.34	4.17	6.69
MIN	2.93	2.46	2.57	2.88	2.34	2.12	2.25	2.12	2.04	2.02	2.51	3.07
CAL YR 2000	MEAN 2.86	MAX 5.04	MIN 2.07									
WTR YR 2001	MEAN 2.99	MAX 6.69	MIN 2.02									

MISCELLANEOUS WATER-QUALITY RECORDS
OCTOBER 2000 TO SEPTEMBER 2001

02240000 -- OCKLAWAHA RIVER NR CONNER, FL

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR													
10...	1000	2.50	527	--	7.6	455	22.8	.50	.13	.90	.02	.03	4.3
24...	1100	2.34	508	5.0	7.7	448	24.4	.35	.10	.85	.03	.03	<.1
MAY													
08...	0940	2.12	492	3.1	7.0	414	22.9	.43	.060	.89	.03	<.02	<.1
22...	1110	1.97	466	4.5	7.5	446	23.9	.54	.13	.81	.02	<.02	4.3
JUN													
05...	0915	1.78	444	--	7.5	439	23.8	.46	E.112c1	.86	.01	.03	5.2
19...	0947	--	E432	--	7.6	435	23.6	.39	E.036c1	.82	<.01	.05	45
JUL													
02...	1040	--	E437	4.9	7.5	443	24.1	.22	E.063c1	.79	<.01	.03	6.3
17...	0900	--	E431	3.9	7.6	442	23.8	.23	E.036c1	.82	.01	.03	5.2

02240500 -- OCKLAWAHA RIVER AT EUREKA, FL

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR													
10...	1120	19.80	653	--	7.7	459	23.5	.40	.050	.89	.02	.02	<.1
24...	1250	19.70	586	3.9	7.8	438	23.6	.34	.040	.81	.02	.03	<.1
MAY													
08...	1308	19.70	E505	6.2	6.3	412	23.5	.50	.040	.76	.03	<.02	<.1
22...	1330	19.33	453	7.1	7.8	442	24.9	.46	.070	.82	.02	<.02	45
JUN													
05...	1100	19.34	457	--	7.8	438	25.5	.44	E.055c1	.82	.01	.02	4.3
19...	1153	19.47	485	--	7.9	435	25.1	.28	E.068c1	.78	.02	.03	3.2
JUL													
02...	1200	19.27	441	7.3	7.9	440	25.7	.22	E.036c1	.71	.01	.03	<.1
17...	1100	19.46	449	7.2	7.9	445	25.4	.3	E.038c1	.507	<.01	.03	<.1

291242081591601 -- OCKLAWAHA RIVER 100 YDS UPSTREAM FROM SILVER RIVER NR OCALA, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
10...	0930	--	7.2	495	23.1	3.8	1.2	.71	.02	.04	25
24...	1030	3.2	7.2	421	23.2	3.3	1.1	.046	<.01	.04	20
MAY											
08...	0915	1.3	6.7	372	23.5	3.6	.91	.032	.03	.02	25
22...	0935	1.6	7.3	423	26.4	3.8	E1.50c1	.017	.01	.02	33
JUN											
05...	0900	--	7.5	446	28.0	3.2	.66	E.102c1	.02	.05	42
19...	0920	--	7.8	457	27.6	2.8	.12	E.035c1	<.01	.06	<.1
JUL											
02...	1030	4.7	7.8	415	28.3	2.8	E.365c1	E.002c1	.01	.06	70
17...	0845	3.3	7.6	392	27.4	2.7	E.519c1	E.006c1	<.01	.05	56

< -- Less than
E -- Estimated value
cl-- Holding time exceeded by the laboratory

MISCELLANEOUS WATER-QUALITY RECORDS
OCTOBER 2000 TO SEPTEMBER 2001

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291243081592001 -- SILVER SPRINGS 100 YDS UPSTREAM FROM OKLAWAHA RIVER NR OCALA, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
10...	0900	--	7.8	450	22.7	<.20	.002	.91	.04	.03	<.1
24...	1000	6.5	7.5	444	23.0	<.2	.005	.928	<.02	<.03	<.1
MAY											
08...	0855	3.2	6.6	418	22.8	<.20	.010	.93	.04	<.02	<.1
22...	0920	3.9	7.5	446	23.4	<.20	.010	.91	.03	<.02	<.1
JUN											
05...	0845	--	7.5	438	23.2	<.20	E.010c1	.94	.03	.02	<.1
19...	0900	--	7.5	439	28.3	<.20	E.027c1	.90	.04	.03	<.1
JUL											
02...	1015	4.5	7.5	444	23.6	<.20	E.006	.85	.03	.03	<.1
17...	0825	3.8	7.5	445	23.6	<.20	E.009c1	.88	.02	.03	<.1

291722081481301 -- OCKLAWAHA RIVER AT GORES LANDING NR FT McCOY, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
10...	1110	--	7.9	457	23.7	.45	.090	.87	.02	.03	3.0
24...	1200	8.6	7.8	440	24.0	.3	.075	.800	<.02	.03	<.1
MAY											
08...	1046	5.7	6.8	409	23.4	.58	.080	.73	.03	<.02	<.1
22...	1225	7.5	7.8	441	25.2	.60	.090	.77	.02	<.02	<.1
JUN											
05...	1015	--	7.8	436	25.2	.46	E.08	.79	.01	.02	4.7
19...	1100	--	7.7	437	25.0	.28	E.074c1	.76	.01	.03	5.5
JUL											
02...	1200	--	--	--	--	.27	E.047c1	.70	<.01	.02	<.1
17...	1015	7.3	7.9	439	24.7	.2	E.041c1	.721	<.01	.02	<.1

292600081405401 -- ST JOHNS RIVER AT BUZZARD'S POINT NR STOKES FERRY, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
11...	1100	--	7.7	1710	25.4	.95	.040	<.002	<.01	.03	15
26...	0935	--	--	--	--	1.0	.020	<.002	<.01	.04	26
MAY											
09...	1250	6.7	7.6	1200	24.0	1.1	.040	<.002	<.01	.02	28
23...	1445	9.9	8.9	1680	28.6	1.3	E.221c1	.002	.01	<.02	43
JUN											
06...	1120	--	9.0	1720	29.5	1.8	E.514c1	<.002c1	.01	.04	78
20...	1308	--	8.9	1720	30.1	2.1	E.054c1	<.002c1	.01	.05	91
JUL											
03...	0730	8.7	9.2	1610	30.3	2.1	E.381c1	E.002c1	<.01	.05	68
18...	1220	7.7	8.8	1480	29.2	1.8	E.257c1	<.002c1	<.01	.04	53

< -- Less than
E -- Estimated value
c1-- Holding time exceeded by the laboratory

MISCELLANEOUS WATER-QUALITY RECORDS
OCTOBER 2000 TO SEPTEMBER 2001

292751081411001 -- ST JOHNS RIVER AT BEECHER'S POINT NR WELAKA, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
11...	1030	--	7.9	1560	25.3	.86	.040	<.002	.01	.03	16
26...	0930	--	--	--	--	.81	.040	<.002	<.01	.03	16
MAY											
09...	1158	7.4	7.9	1170	23.7	.93	.060	<.002	<.01	<.02	33
23...	1400	10.1	8.9	1610	28.9	1.1	E.262c1	<.002	.01	<.02	44
JUN											
06...	1000	--	8.8	1440	29.4	1.4	E.424c1	<.002c1	<.01	.03	58
20...	1228	--	8.8	1400	29.7	1.7	E.066c1	<.002c1	<.01	.04	69
JUL											
03...	0710	8.2	9.1	1520	30.2	1.9	.32	.004	<.01	.04	78
18...	1150	6.5	8.6	1440	28.9	1.5	E.204c1	<.002c1	<.01	.03	34

292819081413101 -- OCKLAWAHA RIVER 100 YDS UPSTREAM FROM ST JOHNS RIVER NR WELAKA, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
11...	1015	--	8.2	520	23.7	.43	.050	.044	.02	<.02	<.1
26...	0845	--	--	--	--	.5	.039	.046	<.01	<.02	<.1
MAY											
08...	1110	4.6	7.3	452	23.5	.57	.020	.033	<.01	<.02	2.9
23...	1310	5.4	7.8	401	27.8	.55	.020	.037	.01	<.02	<.1
JUN											
06...	0930	--	7.6	379	28.7	.52	E.057c1	E.040c1	<.01	<.02	<.1
20...	1200	--	7.7	409	29.2	.51	E.029c1	E.036c1	<.01	<.02	<.1
JUL											
03...	0630	5.3	7.6	432	29.3	.53	E.070c1	E.028c1	<.01	<.02	10
18...	1120	5.7	7.8	410	28.5	.50	.04c	M	<.01	.02	5.4

292843081442601 -- OCKLAWAHA RIVER AT US HIGHWAY 19 NR SALT SPGS, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
10...	1420	--	8.1	517	24.4	.43	.060	.036	.01	<.02	<.1
24...	1645	--	--	--	--	.49	.04	.030	<.01	<.02	<.1
MAY											
08...	1645	5.9	7.1	456	23.8	.61	.020	.031	.02	<.02	<.1
22...	1700	6.7	8.1	404	28.2	.54	.040	.029	.01	<.02	<.1
JUN											
05...	1525	--	7.8	379	29.3	.52	E.05	E.031	<.01	<.02	<.1
19...	1511	--	7.8	409	29.7	.47	E.055c1	E.034c1	<.01	<.02	<.1
JUL											
02...	1350	6.4	7.7	427	29.3	.51	E.077c1	E.028c1	<.01	<.02	4.6
17...	1545	6.3	7.9	413	29.0	.60	E.048c1	E.027c1	<.01	<.02	<.1

< -- Less than
E -- Estimated value
c1-- Holding time exceeded by the laboratory

MISCELLANEOUS WATER-QUALITY RECORDS
OCTOBER 2000 TO SEPTEMBER 2001

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292905081403401 -- ST JOHNS RIVER AT MARKER 48 AT WELAKA, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
11...	0945	--	7.6	1530	25.2	.75	.040	<.002	.01	.02	12
26...	0745	--	--	--	--	.90	.040	<.002	<.01	.03	24
MAY											
08...	1040	7.0	7.0	1290	25.0	1.1	.007	<.002	<.01	.03	60
23...	1130	8.0	8.6	1320	27.9	1.1	.060	<.002	<.01	<.02	11
JUN											
06...	0900	--	8.9	1590	29.3	1.7	E.49	E.002	.01	.04	66
20...	1020	--	8.6	1300	29.7	1.7	E.048c1	<.002c1	.01	.05	61
JUL											
03...	0610	7.7	8.9	1400	30.2	1.7	E.304c1	<.002c1	<.01	.04	81
18...	0920	7.1	8.4	1220	29.0	1.3	E.230c1	<.002c1	<.01	.04	67

293022081481301 -- OKLAWAHA RIVER 800 FT DOWNSTREAM FROM RODMAN DAM, NR ORANGE SPRINGS, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
10...	1345	--	8.1	502	25.3	.48	.070	.010	<.01	<.02	<.1
24...	1545	--	--	--	--	.54	.040	.004	<.01	<.02	<.1
MAY											
08...	1530	6.8	6.5	446	23.9	.60	.020	.004	.01	<.02	<.1
22...	1605	8.4	8.4	401	28.1	.50	.030	.004	.02	<.02	<.1
JUN											
05...	1420	--	8.1	385	30.0	.53	E.043c1	E.002c1	<.01	<.02	<.1
19...	1423	--	8.0	405	30.0	.52	E.033c1	E.005c1	<.01	<.02	5.6
JUL											
02...	1410	7.9	8.1	424	30.6	.60	E.073c1	<.002c1	<.01	<.02	6.8
17...	1410	7.9	8.1	412	21.0	.60	E.053c1	<.002c1	<.01	<.02	6.4

293036081542501 -- LAKE OKLAWAHA BL ORANGE CREEK INFLOW NR ORANGE SPGS, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
10...	1230	--	7.7	523	25.6	.48	.080	.08	.01	.03	<.1
24...	1420	9.3	7.6	483	23.1	.4	.040	.007	<.01	<.02	<.1
MAY											
08...	1437	7.0	7.1	439	24.0	.52	.030	.009	.02	<.02	<.1
22...	1445	9.1	7.7	487	28.1	.44	.030	.004	<.01	<.02	41
JUN											
05...	1320	--	7.6	482	29.0	.48	E.051c1	<.002c1	<.01	<.02	5.2
19...	1306	--	7.6	453	28.8	.45	E.03	E.002	<.01	<.02	8.4
JUL											
02...	1253	7.0	7.6	471	29.9	.33	E.055c1	<.002c1	<.01	<.02	6.3
17...	1245	8.0	7.9	453	29.1	.4	E.062c1	<.002c1	<.01	<.02	5.4

< -- Less than
E -- Estimated value
c1-- Holding time exceeded by the laboratory

MISCELLANEOUS WATER-QUALITY RECORDS
OCTOBER 2000 TO SEPTEMBER 2001

293112081404201 -- ST JOHNS RIVER AT NASHUA, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
11...	0915	--	7.7	1540	25.1	.79	.040	<.002	.01	.02	12
25...	0955	--	--	--	--	.8	.018	<.002	<.01	.03	<16
MAY											
08...	0940	6.7	6.5	1340	24.7	1.1	.004	<.002	.01	.03	<.1
23...	1050	7.6	8.5	1250	28.1	1.0	.060	<.002	.01	<.02	54
JUN											
06...	0830	--	8.8	1580	29.4	1.5	E.443c1	<.002c1	<.01	.04	72
20...	0945	--	8.7	1530	30.0	1.7	E.073c1	<.002c1	.01	.04	44
JUL											
03...	0550	7.1	8.7	1220	30.0	1.5	E.238c1	<.002c1	<.01	.03	72
18...	0850	7.0	8.5	1340	29.3	1.7	E.265c1	<.002c1	<.01	.04	66

293554081390401 -- ST JOHNS RIVER AT HORSESHOE POINT NR SATSUMA, FL

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N) (00630)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P) (70507)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR											
11...	0745	--	7.8	1420	24.8	.76	.060	<.002	<.01	.03	11
25...	0815	--	--	--	--	.74	.030	<.002	<.01	.03	16
MAY											
09...	0750	6.9	7.0	810	23.2	1.4	.010	.002	.02	.06	32
23...	0830	7.3	8.2	1140	28.3	.94	.090	<.002	.01	<.02	25
JUN											
06...	0701	--	8.5	1430	29.4	1.3	E.367c1	<.002c1	.01	.04	56
20...	0751	--	8.5	1410	30.0	1.6	E.044c1	<.002c1	.01	.04	52
JUL											
02...	1530	10.0	8.7	1260	31.9	1.3	E.251c1	<.002c1	<.01	.03	38
18...	0720	6.4	8.2	1400	29.4	1.6	E.304c1	<.002c1	<.01	.04	82

< -- Less than
E -- Estimated value
c1-- Holding time exceeded by the laboratory

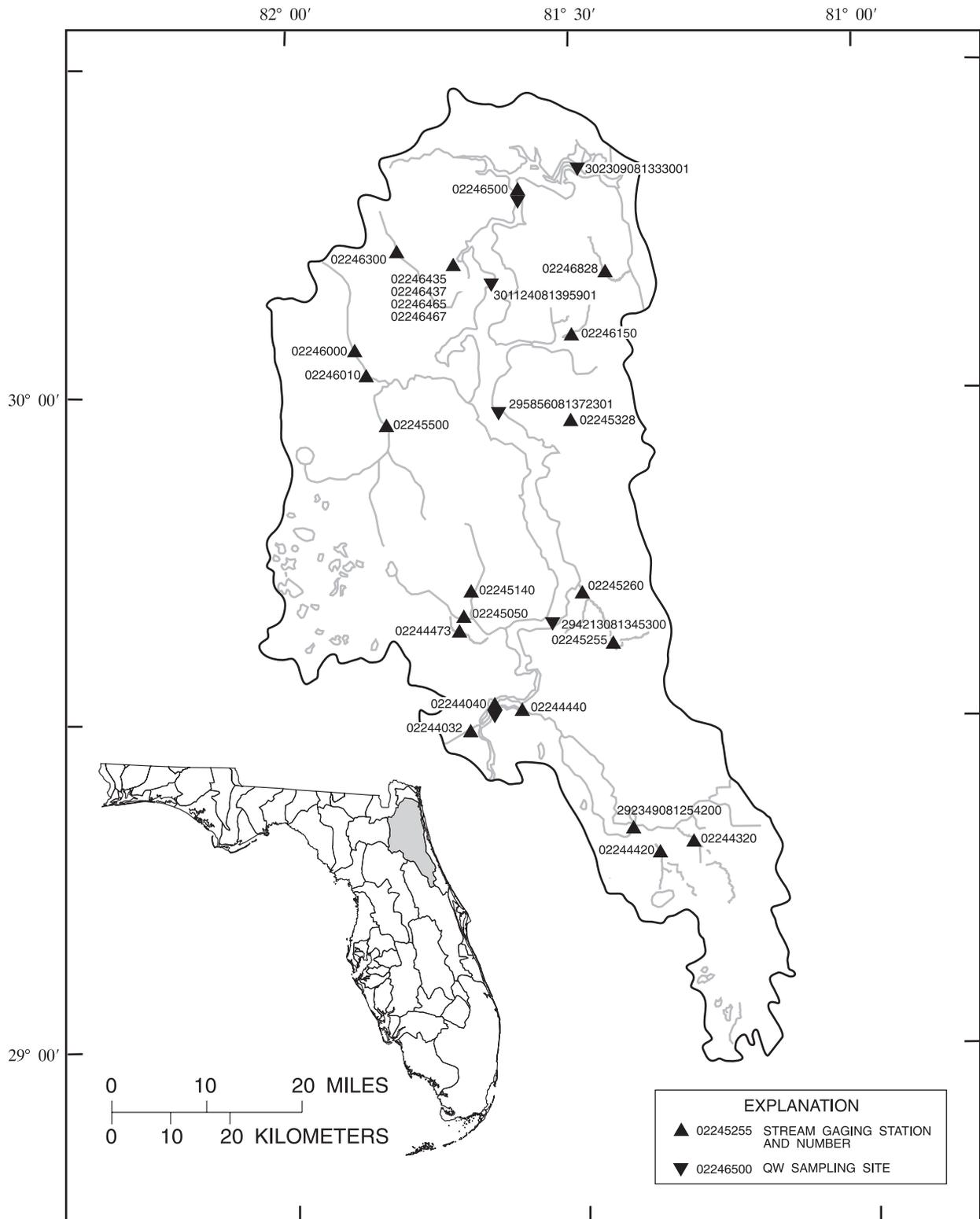


Figure 6.--Location of stream gaging stations in the St. Johns River basin below the Ocklawaha River basin.

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02244040 ST. JOHNS RIVER AT BUFFALO BLUFF NEAR SATSUMA, FL

LOCATION.--Lat 29°35'46", long 81°41'00", in SE $\frac{1}{4}$ 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 mi², approximately. Includes Paynes Prairie, a diked sinkhole area of about 650 mi², which is noncontributing.

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 sea level.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-10100	5610	5940	6560	3850	359	4830	-1680	2460	3580	-1360	6140
2	-1450	6030	-367	2860	2460	2100	5760	385	4640	4140	848	4990
3	4110	5780	-8790	1830	1740	6540	7470	-75	3800	3510	3050	2770
4	3900	6790	e3700	2460	-929	7590	3010	484	3120	1300	6880	1270
5	8770	3770	e4200	4450	-138	1970	-1400	54	3500	4810	5670	3220
6	9270	1370	4550	4300	1880	-929	296	244	3870	4470	6270	3680
7	7510	5610	e3900	2190	1340	-2130	3050	-5400	2730	3300	5330	2120
8	-1540	6190	e3200	2710	954	-3970	4270	-6190	2070	943	4860	1990
9	-11200	8630	e2600	-2060	1710	-3380	4020	-1200	-188	1310	6710	5230
10	-2280	2660	e1800	-358	2400	-6950	3180	1770	-1030	1700	8310	7230
11	3830	-269	e2100	-344	453	-5690	3800	4070	1390	2580	9400	7240
12	3970	-1410	e2300	-1360	-3030	-48	2220	4480	2610	2910	9690	4940
13	2900	548	e2100	-3630	-1250	4760	3620	5510	3050	2240	9260	-928
14	2740	2120	2490	-4770	2920	5330	2910	833	3070	-7940	7660	-11700
15	4830	935	4300	-386	3650	9140	1490	2080	4260	-3680	5840	-15100
16	5190	3240	4970	2450	4780	6520	-1210	3590	3340	-572	2340	3050
17	4460	4300	7050	2780	2870	1480	-3520	-736	2540	751	2840	12000
18	4120	1850	7160	1330	-4940	-1700	-4920	-1390	-612	3590	4710	14600
19	4540	143	3920	3910	-3520	-10700	3200	1680	-250	4330	4360	16000
20	1060	-2380	4160	3260	978	-4490	4730	3000	-181	3920	6290	17600
21	1680	2170	4350	3980	2790	2700	3000	3220	1660	635	5390	16900
22	969	5220	1630	-1180	3690	8090	2860	3860	2790	-3280	3430	17000
23	-2370	6840	-2800	-6400	-3190	4620	3140	201	2130	4310	2440	15800
24	-3990	6710	-2980	-1710	-1010	4060	2800	51	1440	6940	4950	15900
25	-1530	3300	-3690	-95	792	4680	1510	1330	130	6000	5480	15200
26	-591	e1200	-5030	317	1740	2520	-6650	215	550	5330	1500	15700
27	434	e3500	2520	2820	2730	547	-1620	1080	553	5670	4410	15300
28	5610	5460	4550	4320	935	-1740	1180	2440	50	6170	6910	13200
29	5370	4590	-4880	4070	---	4820	982	3120	547	4380	7910	1310
30	2810	3880	1980	6450	---	7570	-4760	2510	2710	5240	7170	3840
31	5780	---	7030	6430	---	6440	---	2100	---	3620	5930	---
TOTAL	58802	104387	63963	47184	26655	50109	49248	31636	56749	82207	164478	216492
MEAN	1897	3480	2063	1522	952	1616	1642	1021	1892	2652	5306	7216
MAX	9270	8630	7160	6560	4780	9140	7470	5510	4640	6940	9690	17600
MIN	-11200	-2380	-8790	-6400	-4940	-10700	-6650	-6190	-1030	-7940	-1360	-15100

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

MEAN	5762	7102	5622	6205	5316	4991	3900	2261	3259	3759	3182	5349
MAX	12460	14270	14230	15230	13690	17290	10880	6302	7998	6954	8621	12050
(WY)	1996	1995	1995	1995	1998	1998	1998	1998	1994	1996	1994	1995
MIN	1027	227	1652	-278	952	1348	741	-327	545	756	317	745
(WY)	1994	1994	1994	1994	2001	2000	1997	1994	1993	2000	1993	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR
ANNUAL TOTAL	714144.3	951910								
ANNUAL MEAN	1951	2608								
HIGHEST ANNUAL MEAN										
LOWEST ANNUAL MEAN										
HIGHEST DAILY MEAN	10200	Sep 23	17600	Sep 20	23400	Nov 28	1994			
LOWEST DAILY MEAN	-11200	Sep 7, Oct 9	-15100	Sep 15	-23900	May 20	1994			
ANNUAL SEVEN-DAY MINIMUM	-4130	Sep 27	-3300	Mar 6	-11600	Nov 21	1993			
MAXIMUM PEAK STAGE			14.18	Sep 16	14.51	Oct 7	1996			
10 PERCENT EXCEEDS	6440		6860		12200					
50 PERCENT EXCEEDS	2320		2790		4360					
90 PERCENT EXCEEDS	-2980		-2190		-1650					

e Estimated.

Note.--Negative figures indicate reverse flow

02244040 ST. JOHNS RIVER AT BUFFALO BLUFF NEAR SATSUMA, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.02	11.38	10.45	9.99	9.69	10.15	10.16	10.38	10.19	10.40	10.94	10.56
2	11.94	11.31	10.58	10.01	9.71	10.10	10.07	10.38	10.09	10.33	11.06	10.59
3	11.73	11.24	11.02	10.03	9.73	9.86	10.02	10.41	10.00	10.27	11.02	10.75
4	11.65	11.16	---	9.99	9.92	9.69	10.04	10.39	9.97	10.31	10.86	10.92
5	11.49	11.17	---	9.89	10.00	9.55	10.34	10.42	9.92	10.22	10.85	10.96
6	11.28	11.33	11.05	9.77	9.93	9.58	10.42	10.44	9.89	10.08	10.85	10.96
7	11.19	11.23	---	9.84	9.94	9.81	10.30	10.71	9.86	10.03	10.88	11.11
8	11.38	11.10	---	9.85	9.98	10.12	10.17	10.97	9.92	10.12	10.89	11.24
9	11.79	10.98	---	9.93	9.97	10.29	10.11	10.89	10.01	10.11	10.84	11.24
10	11.75	10.96	---	9.97	9.89	10.53	10.11	10.75	10.12	10.12	10.71	11.10
11	11.58	11.06	---	10.06	9.90	10.72	10.12	10.59	10.14	10.11	10.55	11.03
12	11.49	11.26	---	10.12	10.17	10.61	10.14	10.45	10.16	10.06	10.42	11.09
13	11.49	11.28	---	10.30	10.19	10.40	10.03	10.30	10.01	10.05	10.30	11.46
14	11.50	11.20	10.86	10.54	10.02	10.19	9.93	10.44	9.94	10.53	10.24	12.29
15	11.42	11.17	10.69	10.45	9.90	9.95	10.05	10.48	9.92	10.68	10.31	13.49
16	11.35	11.12	10.65	10.26	9.79	9.86	10.11	10.34	9.87	10.61	10.51	13.64
17	11.33	11.02	10.33	10.18	9.75	9.91	10.20	10.49	9.90	10.64	10.59	13.47
18	11.30	11.02	10.06	10.23	10.07	10.05	10.40	10.61	10.15	10.58	10.58	13.25
19	11.26	11.14	10.08	10.20	10.29	10.78	10.18	10.51	10.27	10.53	10.62	13.04
20	11.35	11.30	9.95	10.03	10.19	11.22	10.07	10.39	10.28	10.56	10.55	12.77
21	11.37	11.12	9.86	9.81	10.03	10.86	10.04	10.37	10.26	10.79	10.55	12.54
22	11.40	10.88	10.02	9.98	9.94	10.46	9.97	10.30	10.22	11.14	10.62	12.38
23	11.52	10.74	10.23	10.37	10.18	10.46	9.91	10.35	10.18	11.16	10.73	12.28
24	11.75	10.71	10.40	10.44	10.31	10.48	9.87	10.40	10.21	10.82	10.69	12.15
25	11.77	10.81	10.51	10.30	10.25	10.34	9.84	10.37	10.29	10.69	10.63	12.12
26	11.80	---	10.74	10.33	10.13	10.36	10.16	10.36	10.32	10.63	10.81	11.98
27	11.80	---	10.59	10.23	10.06	10.45	10.21	10.35	10.36	10.55	10.85	11.92
28	11.64	10.49	10.42	10.07	10.10	10.61	10.13	10.31	10.39	10.49	10.73	11.96
29	11.55	10.46	10.80	10.06	---	10.59	10.11	10.19	10.48	10.55	10.60	12.30
30	11.60	10.43	10.54	9.91	---	10.33	10.37	10.13	10.48	10.50	10.56	12.56
31	11.47	---	10.15	9.76	---	10.23	---	10.19	---	10.57	10.58	---
MEAN	11.55	11.04	10.45	10.09	10.00	10.28	10.12	10.44	10.13	10.46	10.67	11.90
MAX	12.02	11.38	11.05	10.54	10.31	11.22	10.42	10.97	10.48	11.16	11.06	13.64
MIN	11.19	10.43	9.86	9.76	9.69	9.55	9.84	10.13	9.86	10.03	10.24	10.56

CAL YR 2000 MEAN 10.65 MAX 12.05 MIN 9.83
WTR YR 2001 MEAN 10.60 MAX 13.64 MIN 9.55

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02244320 MIDDLE HAW CREEK NEAR KORONA, FL

LOCATION.--Lat 29°21'35", long 81°18'42", in NW¼ sec.19, T.13 S., R.30 E., Flagler County, Hydrologic Unit 03080103, near center of span on downstream side of bridge on State Highway 11, 1.2 mi north of Codys Corner and 7.7 mi southwest of Korona.

DRAINAGE AREA.--78.3 mi².

PERIOD OF RECORD.--July 1975 to current year.

REVISED RECORDS.--WDR FL-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is at sea level.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	.15	.00	.00	.02	.00	79	3.4	.00	.04	57	61
2	9.8	.09	.00	.00	.02	.00	91	3.1	.00	.03	39	59
3	9.4	.07	.00	.00	.01	.00	93	2.7	.00	.02	36	87
4	8.9	.05	.00	.00	.04	.01	88	2.4	.00	.01	54	102
5	8.2	.04	.00	.00	.04	.00	79	2.0	.00	.01	156	187
6	7.4	.03	.00	.00	.03	.00	68	1.7	.00	.02	214	402
7	6.6	.02	.00	.00	.02	.00	58	1.3	.05	.01	206	570
8	5.9	.01	.00	.00	.01	.00	49	1.1	.02	.01	191	494
9	5.0	.01	.00	.00	.01	.00	43	.94	.01	.00	172	400
10	4.3	.00	.00	.00	.00	.00	38	.76	.05	e.01	170	339
11	3.5	.00	.00	.00	.00	.00	34	.59	.15	e.02	225	294
12	2.9	.00	.00	.00	.00	.00	31	.45	.10	.02	201	278
13	2.3	.00	.00	.00	.00	.04	28	.33	.03	.02	166	316
14	1.8	.01	.00	.00	.00	.01	26	.23	.01	.23	141	1110
15	1.3	.03	.00	.00	.00	.00	25	.17	.02	.11	128	3030
16	.82	.00	.00	.00	.00	.01	22	.10	.02	1.7	124	3400
17	.47	.00	.00	.00	.00	.00	20	.05	.00	2.6	119	2660
18	.29	.00	.00	.00	.00	.03	17	.00	.00	4.1	114	2120
19	.20	.00	.00	.00	.00	1.4	15	.00	.01	9.9	111	1700
20	.14	.00	.00	.00	.00	11	14	.00	.00	19	110	1360
21	.12	.00	.00	.00	.00	6.8	12	.00	e.01	26	106	1090
22	.09	.00	.00	.00	.00	12	10	.00	e.10	28	101	898
23	.11	.00	.00	.00	.00	32	9.1	.00	.09	28	99	804
24	.23	.00	.00	.00	.00	39	7.9	.00	.07	26	94	675
25	.47	.00	.00	.00	.00	36	7.0	.00	.05	22	88	577
26	.91	.01	.00	.00	.00	37	6.6	.00	.03	25	80	504
27	.97	.00	.00	.00	.00	38	5.7	.00	.02	35	72	451
28	.73	.00	.00	.00	.00	38	4.8	.00	.04	24	63	412
29	.52	.00	.00	.00	---	40	4.3	.00	.06	17	56	458
30	.36	.00	.00	.00	---	57	3.8	.00	.05	17	49	891
31	.21	---	.00	.02	---	71	---	.00	---	57	47	---
TOTAL	93.54	0.52	0.00	0.02	0.20	419.30	989.2	21.32	0.99	342.86	3589	25729
MEAN	3.02	.017	.000	.001	.007	13.5	33.0	.69	.033	11.1	116	858
MAX	9.8	.15	.00	.02	.04	71	93	3.4	.15	57	225	3400
MIN	.09	.00	.00	.00	.00	.00	3.8	.00	.00	.00	36	59
CFSM	.04	.00	.00	.00	.00	.17	.42	.01	.00	.14	1.48	11.0
IN.	.04	.00	.00	.00	.00	.20	.47	.01	.00	.16	1.71	12.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	129	61.1	43.0	72.6	64.9	69.6	55.6	12.6	48.1	52.2	72.1	171															
MAX	374	435	232	239	259	269	374	197	300	339	354	858															
(WY)	1996	1995	1998	1977	1998	1978	1982	1979	1976	1991	1978	2001															
MIN	.37	.017	.000	.001	.007	.060	.043	.000	.000	.022	.033	.29															
(WY)	1981	2001	2001	2001	2001	1985	1976	1978	1981	1993	1988	1989															

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1975 - 2001

ANNUAL TOTAL	3070.68		31185.95		70.2	
ANNUAL MEAN	8.39		85.4		125	
HIGHEST ANNUAL MEAN					1979	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	129	Apr 10	3400	Sep 16	3400	Sep 16 2001
LOWEST DAILY MEAN	.00	Many days	.00	Many days	.00	Many days
ANNUAL SEVEN-DAY MINIMUM	.00	May 26	.00	Nov 16	.00	Many days
MAXIMUM PEAK FLOW			3720		3720	
MAXIMUM PEAK STAGE			14.15		14.15	
ANNUAL RUNOFF (CFSM)	.11		1.09		.90	
ANNUAL RUNOFF (INCHES)	1.46		14.82		12.19	
10 PERCENT EXCEEDS	13		133		214	
50 PERCENT EXCEEDS	.27		.05		11	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

292349081254200 HAW CREEK AT MOUTH NEAR SEVILLE, FL

LOCATION.--Lat 29°23'49", long 81°25'42", in SE $\frac{1}{4}$ 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 mi².

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 203 ft³/s, Aug. 22, 2001; minimum measured, 9.8 ft³/s, Feb. 15, 2001.

DISCHARGE MEASUREMENTS, PERIOD FEBRUARY 2001 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)
FEB			JUN		
15...	1009	9.8	19...	0810	66
APR			AUG		
17...	0757	30	22...	0813	203

02244440 DUNNS CREEK NEAR SATSUMA, FL

LOCATION.--Lat 29°34'39", long 81°37'35", in NE $\frac{1}{4}$ 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 mi².

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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-3000	1010	-65	1840	1240	-7.7	979	-702	309	e1150	-616	e-160
2	-236	1030	-616	673	726	450	1310	-187	842	e1300	-229	e-350
3	1430	951	-3230	266	482	1680	1130	-138	822	e950	784	e-800
4	1450	1070	-3650	355	-457	1880	563	93	661	e450	2100	e-2200
5	2550	452	-779	865	-133	772	-935	-154	643	e850	2460	e-640
6	2880	-505	1050	1090	563	171	-422	-159	590	e1100	3000	e1420
7	2320	722	1360	363	360	-529	574	-1750	400	e800	2430	e1100
8	-394	1190	1630	285	176	-1270	959	-1950	236	e400	1890	e900
9	-3160	1400	1390	-729	249	-1180	724	-578	-129	e700	2060	e1540
10	-733	339	310	-196	483	-1800	408	458	-411	e1100	2230	e2300
11	976	-480	-277	-365	74	-1510	393	931	-166	e1200	2790	e2200
12	1030	-1190	265	-751	-1110	20	-74	1060	-176	722	2520	1650
13	583	-591	-31	-1130	-373	1240	416	1060	587	411	e2000	361
14	386	-85	152	-1510	793	1600	567	-204	679	-2300	e1500	-2510
15	856	-131	886	-66	1050	2200	-136	-130	633	-1210	923	e-7000
16	914	345	714	930	1240	1620	-508	522	530	41	e170	e1000
17	632	666	1710	860	822	284	-1170	-725	284	320	e432	e5000
18	456	247	2070	239	-1320	-441	-1130	-714	-474	846	434	e8000
19	549	-675	861	773	-1060	-2970	939	e300	-153	1220	-198	e10000
20	-280	-1440	1160	941	272	-1980	1160	e800	-9.2	969	438	10600
21	79	615	763	1590	918	1130	727	e600	234	-55	e1100	10200
22	28	1720	67	-409	949	2880	668	e800	470	-1690	-52	9650
23	-1220	1830	-1220	-1960	-895	1780	618	e-200	309	-172	e-1000	8930
24	-1900	1530	-1140	-708	-313	1190	509	e-200	86	1440	e-600	8330
25	-974	352	-1250	130	281	1360	213	e-50	-460	1380	194	7590
26	-653	665	-1610	58	706	587	-1780	-316	-465	1050	e-1440	7260
27	-325	1070	420	729	905	3.2	-763	e1100	-337	1170	e-250	6470
28	1070	1110	845	1200	180	-776	-7.3	e1500	-107	1120	e700	5440
29	1030	661	-1730	812	---	656	51	e1700	e300	381	e1100	1460
30	230	437	717	1260	---	1710	-1500	e1250	e750	582	e800	509
31	1080	---	2330	1500	---	1510	---	299	---	667	e1600	---
TOTAL	7654	14315	3102	8935	6808	12259.5	4482.7	4316	6477.8	16892	29270	98250
MEAN	247	477	100	288	243	395	149	139	216	545	944	3275
MAX	2880	1830	2330	1840	1240	2880	1310	1700	842	1440	3000	10600
MIN	-3160	-1440	-3650	-1960	-1320	-2970	-1780	-1950	-474	-2300	-1440	-7000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

MEAN	652	728	468	779	723	576	279	-56.4	324	443	225	633
MAX	3011	3035	2205	2823	4431	2249	1670	1898	2274	1385	1453	3868
(WY)	1996	1995	1998	1983	1983	1983	1996	1997	1997	1997	1978	1995
MIN	-241	-93.6	-356	-217	-184	-311	-576	-339	-806	-328	-775	-600
(WY)	1991	1984	1991	1991	1982	1995	1999	1994	1979	1999	1995	1978

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1978 - 2001
ANNUAL TOTAL	79971.3	212762.0	
ANNUAL MEAN	219	583	483
HIGHEST ANNUAL MEAN			975
LOWEST ANNUAL MEAN			-128
HIGHEST DAILY MEAN	3280	10600	10600
LOWEST DAILY MEAN	-3650	e-7000	-8340
ANNUAL SEVEN-DAY MINIMUM	-1220	-1030	-3130
MAXIMUM PEAK STAGE		*14.82	*14.82
10 PERCENT EXCEEDS	1400	1710	2060
50 PERCENT EXCEEDS	296	482	363
90 PERCENT EXCEEDS	-1200	-1120	-911

e Estimated

* From floodmark

Note.--Negative figures indicate reverse flow

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02244440 DUNNS CREEK NEAR SATSUMA, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.37	11.66	10.77	10.26	9.98	10.47	10.47	10.71	10.54	---	11.29	10.97
2	12.26	11.59	10.92	10.31	10.02	10.42	10.35	10.70	10.43	---	11.41	---
3	12.05	11.52	11.40	10.34	10.04	10.15	10.30	10.73	10.35	---	11.30	---
4	11.95	11.44	11.77	10.30	10.25	9.97	10.34	10.70	10.31	---	11.15	---
5	11.75	11.46	11.65	10.19	10.32	9.91	10.66	10.74	10.25	---	11.17	---
6	11.53	11.63	11.40	10.06	10.23	9.94	10.73	10.76	10.23	---	11.17	---
7	11.47	11.51	11.24	10.14	10.23	10.15	10.60	11.07	10.21	---	11.20	---
8	11.71	11.37	11.07	10.15	10.28	10.47	10.45	11.31	10.26	---	11.22	---
9	12.17	11.25	10.98	10.27	10.26	10.63	10.41	11.22	10.37	---	11.16	11.55
10	12.08	11.27	11.09	10.28	10.19	10.88	10.41	11.06	10.49	---	11.02	---
11	11.87	11.38	11.20	10.37	10.22	11.07	10.41	10.89	10.49	---	10.85	---
12	11.77	11.57	11.13	10.45	10.50	10.94	10.45	10.75	10.50	10.39	10.72	11.43
13	11.78	11.58	11.15	10.64	10.51	10.70	10.34	10.60	10.36	10.39	---	11.77
14	11.79	11.50	11.15	10.88	10.33	10.47	10.24	10.75	10.28	10.92	---	12.74
15	11.71	11.47	10.97	10.77	10.20	10.20	10.37	10.79	10.26	11.04	10.64	---
16	11.63	11.41	10.93	10.56	10.09	10.14	10.45	10.65	10.22	10.96	---	---
17	11.61	11.31	10.63	10.48	10.05	10.22	10.56	10.83	10.25	10.97	---	---
18	11.59	11.32	10.34	10.55	10.41	10.38	10.75	10.94	10.52	10.89	10.88	---
19	11.54	11.46	10.37	10.49	10.62	11.13	10.48	---	10.63	10.84	10.99	---
20	11.65	11.68	10.24	10.34	10.50	11.57	10.35	---	10.64	10.88	10.90	12.98
21	11.64	11.43	10.23	10.10	10.33	11.18	10.34	---	10.61	11.13	---	12.74
22	11.65	11.16	10.32	10.31	10.24	10.75	10.26	---	10.56	11.50	10.94	12.58
23	11.84	11.00	10.57	10.74	10.53	10.75	10.20	---	10.53	11.47	---	12.50
24	12.08	10.97	10.73	10.77	10.62	10.78	10.17	---	10.56	11.15	---	12.36
25	12.09	11.09	10.85	10.64	10.56	10.63	10.16	---	10.65	10.99	10.96	12.35
26	12.11	11.03	11.08	10.65	10.45	10.67	10.52	10.69	10.68	10.94	---	12.19
27	12.10	10.89	10.89	10.54	10.36	10.76	10.53	---	10.71	10.91	---	12.14
28	11.91	10.77	10.72	10.37	10.42	10.94	10.44	---	10.75	10.91	---	12.21
29	11.83	10.74	11.14	10.35	---	10.87	10.40	---	---	10.86	---	12.65
30	11.90	10.72	10.86	10.19	---	10.61	10.71	---	---	10.81	---	12.88
31	11.74	---	10.43	10.05	---	10.51	---	10.54	---	10.90	---	---
MEAN	11.84	11.31	10.91	10.40	10.31	10.59	10.43	10.82	10.45	10.94	11.05	12.25
MAX	12.37	11.68	11.77	10.88	10.62	11.57	10.75	11.31	10.75	11.50	11.41	12.98
MIN	11.47	10.72	10.23	10.05	9.98	9.91	10.16	10.54	10.21	10.39	10.64	10.97
CAL YR 2000	MEAN 10.94	MAX 12.39	MIN 10.13									
WTR YR 2001	MEAN 10.89	MAX 12.98	MIN 9.91									

02244473 RICE CREEK NEAR SPRINGSIDE, FL

LOCATION.--Lat 29°41'17", long 81°44'32", in land grant 40, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on State Highway 100, 1.8 mi northwest of Springside, 5.9 mi northwest of Palatka, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--43.2 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 1.04 ft above sea level (levels by Wardlin Engineering Associates).

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	6.3	9.7	7.5	15	5.1	45	3.4	2.1	9.4	5.9	5.2
2	56	6.2	9.0	7.5	24	5.1	31	3.3	2.1	6.6	11	4.9
3	39	6.1	8.6	7.4	31	4.9	21	3.3	2.0	5.0	18	5.1
4	28	6.1	8.5	7.4	25	6.6	16	3.3	2.0	4.2	48	5.2
5	22	6.1	8.3	7.3	22	12	13	3.1	2.2	3.8	112	5.2
6	18	6.1	7.9	7.3	18	9.2	12	2.9	2.1	3.8	303	5.8
7	25	6.0	7.7	7.2	14	7.0	9.9	3.2	2.1	3.5	216	7.2
8	33	5.9	7.5	7.2	12	6.0	8.1	4.4	2.2	3.5	142	7.0
9	30	5.9	7.5	7.4	11	5.6	7.0	3.9	2.1	3.4	103	6.3
10	19	6.0	7.4	7.1	9.7	5.9	6.2	3.4	2.1	3.4	59	5.5
11	14	5.9	7.6	7.0	9.2	5.8	5.5	3.1	2.8	3.7	39	5.0
12	11	5.8	7.9	7.4	8.5	5.5	4.9	2.8	3.5	3.7	30	5.2
13	9.4	5.7	8.0	7.8	8.1	6.1	4.5	2.7	3.1	3.7	23	6.3
14	8.3	5.9	8.3	7.5	8.0	7.5	4.3	2.6	3.5	3.9	21	36
15	7.6	6.3	8.2	7.5	7.8	6.7	5.8	2.5	4.4	3.6	18	518
16	6.9	6.1	8.0	7.5	7.4	6.5	5.6	2.4	3.5	3.2	38	556
17	6.3	6.0	9.5	7.3	7.1	7.6	4.4	2.3	3.5	3.1	63	430
18	6.0	5.8	9.8	7.1	6.8	8.1	3.8	2.2	6.7	3.1	65	356
19	5.8	5.8	9.0	7.0	6.5	25	3.6	2.2	7.9	3.4	58	275
20	5.7	6.5	8.6	7.3	6.2	127	3.5	2.1	6.2	6.6	46	210
21	6.3	6.7	8.3	7.4	6.1	167	3.3	2.1	4.6	9.7	42	164
22	6.3	6.4	8.2	7.2	5.9	128	3.2	2.1	4.2	8.3	26	183
23	6.7	6.2	8.1	7.1	5.8	91	3.1	2.1	4.3	5.9	16	711
24	9.7	6.3	7.9	6.9	5.8	73	3.0	2.1	4.2	5.9	11	506
25	9.5	10	7.8	6.6	5.9	60	3.5	2.0	3.8	5.1	8.3	396
26	9.6	17	7.7	6.3	5.7	48	7.0	2.0	3.4	4.7	6.8	439
27	8.9	20	7.7	6.2	5.5	33	6.6	2.0	4.4	8.2	5.7	346
28	7.9	16	7.7	6.2	5.3	22	4.9	1.9	10	9.5	5.0	253
29	7.2	13	8.3	6.2	---	20	4.1	2.0	15	5.6	4.6	192
30	6.9	11	8.2	6.2	---	39	3.7	2.0	13	4.4	4.3	154
31	6.6	---	7.8	7.8	---	51	---	2.1	---	4.3	4.1	---
TOTAL	504.6	233.1	254.7	220.8	303.3	1005.2	257.5	81.5	133.0	156.2	1552.7	5798.9
MEAN	16.3	7.77	8.22	7.12	10.8	32.4	8.58	2.63	4.43	5.04	50.1	193
MAX	68	20	9.8	7.8	31	167	45	4.4	15	9.7	303	711
MIN	5.7	5.7	7.4	6.2	5.3	4.9	3.0	1.9	2.0	3.1	4.1	4.9
CFSM	.38	.18	.19	.16	.25	.75	.20	.06	.10	.12	1.16	4.47
IN.	.43	.20	.22	.19	.26	.87	.22	.07	.11	.13	1.34	4.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)
1974	37.8	152	1993	3.50	1988	24.1	123	1998	5.57	1979	41.7	324	1998	6.83	1992
1975	46.4	146	1998	7.12	2001	62.1	367	1998	8.61	2000	58.8	203	1987	6.74	1976
1976	35.9	149	1979	4.45	1999	13.7	142	1979	2.63	2001	33.3	177	1982	2.86	1998
1977	38.2	149	1994	3.11	1988	58.4	303	1978	2.86	1993	38.2	149	1978	2.61	1993
1978	69.3	267	1979	3.35	1990	69.3	267	1979	3.35	1990	69.3	267	1979	3.35	1990

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1974 - 2001

ANNUAL TOTAL	8529.2	10501.5	
ANNUAL MEAN	23.3	28.8	43.2
HIGHEST ANNUAL MEAN			99.5
LOWEST ANNUAL MEAN			15.6
HIGHEST DAILY MEAN	440	711	2000
LOWEST DAILY MEAN	1.7	1.9	1.7
ANNUAL SEVEN-DAY MINIMUM	1.8	2.0	1.8
MAXIMUM PEAK FLOW		835	a2990
MAXIMUM PEAK STAGE		7.82	9.80
INSTANTANEOUS LOW FLOW		b1.9	*1.7
ANNUAL RUNOFF (CFSM)	.54	.67	1.00
ANNUAL RUNOFF (INCHES)	7.34	9.04	13.59
10 PERCENT EXCEEDS	39	47	112
50 PERCENT EXCEEDS	7.2	6.9	13
90 PERCENT EXCEEDS	2.8	3.1	4.0

a From rating curve extended above 1,130 ft³/s

* June 10,11,21,2000

b May 27-30, June 3,4

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02245050 ETONIA CREEK AT BARDIN, FL

LOCATION.--Lat 29°43'00", long 81°43'31", in NW¼ sec.17, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on Bardin Road, 0.2 mi north of Bardin, 4.6 mi upstream from mouth, and 6.2 mi northwest of Palatka.

DRAINAGE AREA.--219 mi².

PERIOD OF RECORD.--October 1973 to September 1990, June 1996 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 7.60 ft above sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	27	38	36	42	37	60	36	21	19	20	36
2	74	29	37	35	42	33	54	29	26	18	22	45
3	60	29	37	35	42	31	43	38	26	18	25	45
4	53	29	37	34	39	40	35	26	20	18	36	46
5	48	29	37	39	40	34	31	35	30	22	45	51
6	45	28	37	40	36	28	29	29	23	24	147	75
7	64	28	36	33	33	39	28	29	20	18	101	79
8	82	31	37	33	31	34	27	36	24	30	158	64
9	64	31	36	32	32	30	26	26	20	20	70	62
10	53	39	37	31	31	40	26	25	20	19	47	59
11	47	34	37	30	31	30	39	24	21	20	34	56
12	43	36	37	39	30	29	30	25	21	19	29	50
13	41	34	35	41	30	28	28	24	21	19	25	43
14	39	35	36	32	30	28	39	24	18	19	23	95
15	38	37	36	34	30	35	28	23	18	19	22	568
16	37	38	36	33	41	39	40	24	21	18	21	711
17	36	37	36	32	30	39	30	24	26	18	21	404
18	35	37	36	32	34	40	35	28	18	26	21	203
19	35	37	36	32	35	54	30	30	19	24	20	109
20	35	37	36	32	32	111	37	22	18	21	20	78
21	34	36	36	35	44	102	31	33	18	27	23	63
22	31	30	36	33	31	75	27	25	18	23	27	57
23	36	39	36	32	42	55	38	22	18	21	21	103
24	35	38	35	32	33	46	28	30	21	18	31	85
25	35	38	36	32	35	43	40	27	18	17	21	105
26	33	47	35	35	34	44	38	21	17	17	25	191
27	31	46	35	38	32	42	29	28	21	18	29	131
28	27	42	35	31	31	41	27	26	29	18	21	86
29	25	40	37	45	---	42	28	21	25	17	37	68
30	25	39	36	36	---	52	28	30	21	22	25	56
31	25	---	36	34	---	70	---	23	---	24	26	---
TOTAL	1365	1057	1123	1068	973	1391	1009	843	637	631	1193	3824
MEAN	44.0	35.2	36.2	34.5	34.8	44.9	33.6	27.2	21.2	20.4	38.5	127
MAX	99	47	38	45	44	111	60	38	30	30	158	711
MIN	25	27	35	30	30	28	26	21	17	17	20	36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	80.1	68.6	97.1	99.2	113	105	89.2	70.7	79.4	86.6	107	115
MEAN	80.1	68.6	97.1	99.2	113	105	89.2	70.7	79.4	86.6	107	115
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	30.3	35.2	36.2	34.5	34.8	39.7	33.6	27.2	21.2	20.4	35.7	46.2
(WY)	2000	2001	2001	2001	2001	1999	2001	2001	2001	2001	2000	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1974 - 2001

	17935	15114	92.8	154	1998
ANNUAL TOTAL	17935	15114	92.8	154	1998
ANNUAL MEAN	49.0	41.4	92.8	154	1998
HIGHEST ANNUAL MEAN			92.8	154	1998
LOWEST ANNUAL MEAN			41.4	41.4	2001
HIGHEST DAILY MEAN	382	Sep 11	711	Sep 16	1780
LOWEST DAILY MEAN	24	Aug 9	*17	*17	Apr 28 1997
ANNUAL SEVEN-DAY MINIMUM	27	Oct 28	18	Jul 23	18
MAXIMUM PEAK FLOW			916	Sep 15	2650
MAXIMUM PEAK STAGE			6.48	Sep 15	8.41
10 PERCENT EXCEEDS	65		56		156
50 PERCENT EXCEEDS	44		33		67
90 PERCENT EXCEEDS	33		20		46

*June 26, July 25,26,29, 2001

02245140 SIMMS CREEK NEAR BARDIN, FL

LOCATION.--Lat 29°44'07", long 81°42'36", in NE¹/₄ sec.9, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, on right bank 0.4 mi downstream from bridge on Simms Creek Road, 1.7 mi northeast of Bardin, 2.7 mi upstream from Etonia Creek, and 6.7 mi northwest of Palatka.

DRAINAGE AREA.--47.3 mi².

PERIOD OF RECORD.--October 1973 to September 1975, March 1976 to current year.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	14	14	e12	18	9.4	87	8.6	7.0	18	19	15
2	115	14	13	e12	25	9.3	57	8.4	7.2	15	35	16
3	76	13	13	e12	29	9.0	37	8.4	7.0	12	65	19
4	51	12	13	e11	23	9.8	29	8.2	6.7	10	78	22
5	42	12	13	e11	24	13	25	8.0	6.7	9.5	81	21
6	36	11	12	e11	20	12	24	7.7	6.7	8.9	232	24
7	73	11	12	e11	17	11	20	7.8	6.7	8.8	307	48
8	94	11	12	e12	15	9.9	18	8.8	8.6	8.8	411	70
9	57	11	12	e12	14	9.4	15	8.7	8.9	8.8	247	41
10	38	11	12	e11	13	9.3	14	8.2	8.8	9.4	156	32
11	30	11	12	e11	13	9.3	13	7.7	10	13	91	28
12	25	10	12	e12	12	9.1	11	7.4	11	14	63	31
13	22	10	12	e12	12	10	11	7.3	12	12	45	67
14	20	10	e12	e11	12	13	9.9	7.1	11	14	36	206
15	19	11	e13	e11	12	11	9.6	7.0	9.1	17	29	1470
16	19	10	e14	e10	11	12	9.6	6.7	8.0	13	30	827
17	18	10	e16	10	11	14	8.5	6.5	7.5	11	29	420
18	16	10	e15	10	11	15	8.1	6.3	9.8	11	26	273
19	15	10	e14	10	10	34	7.9	6.2	13	13	21	200
20	14	11	e13	11	10	94	7.9	6.1	11	28	18	154
21	14	11	e13	11	10	130	7.7	6.7	9.2	51	17	114
22	14	11	e13	11	9.8	92	7.5	7.0	8.7	42	15	83
23	14	12	e12	11	9.7	47	8.0	6.9	8.7	27	14	79
24	15	12	e12	11	9.7	33	8.4	6.9	9.1	22	13	69
25	16	17	e11	10	10	27	9.1	6.8	8.7	19	12	84
26	16	24	e12	10	10	26	13	6.8	8.0	18	12	144
27	16	23	e11	10	10	23	12	6.8	8.1	20	11	147
28	15	18	e12	10	9.8	20	10	6.7	19	15	11	110
29	14	16	e13	9.8	---	19	9.4	6.8	27	13	11	77
30	14	15	e14	9.8	---	34	8.9	7.0	26	11	12	56
31	15	---	e13	12	---	81	---	7.0	---	12	14	---
TOTAL	1112	382	395	338.6	391.0	855.5	516.5	226.5	309.2	505.2	2161	4947
MEAN	35.9	12.7	12.7	10.9	14.0	27.6	17.2	7.31	10.3	16.3	69.7	165
MAX	169	24	16	12	29	130	87	8.8	27	51	411	1470
MIN	14	10	11	9.8	9.7	9.0	7.5	6.1	6.7	8.8	11	15
CFSM	.76	.27	.27	.23	.30	.58	.36	.15	.22	.34	1.47	3.49
IN.	.87	.30	.31	.27	.31	.67	.41	.18	.24	.40	1.70	3.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1974	55.3	205	1997	8.55	1988
1975	30.8	94.8	1998	10.2	1991
1976	44.5	302	1998	11.2	1991
1977	49.6	156	1998	10.9	2001
1978	62.6	374	1998	12.9	1989
1979	58.2	156	1986	10.4	1976
1980	37.1	143	1983	8.49	1989
1981	19.9	141	1979	5.93	2000
1982	33.4	125	1991	6.91	2000
1983	46.4	182	1994	6.49	1988
1984	64.9	174	1974	7.95	1999
1985	74.7	345	1979	6.64	1990

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1974 - 2001

ANNUAL TOTAL	9217.2	12139.5	
ANNUAL MEAN	25.2	33.3	48.4
HIGHEST ANNUAL MEAN			106
LOWEST ANNUAL MEAN			16.4
HIGHEST DAILY MEAN	931	1470	2250
LOWEST DAILY MEAN	4.9	6.1	4.1
ANNUAL SEVEN-DAY MINIMUM	4.9	6.5	4.3
MAXIMUM PEAK FLOW		1670	a2840
MAXIMUM PEAK STAGE		13.97	a14.96
INSTANTANEOUS LOW FLOW		6.0	4.0
ANNUAL RUNOFF (CFSM)	.53	.70	1.02
ANNUAL RUNOFF (INCHES)	7.25	9.55	13.90
10 PERCENT EXCEEDS	44	66	114
50 PERCENT EXCEEDS	13	12	20
90 PERCENT EXCEEDS	5.7	8.0	8.8

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.

WATER-QUALITY RECORDS

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 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 16, 1999; minimum daily mean, 322 $\mu\text{S}/\text{cm}$ @ 25 °C, Feb. 26, 1998.
 SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 2,230 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 16, 1999; minimum daily mean, 323 $\mu\text{S}/\text{cm}$ @ 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, 1,510 $\mu\text{S}/\text{cm}$ @ 25 °C, May 22-27; minimum daily mean, 737 $\mu\text{S}/\text{cm}$ @ 25 °C, Oct. 2.
 SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 1,510 $\mu\text{S}/\text{cm}$ @ 25 °C, May 22-28; minimum daily mean, 737 $\mu\text{S}/\text{cm}$ @ 25 °C, Oct. 1.
 WATER TEMPERATURE (TOP): Maximum daily mean, 31.7 °C, Aug. 19; minimum daily mean 9.7 °C, Jan. 4,5.
 WATER TEMPERATURE (BOTTOM): Maximum daily mean, 31.5 °C, Aug. 19; minimum daily mean 9.6 °C, Jan. 4.
 DISSOLVED OXYGEN (TOP): Maximum daily mean, 12.2 mg/L, Jan. 15; minimum daily mean, 1.1 mg/L, Sept. 27.
 DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 12.2 mg/L, Jan. 15; minimum daily mean, 1.1 mg/L, Sept. 27.

SPECIFIC CONDUCTANCE TOP (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	738	999	1240	1270	1160	1350	1190	1420	1440	---	---	1430
2	737	1030	1240	1280	1140	1350	1210	1410	1400	---	---	1450
3	761	1070	1230	1290	1130	1360	1250	1440	1350	---	---	1460
4	749	1080	1250	1290	1140	1310	1250	1450	1290	---	---	1450
5	787	1090	1220	1250	1160	1270	1250	1450	1270	---	---	1450
6	835	1090	1230	1180	1160	1290	1240	1440	1230	---	---	1460
7	907	1110	1240	1160	1160	1290	1250	1420	1220	---	1240	1460
8	910	1130	1240	1130	1180	1320	1270	1390	1210	---	1170	1460
9	797	1170	1250	1140	1190	1340	1290	1380	1220	---	1100	1460
10	799	1200	1260	1150	1200	1340	1320	1380	1220	---	1140	1470
11	779	1200	1260	1160	1210	1320	1350	1410	1230	1310	1220	1480
12	805	1190	1270	1170	1210	1320	1360	1430	1220	1310	1240	1430
13	821	1190	1270	1160	1210	1340	1400	1470	1250	1280	1250	1410
14	838	1200	1270	1190	1210	1350	1420	1480	1260	1300	1280	1400
15	869	1190	1260	1210	1230	1330	1430	1470	1270	1380	1300	1250
16	894	1210	1240	1180	1260	1320	1430	1480	1300	1380	1320	1200
17	902	1250	1210	1190	1320	1300	1440	1490	1330	1370	1320	1160
18	910	1260	1210	1200	1300	1300	1350	1480	1310	1360	1330	1010
19	918	1250	1180	1220	1260	1330	1380	1480	---	1350	1330	924
20	924	1230	1180	1250	1260	1320	1430	1490	1310	1330	1340	910
21	923	1230	1190	1270	1280	1320	1440	1500	1320	---	1350	933
22	929	1260	1190	1280	1290	1320	1450	1510	1350	---	1360	947
23	932	1290	1190	1250	1300	1280	1460	1510	1410	---	1370	939
24	904	1290	1200	1240	1280	1260	1460	1510	1430	---	1380	924
25	872	1290	1210	1250	1290	1230	1470	1510	1430	---	1380	891
26	874	1280	1210	1260	1300	1210	1460	1510	1420	---	1370	860
27	875	1240	1210	1260	1330	1230	1450	1510	---	---	1370	805
28	905	1200	1220	1300	1340	1210	1450	1500	---	---	1360	798
29	939	1200	1220	1320	---	1220	1460	1500	---	---	1350	789
30	948	1220	1220	1330	---	1190	1450	1460	---	---	1380	789
31	965	---	1230	1270	---	1160	---	1450	---	---	1410	---
MEAN	863	1190	1230	1230	1230	1290	1370	1460	1310	1340	1310	1180
MAX	965	1290	1270	1330	1340	1360	1470	1510	1440	1380	1410	1480
MIN	737	999	1180	1130	1130	1160	1190	1380	1210	1280	1100	789

CAL YR 2000 MEAN 959 MAX 1290 MIN 649
 WTR YR 2001 MEAN 1240 MAX 1510 MIN 737

294213081345300 ST. JOHNS RIVER AT DANCY POINT NEAR SPUDS, FL--Continued

SPECIFIC CONDUCTANCE BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	737	1010	1230	1270	1160	1350	1190	1420	1440	---	---	1430
2	744	1040	1240	1290	1140	1350	1220	1410	1400	---	---	1450
3	761	1070	1230	1290	1140	1360	1250	1430	1330	---	---	1450
4	748	1080	1250	1290	1150	1320	1250	1440	1310	---	---	1450
5	786	1090	1220	1250	1160	1270	1250	1450	1280	---	---	1450
6	834	1090	1230	1180	1160	1290	1240	1440	1240	---	---	1460
7	906	1110	1240	1160	1160	1290	1250	1420	1220	---	1260	1460
8	908	1130	1240	1140	1180	1320	1270	1390	1210	---	1170	1460
9	794	1170	1250	1140	1190	1340	1280	1380	1220	---	1090	1460
10	789	1200	1260	1150	1200	1340	1310	1390	1220	---	1130	1470
11	783	1200	1260	1160	1210	1330	1340	1410	1230	1310	1210	1470
12	803	1190	1270	1170	1210	1320	1360	1430	1220	1310	1240	1440
13	816	1190	1270	1170	1200	1340	1390	1470	1250	1280	1250	1410
14	833	1200	1270	1190	1210	1350	1430	1480	1270	1300	1270	1390
15	867	1190	1260	1210	1230	1340	1430	1470	1280	1380	1300	1240
16	895	1210	1250	1170	1260	1320	1440	1480	1300	1380	1320	1190
17	903	1250	1210	1190	1320	1300	1440	1490	1330	1370	1320	1170
18	911	1260	1210	1200	1300	1300	1350	1480	1330	1360	1330	1020
19	919	1250	1180	1220	1270	1330	1380	1480	---	1360	1340	921
20	924	1230	1180	1250	1260	1320	1430	1480	1320	1330	1340	907
21	923	1230	1190	1270	1280	1320	1440	1490	1320	---	1350	933
22	929	1260	1190	1280	1300	1310	1450	1510	1350	---	1360	947
23	931	1280	1190	1250	1300	1280	1460	1510	1410	---	1370	934
24	905	1290	1200	1240	1280	1260	1460	1510	1430	---	1380	923
25	871	1290	1210	1250	1290	1230	1460	1510	1420	---	1380	890
26	873	1280	1210	1260	1300	1210	1460	1510	1420	---	1370	858
27	---	1240	1210	1260	1330	1230	1450	1510	---	---	1370	802
28	---	1200	1220	1300	1350	1210	1450	1510	---	---	1350	800
29	---	1200	1220	1320	---	1220	1460	1500	---	---	1350	789
30	---	1220	1220	1330	---	1190	1450	1460	---	---	1370	789
31	---	---	1230	1270	---	1170	---	1450	---	---	1410	---
MEAN	850	1190	1230	1230	1230	1290	1370	1460	1310	1340	1310	1180
MAX	931	1290	1270	1330	1350	1360	1460	1510	1440	1380	1410	1470
MIN	737	1010	1180	1140	1140	1170	1190	1380	1210	1280	1090	789
CAL YR 2000	MEAN 960	MAX 1290	MIN 647									
WTR YR 2001	MEAN 1250	MAX 1510	MIN 737									

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	22.8	16.1	10.5	15.5	22.6	20.2	23.1	28.3	---	---	31.1
2	24.9	22.6	16.3	10.2	15.4	22.9	19.9	23.2	28.1	---	---	30.9
3	25.0	22.6	16.1	9.8	14.9	22.8	20.4	23.3	28.5	---	---	30.8
4	25.4	22.6	14.6	9.7	14.4	22.5	20.9	23.5	28.9	---	---	30.6
5	25.9	22.6	13.8	9.7	14.4	20.5	20.9	23.7	29.3	---	---	30.4
6	26.7	22.7	13.9	9.9	14.5	18.3	21.3	24.1	29.6	---	---	30.2
7	26.6	23.0	14.0	10.2	15.0	16.7	22.2	24.0	29.9	---	28.5	30.1
8	26.0	23.4	14.2	10.9	15.4	16.1	23.1	23.9	30.0	---	29.1	30.1
9	23.2	23.4	14.8	10.7	16.2	16.1	24.0	23.9	30.0	---	29.9	29.8
10	21.4	23.3	15.2	10.2	17.0	16.2	24.6	24.2	29.7	---	30.1	29.6
11	21.2	22.5	15.8	10.6	17.5	16.7	25.2	24.7	29.4	29.4	30.4	29.3
12	21.1	22.0	16.4	11.3	17.4	17.6	25.7	25.3	29.1	29.5	30.5	28.8
13	21.1	21.8	16.9	11.6	17.4	18.5	26.1	26.1	29.0	29.4	31.0	28.0
14	21.3	21.6	17.4	11.8	17.9	19.1	26.0	26.2	29.1	29.1	31.3	26.3
15	21.6	20.3	18.1	12.2	18.8	19.9	26.2	26.4	29.2	28.9	31.1	24.4
16	21.8	20.0	18.8	13.0	19.4	20.5	26.0	26.8	29.4	28.7	30.9	23.8
17	22.0	20.3	18.7	13.6	19.7	20.5	25.1	27.3	29.4	28.8	31.2	24.0
18	22.4	19.8	17.2	14.1	18.8	19.8	22.4	27.6	29.3	29.2	31.6	24.6
19	22.6	19.4	16.0	14.8	18.2	18.8	22.1	27.6	---	29.4	31.7	25.2
20	22.5	18.4	14.1	15.3	18.6	18.5	22.8	27.5	29.9	29.5	31.5	25.9
21	22.5	17.4	13.5	14.3	19.3	17.8	23.0	27.9	30.2	---	31.5	26.5
22	22.6	16.5	13.2	13.5	19.8	17.6	23.2	28.1	29.7	---	31.3	26.9
23	22.4	15.7	12.4	12.6	19.6	17.9	23.8	27.9	29.3	---	31.3	27.4
24	22.2	15.7	12.4	12.4	19.2	18.5	24.4	27.6	29.2	---	31.4	27.5
25	22.1	16.7	12.0	12.1	20.1	19.1	24.3	27.4	29.5	---	31.1	27.2
26	22.2	17.2	12.0	12.1	20.9	19.2	23.3	27.8	29.4	---	30.9	26.8
27	22.2	17.2	12.3	12.4	21.4	18.9	22.9	28.2	---	---	30.6	26.2
28	22.2	16.9	13.0	12.9	22.3	18.5	23.1	28.5	---	---	30.9	26.0
29	22.8	16.6	12.3	13.7	---	18.5	23.4	28.3	---	---	31.1	25.0
30	23.0	16.2	11.5	14.5	---	19.0	23.2	28.3	---	---	31.1	23.9
31	22.8	---	10.9	15.2	---	19.7	---	28.4	---	---	31.3	---
MEAN	23.1	20.0	14.6	12.1	17.8	19.0	23.3	26.2	29.3	29.2	30.9	27.6
MAX	26.7	23.4	18.8	15.3	22.3	22.9	26.2	28.5	30.2	29.5	31.7	31.1
MIN	21.1	15.7	10.9	9.7	14.4	16.1	19.9	23.1	28.1	28.7	28.5	23.8
CAL YR 2000	MEAN 23.0	MAX 30.9	MIN 10.9									
WTR YR 2001	MEAN 22.1	MAX 31.7	MIN 9.7									

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

294213081345300 ST. JOHNS RIVER AT DANCY POINT NEAR SPUDS, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	22.8	16.1	10.5	15.4	22.6	20.2	23.0	28.3	---	---	30.9
2	24.8	22.6	16.3	10.2	15.4	22.8	19.8	23.2	28.1	---	---	30.6
3	25.0	22.5	16.1	9.7	14.8	22.8	20.2	23.3	28.2	---	---	30.6
4	25.4	22.5	14.6	9.6	14.3	22.5	20.8	23.5	28.5	---	---	30.5
5	25.8	22.5	13.8	9.7	14.3	20.5	20.9	23.7	29.0	---	---	30.2
6	26.6	22.6	13.8	9.9	14.4	18.3	21.1	24.0	29.4	---	---	30.2
7	26.6	22.9	14.0	10.1	14.8	16.7	21.7	24.0	29.7	---	28.3	30.0
8	26.0	23.3	14.1	10.8	15.4	15.9	22.7	23.9	29.8	---	28.7	31.1
9	23.2	23.4	14.7	10.7	16.0	16.0	23.6	23.8	29.9	---	29.4	29.8
10	21.2	23.2	15.2	10.1	16.8	16.2	24.2	23.9	29.6	---	29.9	29.6
11	20.8	22.4	15.7	10.5	17.5	16.5	24.8	24.5	29.3	29.5	30.0	29.2
12	21.0	21.9	16.3	11.3	17.4	17.3	25.3	25.1	29.0	29.5	30.3	28.8
13	21.1	21.7	16.8	11.5	17.3	18.4	26.0	25.7	29.0	29.4	30.8	28.0
14	21.3	21.6	17.3	11.7	17.6	18.9	25.9	26.1	29.0	29.1	31.2	26.3
15	21.5	20.1	18.0	12.1	18.5	19.9	26.2	26.1	28.8	28.9	31.0	24.4
16	21.6	19.9	18.7	12.9	19.2	20.5	26.0	26.4	29.2	28.7	30.8	23.7
17	21.7	20.3	18.7	13.5	19.7	20.3	25.0	26.9	29.3	28.7	30.9	24.0
18	22.3	19.8	17.0	14.0	18.8	19.8	22.3	27.3	29.0	28.9	31.3	24.5
19	22.4	19.4	16.0	14.6	18.1	18.8	21.9	27.4	---	29.2	31.5	25.1
20	22.5	18.4	14.1	15.3	18.3	18.5	22.5	27.2	29.7	29.4	31.4	25.7
21	22.5	17.4	13.4	14.1	18.9	17.8	22.8	27.4	30.0	---	31.3	26.4
22	22.6	16.4	13.1	13.4	19.6	17.4	23.1	27.7	29.7	---	31.3	26.8
23	22.4	15.7	12.4	12.6	19.6	17.9	23.4	27.8	29.3	---	31.3	27.2
24	22.2	15.7	12.4	12.2	19.2	18.2	24.0	27.5	29.1	---	31.2	27.5
25	22.1	16.6	12.0	12.1	19.8	18.9	24.3	27.3	29.1	---	31.1	27.2
26	22.2	17.2	11.9	11.9	20.7	19.1	23.3	27.6	29.2	---	30.8	26.8
27	---	17.0	12.1	12.3	21.2	18.9	22.7	28.0	---	---	30.5	26.2
28	---	16.8	13.0	12.8	22.1	18.5	23.0	28.3	---	---	30.7	26.0
29	---	16.6	12.3	13.5	---	18.5	23.4	28.2	---	---	30.8	25.0
30	---	16.2	11.5	14.5	---	18.9	23.2	28.1	---	---	30.9	23.8
31	---	---	10.8	15.2	---	19.5	---	28.1	---	---	30.9	---
MEAN	23.1	20.0	14.6	12.0	17.7	18.9	23.1	26.0	29.2	29.1	30.7	27.5
MAX	26.6	23.4	18.7	15.3	22.1	22.8	26.2	28.3	30.0	29.5	31.5	31.1
MIN	20.8	15.7	10.8	9.6	14.3	15.9	19.8	23.0	28.1	28.7	28.3	23.7

CAL YR 2000 MEAN 22.9 MAX 30.8 MIN 10.8
WTR YR 2001 MEAN 22.0 MAX 31.5 MIN 9.6

OXYGEN DISSOLVED TOP (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	7.2	8.2	11.1	9.6	8.0	9.3	9.1	7.5	---	---	3.1
2	7.4	6.7	---	11.3	9.5	7.9	9.4	9.3	7.4	---	---	3.5
3	7.3	6.4	---	11.6	9.6	7.7	9.8	9.2	8.1	---	---	3.9
4	7.1	5.9	---	11.7	9.9	7.8	9.6	9.3	8.2	---	---	4.1
5	6.9	5.9	---	11.6	10.4	8.5	9.3	9.2	8.0	---	---	4.1
6	6.3	6.3	---	11.6	10.8	9.0	9.4	9.2	8.0	---	---	3.5
7	5.1	6.5	10.0	11.7	10.9	9.8	9.6	8.7	8.2	---	6.1	3.8
8	5.8	7.0	10.2	11.5	10.6	10.6	9.5	8.6	8.3	---	6.9	4.0
9	7.6	7.2	10.0	11.4	10.9	10.8	9.3	8.6	8.1	---	7.1	4.2
10	7.9	7.4	9.8	11.7	11.3	10.5	9.0	8.9	7.7	---	6.5	4.3
11	8.6	7.7	9.7	11.8	11.0	10.4	8.7	9.4	7.8	5.7	6.7	4.2
12	8.7	7.6	9.5	11.7	11.0	10.5	8.6	9.2	7.8	6.1	6.5	4.2
13	9.0	7.7	9.4	11.8	11.0	9.9	8.2	9.0	7.5	6.5	6.3	4.6
14	8.9	7.6	9.4	12.0	11.2	9.4	8.0	8.5	7.6	6.4	6.3	6.2
15	8.8	7.9	9.1	12.2	11.2	8.9	8.0	8.6	7.9	6.9	5.4	7.0
16	8.5	8.2	8.8	12.1	10.6	8.4	8.2	8.6	7.4	7.0	5.4	7.2
17	8.3	8.0	8.4	11.9	10.0	8.7	8.5	8.8	7.0	7.2	6.3	5.9
18	8.2	8.1	8.6	11.6	9.8	8.9	9.0	9.0	7.5	7.4	5.8	3.4
19	7.8	8.2	8.5	11.1	9.7	8.6	9.6	8.9	---	7.3	5.5	2.4
20	7.1	8.3	9.1	10.3	9.9	9.0	9.6	8.7	6.6	6.4	4.8	2.9
21	7.2	8.8	9.6	10.3	10.1	9.4	9.7	8.6	5.6	---	4.2	3.2
22	7.1	8.9	10.0	10.5	9.8	9.9	9.4	8.3	4.1	---	3.7	3.3
23	7.4	9.0	10.5	10.9	9.3	10.2	9.5	8.0	3.6	---	4.1	3.1
24	7.9	9.2	10.6	11.1	8.9	10.6	9.5	8.0	3.7	---	5.0	2.3
25	8.0	8.9	10.9	11.0	8.8	10.8	8.8	8.3	4.8	---	4.7	2.2
26	8.2	8.3	11.0	11.3	8.8	10.4	8.6	8.4	4.8	---	5.0	1.7
27	8.5	8.0	11.4	11.7	8.4	10.3	9.2	8.6	---	---	4.7	1.1
28	8.3	8.0	11.3	11.4	8.3	9.7	9.7	8.3	---	---	4.7	1.3
29	8.3	7.9	11.0	11.6	---	9.2	9.5	7.6	---	---	4.7	3.8
30	8.0	7.9	11.2	11.1	---	8.9	8.9	7.5	---	---	4.0	5.4
31	7.5	---	11.5	10.4	---	9.2	---	7.7	---	---	3.7	---
MEAN	7.7	7.7	9.9	11.4	10.0	9.4	9.1	8.6	6.9	6.7	5.4	3.8
MAX	9.0	9.2	11.5	12.2	11.3	10.8	9.8	9.4	8.3	7.4	7.1	7.2
MIN	5.1	5.9	8.2	10.3	8.3	7.7	8.0	7.5	3.6	5.7	3.7	1.1

CAL YR 2000 MEAN 7.7 MAX 11.5 MIN 2.1
WTR YR 2001 MEAN 8.2 MAX 12.2 MIN 1.1

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02245255 DEEP CREEK NEAR HASTINGS, FL

LOCATION.--Lat 29°40'52", long 81°26'56", in NW¼ sec.35, T.9 S., R.28 E., St. Johns County, Hydrologic Unit 03080103, near right bank at downstream side of bridge on County Road, 1.3 mi upstream from Sixteenmile Creek, and 4.2 mi southeast of Hastings.

DRAINAGE AREA.--20.7 mi².

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6.99 ft above sea level.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	.81	.76	2.9	4.1	4.9	2.9	1.7	.27	1.5	18	.94
2	43	.72	.82	3.0	7.5	5.0	1.9	1.9	.44	1.1	30	.95
3	27	.76	.95	3.0	4.1	4.4	1.9	1.7	.16	.82	20	2.0
4	18	.83	.91	2.5	3.9	5.9	2.5	1.3	.12	.58	24	1.3
5	14	.78	.93	2.7	3.4	3.5	3.7	1.2	.10	.43	24	2.8
6	10	.76	1.0	3.3	1.7	1.0	3.6	1.3	.30	.34	39	15
7	11	.74	e1.5	3.4	1.3	1.0	3.2	2.3	.48	.28	23	26
8	9.3	.70	e2.1	3.7	1.1	1.9	3.3	1.9	.75	.24	14	14
9	6.5	.73	e2.5	3.6	1.0	2.5	3.1	1.6	4.3	.23	8.2	19
10	4.5	.86	e2.4	3.0	.93	1.5	3.2	1.0	4.8	.32	4.7	17
11	3.4	.72	e2.6	3.2	1.0	1.4	3.3	.96	20	.43	3.1	13
12	2.7	.73	e2.9	3.7	1.2	2.0	3.4	1.0	25	.30	2.3	41
13	2.5	.72	e3.1	3.4	1.6	1.7	3.5	1.2	3.7	.35	1.7	130
14	2.2	.90	e3.3	3.3	1.9	.96	4.0	1.6	1.5	1.3	1.3	511
15	1.9	.69	e3.2	3.3	2.0	.66	4.7	2.1	1.9	.70	1.1	845
16	1.7	.74	e3.5	2.8	2.1	1.5	3.3	2.2	.88	1.7	1.4	440
17	1.5	.79	e3.9	2.7	3.0	1.2	2.6	2.1	.83	2.1	2.5	322
18	1.4	.75	e4.8	2.7	3.3	1.3	2.2	2.0	1.2	.92	1.6	246
19	1.1	.83	e4.0	2.9	3.2	49	2.5	1.2	.79	1.1	1.1	191
20	.92	1.1	e3.6	3.7	3.2	70	2.8	.74	.53	18	1.1	147
21	1.1	.96	e3.3	2.0	3.4	15	2.6	.72	.55	20	1.1	114
22	1.0	.86	3.1	1.5	4.0	8.3	2.6	.99	.74	5.3	.76	87
23	1.1	.68	3.0	1.3	4.7	5.4	2.6	1.1	.68	2.9	.57	68
24	1.7	.66	3.0	1.1	5.3	3.7	2.6	.44	.79	2.6	.42	51
25	1.9	1.3	2.8	1.2	5.3	3.1	9.6	.27	.46	1.5	.35	89
26	2.1	1.6	2.8	1.4	5.3	2.7	8.0	.18	.28	1.1	.35	91
27	1.8	1.3	2.4	1.9	5.5	2.2	1.2	.15	.24	1.2	.29	66
28	1.4	1.0	2.9	2.7	5.7	2.6	.74	.13	7.0	.96	.26	50
29	1.2	.93	3.8	2.9	---	2.7	.49	.53	11	.63	.26	38
30	1.0	.86	3.1	3.0	---	6.4	1.1	.56	2.3	.44	.24	31
31	.91	---	2.4	4.3	---	4.8	---	.38	---	6.9	.30	---
TOTAL	249.83	25.81	81.37	86.1	90.73	218.22	93.13	36.45	92.09	76.27	227.00	3669.99
MEAN	8.06	.86	2.62	2.78	3.24	7.04	3.10	1.18	3.07	2.46	7.32	122
MAX	72	1.6	4.8	4.3	7.5	70	9.6	2.3	25	20	39	845
MIN	.91	.66	.76	1.1	.93	.66	.49	.13	.10	.23	.24	.94
CFSM	.39	.04	.13	.13	.16	.34	.15	.06	.15	.12	.35	5.91
IN.	.45	.05	.15	.15	.16	.39	.17	.07	.17	.14	.41	6.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	13.8	6.61	9.46	8.70	11.5	11.9	7.38	3.14	7.39	5.80	9.73	23.1															
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	.082	.093	.42	.34	.61	.70	1.79	.49	.062	.13	.089	.090															
(WY)	1991	1991	1981	1981	1985	1985	1985	1990	1981	1990	1993	1990															

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1975 - 2001

ANNUAL TOTAL	2188.72	4946.99	
ANNUAL MEAN	5.98	13.6	9.80
HIGHEST ANNUAL MEAN			24.8
LOWEST ANNUAL MEAN			1.22
HIGHEST DAILY MEAN	210	Sep 9	845
LOWEST DAILY MEAN	.14	Jun 10	.10
ANNUAL SEVEN-DAY MINIMUM	.32	Jun 6	.25
MAXIMUM PEAK FLOW			1290
MAXIMUM PEAK STAGE			9.52
INSTANTANEOUS LOW FLOW			.08
ANNUAL RUNOFF (CFSM)	.29		.65
ANNUAL RUNOFF (INCHES)	3.93		8.89
10 PERCENT EXCEEDS	11		18
50 PERCENT EXCEEDS	1.3		2.0
90 PERCENT EXCEEDS	.39		.53

e Estimated
* Aug. 31, Sept. 1,2,4-6,9, 1999

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 sea level.

REMARKS.--Records poor. Discharge represents net of much larger upstream and downstream discharges.

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	275	2.8	4.9	13	37	21	25	3.7	7.2	15	52	5.8
2	192	9.1	3.2	10	41	21	16	3.4	7.6	10	116	4.0
3	137	8.8	-34	9.3	32	17	11	7.3	4.3	6.0	120	6.6
4	83	8.6	-9.1	9.5	20	28	14	8.6	2.8	4.9	103	7.3
5	82	-.78	22	13	23	27	14	8.5	2.1	5.4	100	36
6	61	3.8	21	12	15	10	23	7.0	8.6	3.7	167	151
7	42	28	18	12	11	2.8	19	2.3	8.1	.59	133	254
8	18	24	16	15	9.8	7.9	17	6.6	28	1.4	94	214
9	1.3	17	14	9.8	8.8	10	19	11	58	.50	73	134
10	43	17	10	13	7.4	9.6	21	10	40	4.0	58	104
11	44	9.0	14	15	7.3	7.3	15	8.4	40	9.0	44	91
12	22	5.9	19	12	6.4	15	15	7.4	138	1.1	82	100
13	13	12	11	12	10	13	15	7.2	82	-4.9	55	218
14	12	14	14	11	11	12	14	3.0	38	-11	27	541
15	15	11	18	18	11	10	16	6.0	22	3.9	23	1390
16	9.8	5.0	13	17	11	11	14	4.4	7.5	10	20	1150
17	2.5	8.1	23	13	13	7.5	8.8	-3.9	.08	14	18	823
18	4.0	1.7	12	12	13	5.7	13	4.0	2.2	9.2	14	619
19	1.1	-18	6.8	18	12	46	13	12	2.2	16	10	474
20	-6.4	8.1	14	23	18	208	14	10	1.6	34	13	391
21	10	30	11	15	17	187	14	11	.53	112	15	333
22	13	18	14	7.3	17	86	15	12	6.5	84	8.8	279
23	8.0	14	11	5.7	17	43	15	12	6.7	50	1.5	246
24	3.7	11	15	10	23	25	15	11	-11	27	3.7	227
25	23	15	13	8.6	23	19	26	7.8	.61	13	-.15	212
26	20	18	11	12	26	15	47	6.7	-2.0	6.5	-14	295
27	19	14	18	13	25	15	19	5.0	-.62	12	-1.2	228
28	38	9.9	16	15	24	9.6	7.3	3.4	24	15	7.3	152
29	8.9	8.9	5.8	13	---	22	4.6	12	53	6.5	4.0	67
30	-.24	8.3	21	17	---	44	1.2	10	26	14	-.19	59
31	17	---	18	27	---	34	---	4.1	---	14	-.39	---
TOTAL	1211.66	322.22	364.6	411.2	489.7	989.4	480.9	221.9	604.00	486.79	1347.15	8811.7
MEAN	39.1	10.7	11.8	13.3	17.5	31.9	16.0	7.16	20.1	15.7	43.5	294
MAX	275	30	23	27	41	208	47	12	138	112	167	1390
MIN	-6.4	-18	-34	5.7	6.4	2.8	1.2	-3.9	-11	-11	-14	4.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	93.7	56.5	64.4	46.1	47.1	50.0	37.9	17.9	42.4	29.6
MAX	217	139	206	87.8	203	128	98.2	38.4	80.3	56.1
(WY)	1996	1995	1998	1993	1998	1996	1997	1995	1997	1996
MIN	12.8	10.7	5.02	11.1	10.6	19.4	6.20	-11.2	4.12	2.78
(WY)	1998	2001	1999	2000	1999	2000	1994	1994	1998	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1992 - 2001

ANNUAL TOTAL	11147.85	15741.22	
ANNUAL MEAN	30.5	43.1	54.8
HIGHEST ANNUAL MEAN			88.1
LOWEST ANNUAL MEAN			20.4
HIGHEST DAILY MEAN	916	Sep 10	1390
LOWEST DAILY MEAN	-34	Dec 3	-78
ANNUAL SEVEN-DAY MINIMUM	-4.0	Aug 18	-22
MAXIMUM PEAK STAGE			7.58
10 PERCENT EXCEEDS	62		126
50 PERCENT EXCEEDS	11		25
90 PERCENT EXCEEDS	1.3		2.8

Note.--Negative figures indicate reverse flow

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02245328 SIXMILE CREEK NEAR PICOLATA, FL

LOCATION.--Lat 29°57'34", long 81°32'37", in SW¹/₄ sec.24, T.6 S, R.27 E., St. Johns County, Hydrologic Unit 03080103, (Picolata Quadrangle), on right bank, 50 ft upstream from bridge on State Highway 13, 2.0 mi upstream from mouth, and 4.2 mi northeast of Picolata.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1990 to September 1993 (periodic measurements only), October 1993 to current year.

REVISED RECORDS.--WDR FL-96-1: Drainage area.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 10.00 ft below sea level.

REMARKS.--Records poor. Discharges not published some days, due to missing velocity record. Discharge represents net of much larger upstream and downstream discharges.

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	267	9.2	52	117	197	98	219	63	728	---	334	-66
2	343	65	7.4	100	99	74	172	-5.3	1090	---	519	-90
3	305	154	-117	126	139	-28	50	18	1300	---	484	-125
4	210	19	20	103	70	41	79	29	1170	---	666	-63
5	212	184	73	85	91	52	138	29	1180	---	799	-106
6	186	-70	108	53	131	112	103	-22	795	---	930	-229
7	46	61	77	50	86	141	34	-6.9	982	---	968	-220
8	-44	24	80	-1.0	52	209	-27	19	707	---	1090	-282
9	-95	6.9	30	68	-20	32	87	69	352	---	979	-249
10	120	80	41	59	-21	54	166	52	107	---	759	-186
11	164	-20	115	85	86	73	-55	-15	312	---	51	-169
12	104	36	188	88	102	90	27	-73	295	---	-120	-303
13	79	44	110	27	77	50	117	-35	293	---	-21	-265
14	95	84	142	18	55	114	3.3	-3.3	357	-660	23	532
15	70	67	207	37	87	-31	-74	92	448	-76	161	3510
16	74	33	-32	71	54	36	33	127	444	-867	-18	3120
17	29	37	-22	62	-1.7	14	32	-34	370	-538	92	1890
18	29	18	86	124	73	55	127	-18	-135	645	11	1160
19	-33	-70	82	-31	8.7	-6.9	84	6.2	-243	-25	-12	773
20	46	-11	123	5.1	34	257	-24	1.9	-208	33	1.4	432
21	50	185	148	117	62	428	-40	14	-241	-25	-6.0	---
22	7.8	71	46	58	11	188	-43	47	-223	-145	-72	---
23	-57	69	40	81	31	158	-30	18	-208	-36	-84	774
24	46	18	64	123	-23	102	-36	54	-222	-17	-41	---
25	133	30	83	78	-54	84	6.2	77	-196	42	-128	---
26	142	114	84	118	55	47	91	147	-219	145	-165	631
27	168	130	72	125	36	90	30	500	-229	139	-76	524
28	225	113	88	20	-29	106	-59	615	29	22	12	---
29	106	109	34	28	---	112	-61	702	---	-115	-71	---
30	107	58	122	-11	---	124	-35	824	---	49	-87	---
31	100	---	88	82	---	355	---	852	---	242	-96	---
TOTAL	3234.8	1648.1	2239.4	2065.1	1488.0	3230.1	1114.5	4143.6	8835	-1187	6882.4	10993
MEAN	104	54.9	72.2	66.6	53.1	104	37.2	134	316	-65.9	222	478
MAX	343	185	207	126	197	428	219	852	1300	645	1090	3510
MIN	-95	-70	-117	-31	-54	-31	-74	-73	-243	-867	-165	-303

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	354	141	236	155	161	126	146	70.2
MAX	1818	438	715	500	658	268	421	296
(WY)	1997	1994	1998	1994	1998	1996	1997	1994
MIN	-5.75	54.9	62.7	66.6	3.10	-1.36	-8.30	-18.5
(WY)	1998	2001	1999	2001	1997	1997	1998	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1994 - 2001
ANNUAL TOTAL	33542.24	44687.0	
ANNUAL MEAN	93.4	130	161
HIGHEST ANNUAL MEAN			380
LOWEST ANNUAL MEAN			43.1
HIGHEST DAILY MEAN	2270	3510	6870
LOWEST DAILY MEAN	-514	-867	-1430
ANNUAL SEVEN-DAY MINIMUM	-74	-239	-239
MAXIMUM PEAK STAGE		14.02	14.02
10 PERCENT EXCEEDS	207	439	396
50 PERCENT EXCEEDS	52	58	87
90 PERCENT EXCEEDS	-51	-81	-49

Note.--Negative figures indicate reverse flow

295856081372301 ST. JOHNS RIVER AT SHANDS BRIDGE NEAR GREEN COVE SPRINGS, FL

LOCATION.--Lat 29°58'56", long 81°37'23", T.6 S., R.27 E., St. Johns County, Hydrologic Unit 03080103, below Shands Bridge on State Highway 16, on the southeast piling of boat fenders, 3.5 mi east-southeast of Green Cove Springs, and 48 mi upstream from mouth.

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (TOP, MIDDLE, BOTTOM): April 1995 to September 2001 (discontinued).
 WATER TEMPERATURE (TOP, MIDDLE, BOTTOM): April 1995 to September 2001 (discontinued).
 DISSOLVED OXYGEN (TOP, MIDDLE, BOTTOM): March 1996 to September 2001 (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 (TOP): Maximum daily mean, 15,000 µS/cm @ 25 °C, Sept. 15, 1999; minimum daily mean, 327 µS/cm @ 25 °C, Mar. 3, 1998.
 SPECIFIC CONDUCTANCE (MIDDLE): Maximum daily mean, 15,100 µS/cm @ 25 °C, Sept. 15, 1999; minimum daily mean, 327 µS/cm @ 25 °C, Mar. 3, 1998.
 SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 19,500 µS/cm @ 25 °C, May 6, 1999; minimum daily mean, 327 µS/cm @ 25 °C, Mar. 3, 1998.
 WATER TEMPERATURE (TOP): Maximum daily mean, 32.5 °C, Aug. 1, 1999; minimum daily mean, 8.3 °C, Feb. 5, 1996.
 WATER TEMPERATURE (MIDDLE): Maximum daily mean, 32.4 °C, Aug. 1, 1999; minimum daily mean, 9.5 °C, Jan. 9, 1996, Jan. 11, 2001.
 WATER TEMPERATURE (BOTTOM): Maximum daily mean, 32.4 °C, Aug. 1, 1999; minimum daily mean, 9.5 °C, Jan. 11, 2001.
 DISSOLVED OXYGEN (TOP): Maximum daily mean, 12.0 mg/L, Jan. 29, 2001; minimum daily mean, 4.3 mg/L, Aug. 20,21, 2001.
 DISSOLVED OXYGEN (MIDDLE): Maximum daily mean, 12.1 mg/L, Jan. 29, 2001; minimum daily mean, 4.2 mg/L, Aug. 20,21, 2001.
 DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 12.0 mg/L, Jan. 29, 2001; minimum daily mean, 4.0 mg/L, Aug. 21, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 5,920 µS/cm @ 25 °C, June 1; minimum daily mean, 828 µS/cm @ 25 °C, Nov. 9.
 SPECIFIC CONDUCTANCE (MIDDLE): Maximum daily mean, 5,990 µS/cm @ 25 °C, June 1; minimum daily mean, 828 µS/cm @ 25 °C, Nov. 9.
 SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 5,980 µS/cm @ 25 °C, June 1; minimum daily mean, 827 µS/cm @ 25 °C, Nov. 9.
 WATER TEMPERATURE (TOP): Maximum daily mean, 31.1 °C, Aug. 18; minimum daily mean, 9.5 °C, Jan. 11.
 WATER TEMPERATURE (MIDDLE): Maximum daily mean, 31.1 °C, Aug. 18; minimum daily mean, 9.5 °C, Jan. 11.
 WATER TEMPERATURE (BOTTOM): Maximum daily mean, 31.0 °C, Aug. 18,19; minimum daily mean, 9.5 °C, Jan. 11.
 DISSOLVED OXYGEN (TOP): Maximum daily mean, 12.0 mg/L, Jan. 29; minimum daily mean, 4.3 mg/L, Aug. 20,21.
 DISSOLVED OXYGEN (MIDDLE): Maximum daily mean, 12.1 mg/L, Jan. 29; minimum daily mean, 4.2 mg/L, Aug. 20,21.
 DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 12.0 mg/L, Jan. 29; minimum daily mean, 4.0 mg/L, Aug. 21.

SPECIFIC CONDUCTANCE TOP (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	854	979	---	---	---	---	1640	5920	2950	---	1150
2	1270	847	---	---	---	---	---	---	5150	2700	---	1150
3	1180	834	---	---	---	---	---	---	4560	2500	---	1150
4	1100	834	---	---	---	---	---	---	4330	2560	---	1130
5	1000	831	---	---	---	---	---	---	4130	2460	---	1130
6	928	849	920	---	---	---	---	---	3970	2130	1280	1130
7	882	846	921	---	---	---	---	---	3790	1980	1280	1130
8	922	831	952	---	---	---	---	---	3820	2110	1270	1130
9	1230	828	986	---	---	---	---	---	3840	2040	1260	1140
10	1470	831	996	---	---	---	---	3310	4050	1970	1240	1170
11	1260	834	993	1210	---	---	1340	3270	4010	1890	1220	1190
12	1120	837	1010	1210	---	---	1350	---	3760	1810	1200	1200
13	1110	840	1020	1210	---	2130	1320	---	3340	1740	1190	1170
14	1090	841	1030	1200	1230	1840	1290	---	3050	2100	1180	1120
15	1020	841	1070	1210	1230	1810	1300	---	2960	2330	1180	---
16	938	845	1080	1210	---	1450	1300	---	2700	---	1170	---
17	916	846	1110	1210	---	1510	1330	---	2530	---	1170	---
18	895	850	1120	1210	---	1860	1560	---	3000	---	1170	---
19	877	850	1130	1210	---	3310	1520	---	3290	---	1160	---
20	881	855	1150	1210	---	4880	1400	---	3390	---	1160	---
21	873	854	1150	1220	---	3770	1370	---	3390	---	1150	---
22	862	860	1150	1220	---	2600	1330	---	3270	---	1150	---
23	898	876	1140	1210	---	2350	1300	---	3100	---	1150	---
24	1000	898	1130	1220	---	2330	1300	---	3030	---	1150	---
25	1070	900	---	1220	---	2120	1290	---	3140	---	1140	---
26	1120	921	---	1220	---	1920	1370	---	3320	---	1150	---
27	1130	933	---	1220	---	2060	1440	---	3290	---	1150	---
28	999	951	---	1220	---	2300	1420	---	3270	---	1150	---
29	909	959	---	1220	---	2320	1400	---	3240	---	1140	---
30	931	974	---	1220	---	1610	1540	---	3160	---	1150	---
31	899	---	---	---	---	---	---	---	---	---	1150	---
MEAN	1030	865	1050	1210	---	2340	1370	---	3590	2220	1180	1150
MAX	1470	974	1150	1220	---	4880	1560	---	5920	2950	1280	1200
MIN	862	828	920	1200	---	1450	1290	---	2530	1740	1140	1120

CAL YR 2000 MEAN 2740 MAX 11100 MIN 688
 WTR YR 2001 MEAN 1620 MAX 5920 MIN 828

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

295856081372301 ST. JOHNS RIVER AT SHANDS BRIDGE NEAR GREEN COVE SPRINGS, FL--Continued

SPECIFIC CONDUCTANCE MIDDLE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	854	978	---	---	1260	---	1650	5990	2980	1460	1150
2	1350	848	---	---	---	1260	---	---	5230	2730	1500	1150
3	1180	835	---	---	---	1250	---	---	4620	2550	1430	1150
4	1100	832	---	---	---	1250	---	---	4400	2590	1350	1130
5	1010	831	---	---	---	1250	---	---	4180	2470	1320	1120
6	925	849	920	---	---	1260	---	---	4050	2140	1300	1130
7	883	844	921	---	---	1270	---	---	3850	1990	1280	1130
8	923	830	953	---	---	1290	---	---	3840	2110	1270	1130
9	1260	828	987	---	---	---	---	---	3900	2050	1260	1130
10	1490	831	998	---	---	---	---	3540	4080	1970	1240	1170
11	1290	835	993	1220	---	---	---	3630	4060	1890	1220	1190
12	1140	838	1010	1210	---	2440	1300	---	3810	1810	1200	1200
13	1130	840	1020	1210	---	2160	1320	---	3370	1750	1190	1170
14	1110	841	1030	1200	1230	2050	1290	---	3090	2110	1180	1120
15	1030	842	1070	1210	1230	2060	1300	---	3010	2530	1170	---
16	944	845	1080	1210	1240	1480	1300	---	2730	2540	1170	---
17	916	846	1110	1210	1240	1550	1330	---	2570	2550	1170	---
18	893	850	1120	1210	1240	1890	1570	---	3040	2490	1170	---
19	874	850	1130	1210	1240	3480	1530	---	3340	2240	1160	---
20	881	855	1150	1210	1240	5020	1410	---	3410	2070	1150	---
21	874	855	1150	1220	1240	3820	1370	---	3410	2090	1150	---
22	862	860	1150	1220	1240	2640	1330	---	3320	2650	1150	---
23	899	875	1140	1210	1240	2370	1310	---	3130	2900	1150	---
24	1000	898	1130	1220	1240	2400	1290	---	3080	2150	1150	---
25	1080	899	---	1220	1250	2160	1280	---	3180	1830	1140	---
26	1120	921	---	1220	1250	1960	1380	---	3370	1620	1150	---
27	1140	934	---	1220	1250	2100	1440	---	3330	1550	1150	---
28	1010	951	---	1220	1250	2320	1420	---	3290	1500	1150	---
29	909	959	---	1220	---	2340	1400	---	3260	1480	1140	---
30	930	974	---	---	---	1630	1560	---	3190	1450	1140	---
31	903	---	---	---	---	---	---	---	---	1410	1150	---
MEAN	1050	865	1050	1210	1240	2070	1380	---	3640	2140	1220	1150
MAX	1490	974	1150	1220	1250	5020	1570	---	5990	2980	1500	1200
MIN	862	828	920	1200	1230	1250	1280	---	2570	1410	1140	1120

CAL YR 2000 MEAN 3300 MAX 11700 MIN 688
WTR YR 2001 MEAN 1630 MAX 5990 MIN 828

SPECIFIC CONDUCTANCE BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	855	978	---	---	1260	---	1650	5980	3000	1460	1150
2	1350	847	---	---	---	1260	---	---	5260	2740	1500	1150
3	1180	835	---	---	---	1250	---	---	4650	2570	1440	1140
4	1100	832	---	---	---	1250	---	---	4420	2600	1350	1130
5	1010	831	---	---	---	1250	---	---	4200	2480	1320	1120
6	924	849	920	---	---	1260	---	---	4070	2140	1300	1130
7	883	844	921	---	---	1270	---	---	3870	2000	1280	1130
8	924	830	952	---	---	1290	---	---	3860	2120	1270	1130
9	1260	827	987	---	---	---	---	---	3920	2050	1260	1130
10	1510	831	998	---	---	---	---	3620	4090	1980	1240	1170
11	1290	835	993	1220	---	---	1310	3730	4070	1890	1220	1190
12	1140	838	1010	1210	---	2470	1350	---	3840	1810	1200	1200
13	1140	840	1020	1210	---	2170	1320	---	3390	1750	1190	1170
14	1110	841	1030	1200	1230	2100	1290	---	3110	2110	1180	1120
15	1030	842	1070	1210	1230	2210	1300	---	3020	2540	1170	---
16	945	845	1080	1210	1240	1490	1300	---	2740	2550	1170	---
17	915	846	1110	1210	1240	1560	1330	---	2580	2560	1160	---
18	892	850	1120	1210	1240	1910	1580	---	3050	2510	1160	---
19	873	850	1120	1210	1240	3560	1530	---	3360	2250	1160	---
20	882	855	1150	1210	1240	5090	1410	---	3420	2080	1160	---
21	873	855	1150	1220	1240	3840	1380	---	3420	2100	1150	---
22	862	860	1150	1220	1240	2670	1330	---	3330	2660	1150	---
23	900	875	1140	1210	1240	2380	1310	---	3140	2920	1150	---
24	1000	896	1130	1220	1240	2430	1300	---	3090	2160	1150	---
25	1080	899	---	1220	1250	2200	1290	---	3190	1850	1140	---
26	1120	921	---	1220	1250	1980	1380	---	3370	1630	1150	---
27	1140	934	---	1220	1250	2100	1450	---	3340	1560	1150	---
28	1010	951	---	1220	1250	2320	1420	---	3300	1500	1140	---
29	910	959	---	1220	---	2350	1410	---	3280	1480	1140	---
30	931	974	---	1220	---	1640	1560	---	3190	1440	1150	---
31	905	---	---	---	---	---	---	---	---	1410	1150	---
MEAN	1050	865	1050	1210	1240	2090	1380	---	3650	2140	1220	1150
MAX	1510	974	1150	1220	1250	5090	1580	---	5980	3000	1500	1200
MIN	862	827	920	1200	1230	1250	1290	---	2580	1410	1140	1120

CAL YR 2000 MEAN 3300 MAX 12100 MIN 688
WTR YR 2001 MEAN 1640 MAX 5980 MIN 827

295856081372301 ST. JOHNS RIVER AT SHANDS BRIDGE NEAR GREEN COVE SPRINGS, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	22.4	15.6	---	---	---	---	22.9	28.0	28.9	---	30.3
2	25.0	22.5	---	---	---	---	---	---	27.8	29.2	---	30.1
3	25.2	22.4	---	---	---	---	---	---	28.0	29.8	---	30.0
4	25.6	22.5	---	---	---	---	---	---	28.5	30.1	---	29.8
5	25.8	22.5	---	---	---	---	---	---	29.0	30.2	---	29.8
6	26.1	22.6	13.9	---	---	---	---	---	29.1	30.2	28.7	29.9
7	26.0	22.8	13.5	---	---	---	---	---	29.4	30.4	28.9	29.8
8	25.5	22.9	13.8	---	---	---	---	---	29.4	30.5	29.2	29.8
9	23.3	22.9	14.3	---	---	---	---	---	29.3	30.4	29.9	29.6
10	21.7	22.9	14.6	---	---	---	---	24.5	28.9	30.3	29.9	29.4
11	21.1	22.0	14.9	9.5	---	---	24.2	24.4	28.4	30.1	29.7	29.2
12	21.1	21.5	15.4	9.9	---	17.7	24.4	---	28.0	30.1	30.0	28.7
13	21.2	21.4	15.8	10.2	---	18.1	24.9	---	28.2	30.0	30.4	28.0
14	21.3	21.2	16.3	10.7	16.7	18.5	25.0	---	28.5	29.5	30.6	26.8
15	21.4	19.9	16.9	11.1	17.1	19.2	25.2	---	28.8	29.3	30.4	---
16	21.5	19.6	17.4	11.7	---	20.0	25.1	---	28.9	---	30.4	---
17	21.7	19.7	17.3	12.3	---	19.8	24.3	---	29.0	---	30.8	---
18	21.9	19.3	15.9	12.9	---	19.0	21.9	---	29.4	---	31.1	---
19	22.1	18.8	15.1	13.6	---	18.3	21.5	---	29.4	---	31.0	---
20	22.2	17.7	13.5	13.7	---	18.2	21.7	---	29.7	---	30.7	---
21	22.2	16.8	12.8	12.5	---	17.8	22.2	---	30.0	---	30.8	---
22	22.3	15.6	12.6	12.1	---	17.4	22.7	---	29.6	---	30.9	---
23	22.2	15.3	12.0	11.7	---	17.5	23.2	---	29.2	---	30.8	---
24	22.1	15.5	11.8	11.7	---	18.0	23.8	---	29.0	---	30.7	---
25	21.9	16.2	---	11.5	---	18.1	23.8	---	29.3	---	30.6	---
26	21.9	16.3	---	11.3	---	18.2	23.0	---	29.5	---	30.6	---
27	21.9	16.1	---	11.5	---	17.8	22.8	---	29.5	---	30.5	---
28	21.9	15.9	---	12.1	---	17.5	23.1	---	29.0	---	30.5	---
29	22.1	15.8	---	12.7	---	17.6	23.2	---	28.6	---	30.7	---
30	22.4	15.6	---	13.3	---	18.1	23.0	---	28.6	---	30.8	---
31	22.4	---	---	---	---	---	---	---	---	---	30.7	---
MEAN	22.8	19.6	14.7	11.8	---	18.3	23.5	---	28.9	29.9	30.4	29.4
MAX	26.1	22.9	17.4	13.7	---	20.0	25.2	---	30.0	30.5	31.1	30.3
MIN	21.1	15.3	11.8	9.5	---	17.4	21.5	---	27.8	28.9	28.7	26.8

CAL YR 2000 MEAN 22.3 MAX 30.6 MIN 11.0
WTR YR 2001 MEAN 22.9 MAX 31.1 MIN 9.5

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.9	22.3	15.5	---	---	21.3	---	22.8	28.1	28.8	29.6	30.3
2	24.8	22.4	---	---	---	21.6	---	---	27.8	29.2	29.3	30.0
3	25.2	22.3	---	---	---	21.8	---	---	28.0	29.7	28.9	30.0
4	25.6	22.5	---	---	---	21.6	---	---	28.4	30.0	28.8	29.8
5	25.7	22.4	---	---	---	20.4	---	---	28.9	30.2	28.8	29.8
6	26.1	22.6	13.8	---	---	18.2	---	---	29.1	30.1	28.6	29.9
7	26.0	22.7	13.5	---	---	16.7	---	---	29.3	30.3	28.8	29.7
8	25.5	22.8	13.7	---	---	16.1	---	---	29.4	30.5	29.1	29.8
9	23.4	22.9	14.2	---	---	---	---	---	29.3	30.3	29.7	29.6
10	21.6	22.9	14.6	---	---	---	---	24.1	28.9	30.3	29.8	29.4
11	21.1	22.0	14.9	9.5	---	---	24.1	24.1	28.4	30.1	29.7	29.2
12	21.1	21.5	15.4	9.9	---	17.5	24.3	---	28.0	30.1	29.9	28.8
13	21.2	21.4	15.8	10.2	---	18.1	24.9	---	28.1	30.0	30.4	28.0
14	21.3	21.2	16.3	10.6	16.5	18.4	25.0	---	28.4	29.5	30.5	26.8
15	21.4	19.9	16.8	11.1	17.0	19.2	25.2	---	28.7	29.2	30.4	---
16	21.4	19.5	17.4	11.6	17.6	19.9	25.0	---	28.9	28.9	30.3	---
17	21.6	19.7	17.3	12.3	18.0	19.8	24.3	---	28.9	28.9	30.7	---
18	21.8	19.3	15.9	12.8	17.7	19.0	21.8	---	29.3	29.1	31.1	---
19	22.1	18.7	15.1	13.5	17.6	18.3	21.5	---	29.4	29.2	31.0	---
20	22.2	17.8	13.5	13.7	17.9	18.2	21.7	---	29.7	29.2	30.7	---
21	22.2	16.8	12.8	12.5	18.3	17.8	22.1	---	29.9	29.1	30.7	---
22	22.3	15.6	12.6	12.1	18.9	17.4	22.7	---	29.6	29.5	30.9	---
23	22.2	15.3	12.0	11.7	18.9	17.5	23.1	---	29.2	29.5	30.8	---
24	22.1	15.5	11.8	11.7	18.8	17.9	23.7	---	29.0	28.9	30.7	---
25	21.9	16.2	---	11.5	19.2	18.1	23.8	---	29.2	29.1	30.6	---
26	21.9	16.3	---	11.3	19.8	18.1	23.0	---	29.4	29.5	30.6	---
27	21.9	16.1	---	11.5	20.3	17.8	22.7	---	29.5	29.7	30.4	---
28	21.9	15.9	---	12.1	21.0	17.5	23.1	---	29.0	29.7	30.4	---
29	22.1	15.8	---	12.7	---	17.6	23.2	---	28.6	30.2	30.6	---
30	22.4	15.6	---	13.2	---	18.1	23.0	---	28.6	30.4	30.7	---
31	22.3	---	---	---	---	---	---	---	---	30.1	30.7	---
MEAN	22.8	19.5	14.6	11.8	18.5	18.7	23.4	---	28.9	29.7	30.1	29.4
MAX	26.1	22.9	17.4	13.7	21.0	21.8	25.2	---	29.9	30.5	31.1	30.3
MIN	21.1	15.3	11.8	9.5	16.5	16.1	21.5	---	27.8	28.8	28.6	26.8

CAL YR 2000 MEAN 22.7 MAX 30.6 MIN 11.0
WTR YR 2001 MEAN 23.1 MAX 31.1 MIN 9.5

295856081372301 ST. JOHNS RIVER AT SHANDS BRIDGE NEAR GREEN COVE SPRINGS, FL--Continued

OXYGEN DISSOLVED MIDDLE (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	7.2	8.0	---	---	8.9	---	10.0	6.4	5.7	6.0	4.8
2	8.1	6.9	---	---	---	8.8	---	---	6.6	5.8	6.1	4.7
3	8.2	6.6	---	---	---	8.3	---	---	6.8	6.3	6.2	5.2
4	8.1	6.4	---	---	---	7.9	---	---	6.9	6.8	6.0	5.3
5	7.8	6.4	---	---	---	8.1	---	---	6.9	6.8	5.8	5.4
6	7.4	6.5	9.1	---	---	8.7	---	---	6.7	6.2	5.8	5.2
7	7.3	6.6	9.0	---	---	9.1	---	---	6.5	6.2	5.6	4.9
8	7.6	6.5	9.0	---	---	9.1	---	---	6.4	6.5	5.6	5.3
9	8.3	6.6	8.7	---	---	---	---	---	6.4	6.0	6.0	5.5
10	8.6	6.7	8.6	---	---	---	---	7.8	6.3	5.9	5.6	4.9
11	8.8	7.0	8.5	10.7	---	---	8.9	7.7	6.3	5.9	5.0	4.7
12	8.8	7.1	8.3	11.1	---	10.1	9.0	---	6.5	6.1	5.0	5.3
13	8.9	7.0	8.2	11.3	---	9.9	9.1	---	6.6	6.2	5.0	5.8
14	8.9	7.1	8.1	11.3	10.2	9.7	8.8	---	6.5	6.6	4.8	6.6
15	8.8	7.4	8.0	11.3	10.2	9.4	8.9	---	6.9	6.8	4.6	---
16	8.5	7.5	7.9	11.4	10.2	9.0	9.1	---	7.2	7.0	4.6	---
17	8.4	7.3	7.9	11.5	9.9	8.8	9.4	---	7.3	6.9	4.9	---
18	8.2	7.5	8.1	11.4	9.9	8.7	9.6	---	7.4	6.7	4.9	---
19	8.0	7.7	8.3	11.4	10.0	8.7	9.8	---	7.0	6.3	4.9	---
20	7.9	8.1	8.4	11.1	9.9	8.8	10.0	---	6.8	6.0	4.2	---
21	8.0	8.3	8.6	11.0	9.8	8.8	10.0	---	6.6	6.0	4.2	---
22	8.0	8.6	8.7	11.1	9.6	8.8	10.1	---	6.3	6.8	4.5	---
23	8.2	8.4	9.0	11.3	9.4	8.9	9.9	---	6.2	6.8	5.0	---
24	8.4	8.3	9.2	11.5	9.3	8.9	9.7	---	6.3	6.5	5.2	---
25	8.3	8.2	---	11.6	9.3	8.9	9.4	---	6.7	6.3	5.0	---
26	8.1	8.1	---	11.8	9.1	9.0	9.7	---	6.8	6.7	5.8	---
27	7.9	8.0	---	11.8	9.0	9.2	10.0	---	6.6	6.4	5.8	---
28	7.7	8.0	---	11.9	9.0	9.3	10.1	---	6.2	6.1	5.8	---
29	7.5	7.9	---	12.1	---	9.0	10.0	---	5.8	6.4	5.6	---
30	7.4	7.9	---	11.7	---	8.6	10.0	---	5.7	6.1	5.5	---
31	7.2	---	---	---	---	---	---	---	---	5.7	5.3	---
MEAN	8.1	7.4	8.5	11.4	9.7	8.9	9.6	---	6.6	6.3	5.3	5.3
MAX	8.9	8.6	9.2	12.1	10.2	10.1	10.1	---	7.4	7.0	6.2	6.6
MIN	7.2	6.4	7.9	10.7	9.0	7.9	8.8	---	5.7	5.7	4.2	4.7

CAL YR 2000 MEAN 7.4 MAX 10.0 MIN 4.6
WTR YR 2001 MEAN 7.7 MAX 12.1 MIN 4.2

OXYGEN DISSOLVED BOTTOM (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	7.1	7.9	---	---	8.9	---	10.0	6.3	5.7	5.9	4.7
2	7.9	6.8	---	---	---	8.8	---	---	6.5	5.7	6.0	4.6
3	7.9	6.5	---	---	---	8.4	---	---	6.7	6.1	6.1	5.0
4	7.8	6.3	---	---	---	8.0	---	---	6.8	6.7	5.9	5.2
5	7.5	6.3	---	---	---	8.2	---	---	6.9	6.6	5.7	5.2
6	7.1	6.5	8.9	---	---	8.7	---	---	6.6	6.1	5.7	5.0
7	7.0	6.5	9.0	---	---	9.0	---	---	6.4	6.1	5.5	4.7
8	7.3	6.5	8.9	---	---	9.1	---	---	6.3	6.4	5.5	5.2
9	8.0	6.5	8.6	---	---	---	---	---	6.3	5.9	5.8	5.4
10	8.4	6.7	8.5	---	---	---	---	7.7	6.3	5.8	5.4	4.8
11	8.6	7.0	8.4	10.6	---	---	8.7	7.6	6.3	5.8	4.9	4.5
12	8.6	7.1	8.3	11.0	---	10.1	9.1	---	6.5	6.0	4.9	5.2
13	8.7	6.9	8.1	11.2	---	9.8	9.2	---	6.5	6.2	4.8	5.7
14	8.7	7.0	8.1	11.3	10.0	9.6	8.8	---	6.5	6.5	4.7	6.5
15	8.6	7.3	7.9	11.3	10.1	9.3	8.9	---	6.7	6.8	4.5	---
16	8.3	7.4	7.8	11.4	10.0	8.9	9.1	---	7.2	6.9	4.5	---
17	8.2	7.3	7.8	11.4	9.7	8.8	9.3	---	7.1	6.8	4.7	---
18	8.0	7.5	8.0	11.3	9.7	8.7	9.6	---	7.2	6.5	4.7	---
19	7.9	7.7	8.2	11.4	9.9	8.6	9.8	---	6.9	6.2	4.7	---
20	7.8	8.0	8.3	11.1	9.8	8.6	9.9	---	6.7	5.9	4.1	---
21	7.9	8.2	8.5	10.9	9.7	8.7	10.0	---	6.5	6.0	4.0	---
22	8.0	8.5	8.6	11.1	9.5	8.7	10.0	---	6.3	6.7	4.3	---
23	8.1	8.4	8.9	11.3	9.4	8.7	9.9	---	6.1	6.7	4.9	---
24	8.3	8.2	9.1	11.4	9.2	8.8	9.7	---	6.2	6.4	5.0	---
25	8.3	8.2	---	11.6	9.2	8.8	9.4	---	6.6	6.2	4.8	---
26	8.1	8.0	---	11.7	9.1	8.9	9.7	---	6.7	6.6	5.6	---
27	7.9	7.9	---	11.8	9.0	9.1	9.9	---	6.6	6.3	5.7	---
28	7.7	7.9	---	11.8	9.0	9.1	10.1	---	6.2	5.9	5.5	---
29	7.4	7.8	---	12.0	---	8.8	9.9	---	5.8	6.3	5.4	---
30	7.4	7.8	---	11.7	---	8.5	9.9	---	5.6	6.0	5.3	---
31	7.2	---	---	---	---	---	---	---	---	5.6	5.1	---
MEAN	7.9	7.3	8.4	11.4	9.6	8.9	9.5	---	6.5	6.2	5.1	5.1
MAX	8.7	8.5	9.1	12.0	10.1	10.1	10.1	---	7.2	6.9	6.1	6.5
MIN	7.0	6.3	7.8	10.6	9.0	8.0	8.7	---	5.6	5.6	4.0	4.5

CAL YR 2000 MEAN 7.4 MAX 10.0 MIN 4.5
WTR YR 2001 MEAN 7.6 MAX 12.0 MIN 4.0

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02245500 SOUTH FORK BLACK CREEK NEAR PENNEY FARMS, FL

LOCATION.--Lat 29°58'45", long 81°51'08", in NE¹/₄ sec.13, T.6 S., R.24 E., Clay County, Hydrologic Unit 03080103, on right bank at upstream side of bridge on State Highway 16, 0.7 mi downstream from Greens Creek, 2.5 mi west of Penney Farms, 9.5 mi west of Green Cove Springs, and 24 mi upstream from mouth of Black Creek.

DRAINAGE AREA.--134 mi².

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

REVISED RECORDS.--WSP 1234: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 9.82 ft above sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e125	26	33	35	48	22	167	13	8.8	25	104	55
2	e110	26	32	33	63	22	153	13	8.9	40	102	72
3	98	25	31	32	70	21	101	13	8.9	25	100	316
4	73	25	31	32	63	29	75	12	8.9	18	109	205
5	66	25	30	31	68	46	61	12	8.9	16	130	364
6	61	24	e29	31	54	34	53	11	9.0	14	372	180
7	63	24	e29	30	45	27	46	11	9.2	13	344	172
8	66	24	e29	30	40	24	40	14	14	15	207	165
9	61	23	e29	29	37	23	34	14	10	17	132	106
10	55	23	e28	28	35	27	29	12	11	18	92	89
11	50	22	e28	28	34	29	25	11	16	19	65	77
12	46	22	e28	29	33	26	22	11	33	16	50	86
13	43	22	e28	29	32	26	20	12	58	14	67	144
14	41	22	e28	28	32	30	18	11	29	30	44	476
15	39	23	28	28	31	26	18	11	19	23	39	1930
16	35	23	29	28	30	106	16	11	15	16	51	1700
17	32	23	30	27	28	186	14	11	14	14	51	878
18	30	23	28	27	27	102	13	11	13	14	85	474
19	29	22	28	27	26	148	13	11	12	17	76	286
20	31	24	28	42	25	400	13	11	59	e21	60	213
21	39	24	28	46	25	481	12	11	29	e18	39	168
22	36	23	29	39	25	296	12	e11	19	e16	29	149
23	34	24	28	36	24	184	13	e11	18	e15	24	e136
24	37	24	28	36	24	129	13	e11	24	e14	21	e122
25	38	58	28	33	26	100	15	e10	18	e17	19	e109
26	39	76	28	30	25	92	25	e10	14	e15	18	e97
27	37	65	28	29	24	79	20	e10	13	e30	16	e88
28	33	49	36	29	23	67	17	e10	18	86	19	e80
29	31	40	67	28	---	62	15	e12	34	58	21	e73
30	29	37	47	28	---	98	14	e11	39	64	23	e68
31	28	---	38	33	---	124	---	e10	---	72	52	---
TOTAL	1535	891	969	971	1017	3066	1087	353	591.6	790	2561	9078
MEAN	49.5	29.7	31.3	31.3	36.3	98.9	36.2	11.4	19.7	25.5	82.6	303
MAX	125	76	67	46	70	481	167	14	59	86	372	1930
MIN	28	22	28	27	23	21	12	10	8.8	13	16	55
CFSM	.37	.22	.23	.23	.27	.74	.27	.08	.15	.19	.62	2.26
IN.	.43	.25	.27	.27	.28	.85	.30	.10	.16	.22	.71	2.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	167	87.8	123	140	174
MAX	633	484	859	442	808
(WY)	1948	1948	1998	1970	1998
MIN	21.1	18.1	23.9	30.5	34.0
(WY)	1978	1941	1991	1957	1957

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1940 - 2001
ANNUAL TOTAL	28653.8	22909.6	
ANNUAL MEAN	78.3	62.8	149
HIGHEST ANNUAL MEAN			302
LOWEST ANNUAL MEAN			52.0
HIGHEST DAILY MEAN	3800	Sep 10	10300
LOWEST DAILY MEAN	9.7	May 11-13	8.8
ANNUAL SEVEN-DAY MINIMUM	10	May 19	8.9
MAXIMUM PEAK FLOW		2490	Sep 15
MAXIMUM PEAK STAGE		15.02	Sep 15
INSTANTANEOUS LOW FLOW		b8.6	b8.6
ANNUAL RUNOFF (CFSM)	.58	.47	1.11
ANNUAL RUNOFF (INCHES)	7.95	6.36	15.14
10 PERCENT EXCEEDS	131	109	311
50 PERCENT EXCEEDS	29	29	70
90 PERCENT EXCEEDS	12	12	28

e Estimated
a From floodmarks and rating curve extended above 11,000 ft³/s
b May 31, Jun 1, 2001

02246000 NORTH FORK BLACK CREEK NEAR MIDDLEBURG, FL

LOCATION.--Lat 30°06'47", long 81°54'24", in NE¹/₄ sec.33, T.4 S., R.24 E., Clay County, Hydrologic Unit 03080103, on left bank 0.3 mi upstream from Big Branch, 4 mi northwest of Middleburg, and 7.5 mi upstream from confluence with South Fork.

DRAINAGE AREA.--177 mi².

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

REVISED RECORDS.--WSP 852: 1933 (m). WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 0.62 ft above sea level (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 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	43	43	56	50	38	109	13	5.6	56	433	106
2	181	40	44	50	58	47	87	13	5.5	47	479	249
3	132	37	47	46	61	39	67	12	4.8	45	326	575
4	107	36	52	44	59	52	60	12	4.1	49	276	707
5	92	36	49	42	69	113	54	11	4.0	62	243	804
6	81	43	45	41	61	74	50	11	4.1	46	560	837
7	119	38	41	38	52	57	44	12	5.4	35	615	650
8	135	35	37	37	46	47	39	19	26	30	458	473
9	123	33	34	36	42	40	36	16	35	28	335	359
10	108	29	34	34	38	39	33	12	27	25	208	266
11	88	30	35	34	36	45	31	9.6	30	24	126	211
12	72	37	35	34	34	41	28	8.4	50	22	93	232
13	64	38	35	36	33	41	25	9.1	72	24	103	520
14	60	35	36	36	33	43	23	11	50	133	130	1270
15	55	32	34	35	32	40	22	8.6	47	230	98	3710
16	50	32	34	34	31	44	21	7.4	46	92	76	4720
17	47	29	36	33	30	70	19	7.7	40	57	64	2120
18	45	28	36	33	30	62	18	8.1	37	48	167	1110
19	47	32	37	31	28	104	17	6.7	40	44	296	675
20	52	37	37	31	27	309	17	6.3	42	41	323	450
21	57	31	36	32	26	333	16	6.1	44	115	215	332
22	56	28	36	32	26	205	16	5.9	43	143	133	262
23	57	27	35	31	25	155	15	5.6	48	102	95	292
24	68	28	34	33	25	115	15	5.2	50	99	74	314
25	67	53	34	31	26	88	16	4.8	46	108	61	275
26	65	86	34	30	26	88	19	4.8	40	70	55	249
27	65	68	34	29	26	83	18	5.1	36	54	50	200
28	59	56	37	29	28	70	15	5.1	37	66	39	183
29	52	49	69	28	---	67	14	7.2	43	66	35	169
30	53	45	69	29	---	116	14	14	63	72	34	162
31	47	---	61	34	---	139	---	7.5	---	113	38	---
TOTAL	2504	1171	1260	1099	1058	2804	958	285.2	1025.5	2146	6238	22482
MEAN	80.8	39.0	40.6	35.5	37.8	90.5	31.9	9.20	34.2	69.2	201	749
MAX	200	86	69	56	69	333	109	19	72	230	615	4720
MIN	45	27	34	28	25	38	14	4.8	4.0	22	34	106
CFSM	.46	.22	.23	.20	.21	.51	.18	.05	.19	.39	1.14	4.23
IN.	.53	.25	.26	.23	.22	.59	.20	.06	.22	.45	1.31	4.73

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

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	244	96.5	136	166	239	236	140	92.7	130	188	288	329																																																										
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1932 - 2001	
ANNUAL TOTAL	30289.5		43030.7			
ANNUAL MEAN	82.8		118		190	
HIGHEST ANNUAL MEAN					440	
LOWEST ANNUAL MEAN					50.4	
HIGHEST DAILY MEAN	1260	Sep 10	4720	Sep 16	11200	Aug 30 1968
LOWEST DAILY MEAN	2.9	Jun 19	4.0	Jun 5	2.9	Jun 19 2000
ANNUAL SEVEN-DAY MINIMUM	3.8	Jun 14	4.8	Jun 1	3.8	Jun 14 2000
MAXIMUM PEAK FLOW			5770		12700	
MAXIMUM PEAK STAGE			18.47		24.69	
INSTANTANEOUS LOW FLOW			3.7		2.6	
ANNUAL RUNOFF (CFSM)	.47		.67		1.07	
ANNUAL RUNOFF (INCHES)	6.37		9.04		14.59	
10 PERCENT EXCEEDS	165		236		407	
50 PERCENT EXCEEDS	35		43		71	
90 PERCENT EXCEEDS	9.2		14		21	

02246150 BIG DAVIS CREEK AT BAYARD, FL

LOCATION.--Lat 30°09'05", long 81°31'35", in land grant 37, T.4 S., R.28 E., Duval County, Hydrologic Unit 03080103, at downstream end of culvert on U.S. Highway 1, 0.8 mi northwest of Bayard, 2.0 mi upstream from mouth, and 14.8 mi southeast of Union Station in Jacksonville.

DRAINAGE AREA.--13.6 mi².

PERIOD OF RECORD.--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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	5.0	3.9	5.2	6.1	4.0	e7.4	2.6	3.2	6.7	7.5	4.5
2	25	4.7	3.8	4.8	7.1	3.8	e7.2	2.6	3.0	4.9	11	9.5
3	19	4.5	3.8	4.5	6.4	3.3	e7.0	2.6	2.8	4.0	10	22
4	15	4.2	3.6	4.4	6.4	5.0	e6.5	2.6	2.6	3.5	8.2	19
5	13	4.0	3.5	4.3	6.4	6.6	6.1	2.5	2.5	3.3	6.1	16
6	11	3.9	3.4	4.3	5.6	5.0	6.0	2.5	3.2	3.1	7.4	22
7	10	3.8	3.4	4.1	4.9	3.9	5.4	2.6	4.5	2.9	6.2	25
8	9.4	3.7	3.3	4.1	4.5	3.4	5.0	2.8	3.9	2.9	5.7	14
9	8.2	3.7	3.3	4.0	4.3	3.2	4.5	2.6	3.8	3.2	4.2	14
10	7.5	3.7	3.3	3.8	4.1	3.3	4.1	2.5	4.2	2.9	3.4	16
11	6.8	3.3	3.4	3.8	3.9	3.2	3.7	2.4	4.4	3.0	6.8	21
12	6.1	3.3	3.5	3.9	3.7	3.1	3.5	2.3	5.8	2.8	14	60
13	5.6	3.1	3.3	3.8	3.6	4.1	3.3	2.4	6.1	3.0	7.1	93
14	5.3	3.2	3.3	3.8	3.6	4.5	3.2	2.3	5.2	11	5.0	151
15	4.9	3.1	3.3	3.7	3.5	4.1	3.2	2.3	8.3	7.3	4.0	336
16	4.6	3.1	3.4	3.7	3.4	13	3.0	2.2	6.1	4.8	5.4	217
17	4.1	3.0	3.5	3.6	3.3	10	2.8	2.2	6.0	4.0	4.7	119
18	3.8	2.9	3.3	3.6	3.1	9.0	2.6	2.1	5.0	4.3	3.7	77
19	3.5	2.8	3.3	3.3	3.1	17	2.7	2.0	4.3	6.1	4.8	57
20	6.2	3.0	3.4	4.0	3.0	52	2.7	2.0	3.9	6.0	4.4	43
21	7.9	2.8	3.3	3.8	2.9	38	2.7	2.0	3.6	12	3.7	33
22	6.7	2.7	3.3	3.6	2.9	25	2.7	2.0	4.1	7.6	3.1	34
23	6.5	2.6	3.3	4.0	2.9	18	2.7	2.0	3.9	5.4	2.7	53
24	8.3	2.7	3.3	4.1	2.8	14	2.6	2.0	4.4	4.6	2.5	43
25	9.2	6.7	3.2	3.8	2.9	12	3.0	1.9	14	3.8	2.3	38
26	10	7.7	3.3	3.5	2.8	13	3.3	1.9	11	3.3	2.2	32
27	8.6	6.7	3.3	3.3	2.8	11	2.9	1.9	6.1	3.0	2.2	26
28	7.4	5.5	4.4	3.3	3.0	9.1	2.7	2.1	5.2	2.8	2.3	22
29	6.5	4.8	5.3	3.2	---	e8.4	2.7	3.9	12	2.5	2.2	18
30	5.9	4.3	5.7	3.2	---	e8.0	2.7	5.2	11	2.4	2.0	14
31	5.2	---	5.8	4.4	---	e7.6	---	3.8	---	3.0	2.4	---
TOTAL	282.2	118.5	113.2	120.9	113.0	325.6	117.9	76.8	164.1	140.1	157.2	1649.0
MEAN	9.10	3.95	3.65	3.90	4.04	10.5	3.93	2.48	5.47	4.52	5.07	55.0
MAX	31	7.7	5.8	5.2	7.1	52	7.4	5.2	14	12	14	336
MIN	3.5	2.6	3.2	3.2	2.8	3.1	2.6	1.9	2.5	2.4	2.0	4.5
CFSM	.67	.29	.27	.29	.30	.77	.29	.18	.40	.33	.37	4.04
IN.	.77	.32	.31	.33	.31	.89	.32	.21	.45	.38	.43	4.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001			
MEAN	19.8	8.43	9.44	10.6	12.6	11.7	6.82	5.19	8.80	9.13	14.2	22.1																											
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	.78	1.44	1.36	1.66	3.39	2.72	1.22	.47	.57	.29	.56	.93																											
(WY)	1982	1991	1981	1981	1991	2000	1968	1981	1981	1977	1990	1980																											

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1966 - 2001

ANNUAL TOTAL	2174.16	3378.5		
ANNUAL MEAN	5.94	9.26	11.5	
HIGHEST ANNUAL MEAN			22.0	1995
LOWEST ANNUAL MEAN			2.33	1981
HIGHEST DAILY MEAN	127	Sep 9	336	Sep 15
LOWEST DAILY MEAN	.46	Jun 3,10	1.9	May 25,26
ANNUAL SEVEN-DAY MINIMUM	.47	Jun 3	2.0	May 21
MAXIMUM PEAK FLOW			377	Sep 15
MAXIMUM PEAK STAGE			8.48	Sep 15
INSTANTANEOUS LOW FLOW			1.8	Aug 30
ANNUAL RUNOFF (CFSM)	.44	.68	.84	
ANNUAL RUNOFF (INCHES)	5.95	9.24	11.48	
10 PERCENT EXCEEDS	9.1	14	25	
50 PERCENT EXCEEDS	3.3	3.9	5.0	
90 PERCENT EXCEEDS	.64	2.6	1.3	

e Estimated
* July 25, 1977, June 19, 1981

301124081395901 ST. JOHNS RIVER AT BUCKMAN BRIDGE AT JACKSONVILLE, FL--Continued

SPECIFIC CONDUCTANCE MIDDLE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11900	6860	1680	3780	4640	9560	---	12600	14900	12600	8070	1830
2	17000	6400	1800	3270	4230	9320	---	13700	14200	11900	8110	1690
3	17000	5750	3140	3420	4140	8070	---	14400	13500	11300	7280	1710
4	14400	5320	7370	3240	4620	7300	---	14400	13200	11300	6380	1760
5	10900	5000	14300	3030	4860	6120	---	14600	12800	10700	5730	1630
6	9170	5690	15000	2450	4530	6260	---	15100	12500	9840	4940	1530
7	6630	5260	13400	2550	4380	7130	---	17300	12100	9530	4170	1590
8	7050	4660	10600	2470	4590	9580	---	21400	12000	9830	3790	1650
9	8970	4280	7800	2350	4600	13500	---	24400	12100	9700	3460	1600
10	9080	3650	7590	2530	4180	15500	---	24600	12300	9760	2960	1450
11	8390	3920	7580	2830	3930	20000	5850	22600	12500	9640	2340	1300
12	7900	4540	6930	3420	5010	23400	6200	19600	12600	9390	1960	1280
13	7870	5100	6710	4660	6080	19800	5950	16700	11600	9090	1820	1380
14	7850	5170	6650	9390	6000	15400	5570	16500	11200	10600	1700	1620
15	7410	4880	5660	12200	5710	12900	6110	17100	10800	12700	1720	3720
16	6940	4870	5610	11000	5220	11100	6260	16500	10400	13500	1760	2630
17	6650	4340	4510	9350	4540	10500	6710	17300	10300	13600	1780	1740
18	6380	4070	3500	9080	5730	11000	8600	18300	11200	13200	1750	957
19	6040	4810	3450	8350	9200	14700	9480	17000	11500	12200	1710	918
20	6110	5970	3000	6540	11700	23200	9160	16400	11800	11500	1630	968
21	5920	4700	2850	5360	10600	18400	8630	16000	11900	11800	1580	999
22	5710	3880	2750	5690	9050	14000	8020	15600	11800	13800	1570	996
23	6210	3250	2980	7890	9180	13100	7590	15500	11400	15400	1610	969
24	7700	3120	3400	9640	9980	12800	7140	15900	11400	13100	1640	955
25	8810	3070	3900	8760	11100	11200	6550	15900	11900	11200	1620	949
26	9730	2590	5500	9280	10100	10700	7630	16000	12500	10300	1730	929
27	10100	2150	7350	9310	9390	10600	8640	16300	12600	9520	2180	912
28	9680	1840	7900	8250	9430	---	9410	16300	12900	8540	2460	889
29	8980	1730	8300	8180	---	---	9670	15200	13200	8470	2150	891
30	8390	1660	7010	6880	---	---	11600	14800	13000	7750	2070	928
31	7600	---	4770	5380	---	---	---	14900	---	7490	2020	---
MEAN	8790	4280	6230	6150	6670	12800	7740	16900	12200	10900	3020	1410
MAX	17000	6860	15000	12200	11700	23400	11600	24600	14900	15400	8110	3720
MIN	5710	1660	1680	2350	3930	6120	5570	12600	10300	7490	1570	889

CAL YR 2000 MEAN 9670 MAX 30700 MIN 733
WTR YR 2001 MEAN 8080 MAX 24600 MIN 889

SPECIFIC CONDUCTANCE BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18500	7420	---	3910	4710	9900	8050	13300	15100	13200	8160	1850
2	24900	6720	---	3300	4280	9710	7570	14900	14300	12300	8220	1710
3	24300	6050	---	3470	4180	8570	7240	15900	13500	11500	7400	1730
4	20100	5550	---	3290	4650	7500	6880	15500	13200	11400	6450	1790
5	15100	5240	---	3060	4920	6100	7560	15400	12900	10800	5790	1660
6	12000	5870	24500	2490	4590	6270	7890	16000	12500	9890	4980	1540
7	7740	5640	19600	2600	4450	7200	7370	17700	12200	9580	4200	1600
8	7090	5050	13100	2510	4400	10100	6830	24100	12000	9900	3830	1650
9	8990	4370	8930	2380	4640	17600	6430	28800	12100	9720	3490	1610
10	9210	3670	7840	2560	4090	16500	6270	28000	12400	9810	2970	1450
11	8470	3960	7730	2910	3990	22300	6290	25500	12700	9810	2350	1300
12	8140	4590	7050	3550	5150	27600	6240	22200	13000	9590	1990	1280
13	8040	5350	6820	4800	6470	24900	6060	18200	11700	9230	1840	1380
14	7990	5420	6780	13000	6550	17200	5620	17400	11400	10800	1710	1620
15	7550	4970	5760	17900	6400	13400	6170	18200	10900	15000	1720	3910
16	7050	4980	5700	14900	5670	11400	6290	18300	10400	16000	1760	2970
17	6800	4540	4550	10700	4740	10700	6730	18800	10300	14700	1780	2310
18	6510	3300	3540	9770	5760	11100	9190	19600	11200	14200	1750	985
19	6170	---	3480	8840	10400	15100	11900	18400	11600	13200	1700	935
20	6260	---	3030	6740	17300	27700	11500	17500	12000	11900	1630	971
21	6020	---	2880	5450	13500	31800	9300	16700	12100	12000	1580	997
22	5840	---	2760	5710	10400	21300	8250	15900	11900	14100	1570	995
23	6250	---	3000	8000	9430	14200	7710	15600	11500	17400	1610	968
24	7870	---	3460	11100	10300	13200	7250	16000	11500	14800	1640	955
25	9630	---	3970	10100	12800	11400	6590	16100	12000	11500	1620	949
26	10600	---	5660	9830	11300	10700	7630	16200	12700	10400	1740	928
27	11400	---	10500	10100	9930	10700	8850	16500	13000	9670	2560	912
28	10800	---	11600	9270	9820	11400	10100	16700	13200	8730	2810	889
29	10200	---	8890	8880	---	11400	10300	15400	13600	8620	2280	892
30	8880	---	8030	7310	---	9900	12000	14900	13700	7840	2140	928
31	8030	---	5290	5580	---	8900	---	15200	---	7550	2060	---
MEAN	10200	5150	7480	6900	7320	14100	7870	18000	12400	11500	3080	1460
MAX	24900	7420	24500	17900	17300	31800	12000	28800	15100	17400	8220	3910
MIN	5840	3300	2760	2380	3990	6100	5620	13300	10300	7550	1570	889

CAL YR 2000 MEAN 11800 MAX 34500 MIN 734
WTR YR 2001 MEAN 8960 MAX 31800 MIN 889

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

301124081395901 ST. JOHNS RIVER AT BUCKMAN BRIDGE AT JACKSONVILLE, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	22.4	15.5	---	13.7	21.1	18.9	22.7	28.1	29.4	29.7	30.5
2	25.1	22.3	15.6	---	13.7	21.5	18.9	22.8	27.9	29.9	29.3	30.1
3	25.1	22.3	15.2	---	13.5	21.7	19.1	22.8	28.1	30.3	29.1	30.0
4	25.5	22.5	13.9	---	13.1	21.6	19.7	23.1	28.5	30.4	29.1	29.9
5	25.7	22.5	13.3	---	13.2	20.2	19.9	23.5	29.1	30.6	29.0	---
6	26.3	22.6	13.3	---	13.3	18.0	20.5	24.0	29.4	30.5	28.7	29.9
7	26.1	22.8	13.4	---	13.8	16.4	21.3	23.9	29.5	30.7	28.8	---
8	25.5	23.0	13.6	---	14.3	16.1	22.0	23.6	29.6	30.7	29.4	29.8
9	23.1	23.1	14.2	---	15.0	16.3	22.9	23.7	29.3	30.6	---	29.6
10	21.3	23.0	14.6	---	15.6	16.6	23.4	24.0	28.7	30.6	30.1	29.4
11	20.6	22.2	15.0	9.3	15.8	16.9	23.9	24.5	28.3	30.3	30.0	29.2
12	20.7	21.7	15.5	9.8	15.6	17.8	24.3	24.8	27.8	30.2	30.3	28.8
13	20.7	21.5	15.7	10.2	15.7	18.6	24.9	25.3	27.9	30.1	---	28.2
14	20.9	21.2	16.2	10.7	16.0	18.8	25.1	25.7	28.2	29.7	30.7	27.2
15	21.2	19.9	16.7	11.2	16.8	19.3	25.3	26.0	28.5	29.4	30.5	25.5
16	21.3	19.4	17.1	11.7	17.5	19.9	25.0	26.5	28.8	29.0	---	24.4
17	21.6	19.6	17.2	12.3	17.9	19.7	24.3	26.9	28.9	29.0	---	---
18	21.9	18.9	15.8	12.7	17.4	19.0	22.0	27.3	29.0	29.4	31.3	24.6
19	22.1	18.2	14.8	13.5	17.1	18.2	21.8	27.3	29.2	29.7	31.1	---
20	22.1	17.3	13.2	13.7	17.5	18.1	21.9	27.2	29.5	29.7	31.0	---
21	22.1	16.4	12.5	12.7	18.1	17.1	22.2	27.4	---	29.4	---	---
22	22.3	15.3	12.3	12.3	18.7	17.0	22.6	27.7	29.5	29.6	---	26.5
23	22.3	14.9	11.6	11.8	18.7	17.2	23.0	27.7	29.2	29.5	30.9	26.7
24	22.0	15.0	11.4	11.8	18.5	17.7	23.7	27.6	29.0	28.7	---	26.9
25	21.9	15.7	11.1	11.6	19.2	18.1	23.5	27.3	29.3	28.9	30.8	27.1
26	22.0	15.9	11.1	11.4	19.8	18.0	22.7	27.6	29.5	29.3	30.7	26.5
27	22.0	15.9	11.3	11.6	20.3	17.4	22.5	27.7	29.7	29.5	30.7	26.2
28	22.1	15.8	11.7	12.0	20.8	17.1	22.7	27.8	29.3	---	30.7	26.0
29	22.3	15.7	11.4	12.6	---	17.2	22.9	27.7	28.9	30.4	30.8	25.1
30	22.4	15.5	---	13.2	---	17.8	22.8	27.8	29.1	30.5	---	23.7
31	22.5	---	---	13.6	---	18.6	---	28.2	---	30.2	30.9	---
MEAN	22.8	19.4	13.9	11.9	16.5	18.4	22.5	25.8	28.9	29.9	30.2	27.6
MAX	26.3	23.1	17.2	13.7	20.8	21.7	25.3	28.2	29.7	30.7	31.3	30.5
MIN	20.6	14.9	11.1	9.3	13.1	16.1	18.9	22.7	27.8	28.7	28.7	23.7

CAL YR 2000 MEAN 23.3 MAX 30.8 MIN 11.1
WTR YR 2001 MEAN 22.4 MAX 31.3 MIN 9.3

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	22.3	15.4	9.4	13.7	21.0	---	22.7	28.1	29.4	29.7	30.4
2	25.1	22.3	15.5	9.0	13.7	21.5	---	22.8	27.9	29.8	29.3	30.0
3	25.2	22.3	15.2	8.6	13.5	21.7	---	22.9	28.1	30.2	29.1	29.9
4	25.4	22.4	14.0	8.3	13.1	21.6	---	23.1	28.5	30.4	29.0	29.8
5	25.7	22.5	14.0	8.4	13.2	20.1	---	23.5	29.1	30.5	29.0	29.9
6	26.0	22.6	13.9	8.7	13.3	17.9	---	24.0	29.3	30.5	28.7	29.9
7	26.1	22.8	13.7	9.0	13.8	16.4	---	23.9	29.4	30.5	28.8	29.8
8	25.6	23.0	13.8	9.6	14.2	16.1	---	23.7	29.5	30.7	29.3	29.8
9	23.2	23.1	14.2	9.4	15.0	16.4	---	23.7	29.3	30.6	29.9	29.6
10	21.3	23.0	14.6	9.0	15.6	16.6	---	23.9	28.8	30.6	30.0	29.4
11	20.7	22.2	15.0	9.2	15.8	16.8	23.9	24.3	28.3	30.3	30.0	29.2
12	20.7	21.6	15.4	9.8	15.7	17.2	24.3	24.6	27.8	30.2	30.2	28.8
13	20.7	21.5	15.7	10.2	15.6	18.2	24.8	25.1	27.9	30.1	30.6	28.2
14	20.9	21.2	16.1	10.8	16.0	18.7	25.1	25.5	28.2	29.8	30.7	27.2
15	21.1	19.9	16.6	11.2	16.7	19.3	25.3	25.8	28.4	29.6	30.5	25.5
16	21.2	19.4	17.1	11.5	17.4	19.9	25.1	26.3	28.8	29.2	30.6	24.3
17	21.5	19.6	17.2	12.0	17.9	19.7	24.3	26.7	28.9	29.1	31.0	24.3
18	21.7	18.9	15.7	12.6	17.4	19.0	22.0	27.1	29.0	29.3	31.3	24.5
19	22.0	18.3	14.8	13.5	17.1	18.2	21.7	27.3	29.1	29.6	31.1	25.1
20	22.1	17.3	13.2	13.7	17.4	18.1	21.9	27.2	29.4	29.7	30.9	25.5
21	22.1	16.4	12.5	12.6	17.9	17.3	22.2	27.4	29.8	29.4	30.9	26.0
22	22.3	15.3	12.3	12.2	18.6	16.9	22.6	27.7	29.5	29.5	30.9	26.4
23	22.3	14.9	11.6	11.9	18.6	17.1	22.9	27.7	29.2	29.5	30.9	26.7
24	22.1	15.0	11.4	11.9	18.5	17.6	23.6	27.5	29.0	28.8	30.8	26.9
25	21.9	15.7	11.1	11.6	19.0	18.1	23.6	27.3	29.2	28.9	30.8	27.0
26	22.0	15.9	11.1	11.4	19.6	17.9	22.8	27.5	29.5	29.3	30.7	26.6
27	22.0	15.8	11.4	11.6	20.1	17.4	22.4	27.7	29.7	29.5	30.6	26.2
28	22.1	15.7	11.7	12.0	20.7	---	22.7	27.8	29.4	29.7	30.6	26.0
29	22.2	15.7	11.4	12.5	---	---	22.9	27.8	29.0	30.3	30.8	25.2
30	22.4	15.5	10.8	13.2	---	---	22.8	27.7	29.1	30.5	30.9	23.7
31	22.3	---	9.7	13.6	---	---	---	28.1	---	30.2	30.8	---
MEAN	22.7	19.4	13.7	10.9	16.4	18.4	23.3	25.8	28.9	29.9	30.3	27.4
MAX	26.1	23.1	17.2	13.7	20.7	21.7	25.3	28.1	29.8	30.7	31.3	30.4
MIN	20.7	14.9	9.7	8.3	13.1	16.1	21.7	22.7	27.8	28.8	28.7	23.7

CAL YR 2000 MEAN 22.3 MAX 30.8 MIN 9.7
WTR YR 2001 MEAN 22.3 MAX 31.3 MIN 8.3

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

301124081395901 ST. JOHNS RIVER AT BUCKMAN BRIDGE AT JACKSONVILLE, FL--Continued

OXYGEN DISSOLVED MIDDLE (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	7.8	9.1	10.3	10.1	8.2	---	6.8	5.5	6.9	---	5.7
2	5.9	7.7	9.1	10.4	10.0	8.2	---	6.8	5.6	7.2	---	5.7
3	5.8	7.6	9.0	10.6	10.0	8.3	---	7.1	5.8	7.0	---	5.8
4	6.1	7.5	9.0	10.7	10.0	8.2	---	7.6	5.8	6.6	---	5.7
5	6.7	7.4	8.7	10.9	10.0	8.4	---	8.1	5.8	6.5	---	5.7
6	6.8	7.3	8.5	11.0	10.0	8.7	---	8.1	5.8	6.0	---	5.6
7	7.2	7.3	8.4	11.0	10.0	8.9	---	8.0	5.6	5.7	---	5.5
8	7.1	7.3	8.4	11.1	9.9	8.9	---	7.7	5.5	4.8	---	5.5
9	7.8	7.3	8.4	11.1	9.9	8.7	---	7.3	5.5	5.4	---	5.5
10	8.2	7.4	8.3	11.2	9.9	8.6	---	7.2	5.4	6.5	---	5.4
11	8.4	7.5	8.2	11.6	9.7	8.4	8.5	7.3	5.5	---	---	5.4
12	8.3	7.5	8.2	11.2	9.5	8.5	9.2	7.3	5.7	---	---	5.5
13	8.2	7.4	8.2	11.1	9.2	8.6	9.2	7.2	6.0	---	---	5.7
14	8.1	7.4	8.1	10.9	9.1	8.7	8.8	7.1	6.3	---	---	6.0
15	7.9	7.7	8.1	10.7	9.2	8.7	8.5	7.2	6.5	---	---	6.7
16	7.8	7.8	8.1	10.7	9.3	8.4	8.1	7.1	6.6	---	---	7.0
17	7.8	7.9	8.1	10.7	9.3	8.2	7.9	7.0	6.6	---	---	6.8
18	7.9	8.0	8.3	10.6	9.2	8.1	8.1	6.9	6.6	---	---	6.4
19	7.8	8.2	8.4	10.6	9.1	7.9	8.0	6.9	6.7	---	---	6.1
20	7.7	8.3	8.6	10.5	8.9	7.6	7.9	6.6	6.9	---	---	6.1
21	7.7	8.5	8.9	10.5	8.9	7.5	7.8	6.4	6.9	---	---	6.1
22	7.8	8.8	9.1	10.5	9.0	7.5	7.6	6.3	6.6	---	---	5.8
23	7.7	8.9	9.3	10.5	9.0	7.3	7.5	6.1	6.5	---	---	5.5
24	7.7	9.0	9.6	10.4	8.7	7.2	7.3	5.9	6.7	---	---	4.9
25	7.6	9.1	9.7	10.5	8.5	7.0	7.1	5.9	6.8	---	---	4.4
26	8.1	9.0	9.8	10.5	8.5	7.0	7.1	5.9	6.8	---	---	4.1
27	8.0	9.0	9.7	10.5	8.5	7.0	7.0	5.6	6.6	---	---	4.1
28	8.0	9.0	9.7	10.6	8.4	---	6.9	5.8	6.4	---	---	4.1
29	8.0	9.0	9.7	10.5	---	---	7.0	5.7	6.2	---	5.9	5.3
30	7.9	9.0	9.8	10.5	---	---	6.8	5.5	6.5	---	5.8	7.0
31	7.9	---	10.1	10.3	---	---	---	5.5	---	---	5.7	---
MEAN	7.6	8.1	8.9	10.7	9.3	8.1	7.8	6.8	6.2	6.3	5.8	5.6
MAX	8.4	9.1	10.1	11.6	10.1	8.9	9.2	8.1	6.9	7.2	5.9	7.0
MIN	5.8	7.3	8.1	10.3	8.4	7.0	6.8	5.5	5.4	4.8	5.7	4.1

CAL YR 2000 MEAN 7.5 MAX 10.1 MIN 5.0
WTR YR 2001 MEAN 7.8 MAX 11.6 MIN 4.1

OXYGEN DISSOLVED BOTTOM (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	7.6	---	10.2	10.0	8.3	8.0	6.4	5.3	6.5	---	5.5
2	4.8	7.6	---	10.4	9.9	8.2	8.6	6.5	5.5	6.8	---	5.5
3	4.9	7.5	---	10.5	9.9	8.2	8.6	6.7	5.7	6.9	---	5.5
4	5.1	7.3	---	10.6	9.9	8.1	8.3	7.3	5.6	6.5	---	5.5
5	5.5	7.3	---	10.9	9.9	8.4	8.0	7.7	5.6	6.4	---	5.3
6	5.9	7.2	7.7	11.0	9.9	8.7	7.7	7.8	5.7	6.0	---	5.2
7	6.6	7.1	7.5	11.0	9.9	8.9	7.5	7.7	5.5	5.8	---	5.2
8	7.0	7.1	7.9	11.1	9.8	8.8	7.4	7.2	5.4	4.8	---	5.2
9	7.6	7.2	8.2	11.1	9.7	8.2	7.2	6.4	5.4	5.4	---	5.2
10	8.1	7.3	8.1	11.2	9.7	8.4	7.3	6.4	5.2	6.5	---	5.2
11	8.2	7.4	8.1	11.3	9.6	8.2	8.5	6.4	5.3	---	---	5.1
12	8.1	7.4	8.0	11.1	9.3	8.2	9.1	6.6	5.5	---	---	5.3
13	8.0	7.2	8.0	11.0	9.2	8.1	8.8	6.8	5.9	---	---	5.5
14	7.9	7.2	8.0	10.5	9.1	8.4	8.5	6.8	6.2	---	---	5.9
15	7.9	7.5	8.0	10.2	9.0	8.5	8.2	6.7	6.4	---	---	6.4
16	7.8	7.6	8.0	10.3	9.0	8.2	7.8	6.3	6.6	---	---	6.7
17	7.8	7.7	8.0	10.5	9.2	8.1	7.5	6.5	6.4	---	---	6.5
18	7.8	7.7	8.2	10.5	9.1	8.0	7.7	6.3	6.5	---	---	6.2
19	7.8	---	8.3	10.5	8.8	7.8	7.3	6.4	6.8	---	---	5.9
20	7.7	---	8.6	10.4	8.2	7.1	7.4	6.2	6.7	---	---	5.9
21	7.7	---	8.9	10.4	8.4	6.7	7.4	6.1	6.7	---	---	6.0
22	7.8	---	9.1	10.4	8.8	6.8	7.4	6.1	6.6	---	---	5.7
23	7.7	---	9.3	10.4	8.9	7.0	7.2	5.8	6.5	---	---	5.3
24	7.7	---	9.6	10.2	8.7	7.0	7.0	5.8	6.4	---	---	4.8
25	7.6	---	9.7	10.3	8.4	6.9	6.9	5.7	6.7	---	---	4.2
26	7.9	---	9.8	10.3	8.4	6.8	6.8	5.7	6.6	---	---	3.9
27	7.7	---	9.5	10.3	8.5	6.8	6.7	5.4	6.4	---	---	3.9
28	7.8	---	9.4	10.3	8.4	6.9	6.6	5.5	6.2	---	---	3.8
29	7.7	---	9.7	10.3	---	7.2	6.5	5.5	5.9	---	5.3	5.2
30	7.8	---	9.7	10.3	---	7.3	6.5	5.3	5.9	---	5.5	6.9
31	7.7	---	10.0	10.2	---	7.5	---	5.2	---	---	5.4	---
MEAN	7.2	7.4	8.7	10.6	9.2	7.8	7.6	6.4	6.0	6.2	5.4	5.4
MAX	8.2	7.7	10.0	11.3	10.0	8.9	9.1	7.8	6.8	6.9	5.5	6.9
MIN	4.8	7.1	7.5	10.2	8.2	6.7	6.5	5.2	5.2	4.8	5.3	3.8

CAL YR 2000 MEAN 6.9 MAX 10.0 MIN 4.0
WTR YR 2001 MEAN 7.5 MAX 11.3 MIN 3.8

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02246435 FISHING CREEK AT WESCONNET BLVD. AT JACKSONVILLE, FL

WATER-QUALITY RECORDS

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.--1.03 mi².

GAGE.--Non-recording gage. Datum of gage is undetermined.

PERIOD OF RECORD.--February 2000 to current year.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) (MG/L) (00400)	PH WATER WHOLE LAB (STAND-ARD) (MG/L) (00403)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L 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)	
OCT	10...	0830	--	6.3	7.2	--	--	243	15.0	--	--	--	--	
NOV	28...	0945	--	5.8	7.2	--	--	247	12.5	--	--	--	--	
DEC	12...	1120	.170	4.6	7.3	--	--	253	17.1	--	--	--	--	
JAN	16...	0845	--	6.1	7.6	--	--	257	12.6	--	--	--	--	
FEB	06...	0930	.34	7.9	7.2	7.7	266	244	10.2	98	30	5.7	4.1	12
MAR	13...	0945	--	2.6	7.7	--	--	273	21.0	--	--	--	--	
APR	10...	0900	--	2.9	7.3	--	--	258	20.5	--	--	--	--	
JUL	09...	0830	--	1.0	7.1	--	--	269	26.2	--	--	--	--	
AUG	21...	0755	.48	3.7	7.0	7.2	172	168	25.3	74	24	3.3	2.4	6.7
SEP	10...	0800	--	3.3	7.3	--	--	185	24.2	--	--	--	--	
	15...	0915	75	5.0	7.2	--	--	72	21.3	--	--	--	--	

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
DEC	12...	--	--	--	--	.03	.63	<.02	<.01	.10	.14	--	--	
FEB	06...	66	24	<.10	5.0	20	<.010	.65	<.02	<.01	.06	.05	214	12
AUG	21...	E52c1	10	<.1	8.9	11	.08	1.3	.07	<.01	.12	.16	567	14
SEP	15...	--	--	--	--	.04	1.2	<.02	<.01	.10	.13	--	--	

< -- Less than
 E -- Estimated value
 cl-- Holding time exceeded by the laboratory

02246437 FISHING CREEK AT 110th STREET AT JACKSONVILLE, FL

WATER-QUALITY RECORDS

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.--1.29 mi².

GAGE.--Non-recording gage. Datum of gage is undetermined.

PERIOD OF RECORD.--February 2000 to current year.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL AS (MG/L) (00900)	CALCIUM DIS-SOLVED AS CA (MG/L) (00915)	MAGNESIUM, DIS-SOLVED AS MG (MG/L) (00925)	POTASSIUM, DIS-SOLVED AS K (MG/L) (00935)	SODIUM, DIS-SOLVED AS NA (MG/L) (00930)
OCT 10...	0900	--	6.2	7.2	--	--	294	15.2	--	--	--	--	--
NOV 28...	1030	--	5.2	7.1	--	--	312	13.0	--	--	--	--	--
DEC 12...	1300	.27	2.9	7.0	--	--	284	17.2	--	--	--	--	--
JAN 16...	0930	--	5.3	6.7	--	--	279	13.1	--	--	--	--	--
FEB 06...	1045	.48	7.6	6.9	7.7	320	309	10.6	110	35	5.8	3.6	19
MAR 13...	1015	--	3.4	7.3	--	--	302	20.0	--	--	--	--	--
APR 10...	0930	--	2.4	7.0	--	--	296	20.0	--	--	--	--	--
JUN 06...	0900	--	1.3	7.0	--	--	295	24.5	--	--	--	--	--
JUL 09...	0930	--	2.5	7.0	--	--	284	26.0	--	--	--	--	--
AUG 21...	0940	1.0	5.2	7.2	7.8	237	234	25.2	94	31	4.0	2.4	13
SEP 10...	0820	--	5.4	7.0	--	--	224	24.2	--	--	--	--	--
15...	1000	107	5.4	7.3	--	--	63	21.4	--	--	--	--	--

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L) AS CACO3 (90410)	CHLORIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUORIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITROGEN, AMMONIA + ORGANIC (MG/L) AS N (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L) AS P (00671)	PHOSPHORUS TOTAL (MG/L) AS P (00665)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGANESE, DIS-SOLVED (UG/L) AS MN (01056)
DEC 12...	--	--	--	--	--	.06	.56	<.02	<.01	.09	.11	--	--
FEB 06...	83	30	.14	9.1	23	.043	.47	.10	<.01	.05	.04	510	19
AUG 21...	72	19	.1	12	13	.09	1.2	.15	<.01	.10	.14	811	27
SEP 15...	--	--	--	--	--	.05	1.1	.03	<.01	.13	.15	--	--

< -- Less than

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02246465 SOUTH BRANCH BIG FISHWEIR CREEK AT CASSAT AVE. AT JACKSONVILLE, FL

WATER-QUALITY RECORDS

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.--0.34 mi².

GAGE.--Non-recording gage. Datum of gage is undetermined.

PERIOD OF RECORD.--February 2000 to current year.

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

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-ONIA + 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)
OCT													
10...	0930	--	634	--	7.5	--	16.0	5.4	--	--	--	--	--
NOV													
28...	1115	--	597	--	7.5	--	14.0	5.9	--	--	--	--	--
DEC													
13...	0945	.08	622	--	7.2	--	16.2	3.2	.030	<.010	.31	<.020	.160
JAN													
16...	1015	--	622	--	6.7	--	15.0	4.9	--	--	--	--	--
FEB													
07...	0800	.16	602	610	7.3	7.8	11.4	6.7	.056	.010	.34	.080	.070
MAR													
13...	1045	--	543	--	7.4	--	21.0	3.9	--	--	--	--	--
APR													
10...	1000	--	628	--	7.3	--	21.0	3.7	--	--	--	--	--
MAY													
15...	1120	.04	577	--	6.9	--	22.2	2.6	.165	<.010	.64	.060	.200
JUN													
06...	0930	--	605	--	7.3	--	25.0	3.1	--	--	--	--	--
JUL													
09...	1000	--	341	--	7.2	--	26.1	3.8	--	--	--	--	--
AUG													
21...	1050	1.5	620	593	7.4	8.2	26.3	4.3	1.70	.040	2.5	.360	.330
SEP													
10...	0930	--	605	--	7.3	--	25.1	5.4	--	--	--	--	--
15...	1245	9.9	237	--	7.3	--	21.7	6.6	.090	<.010	1.1	.260	.640

DATE	PHOS-PHORUS ORTHO, 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 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 SI02) (00955)	IRON, DIS-SOLVED (UG/L) AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN) (01056)
DEC													
13...	.070	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	.040	250	81.0	12.0	29.0	3.40	187	73.0	37.0	.2	17.0	220	52.0
MAY													
15...	.080	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
21...	.140	250	82.0	11.0	25.0	4.20	185	65.0	36.0	.3	18.0	150	84.0
SEP													
15...	.590	--	--	--	--	--	--	--	--	--	--	--	--

< -- Less than

02246467 SOUTH BRANCH BIG FISHWEIR CREEK AT BLANDING BLVD. AT JACKSONVILLE, FL

WATER-QUALITY RECORDS

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.--0.57 mi².

GAGE.--Non-recording gage.

PERIOD OF RECORD.--February 2000 to current year.

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

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) (US/CM) (00400)	PH WATER WHOLE LAB (STAND-ARD) (US/CM) (00403)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	NITRO-GEN,AM-ONIA + ORGANIC TOTAL (MG/L) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	PHOS-PHORUS TOTAL (MG/L) (00665)
OCT													
10...	1000	--	635	--	7.4	--	16.2	4.7	--	--	--	--	--
NOV													
28...	1140	--	612	--	7.4	--	15.0	4.7	--	--	--	--	--
DEC													
13...	0845	.20	618	--	6.5	--	16.3	2.8	.290	.050	.70	.620	.190
JAN													
16...	1045	--	633	--	7.4	--	15.0	4.6	--	--	--	--	--
FEB													
07...	0910	.25	610	621	7.2	7.9	11.5	6.8	.165	.030	.54	.620	.080
MAR													
13...	1115	--	431	--	7.5	--	21.2	2.2	--	--	--	--	--
APR													
10...	1045	--	613	--	7.3	--	21.0	2.2	--	--	--	--	--
MAY													
15...	1210	.26	563	--	7.1	--	21.6	2.3	.284	.050	.92	.590	.340
JUN													
06...	1000	--	622	--	7.3	--	25.0	2.7	--	--	--	--	--
JUL													
09...	1030	--	333	--	7.5	--	26.1	2.9	--	--	--	--	--
AUG													
22...	0800	.12	599	584	6.7	8.0	25.7	4.1	.150	.070	.90	1.10	.190
SEP													
10...	0950	--	578	--	7.4	--	25.2	4.7	--	--	--	--	--
15...	1345	16	281	--	7.3	--	22.0	5.7	.170	.020	1.2	.450	E.530c1

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ANC UNFLTRD LAB (MG/L) (90410)	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	IRON, DIS-SOLVED (UG/L) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)
DEC													
13...	.120	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	.060	250	83.0	11.0	29.0	3.40	182	83.0	35.0	.2	14.0	80	66.0
MAY													
15...	.220	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
22...	.120	250	81.0	11.0	25.0	3.80	179	70.0	35.0	.2	16.0	60	27.0
SEP													
15...	E.020c1	--	--	--	--	--	--	--	--	--	--	--	--

E -- Estimated value
 c1-- Holding time exceeded by the laboratory

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

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 mi², includes Paynes Prairie, a diked sinkhole area of about 650 mi², 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 sea level. 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 except for periods of estimated daily discharge, which are poor. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-9080	11700	-2390	15300	10000	-4180	11500	-7980	-1090	3110	-5630	12300
2	14400	9990	-10100	3620	965	9260	-3650	-6390	11400	7440	10400	8460
3	12000	8680	-37000	-193	-4200	15400	2260	-3940	8600	5630	18500	2940
4	5150	3540	-23200	2210	-21000	10200	-8900	-5480	5360	4980	23500	6910
5	17500	-8130	1260	8630	672	7680	-21700	-4490	10700	20400	21500	17400
6	21000	-11400	9300	4240	7620	-20700	4460	3010	12600	18400	21300	12600
7	141	13100	5710	-4220	3340	-27300	17500	-24200	11400	3120	14300	-2120
8	-21200	7070	9590	9620	6830	-14600	18800	-5490	9530	2520	11500	3120
9	-28500	11100	6430	2840	10600	1150	15700	10800	245	11000	17100	13500
10	3420	8940	-6730	-2820	22900	-13300	11800	14300	5560	5820	16900	16400
11	12600	-16400	2980	5610	1880	-1420	7570	14700	506	8140	18500	10500
12	9840	-4680	18500	9520	-5630	11000	10400	18500	14800	10300	11100	-11900
13	4530	4710	1290	-17000	10200	32900	19300	8710	11300	-2740	e3500	-14800
14	8890	16800	21800	681	7800	20400	343	-9280	5320	-32300	e7000	-40200
15	15900	6780	18400	15000	2550	22200	-4370	938	4100	-1340	e-1000	-17700
16	14400	12500	11200	9810	4310	13200	-3460	-2640	4180	-5310	-6060	44000
17	10700	14800	43400	-1460	-3250	-1120	-5080	-18200	-12400	-6620	4360	58200
18	12200	-1240	-1610	-7540	-31300	-26100	-15500	-10000	-16100	4000	12800	e52100
19	6250	-22100	1810	4710	-8680	-55300	8180	3140	-2350	11200	21800	e54100
20	-6690	-10600	6230	26000	4110	4290	2440	5010	1020	11400	20900	e53400
21	-233	20700	-3940	3390	5780	40300	5120	7120	4070	-7190	14300	e45900
22	-6010	9060	1470	-19300	3700	16200	7380	14700	14000	-10900	7110	e37800
23	-23600	12800	-18400	-23100	-17900	73	5530	3800	15400	25700	8630	31200
24	-16100	390	-2150	10500	-4130	15200	13500	5560	6130	36700	12700	32500
25	-1480	11600	-11100	9790	7200	19200	12400	10400	2750	16000	-2000	e28600
26	-2690	19700	-5120	2500	12500	6350	-15900	8870	7070	11300	-16400	e31700
27	7740	18600	19300	19000	1590	3720	10400	4070	-1910	10200	-992	e15100
28	17000	13800	4700	12300	3330	-12700	11300	13100	-5880	865	10100	e13100
29	8150	11400	-10400	7210	---	25400	-2660	15500	-7470	-2380	8950	e-29300
30	10200	10700	36600	27100	---	27400	-12900	-5040	-1430	13000	5300	7350
31	17800	---	25000	20400	---	17100	---	-6670	---	-9080	7660	---
TOTAL	114228	183910	112830	154348	31787	141903	101763	52428	117411	163365	297628	493160
MEAN	3685	6130	3640	4979	1135	4578	3392	1691	3914	5270	9601	16440
MAX	21000	20700	43400	27100	22900	40300	19300	18500	15400	36700	23500	58200
MIN	-28500	-22100	-37000	-23100	-31300	-55300	-21700	-24200	-16100	-32300	-16400	-40200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

MEAN	10990	8457	8410	7260	7706	5835	7107	4920	8649	8485	8723	9007
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1972 - 2001

ANNUAL TOTAL	1352779	1964761	
ANNUAL MEAN	3696	5383	7955
HIGHEST ANNUAL MEAN			15640
LOWEST ANNUAL MEAN			4086
HIGHEST DAILY MEAN	55300	Sep 18	73500
LOWEST DAILY MEAN	-43900	May 30	-63400
ANNUAL SEVEN-DAY MINIMUM	-17700	May 26	-17700
MAXIMUM PEAK STAGE			14.23
10 PERCENT EXCEEDS	17900		19500
50 PERCENT EXCEEDS	5030		6230
90 PERCENT EXCEEDS	-13600		-12100
			7955
			15640
			4086
			73500
			-63400
			-17700
			15.20
			25500
			8360
			-9540

e Estimated

Note.--Negative figures indicate reverse flow

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
1	12.81	11.39	12.23	10.80	11.45	9.85	10.87	9.27	10.61	8.92	11.24	9.72
2	12.82	11.37	12.18	10.79	11.64	10.16	10.71	9.16	10.59	8.88	11.32	9.63
3	12.48	11.10	12.09	10.73	11.91	10.67	10.86	9.38	10.64	9.00	11.10	9.29
4	12.30	11.06	12.08	10.72	12.10	10.76	10.87	9.30	11.08	9.37	11.04	9.65
5	12.15	10.83	12.13	10.69	12.04	10.73	11.05	9.51	11.28	9.46	10.49	8.54
6	11.97	10.63	12.38	11.10	11.96	10.64	10.87	9.06	11.15	9.12	10.52	8.37
7	11.90	10.47	12.23	10.82	11.82	10.36	11.10	9.07	11.22	9.04	11.26	8.66
8	12.15	10.71	12.10	10.63	11.74	10.14	11.29	9.11	11.27	9.02	11.63	9.39
9	12.48	10.80	12.15	10.60	11.69	9.84	11.03	8.67	11.33	9.04	11.63	9.73
10	12.32	10.92	11.92	10.26	11.86	9.84	11.28	8.83	11.15	8.98	11.82	9.74
11	12.17	10.70	12.25	10.11	12.05	10.02	11.34	9.15	11.01	8.91	11.87	10.15
12	12.16	10.60	12.40	10.58	11.94	9.96	11.39	9.14	11.33	9.50	11.84	10.05
13	12.22	10.57	12.45	10.63	11.97	9.74	11.59	9.46	11.29	9.48	11.75	9.62
14	12.28	10.67	12.24	10.39	12.02	10.10	11.76	10.10	11.10	9.40	11.21	9.33
15	12.26	10.63	12.13	10.18	11.60	9.72	11.61	9.77	10.94	9.29	11.26	9.35
16	12.26	10.55	12.19	10.43	11.85	9.95	11.29	9.53	10.88	9.25	10.94	9.39
17	12.27	10.60	11.99	10.26	11.70	9.02	11.14	9.60	10.93	9.18	10.82	9.13
18	12.26	10.60	11.88	10.20	10.95	9.10	11.32	9.88	11.08	9.18	10.97	9.53
19	12.19	10.58	12.12	10.64	11.12	9.31	11.26	9.80	11.37	9.80	11.97	10.77
20	12.35	10.76	12.27	10.68	10.77	8.87	11.17	9.25	11.30	9.84	12.71	11.32
21	12.28	10.64	11.84	10.07	11.01	9.07	10.68	8.73	11.11	9.49	11.85	10.21
22	12.25	10.61	11.68	9.85	11.07	9.20	10.86	8.85	11.18	9.35	11.30	9.74
23	12.42	10.73	11.64	9.92	11.17	9.05	11.49	9.54	11.30	9.45	11.46	9.65
24	12.63	11.05	11.81	9.87	11.36	9.44	11.54	9.95	11.47	9.81	11.47	9.83
25	12.61	11.03	12.17	10.27	11.36	9.53	11.11	9.48	11.35	9.77	11.29	9.54
26	12.63	11.03	11.76	9.98	11.51	9.89	11.34	9.65	11.15	9.43	11.27	9.57
27	12.61	11.10	11.58	9.79	11.53	9.94	11.20	9.56	11.09	9.45	11.22	9.51
28	12.53	10.94	11.43	9.65	11.41	9.76	10.99	9.39	11.19	9.51	11.45	9.83
29	12.41	10.80	11.44	9.73	11.85	10.21	11.13	9.53	---	---	12.00	10.03
30	12.45	10.93	11.28	9.64	11.57	9.58	11.09	9.26	---	---	11.59	9.57
31	12.29	10.85	---	---	10.88	9.33	10.76	9.00	---	---	11.26	9.47
MAX	12.82	11.39	12.45	11.10	12.10	10.76	11.76	10.10	11.47	9.84	12.71	11.32
MIN	11.90	10.47	11.28	9.64	10.77	8.87	10.68	8.67	10.59	8.88	10.49	8.37
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
1	11.14	9.11	11.35	9.86	11.53	9.66	11.56	9.83	12.20	10.44	11.59	9.81
2	11.02	9.37	11.40	9.94	11.32	9.43	11.48	9.68	12.11	10.41	11.68	9.90
3	11.21	9.56	11.42	9.81	11.26	9.28	11.51	9.63	12.01	10.30	11.97	10.20
4	11.18	9.30	11.41	9.73	11.18	9.29	11.52	9.60	11.87	10.12	12.05	10.40
5	11.59	9.45	11.51	9.74	11.21	9.24	11.33	9.47	11.83	10.03	11.93	10.43
6	11.64	9.82	11.54	9.70	11.09	9.26	11.17	9.34	11.81	10.14	11.88	10.33
7	11.45	9.47	11.98	9.93	11.10	9.23	10.94	9.40	11.71	10.22	12.14	10.55
8	11.35	9.29	11.94	10.31	10.89	9.31	11.34	9.73	11.79	10.24	12.19	10.80
9	11.37	9.32	11.81	10.21	11.22	9.39	11.39	9.62	11.78	10.26	12.20	10.77
10	11.21	9.46	11.59	10.10	11.34	9.62	11.26	9.79	11.71	10.03	11.99	10.45
11	11.40	9.65	11.62	10.01	11.39	9.87	11.40	9.82	11.43	9.80	11.97	10.34
12	11.45	9.67	11.49	9.72	11.45	9.85	11.27	9.77	11.33	9.64	12.22	10.47
13	11.31	9.40	11.34	9.80	11.14	9.61	11.28	9.59	11.28	9.48	12.71	11.00
14	10.99	9.46	11.42	10.17	11.14	9.45	11.69	10.28	11.27	9.32	13.23	11.35
15	11.21	9.72	11.58	10.24	10.98	9.35	11.69	10.22	11.65	9.60	14.14	12.22
16	11.21	9.56	11.39	10.01	10.97	9.27	11.63	10.08	11.93	9.88	14.23	12.63
17	11.20	9.83	11.72	10.30	11.12	9.25	11.67	9.98	11.92	9.83	13.95	12.24
18	11.15	9.15	11.84	10.40	11.50	9.70	11.74	9.90	11.96	9.67	13.67	---
19	11.17	9.68	11.63	10.06	11.52	9.64	11.73	9.77	11.78	9.63	13.47	---
20	11.21	9.59	11.56	9.87	11.57	9.58	11.91	9.61	11.74	9.58	---	---
21	11.08	9.49	11.65	9.88	11.63	9.55	12.23	10.11	11.57	9.59	13.02	---
22	11.02	9.27	11.61	9.64	11.51	9.53	12.25	10.57	11.73	9.70	12.78	---
23	11.13	9.26	11.64	9.64	11.25	9.47	12.42	10.72	11.79	9.94	12.70	11.12
24	11.13	9.17	11.73	9.83	11.50	9.53	12.44	9.91	11.73	9.96	12.78	11.13
25	10.75	8.96	11.40	9.68	11.55	9.80	11.71	9.96	11.61	9.84	12.49	---
26	11.00	9.33	11.60	9.72	11.58	9.86	11.63	9.95	11.87	10.27	12.29	---
27	11.39	9.57	11.57	9.74	11.47	9.80	11.77	9.84	11.90	10.33	12.39	---
28	11.29	9.52	11.50	9.67	11.51	9.77	11.50	9.77	11.71	10.08	12.49	---
29	11.20	9.56	11.47	9.52	11.60	9.92	11.71	9.96	11.60	9.86	12.93	---
30	11.38	9.80	11.25	9.60	11.67	9.98	11.44	9.71	11.65	9.89	13.09	11.63
31	---	---	11.40	9.71	---	---	11.90	9.92	11.59	9.84	---	---
MAX	11.64	9.83	11.98	10.40	11.67	9.98	12.44	10.72	12.20	10.44	14.23	12.63
MIN	10.75	8.96	11.25	9.52	10.89	9.23	10.94	9.34	11.27	9.32	11.59	9.81
YEAR	HIGH	LOW	MAXIMUM		MINIMUM							
			14.23	10.49	10.49	8.37						
			12.63									

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, 48,800 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 15, 1999; minimum daily mean, 308 $\mu\text{S}/\text{cm}$ @ 25 °C, Mar. 10, 1998.
 SPECIFIC CONDUCTANCE (MIDDLE): Maximum daily mean, 48,800 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 15, 1999; minimum daily mean, 309 $\mu\text{S}/\text{cm}$ @ 25 °C, Mar. 10, 1998.
 SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 48,900 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 15, 1999; minimum daily mean, 309 $\mu\text{S}/\text{cm}$ @ 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, 12.4 mg/L, Nov. 9, 1999; minimum daily mean, 3.7 mg/L, July 16, 1998.
 DISSOLVED OXYGEN (MIDDLE): Maximum daily mean, 12.6 mg/L, Nov. 9, 1999; minimum daily mean, 3.0 mg/L, July 14, 1998.
 DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 12.5 mg/L, Nov. 9, 1999; minimum daily mean, 4.1 mg/L, Sept. 27,28, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE (TOP): Maximum daily mean, 40,800 $\mu\text{S}/\text{cm}$ @ 25 °C, May 8; minimum daily mean, 999 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 27.
 SPECIFIC CONDUCTANCE (MIDDLE): Maximum daily mean, 41,200 $\mu\text{S}/\text{cm}$ @ 25 °C, May 8; minimum daily mean, 999 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 27.
 SPECIFIC CONDUCTANCE (BOTTOM): Maximum daily mean, 41,500 $\mu\text{S}/\text{cm}$ @ 25 °C, May 8; minimum daily mean, 991 $\mu\text{S}/\text{cm}$ @ 25 °C, Sept. 27.
 WATER TEMPERATURE (TOP): Maximum daily mean, 31.2 °C, Aug. 18; minimum daily mean, 8.8 °C, Jan. 4,5.
 WATER TEMPERATURE (MIDDLE): Maximum daily mean, 31.2 °C, Aug. 18; minimum daily mean, 9.7 °C, Jan. 10.
 WATER TEMPERATURE (BOTTOM): Maximum daily mean, 31.1 °C, Aug. 18; minimum daily mean, 8.6 °C, Jan. 5.
 DISSOLVED OXYGEN (TOP): Maximum daily mean, 11.0 mg/L, Jan. 6; minimum daily mean, 4.6 mg/L, Sept. 8.
 DISSOLVED OXYGEN (MIDDLE): Maximum daily mean, 10.7 mg/L, Jan. 9-11; minimum daily mean, 4.5 mg/L, Sept. 8.
 DISSOLVED OXYGEN (BOTTOM): Maximum daily mean, 10.7 mg/L, Jan. 9-11; minimum daily mean, 4.1 mg/L, Sept. 27,28.

SPECIFIC CONDUCTANCE TOP (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34800	15500	8180	12600	11600	21500	14700	29900	26700	23400	18800	8400
2	28700	14300	11500	11700	11100	21300	13900	30000	25100	22000	18800	7980
3	20600	13300	23300	12600	11500	17900	13800	29500	23700	21200	16200	8680
4	18400	12500	34200	12700	15100	16300	13700	29300	23200	22000	13600	9600
5	16400	13200	32500	12100	17400	13000	17800	30100	22600	20800	12200	8430
6	13500	16100	22600	10000	15800	14100	19600	30200	22000	18800	10400	6990
7	11900	13600	18700	11100	15700	21400	17300	36200	21400	18600	9170	8810
8	14100	12000	16100	11500	16100	29000	15600	40800	21100	20600	8390	10400
9	23700	10900	15000	11600	16000	30200	14900	37200	22400	20500	7700	9160
10	25900	10100	16100	14500	14800	34700	15100	---	24300	21800	6570	6100
11	21300	12300	18000	16400	14700	37600	15800	---	24700	21000	5400	4860
12	18900	17200	16800	17300	21200	33300	16400	---	24200	20200	4550	5250
13	18800	17800	17400	23400	21400	28100	15100	---	21100	20100	3980	8420
14	18800	16100	17500	28200	18100	24100	14400	---	20100	27300	3610	14500
15	17100	16200	14400	22500	15900	22200	17200	---	19100	28100	4760	24500
16	15600	16300	14800	18700	14900	19800	19000	---	18500	27100	7730	15100
17	15000	14300	10800	18300	14600	19400	21900	---	19000	27200	9060	6090
18	14400	14500	8460	19900	21100	21400	27700	---	23000	25500	8720	3690
19	13700	19000	8720	19000	26300	33600	23300	---	23900	23500	7620	2080
20	15100	24300	7680	15600	20700	38800	20600	---	24500	22500	6300	1170
21	14900	18400	8130	13200	18400	27300	19500	---	24300	24600	5870	1020
22	15100	15900	9080	15200	18300	22400	18000	---	23800	31000	7110	1030
23	18700	13000	13200	25500	22400	21300	17600	---	23000	29900	9940	1050
24	25400	12400	18000	26400	25400	21100	17100	27000	23500	22700	9540	1050
25	25900	12400	21000	23000	22800	19100	16200	27700	25000	20300	9100	1030
26	26200	10500	27900	24500	20500	18500	21900	28100	25900	19100	13500	1010
27	25700	8520	22800	21500	19800	19100	24500	28700	25700	17700	13100	999
28	21200	7250	17500	18300	20400	21700	23100	28200	26100	16300	11000	1040
29	18500	7040	25200	18000	---	22600	22300	26100	26300	16700	9450	3300
30	19200	6710	19400	15500	---	17500	28900	25400	25100	15600	9190	8060
31	17000	---	14600	12800	---	15800	---	26300	---	16100	9310	---
MEAN	19500	13700	17100	17200	17900	23400	18600	30000	23300	22000	9380	6330
MAX	34800	24300	34200	28200	26300	38800	28900	40800	26700	31000	18800	24500
MIN	11900	6710	7680	10000	11100	13000	13700	25400	18500	15600	3610	999
CAL YR 2000	MEAN 19200	MAX 44900	MIN 1090									
WTR YR 2001	MEAN 17800	MAX 40800	MIN 999									

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

SPECIFIC CONDUCTANCE MIDDLE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35400	15600	8330	---	---	21800	14700	30400	26800	23500	19000	8570
2	29700	14400	11900	---	11100	21600	13900	30500	25200	22100	19000	8100
3	21600	13400	24000	---	11600	18100	13800	29900	23700	21200	16300	8940
4	18900	12600	34500	---	---	16400	13800	29600	23300	22000	13700	9860
5	16600	13300	33400	---	---	13100	17900	30300	22600	20800	12200	8650
6	13600	16600	23800	---	15900	14100	19800	30500	22100	18900	10400	7150
7	12100	13800	19400	---	15800	21600	17400	36500	21500	18700	9180	9090
8	14200	12200	16200	14600	16300	29400	15600	41200	21200	20800	8400	10800
9	24200	11000	15100	11700	16100	30700	14900	37700	22500	20700	7720	9530
10	26400	10200	16300	14600	14900	35000	15200	34000	24500	22000	6580	6250
11	21600	12400	18200	16700	14800	38300	15900	30300	25000	21300	5400	4890
12	19100	16300	17000	17600	21500	33900	16600	27300	24400	20500	4560	5320
13	19100	18200	17500	23900	22000	28300	15300	25700	21300	20300	3980	8750
14	19100	16400	17700	29200	18400	24300	14500	27900	20200	27700	3620	14800
15	17300	16400	14400	23400	16300	22200	17500	28100	19200	29200	4830	24900
16	15900	16500	14900	19200	15100	19800	19400	26200	18600	27500	7990	15400
17	15200	14500	10900	18600	14800	19500	22400	29500	19100	27500	9330	6120
18	14700	14700	---	20100	21300	21500	28000	30700	23200	25700	8900	3690
19	14000	19200	---	19200	27000	33800	23900	29100	24100	23800	7700	2080
20	15500	24800	---	15800	21400	39300	21000	27700	24700	22500	6340	1170
21	15300	18700	---	13200	18800	27500	19600	27600	24500	24700	5940	1020
22	15500	16000	---	15300	18500	22500	18100	26300	23900	31300	7150	1030
23	19100	13000	---	26000	22600	21300	17700	26500	23200	30100	10200	1050
24	26000	12500	---	27000	25900	21100	17200	28000	23600	22800	9960	1050
25	26500	12600	---	23200	23100	19200	16300	27900	25200	20300	9300	1030
26	26600	10500	---	24800	20800	18600	22100	28200	26000	19100	14000	1010
27	26000	8560	---	21800	19900	19200	24800	28800	25900	17700	14000	999
28	21500	7280	---	18400	20600	21800	23400	28300	26200	16300	11500	1040
29	18700	7080	---	18200	---	22800	22700	26200	26500	16700	9590	3370
30	19400	6750	---	15700	---	17600	29300	25400	25300	15600	9300	8520
31	17100	---	---	13200	---	15800	---	26400	---	16100	9500	---
MEAN	19900	13800	18400	19200	18600	23600	18800	29400	23400	22200	9530	6470
MAX	35400	24800	34500	29200	27000	39300	29300	41200	26800	31300	19000	24900
MIN	12100	6750	8330	11700	11100	13100	13800	25400	18600	15600	3620	999

CAL YR 2000 MEAN 19800 MAX 45400 MIN 1100
WTR YR 2001 MEAN 18600 MAX 41200 MIN 999SPECIFIC CONDUCTANCE BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36000	15700	8480	12700	---	22100	14700	30800	26900	23700	19200	8670
2	31200	14600	12500	11800	---	21900	13900	30800	25300	22100	19200	8230
3	22600	13500	24600	13000	12400	18300	13800	30200	23800	21300	16400	9080
4	19400	12800	34800	---	---	16500	13800	29800	23300	22100	13700	10100
5	16900	13300	34000	12500	20800	13100	18000	30400	22700	20900	12300	8820
6	13800	17000	25400	10200	17200	14100	19900	30600	22100	19000	10400	7280
7	12200	14000	20200	11300	15900	21800	17500	36700	21600	18700	9190	9260
8	14500	12300	16600	11700	16300	29800	15700	41500	21300	20900	8410	11100
9	24600	11100	15200	11800	16100	31200	15000	38200	22600	20900	7750	9870
10	26800	10200	16400	14800	15000	35300	15300	34300	24700	22100	6590	6380
11	22000	12500	18300	17000	14900	38900	16100	30700	25300	21500	5400	4910
12	19400	17800	17100	17800	21700	34300	16700	27600	24600	20700	4560	5410
13	19300	18600	17700	24200	21700	28500	15400	25800	21500	20600	3980	8960
14	19400	16700	17900	30200	18800	24200	14700	28000	20400	27900	3630	15000
15	17700	16600	14500	24500	16600	22200	17900	28400	19400	29900	4910	25200
16	16200	16800	14900	19700	15200	19900	19900	26500	18600	28100	8190	15600
17	15600	14700	10900	18700	15000	19500	22800	29900	19100	27700	9540	6160
18	15100	14800	8520	20400	21500	21600	28400	31300	23400	26000	9130	3690
19	14400	19300	8770	19500	28100	33800	24300	29200	24300	23900	7810	2080
20	16000	25200	7720	15800	22200	39600	21200	27800	24900	22600	6390	1160
21	15700	18900	8240	13300	19100	27700	19900	27700	24700	24900	6000	1020
22	15900	16100	9220	15400	18600	22500	18200	26400	24000	31600	7220	1030
23	19400	13100	13400	26300	22800	21400	17800	26600	23200	30300	10300	1050
24	26500	12600	18700	28700	26200	21100	17300	28200	23600	22900	10300	1050
25	26900	12700	21600	23600	23500	19200	16300	28000	25300	20300	9470	1030
26	26800	10600	28900	25100	21000	18600	22200	28400	26200	19200	---	1010
27	26200	8600	24200	22100	20000	19000	25100	29000	26000	17800	---	991
28	21700	7290	18500	18500	20800	21900	23700	28400	26400	16400	10200	1030
29	18800	7130	26600	18300	---	22900	23000	26300	26700	16800	9730	3420
30	19600	6810	18600	16300	---	17700	29600	25500	25600	15500	9390	9050
31	17300	---	14800	---	---	15800	---	26500	---	16200	9630	---
MEAN	20300	14000	17700	18100	19300	23700	18900	29700	23600	22300	9270	6590
MAX	36000	25200	34800	30200	28100	39600	29600	41500	26900	31600	19200	25200
MIN	12200	6810	7720	10200	12400	13100	13800	25500	18600	15500	3630	991

CAL YR 2000 MEAN 20200 MAX 45600 MIN 1110
WTR YR 2001 MEAN 18700 MAX 41500 MIN 991

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.1	22.4	15.7	9.5	13.8	20.4	18.8	22.6	27.9	29.4	29.8	30.7
2	24.8	22.4	16.0	9.2	13.7	20.8	18.8	22.7	27.8	29.9	29.4	30.4
3	24.7	22.4	16.2	9.0	13.5	21.3	19.1	22.8	28.0	30.3	29.1	30.2
4	25.2	22.5	15.8	8.8	13.3	21.3	19.6	23.1	28.6	30.3	29.1	30.1
5	25.6	22.6	14.9	8.8	13.4	20.2	19.6	23.5	29.1	30.4	29.0	30.1
6	26.2	22.7	13.9	9.0	13.7	18.9	20.1	23.9	29.3	30.6	28.7	29.8
7	26.3	22.9	13.9	9.4	14.1	17.7	21.1	23.7	29.5	30.8	29.0	29.8
8	25.7	23.2	14.1	9.9	14.6	16.7	21.9	23.6	29.4	30.7	29.4	29.7
9	24.1	23.3	14.7	9.9	15.2	16.2	22.6	23.7	29.2	30.7	29.8	29.3
10	22.6	23.2	15.1	9.7	15.7	16.0	23.2	---	28.7	30.6	30.1	29.2
11	21.7	22.6	15.4	9.9	15.8	16.2	23.6	---	28.3	30.4	30.0	29.0
12	21.5	22.2	15.8	10.4	15.5	17.4	24.0	---	27.8	30.4	30.1	28.7
13	21.5	21.8	16.0	10.7	15.3	18.5	24.5	---	27.7	30.2	30.4	28.2
14	21.6	21.5	16.4	11.1	15.8	18.9	24.8	---	28.0	30.0	30.5	27.4
15	21.6	20.5	16.7	11.5	16.6	19.2	24.8	---	28.2	29.5	30.4	25.9
16	21.6	20.1	17.0	12.1	17.3	19.7	24.5	---	28.5	29.1	30.6	24.7
17	21.7	19.9	17.2	12.5	17.7	19.7	23.8	---	28.7	29.0	31.0	24.7
18	21.9	19.3	16.0	12.9	17.2	19.1	22.4	---	28.8	29.3	31.2	25.0
19	22.1	19.0	15.2	13.6	16.9	18.0	21.9	---	29.0	29.7	30.9	25.3
20	22.2	18.4	13.4	13.9	17.6	17.6	22.1	---	29.3	29.8	30.9	25.7
21	22.2	17.0	12.9	13.1	18.2	17.2	22.5	---	29.6	29.5	31.0	26.2
22	22.4	16.0	13.0	12.9	18.6	16.8	22.8	---	29.4	29.5	30.9	26.7
23	22.5	15.3	12.7	12.5	18.2	17.3	23.3	---	29.0	29.5	30.7	26.9
24	22.4	15.4	12.7	12.3	17.9	17.8	23.9	27.5	28.9	28.8	30.5	27.0
25	22.2	16.1	12.4	12.1	18.7	18.2	23.8	27.2	29.2	28.8	30.5	26.9
26	22.4	16.2	12.2	11.8	19.6	18.1	23.0	27.3	29.3	29.1	30.4	26.3
27	22.3	16.1	12.2	11.9	20.0	17.7	22.6	27.5	29.5	29.3	30.2	25.9
28	22.4	16.0	12.4	12.2	20.3	17.5	22.9	27.4	29.2	29.6	30.5	25.7
29	22.6	16.0	12.1	12.7	---	17.5	22.9	27.4	28.9	30.0	30.8	25.2
30	22.6	15.8	11.1	13.3	---	17.8	22.6	27.6	29.0	30.3	31.0	24.3
31	22.5	---	10.0	13.7	---	18.4	---	27.9	---	30.2	31.0	---
MEAN	23.0	19.8	14.3	11.3	16.4	18.3	22.4	25.3	28.8	29.9	30.2	27.5
MAX	26.3	23.3	17.2	13.9	20.3	21.3	24.8	27.9	29.6	30.8	31.2	30.7
MIN	21.5	15.3	10.0	8.8	13.3	16.0	18.8	22.6	27.7	28.8	28.7	24.3

CAL YR 2000 MEAN 22.1 MAX 30.8 MIN 10.0
WTR YR 2001 MEAN 22.2 MAX 31.2 MIN 8.8

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.2	22.3	15.6	---	13.9	20.4	18.8	22.6	27.9	29.4	29.8	30.7
2	24.9	22.3	15.9	---	13.7	20.7	18.8	22.7	27.8	29.9	29.4	30.4
3	24.9	22.3	16.1	---	13.5	21.3	19.1	22.8	28.0	30.3	29.1	30.3
4	25.3	22.4	15.7	---	13.3	21.3	19.6	23.1	28.6	30.3	29.1	30.1
5	25.7	22.5	14.9	---	13.5	20.2	19.6	23.5	29.1	30.4	29.0	30.1
6	26.3	22.6	13.9	---	13.7	18.9	20.1	24.0	29.3	30.6	28.7	29.8
7	26.4	22.8	13.8	---	14.1	17.7	21.1	23.7	29.6	30.8	29.0	29.8
8	25.8	23.1	14.0	10.0	14.6	16.6	21.9	23.6	29.4	30.7	29.4	29.7
9	24.2	23.2	14.6	9.9	15.2	16.2	22.6	23.7	29.2	30.7	29.8	29.4
10	22.7	23.1	15.0	9.7	15.7	16.0	23.2	24.0	28.7	30.6	30.1	29.2
11	21.7	22.5	15.3	9.9	15.8	16.1	23.6	24.5	28.3	30.4	30.0	29.0
12	21.4	22.0	15.7	10.4	15.5	17.3	24.0	24.8	27.8	30.4	30.1	28.7
13	21.4	21.7	15.9	10.7	15.3	18.5	24.5	25.0	27.7	30.2	30.4	28.3
14	21.5	21.4	16.3	11.1	15.8	18.9	24.8	25.3	28.1	30.1	30.5	27.5
15	21.5	20.4	16.6	11.5	16.6	19.2	24.7	25.7	28.2	29.6	30.4	26.0
16	21.5	20.0	17.0	12.1	17.2	19.7	24.5	26.2	28.5	29.2	30.6	24.8
17	21.6	19.8	17.1	12.4	17.7	19.7	23.8	26.6	28.7	29.0	31.0	24.7
18	21.8	19.2	---	12.9	17.1	19.1	22.4	27.0	28.8	29.3	31.2	25.0
19	22.0	18.9	---	13.6	16.8	18.0	21.9	27.0	29.0	29.7	30.9	25.3
20	22.1	18.3	---	13.9	17.5	17.6	22.1	27.0	29.3	29.8	30.9	25.7
21	22.1	17.0	---	13.1	18.1	17.2	22.5	27.2	29.6	29.5	31.0	26.2
22	22.3	15.9	---	12.9	18.6	16.8	22.8	27.5	29.4	29.5	30.9	26.7
23	22.4	15.2	---	12.5	18.2	17.3	23.3	27.6	29.1	29.5	30.7	26.9
24	22.3	15.3	---	12.3	17.9	17.8	23.9	27.4	29.0	28.8	30.5	27.0
25	22.2	16.0	---	12.1	18.7	18.2	23.8	27.2	29.2	28.8	30.5	26.9
26	22.3	16.1	---	11.8	19.5	18.1	23.0	27.3	29.3	29.1	30.4	26.3
27	22.3	16.0	---	11.9	20.0	17.7	22.6	27.5	29.5	29.3	30.3	25.9
28	22.3	15.9	---	12.2	20.3	17.5	22.8	27.5	29.2	29.6	30.5	25.7
29	22.5	15.9	---	12.7	---	17.5	22.9	27.4	28.9	30.0	30.8	25.3
30	22.5	15.7	---	13.3	---	17.8	22.6	27.6	29.0	30.3	31.0	24.3
31	22.4	---	---	13.6	---	18.4	---	27.9	---	30.2	31.0	---
MEAN	23.0	19.7	15.5	11.9	16.4	18.3	22.4	25.6	28.8	29.9	30.2	27.5
MAX	26.4	23.2	17.1	13.9	20.3	21.3	24.8	27.9	29.6	30.8	31.2	30.7
MIN	21.4	15.2	13.8	9.7	13.3	16.0	18.8	22.6	27.7	28.8	28.7	24.3

CAL YR 2000 MEAN 22.8 MAX 30.8 MIN 11.0
WTR YR 2001 MEAN 23.0 MAX 31.2 MIN 9.7

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.2	22.3	15.7	9.3	---	20.4	18.8	22.6	27.9	29.4	29.8	30.7
2	24.9	22.3	16.0	8.9	---	20.7	18.8	22.7	27.8	29.8	29.4	30.4
3	24.8	22.3	16.2	8.9	13.5	21.3	19.1	22.8	28.0	30.2	29.1	30.2
4	25.2	22.5	15.8	---	---	21.3	19.6	23.1	28.5	30.3	29.1	30.1
5	25.6	22.6	15.1	8.6	13.5	20.2	19.5	23.5	29.1	30.4	29.0	30.1
6	26.2	22.7	14.1	8.8	13.7	18.8	20.1	23.9	29.3	30.6	28.7	29.8
7	26.2	22.9	13.9	9.2	14.1	17.6	21.1	23.7	29.5	30.7	29.0	29.8
8	25.7	23.2	14.2	9.9	14.7	16.6	21.9	23.6	29.4	30.7	29.4	29.7
9	24.1	23.3	14.7	9.9	15.4	16.2	22.6	23.7	29.2	30.7	29.8	29.4
10	22.6	23.2	15.1	9.7	15.8	15.9	23.2	24.0	28.7	30.6	30.0	29.2
11	21.6	22.6	15.4	9.9	15.8	16.1	23.6	24.5	28.3	30.4	30.0	29.0
12	21.4	22.1	15.8	10.4	15.4	17.2	23.9	24.8	27.8	30.4	30.1	28.7
13	21.4	21.8	16.0	10.7	15.3	18.5	24.5	25.0	27.7	30.2	30.3	28.3
14	21.5	21.5	16.3	11.1	15.8	18.9	24.8	25.2	28.1	30.1	30.5	27.5
15	21.5	20.4	16.6	11.5	16.6	19.2	24.7	25.7	28.2	29.6	30.4	26.0
16	21.5	20.0	17.0	12.1	17.3	19.7	24.4	26.2	28.5	29.2	30.5	24.8
17	21.6	19.8	17.1	12.5	17.7	19.7	23.8	26.5	28.7	29.1	30.9	24.7
18	21.8	19.2	15.8	12.9	17.1	19.1	22.4	26.9	28.8	29.3	31.1	25.0
19	22.0	18.9	15.0	13.7	16.8	18.0	21.9	27.0	29.0	29.6	30.9	25.3
20	22.1	18.3	13.1	13.9	17.5	17.6	22.1	27.0	29.3	29.8	30.9	25.7
21	22.1	17.0	12.8	13.0	18.1	17.2	22.4	27.1	29.6	29.5	31.0	26.2
22	22.4	15.9	12.8	12.9	18.6	16.8	22.8	27.5	29.4	29.5	30.9	26.7
23	22.4	15.2	12.6	12.5	18.2	17.2	23.3	27.6	29.0	29.5	30.7	26.9
24	22.3	15.3	12.6	12.3	17.9	17.8	23.9	27.4	28.9	28.8	30.5	27.0
25	22.2	16.1	12.3	12.1	18.7	18.2	23.8	27.2	29.2	28.8	30.5	26.7
26	22.3	16.3	12.1	11.8	19.5	18.1	23.0	27.3	29.3	29.1	---	---
27	22.3	16.1	12.1	11.9	20.0	17.7	22.6	27.4	29.5	29.3	---	25.8
28	22.3	16.0	12.3	12.3	20.3	17.5	22.8	27.4	29.2	29.6	30.6	25.7
29	22.5	16.0	12.0	12.8	---	17.5	22.9	27.4	28.9	30.0	30.8	25.2
30	22.5	15.8	10.7	13.3	---	17.8	22.6	27.5	29.0	30.3	31.0	24.3
31	22.4	---	9.7	---	---	18.4	---	27.9	---	30.2	31.0	---
MEAN	23.0	19.7	14.2	11.3	16.7	18.3	22.4	25.6	28.8	29.9	30.2	27.5
MAX	26.2	23.3	17.1	13.9	20.3	21.3	24.8	27.9	29.6	30.7	31.1	30.7
MIN	21.4	15.2	9.7	8.6	13.5	15.9	18.8	22.6	27.7	28.8	28.7	24.3

CAL YR 2000 MEAN 22.6 MAX 30.8 MIN 9.7
WTR YR 2001 MEAN 22.4 MAX 31.1 MIN 8.6

OXYGEN DISSOLVED TOP (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	8.0	8.9	10.7	9.1	8.6	8.0	7.3	6.1	6.3	5.5	5.8
2	5.7	8.0	8.6	10.7	9.0	8.5	8.0	7.5	6.2	6.5	5.6	5.7
3	6.0	7.9	7.9	10.7	9.0	8.4	8.2	7.6	6.3	6.7	6.2	5.4
4	5.9	7.8	7.4	10.7	8.9	8.3	8.2	7.6	6.4	6.3	7.0	5.3
5	5.9	7.6	8.4	10.8	9.0	8.4	7.7	7.5	6.4	6.3	7.0	5.5
6	6.1	7.5	10.4	11.0	9.1	8.5	7.8	7.5	6.3	6.4	7.0	5.3
7	6.1	7.8	10.7	10.8	9.2	8.4	8.1	6.9	6.5	6.3	7.3	4.8
8	5.9	7.8	10.8	10.8	9.2	8.5	8.3	6.8	6.2	6.1	7.5	4.6
9	6.2	8.0	10.7	10.7	9.3	8.7	8.4	7.3	6.0	6.0	7.5	4.9
10	6.5	8.0	10.4	10.8	9.3	8.5	8.4	---	5.9	5.9	7.3	5.3
11	6.9	7.8	10.2	10.8	9.2	8.6	8.1	---	5.9	6.0	6.9	5.3
12	7.1	7.5	10.0	10.7	9.0	8.8	7.9	---	6.0	6.2	6.6	5.2
13	7.1	7.5	9.8	10.3	8.9	8.9	7.7	---	6.3	6.2	6.5	4.9
14	7.2	7.7	9.7	10.0	9.7	8.8	7.4	---	6.6	6.0	6.3	4.8
15	7.2	7.9	9.7	10.1	9.9	8.6	7.1	---	6.7	6.5	6.0	5.4
16	7.3	7.9	9.5	10.1	9.9	8.3	7.0	---	6.9	6.6	5.7	6.2
17	7.2	8.1	9.7	9.9	9.8	8.1	7.1	---	6.9	6.5	5.9	6.5
18	7.1	8.1	9.8	9.6	9.5	7.8	7.2	---	6.5	6.6	6.0	6.2
19	7.1	7.9	9.8	9.5	9.4	7.5	8.0	---	6.8	6.6	6.1	5.9
20	7.0	7.8	10.1	9.2	9.6	7.7	8.3	---	7.0	6.3	6.2	5.6
21	7.1	8.3	10.2	9.1	9.6	8.1	8.2	---	7.1	5.9	6.1	5.4
22	7.1	8.9	10.2	9.0	9.5	8.3	7.9	---	6.8	5.8	5.7	5.3
23	7.1	9.1	10.1	8.7	9.1	8.3	7.7	---	6.5	6.0	5.6	5.3
24	7.3	9.1	10.1	8.8	8.8	8.3	7.5	6.3	6.3	6.3	5.8	5.2
25	7.7	9.1	9.9	8.9	9.1	8.2	7.2	6.3	6.4	6.4	5.9	5.2
26	7.9	9.1	9.8	8.9	9.1	8.1	6.8	6.2	6.5	6.4	5.6	5.1
27	8.0	9.2	10.1	9.1	9.0	8.0	7.0	6.2	6.4	6.5	6.0	4.7
28	8.2	9.2	10.4	9.3	8.8	7.8	7.3	6.2	6.1	6.6	6.4	4.7
29	8.1	9.1	9.7	9.3	---	7.8	7.3	6.1	5.8	6.5	6.5	5.0
30	8.0	9.0	10.0	9.3	---	8.0	7.0	5.9	5.9	6.5	6.2	5.7
31	8.1	---	10.5	9.2	---	8.1	---	5.9	---	6.0	6.0	---
MEAN	7.0	8.2	9.8	9.9	9.2	8.3	7.7	6.8	6.4	6.3	6.3	5.3
MAX	8.2	9.2	10.8	11.0	9.9	8.9	8.4	7.6	7.1	6.7	7.5	6.5
MIN	5.4	7.5	7.4	8.7	8.8	7.5	6.8	5.9	5.8	5.8	5.5	4.6

CAL YR 2000 MEAN 7.7 MAX 11.5 MIN 4.0
WTR YR 2001 MEAN 7.6 MAX 11.0 MIN 4.6

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL--Continued

OXYGEN DISSOLVED MIDDLE (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	7.9	9.0	---	9.0	8.5	7.9	7.2	6.0	6.2	5.4	5.7
2	5.7	7.8	8.7	---	8.8	8.4	7.9	7.4	6.2	6.5	5.5	5.6
3	5.9	7.8	8.0	---	8.9	8.4	8.0	7.5	6.3	6.6	6.1	5.3
4	6.0	7.7	7.6	---	8.8	8.2	8.0	7.6	6.3	6.2	6.9	5.1
5	6.0	7.6	8.5	---	8.7	8.4	7.6	7.5	6.4	6.2	6.9	5.3
6	6.2	7.4	10.2	---	9.0	8.4	7.7	7.4	6.3	6.3	6.9	5.3
7	6.3	7.8	10.4	---	9.1	8.3	8.0	6.9	6.4	6.2	7.2	4.6
8	6.0	7.8	10.6	10.5	9.1	8.4	8.2	6.7	6.2	6.0	7.4	4.5
9	6.1	8.0	10.6	10.7	9.2	8.5	8.2	7.2	5.9	5.9	7.3	4.8
10	6.4	8.1	10.3	10.7	9.2	8.4	8.2	7.6	5.8	5.7	7.1	5.1
11	6.7	7.8	10.0	10.7	9.1	8.5	8.0	7.7	5.9	5.8	6.8	5.3
12	6.9	7.5	9.8	10.6	8.8	8.7	7.8	7.5	5.9	6.1	6.5	5.2
13	7.0	7.5	9.7	10.2	8.8	8.8	7.6	7.1	6.2	6.1	6.4	4.8
14	7.0	7.7	9.5	9.9	9.6	8.7	7.3	6.9	6.5	5.9	6.2	4.7
15	7.1	7.8	9.4	10.0	9.9	8.5	7.0	7.0	6.7	6.3	5.9	5.3
16	7.1	7.9	9.3	10.0	9.9	8.2	6.9	7.1	6.9	6.4	5.6	6.1
17	7.0	8.1	9.5	9.8	9.7	8.0	7.0	6.8	6.8	6.3	5.8	6.5
18	7.0	8.2	---	9.5	9.4	7.8	7.1	6.9	6.4	6.5	5.9	6.1
19	7.0	7.9	---	9.4	9.3	7.4	7.8	6.9	6.7	6.5	5.9	5.9
20	6.9	7.9	---	9.1	9.5	7.6	8.2	6.7	6.9	6.3	6.1	5.6
21	7.0	8.5	---	9.1	9.6	8.0	8.1	6.4	6.9	5.8	6.0	5.4
22	7.0	9.1	---	8.9	9.5	8.2	7.8	6.5	6.8	5.6	5.6	5.4
23	7.0	9.3	---	8.6	9.0	8.2	7.6	6.4	6.4	5.9	5.5	5.3
24	7.1	9.3	---	8.6	8.8	8.2	7.4	6.2	6.3	6.2	5.7	5.2
25	7.4	9.3	---	8.8	9.0	8.1	7.1	6.2	6.2	6.3	5.7	5.2
26	7.8	9.3	---	8.8	9.1	8.0	6.7	6.2	6.3	6.3	5.4	5.1
27	7.9	9.3	---	9.0	9.0	7.9	6.9	6.1	6.3	6.4	5.8	4.8
28	8.0	9.3	---	9.1	8.8	7.7	7.2	6.1	6.0	6.5	6.2	4.7
29	8.0	9.3	---	9.1	---	7.7	7.2	6.0	5.7	6.4	6.4	5.0
30	7.9	9.2	---	9.2	---	7.9	6.9	5.9	5.8	6.4	6.1	5.6
31	7.9	---	---	9.0	---	7.9	---	5.9	---	5.9	5.9	---
MEAN	6.9	8.3	9.5	9.6	9.2	8.2	7.6	6.8	6.3	6.2	6.2	5.3
MAX	8.0	9.3	10.6	10.7	9.9	8.8	8.2	7.7	6.9	6.6	7.4	6.5
MIN	5.4	7.4	7.6	8.6	8.7	7.4	6.7	5.9	5.7	5.6	5.4	4.5

CAL YR 2000 MEAN 7.4 MAX 11.9 MIN 4.1
WTR YR 2001 MEAN 7.4 MAX 10.7 MIN 4.5

OXYGEN DISSOLVED BOTTOM (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	7.9	9.0	10.1	---	8.4	7.8	7.1	5.9	6.1	5.3	5.5
2	5.4	7.8	8.6	10.1	---	8.2	7.8	7.3	6.0	6.3	5.4	5.4
3	5.8	7.8	7.9	10.1	8.4	8.2	7.9	7.4	6.1	6.4	5.9	5.1
4	5.9	7.7	7.7	---	---	8.1	7.8	7.4	6.2	6.1	6.8	5.0
5	5.9	7.7	8.4	10.3	8.3	8.2	7.5	7.3	6.2	6.0	6.8	5.2
6	6.2	7.4	9.8	10.4	8.6	8.3	7.5	7.3	6.1	6.2	7.0	5.1
7	6.2	7.8	10.2	10.3	8.8	8.2	7.8	6.8	6.2	6.1	7.2	4.5
8	6.0	7.9	10.4	10.5	8.7	8.2	8.0	6.6	6.0	5.9	7.2	4.3
9	6.0	8.0	10.3	10.7	8.8	8.4	8.0	7.0	5.8	5.7	7.2	4.7
10	6.2	8.1	10.1	10.7	8.8	8.3	8.0	7.4	5.7	5.6	7.1	5.1
11	6.6	7.8	9.8	10.7	8.7	8.3	7.8	7.6	5.7	5.7	6.8	5.2
12	6.8	7.4	9.6	10.6	8.5	8.5	7.6	7.4	5.8	5.9	6.5	5.1
13	6.9	7.4	9.5	10.2	8.5	8.6	7.4	7.0	6.1	5.9	6.4	4.7
14	6.9	7.7	9.3	9.8	9.2	8.5	7.1	6.8	6.4	5.7	6.2	4.6
15	7.0	7.9	9.4	9.9	9.3	8.3	6.8	6.9	6.5	6.1	5.9	5.2
16	7.0	7.9	9.1	9.8	9.2	8.1	6.7	7.0	6.7	6.2	5.6	5.9
17	7.0	8.1	9.3	9.5	9.4	7.9	6.8	6.6	6.6	6.2	5.7	6.3
18	6.9	8.2	9.3	9.3	9.2	7.6	6.8	6.7	6.3	6.3	5.9	6.1
19	6.9	7.9	9.1	9.2	8.9	7.3	7.6	6.8	6.6	6.3	6.0	5.8
20	6.9	7.8	9.5	8.9	9.3	7.4	8.0	6.6	6.7	6.1	6.1	5.5
21	6.9	8.5	9.5	8.8	9.4	7.9	7.9	6.3	6.7	5.7	5.9	5.4
22	7.0	9.1	9.5	8.7	9.4	8.0	7.6	6.3	6.6	5.5	5.7	5.3
23	7.0	9.4	9.6	8.4	8.9	8.0	7.4	6.2	6.3	5.7	5.5	5.2
24	7.0	9.3	9.4	8.4	8.7	8.0	7.2	6.1	6.1	6.1	5.7	5.2
25	7.4	9.3	9.3	8.6	8.9	8.0	7.0	6.1	6.1	6.2	5.8	5.1
26	7.8	9.3	9.1	8.6	8.9	7.8	6.6	6.0	6.2	6.2	---	4.2
27	7.9	9.3	9.5	8.8	8.8	7.7	6.7	6.0	6.2	6.3	---	4.1
28	8.0	9.3	9.7	8.9	8.6	7.6	7.0	6.0	5.9	6.4	6.3	4.1
29	8.0	9.3	9.0	8.8	---	7.6	7.0	5.9	5.6	6.3	6.0	4.4
30	7.9	9.2	9.3	8.9	---	7.7	6.8	5.7	5.7	6.4	5.8	5.0
31	7.9	---	9.8	---	---	7.8	---	5.7	---	5.8	5.6	---
MEAN	6.8	8.3	9.4	9.6	8.9	8.0	7.4	6.7	6.2	6.0	6.2	5.1
MAX	8.0	9.4	10.4	10.7	9.4	8.6	8.0	7.6	6.7	6.4	7.2	6.3
MIN	5.3	7.4	7.7	8.4	8.3	7.3	6.6	5.7	5.6	5.5	5.3	4.1

CAL YR 2000 MEAN 7.4 MAX 11.3 MIN 4.2
WTR YR 2001 MEAN 7.3 MAX 10.7 MIN 4.1

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

302309081333001 ST. JOHNS RIVER AT DAMES POINT BRIDGE AT JACKSONVILLE, FL--Continued

SPECIFIC CONDUCTANCE MIDDLE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49000	---	---	43200	28900	41600	33500	---	42700	44800	---	---
2	47300	35500	---	43800	30700	41200	35200	---	41300	43400	---	---
3	---	34500	---	47200	32900	37400	35200	---	---	42600	38300	---
4	41900	34200	---	47000	38100	35300	35600	---	40000	44700	34400	38800
5	38400	36700	---	47300	39200	---	43300	---	40200	42000	33200	36100
6	32900	40800	---	43600	37000	35600	43700	---	39900	39400	29500	34500
7	31800	36900	---	48100	37800	44000	41400	---	---	40200	27500	39600
8	39800	34200	---	49100	38500	---	39400	---	---	44900	29900	40700
9	45100	33700	---	---	38500	47800	---	---	42000	42700	30900	38800
10	44400	33000	---	41900	36900	49100	---	49200	44400	43200	27300	---
11	41700	40600	---	42900	37200	50200	42200	47900	43700	42800	25100	---
12	40000	45200	---	42800	43200	49500	43200	45800	42800	41600	24500	35900
13	40400	45100	---	---	42200	47000	40700	43600	39500	41600	26200	40300
14	40600	43100	48700	48500	40200	42300	39800	45600	38300	47400	29700	40100
15	39500	43800	45100	46600	38300	41300	45300	45600	37000	48000	36400	47700
16	38500	44400	46900	43100	36400	37500	44000	43300	37600	46900	40500	38900
17	38900	41000	38600	40800	34800	37700	45000	45800	39300	47100	39600	25500
18	38900	41500	34600	42800	41500	41100	48000	46500	44500	---	38100	16000
19	38500	46200	41100	42000	44900	50100	46800	45000	45000	45100	35200	12300
20	39400	49100	36900	36000	42600	51100	45100	43500	45600	44200	34500	8490
21	38700	44800	41000	32600	39500	---	44000	---	45800	47000	36300	8240
22	38800	42100	43000	37800	38700	39400	42400	42500	44900	50400	39200	10300
23	41300	39800	48800	46100	42100	38400	42300	43100	44600	49800	41200	14200
24	45700	---	52300	45500	43900	39700	42500	44700	---	43400	39600	---
25	45400	---	53200	42800	42600	36200	41100	44200	47000	---	39500	14800
26	45000	---	56300	43900	40300	37100	49000	44500	47000	---	45000	14600
27	45000	---	54900	41800	39500	39400	49600	44900	46900	---	44700	20000
28	42500	---	52600	38500	40800	43800	48500	44000	46800	---	40200	24500
29	40500	---	56200	38700	---	44500	48100	41400	47100	---	37200	34900
30	41000	---	51600	35000	---	---	51700	---	46400	---	37400	41300
31	38400	---	45400	29900	---	34700	---	---	---	---	37100	---
MEAN	41000	40300	47100	42400	38800	42000	43100	44800	43100	44500	35100	28200
MAX	49000	49100	56300	49100	44900	51100	51700	49200	47100	50400	45000	47700
MIN	31800	33000	34600	29900	28900	34700	33500	41400	37000	39400	24500	8240
CAL YR 2000	MEAN 40600	MAX 56300	MIN 21400									
WTR YR 2001	MEAN 40600	MAX 56300	MIN 8240									

SPECIFIC CONDUCTANCE BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49100	---	---	42400	30100	42500	35700	44600	42400	45400	---	---
2	47500	38000	---	43000	31600	42400	37500	46000	41200	44100	---	---
3	---	37500	---	46600	33600	38600	37300	45700	39900	43300	39200	---
4	42400	36800	---	46500	39100	36700	38300	45400	40100	45100	36100	---
5	39300	39300	---	46000	40000	---	44900	45800	40300	42700	40600	---
6	34100	43300	---	42800	37900	37400	45500	45800	40100	40200	33400	---
7	33300	37900	---	47400	38500	45200	43000	47300	40100	41200	30600	---
8	41800	34900	---	48300	39200	---	41200	47700	40500	45600	32000	---
9	46600	34900	---	---	39100	48600	---	---	42200	43300	32900	---
10	45100	34200	---	42400	37500	50000	---	46300	44500	44000	29800	---
11	42200	41600	---	43500	38100	51000	36700	45200	43800	43300	27900	---
12	40700	45700	---	43300	43700	50300	37700	43400	43000	42200	28000	---
13	41500	45400	---	---	43000	47900	35100	41600	---	42200	30200	---
14	41800	43500	48300	48800	40900	44000	34200	43500	38800	48100	32200	---
15	40900	44300	44500	46900	39200	42600	40000	43700	37500	48700	40000	---
16	39900	44800	46600	43600	37300	38900	38500	41500	38200	47300	43600	---
17	40300	41800	38200	42200	35600	39300	39600	44100	39900	47400	42400	---
18	40500	42000	34600	43500	42700	42800	42300	44900	45600	---	40200	---
19	39900	46700	40600	42700	45600	51400	41100	43500	45500	45600	37100	12500
20	41500	49000	36400	36800	43300	52300	39300	42200	46200	45000	38300	---
21	40400	44700	41100	33500	40500	---	38300	---	46300	47600	40000	---
22	40400	42600	42500	38900	39600	40600	36900	41400	45400	50800	42800	---
23	43000	40300	48600	46800	43100	39900	36900	42100	45200	50000	45100	---
24	47100	---	51600	46000	44800	41400	37100	43700	---	43700	43800	---
25	46700	---	52100	43100	43600	37800	35600	43300	47600	---	43900	---
26	46500	---	55100	44300	41300	38700	43200	43900	47500	---	49200	18200
27	46700	---	53700	42500	40500	41200	43700	44300	47200	---	48900	24400
28	44100	---	51500	39200	41900	45400	42800	43500	47200	---	45100	26400
29	42500	---	55000	39300	---	46100	42300	40900	47500	---	41900	37100
30	43000	---	50500	35600	---	---	45700	---	46900	---	42300	42100
31	40400	---	44600	30700	---	37100	---	---	---	---	---	---
MEAN	42300	41300	46400	42600	39700	43300	39700	44100	43200	45100	38500	26800
MAX	49100	49000	55100	48800	45600	52300	45700	47700	47600	50800	49200	42100
MIN	33300	34200	34600	30700	30100	36700	34200	40900	37500	40200	27900	12500
CAL YR 2000	MEAN 41300	MAX 55100	MIN 23100									
WTR YR 2001	MEAN 41900	MAX 55100	MIN 12500									

302309081333001 ST. JOHNS RIVER AT DAMES POINT BRIDGE AT JACKSONVILLE, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.9	---	---	10.5	13.7	19.1	18.4	22.0	27.3	29.1	---	---
2	24.8	22.6	---	10.1	13.5	19.4	18.1	22.2	27.2	29.4	---	---
3	---	22.6	---	9.8	---	20.1	18.3	22.4	27.5	29.7	29.1	---
4	25.4	22.7	---	9.6	---	20.2	18.7	22.8	27.9	29.8	29.2	---
5	25.7	22.7	---	9.6	---	19.5	18.4	23.1	28.2	30.0	29.1	---
6	26.1	22.6	---	9.8	---	17.0	18.9	23.6	28.5	30.3	28.9	---
7	26.0	22.8	---	10.0	---	14.8	19.8	23.3	28.7	30.4	29.1	---
8	25.5	22.9	---	10.6	---	---	20.6	23.0	28.8	30.3	29.5	---
9	23.5	23.0	---	10.3	---	14.7	---	---	28.6	30.4	29.9	---
10	22.1	22.9	---	10.0	---	14.9	---	23.8	28.1	30.4	30.1	---
11	21.6	22.0	---	10.4	---	15.5	21.9	24.4	27.8	30.1	30.1	---
12	21.6	21.5	---	10.9	---	16.4	22.2	24.7	27.6	30.2	30.1	---
13	21.5	21.5	---	---	14.3	17.5	23.0	25.0	27.8	30.1	30.2	---
14	21.6	21.4	16.2	11.4	14.9	18.0	23.4	25.2	---	29.3	30.1	---
15	21.7	20.3	16.5	11.9	15.8	18.6	23.0	25.4	---	29.0	29.5	---
16	21.8	20.1	16.8	12.4	16.5	19.2	22.7	25.9	28.6	28.9	29.3	---
17	22.0	20.2	16.9	12.7	16.9	19.1	22.0	25.8	28.4	28.7	---	---
18	22.2	19.6	15.8	13.0	15.7	18.1	20.2	25.7	28.2	---	29.9	---
19	22.5	19.1	14.8	13.7	15.0	16.6	20.2	25.9	28.3	29.3	29.7	25.4
20	22.6	18.2	13.5	13.9	15.7	16.3	20.7	26.0	28.7	29.4	29.8	25.7
21	22.6	17.5	13.1	12.9	16.5	---	21.2	---	29.0	28.9	---	26.3
22	22.7	16.4	13.0	12.2	17.2	16.6	21.8	26.4	28.9	---	29.7	26.6
23	---	16.0	12.7	11.4	16.5	16.8	22.3	26.4	28.6	29.0	29.5	26.8
24	---	---	12.5	11.4	16.2	17.2	22.8	26.1	---	28.7	29.7	---
25	22.0	---	12.2	11.5	17.1	17.5	22.8	26.2	28.8	---	30.0	26.9
26	22.1	---	11.8	11.3	18.0	17.4	21.4	26.4	29.1	---	29.6	26.6
27	22.1	---	12.0	11.7	18.7	16.9	21.3	26.8	29.2	---	---	26.2
28	22.2	---	12.5	12.2	19.0	16.7	21.9	27.0	28.9	---	29.9	26.0
29	22.5	---	11.7	12.7	---	16.7	22.2	27.0	28.6	---	30.2	25.3
30	22.6	---	11.3	13.2	---	---	22.0	---	28.7	---	30.3	24.3
31	22.6	---	10.7	13.6	---	18.1	---	---	---	---	---	---
MEAN	23.0	20.8	13.6	11.5	16.2	17.5	21.1	24.9	28.4	29.6	29.7	26.0
MAX	26.1	23.0	16.9	13.9	19.0	20.2	23.4	27.0	29.2	30.4	30.3	26.9
MIN	21.5	16.0	10.7	9.6	13.5	14.7	18.1	22.0	27.2	28.7	28.9	24.3

CAL YR 2000 MEAN 22.8 MAX 29.9 MIN 10.7
WTR YR 2001 MEAN 21.8 MAX 30.4 MIN 9.6

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.9	---	---	10.4	13.6	18.9	18.4	---	27.2	29.0	---	---
2	24.8	22.6	---	10.0	13.4	19.3	17.9	---	27.1	29.4	---	---
3	---	22.6	---	9.7	13.1	20.0	18.2	---	27.4	29.6	29.0	---
4	25.4	22.7	---	9.5	12.6	20.0	18.6	---	27.8	29.7	29.2	29.1
5	25.7	22.7	---	9.6	12.7	---	18.3	---	28.1	30.0	29.0	29.4
6	26.1	22.6	---	9.8	13.0	16.7	18.8	---	28.4	30.2	28.8	29.5
7	26.0	22.7	---	10.0	13.3	14.7	19.8	---	30.3	30.3	---	29.3
8	25.4	22.9	---	10.6	13.9	---	20.5	---	---	30.1	29.4	29.4
9	23.6	23.0	---	10.2	14.5	14.7	---	---	28.6	30.3	29.8	29.4
10	22.1	22.9	---	9.9	15.2	14.8	---	23.8	28.0	30.3	30.0	29.3
11	21.5	22.0	---	10.4	15.1	15.5	21.7	24.3	27.7	30.1	30.0	29.2
12	21.5	21.5	---	10.9	14.2	16.4	22.0	24.6	27.6	30.2	30.0	28.8
13	21.5	21.5	---	---	14.2	17.5	22.8	24.9	27.8	30.1	30.0	28.2
14	21.6	21.3	16.2	11.4	14.8	18.0	23.1	25.0	28.0	29.3	29.9	27.1
15	21.7	20.3	16.5	11.8	15.7	18.6	22.2	25.2	28.3	29.1	29.2	25.6
16	21.8	20.1	16.8	12.5	16.4	19.2	22.4	25.8	28.5	28.9	29.0	24.8
17	22.0	20.2	16.8	12.7	16.7	18.9	21.8	25.5	28.3	28.7	29.4	25.0
18	22.2	19.6	15.6	13.0	15.3	17.9	20.0	25.5	28.1	---	29.8	25.1
19	22.5	19.1	14.7	13.8	14.9	16.4	20.1	25.8	28.3	29.2	29.6	25.4
20	22.6	18.2	13.2	13.8	15.7	16.3	20.6	25.9	28.6	29.4	29.7	25.8
21	22.6	17.4	12.9	12.8	16.5	---	21.1	---	28.9	28.9	29.6	26.3
22	22.7	16.3	13.0	12.0	17.1	16.5	21.7	26.3	28.8	28.7	29.4	26.6
23	22.6	15.9	12.7	11.3	16.4	16.7	22.2	26.3	28.6	29.0	29.4	26.7
24	22.2	---	12.5	11.4	16.1	17.1	22.7	26.0	---	28.7	29.6	---
25	22.0	---	12.2	11.5	17.1	17.5	22.7	26.1	28.7	---	29.8	26.8
26	22.1	---	11.8	11.2	18.0	17.3	21.1	26.4	29.0	---	29.4	26.6
27	22.0	---	12.0	11.6	18.6	16.8	21.1	26.7	29.2	---	29.4	26.3
28	22.2	---	12.5	12.1	18.8	16.6	21.7	26.9	28.9	---	29.8	26.1
29	22.4	---	11.5	12.6	---	16.7	22.1	27.0	28.6	---	30.1	25.4
30	22.5	---	11.2	13.2	---	---	21.9	---	28.6	---	30.1	24.3
31	22.6	---	10.6	13.6	---	18.0	---	---	---	---	---	---
MEAN	23.0	20.8	13.5	11.4	15.2	17.3	20.9	25.7	28.3	29.5	29.6	27.1
MAX	26.1	23.0	16.8	13.8	18.8	20.0	23.1	27.0	29.2	30.3	30.1	29.5
MIN	21.5	15.9	10.6	9.5	12.6	14.7	17.9	23.8	27.1	28.7	28.8	24.3

CAL YR 2000 MEAN 22.7 MAX 29.8 MIN 10.6
WTR YR 2001 MEAN 21.8 MAX 30.3 MIN 9.5

ST. JOHNS RIVER BASIN BELOW OCKLAWAHA RIVER

02246828 PABLO CREEK AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'07", long 81°28'42", in land grant 39, T.3 S., R.28 E., Duval County, Hydrologic Unit 03080103, near right bank on upstream side of 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 mi².

PERIOD OF RECORD.--March 1974 to current year.

REVISED RECORDS.--WDR FL-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 0.14 ft above sea level.

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e95	17	22	e19	e17	e10	e15	e7.0	e8.0	13	12	e25
2	e77	16	20	e18	e16	e10	e14	e7.0	e8.0	9.2	17	e40
3	e62	16	20	e18	e16	e12	e13	e7.0	e7.5	7.0	23	e50
4	e54	16	18	e17	e15	e13	e12	e7.0	e7.0	6.0	25	e45
5	e47	15	17	e17	e15	e14	e12	e7.0	e8.0	5.3	22	e42
6	e45	15	16	e16	e14	e14	e12	e7.0	e9.0	4.6	31	e50
7	e44	16	16	e16	e13	e13	e11	e8.0	e9.5	4.1	46	e55
8	e42	16	15	e15	e12	e12	e10	e8.5	e9.0	3.8	38	e45
9	e38	15	16	e15	e12	e12	e10	e8.0	e8.5	3.6	24	e40
10	e34	14	15	e16	e12	e13	e9.0	e7.0	e9.0	3.7	16	e45
11	e31	13	15	e16	e11	e12	e8.5	e7.0	e10	4.2	12	e65
12	e28	13	15	e16	e12	e12	e8.0	e7.0	e9.5	4.2	16	e95
13	e26	12	15	e15	e11	e13	e9.0	e7.0	8.8	4.0	34	e140
14	e25	13	e16	e15	e11	e12	e8.8	e7.0	10	13	40	e240
15	e23	13	e16	e16	e11	e13	e8.5	e6.8	20	9.3	38	e350
16	e22	13	e17	e15	e10	e17	e8.0	e6.7	21	6.1	e40	e260
17	21	13	e16	e15	e10	e16	e7.5	6.6	32	4.9	e37	e200
18	19	13	e17	e15	e10	e20	e7.0	6.5	22	4.5	e34	e120
19	19	13	e17	e16	e9.5	e42	e7.0	e6.3	15	4.4	e36	e80
20	25	13	e16	e15	e9.2	e65	e7.0	e6.0	11	8.9	e34	e60
21	29	12	e16	e15	e9.2	e52	e7.5	e6.0	11	18	e31	e50
22	28	12	e16	e14	e9.2	e44	e8.0	e6.1	15	18	e28	e55
23	25	12	e16	e14	e9.0	e36	e8.0	e6.0	12	20	e24	e70
24	27	12	e16	e15	e9.0	e26	e8.5	e6.0	10	20	e22	e65
25	27	33	e16	e15	e9.0	e20	e8.5	e6.0	8.7	15	e20	e52
26	27	40	e17	e15	e9.0	e24	e8.0	e6.0	7.3	11	e19	e50
27	26	40	e17	e14	e9.0	e23	e7.5	e6.0	6.1	8.7	e18	e42
28	23	33	e17	e15	e9.5	e20	e7.5	e6.8	6.1	6.9	e16	e38
29	21	28	e18	e16	---	e19	e7.2	e8.0	11	5.9	e15	e30
30	20	25	e18	e16	---	e16	e7.0	e9.0	16	7.3	e16	e25
31	18	---	e18	e16	---	e16	---	e8.0	---	9.1	e17	---
TOTAL	1048	532	520	486	319.6	641	275.0	214.3	346.0	263.7	801	2524
MEAN	33.8	17.7	16.8	15.7	11.4	20.7	9.17	6.91	11.5	8.51	25.8	84.1
MAX	95	40	22	19	17	65	15	9.0	32	20	46	350
MIN	18	12	15	14	9.0	10	7.0	6.0	6.1	3.6	12	25
CFSM	1.31	.69	.65	.61	.44	.80	.36	.27	.45	.33	1.00	3.26
IN.	1.51	.77	.75	.70	.46	.92	.40	.31	.50	.38	1.15	3.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	63.8	30.2	29.5	37.3	38.0	37.9	24.2	15.8	29.7	34.0	44.6	70.1																	
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1974 - 2001

ANNUAL TOTAL	9012.23	7970.6	
ANNUAL MEAN	24.6	21.8	
HIGHEST ANNUAL MEAN			37.5
LOWEST ANNUAL MEAN			69.6
HIGHEST DAILY MEAN	500	Sep 10	8.73
LOWEST DAILY MEAN	.81	May 31	1981
ANNUAL SEVEN-DAY MINIMUM	.90	Jun 4	1996
MAXIMUM PEAK FLOW			1670
MAXIMUM PEAK STAGE			8.73
INSTANTANEOUS LOW FLOW			.81
ANNUAL RUNOFF (CFSM)	.95		.90
ANNUAL RUNOFF (INCHES)	12.99	3.6	3.9
10 PERCENT EXCEEDS	43	Jul 9	Jul 7
50 PERCENT EXCEEDS	14		
90 PERCENT EXCEEDS	2.0	7.0	
			*2150
			9.53
			.71
		3.3	Jul 9,10
		.85	
		11.49	
		42	
		15	
		20	
		7.0	6.2

e Estimated
* Result of levee failure

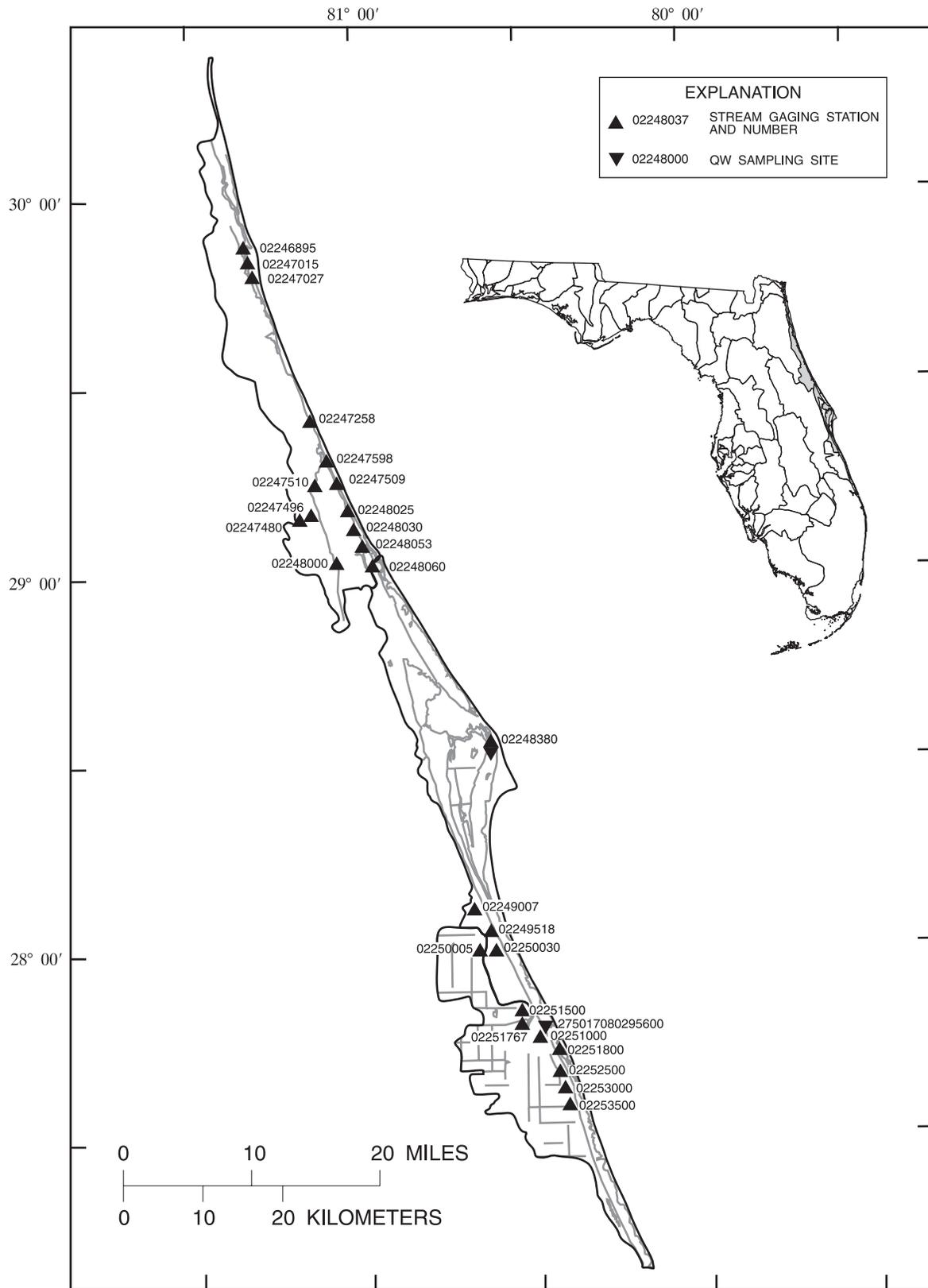


Figure 7.--Location of stream gaging stations in the coastal area between the St. Johns and St. Lucie Rivers.

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 mi².

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

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at sea level. Prior to Oct. 1, 2000 at datum 5.07 ft higher.

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	340	303	558	488	330	489	584	371	278	436	249
2	570	416	295	554	442	451	407	602	292	208	467	248
3	442	415	384	614	324	386	468	461	227	118	363	244
4	456	408	529	650	377	424	393	324	185	193	308	350
5	475	286	639	602	364	209	363	242	130	227	312	394
6	402	461	633	474	193	189	367	193	126	168	322	477
7	265	417	655	480	55	197	256	-6.4	122	55	279	548
8	259	243	562	386	88	193	151	396	99	257	448	532
9	450	219	315	217	126	148	181	405	82	246	471	580
10	346	196	301	297	113	-65	252	492	363	480	474	591
11	204	23	315	301	-24	373	443	603	361	469	428	515
12	171	195	179	230	474	415	574	591	470	458	394	589
13	284	134	-51	346	729	632	651	451	404	370	359	692
14	159	176	429	702	561	430	558	591	311	490	376	1050
15	163	127	265	761	362	531	583	665	263	509	411	1210
16	121	296	534	541	341	525	566	478	306	452	352	1040
17	345	421	483	510	287	407	485	654	229	406	282	767
18	395	344	311	483	256	329	490	647	323	317	186	601
19	370	371	417	367	474	545	538	593	165	257	75	672
20	548	643	317	263	404	802	445	608	118	115	114	718
21	466	352	519	286	300	616	455	576	99	-140	150	726
22	341	332	448	183	242	446	413	467	48	142	243	692
23	271	289	353	294	45	222	277	331	19	620	495	759
24	337	198	380	564	366	466	371	338	132	444	424	660
25	278	353	176	305	252	396	215	448	389	532	381	597
26	103	228	517	381	247	334	317	537	477	567	410	480
27	326	191	459	447	224	182	479	639	493	512	395	537
28	237	77	285	269	358	154	600	699	468	436	395	502
29	117	183	534	332	---	652	534	636	408	513	372	557
30	344	203	589	421	---	504	617	521	382	382	308	666
31	375	---	494	401	---	533	---	473	---	296	337	---
TOTAL	10139	8537	12569	13219	8468	11956	12938	15238.6	7862	10377	10767	18243
MEAN	327	285	405	426	302	386	431	492	262	335	347	608
MAX	570	643	655	761	729	802	651	699	493	620	495	1210
MIN	103	23	-51	183	-24	-65	151	-6.4	19	-140	75	244

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

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	368	283	358	366	280	314	279	203	153	201	249	450
MAX	410	285	405	426	302	386	431	492	262	335	347	608
(WY)	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	327	281	300	291	257	242	-163	-133	-111	-159	80.3	321
(WY)	2001	2000	2000	2000	2000	2000	1999	1999	1999	1999	1999	2000

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1999 - 2001

ANNUAL TOTAL	100488.08	140313.6	
ANNUAL MEAN	281	384	287
HIGHEST ANNUAL MEAN			384
LOWEST ANNUAL MEAN			31.0
HIGHEST DAILY MEAN	1170	May 16	1210
LOWEST DAILY MEAN	-113	Jun 30	-532
ANNUAL SEVEN-DAY MINIMUM	78	Jun 27	-270
MAXIMUM PEAK STAGE			16.24
10 PERCENT EXCEEDS	478		602
50 PERCENT EXCEEDS	285		382
90 PERCENT EXCEEDS	67		153

* Sep 15, 1999, Sep 14, 2001

Note.--Negative figures indicate reverse flow

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

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 mi².

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

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 10.00 ft below sea level (Florida Department of Transportation bench mark).

REMARKS.--Records fair. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	34	38	46	8.6	-9.6	35	19	33	51	30	31
2	134	69	-17	-2.8	34	13	- .69	1.6	19	6.7	37	23
3	71	10	37	7.1	2.5	.24	24	-5.9	23	24	72	11
4	57	-6.6	-44	46	-14	28	22	29	49	44	101	53
5	22	42	82	25	26	20	17	24	38	17	78	57
6	24	54	9.9	33	-13	-14	8.7	20	15	41	134	64
7	-49	6.0	15	61	-9.4	24	13	-24	54	- .62	104	120
8	14	17	85	59	27	17	36	102	35	51	90	46
9	16	12	66	45	44	55	29	73	65	21	101	69
10	20	21	28	54	44	48	21	36	27	31	---	79
11	43	17	62	67	29	149	18	16	46	50	---	34
12	.16	32	19	77	60	99	34	58	52	44	---	105
13	29	24	38	27	85	97	52	-14	12	25	---	99
14	49	54	84	118	34	58	.59	30	40	49	---	334
15	50	48	25	49	-2.9	69	8.9	-12	23	60	---	1350
16	22	49	72	36	-5.3	-8.5	-2.0	-1.9	44	40	---	679
17	65	74	56	20	-28	18	-9.1	21	27	16	---	---
18	51	125	32	30	-21	-1.0	-6.9	92	47	38	48	---
19	14	25	7.3	13	33	83	-20	22	18	37	41	---
20	48	79	-19	37	-5.7	62	-29	37	35	11	82	---
21	16	83	-8.9	1.9	-22	12	7.8	44	37	-29	162	---
22	15	20	13	-16	-21	11	3.1	28	43	49	76	---
23	-21	61	11	18	-6.6	-18	.96	-33	38	146	111	---
24	2.4	15	36	6.1	58	42	-3.2	47	105	119	92	---
25	64	-5.3	29	28	2.7	46	9.2	69	73	110	57	---
26	19	46	9.0	20	27	-7.4	8.2	93	49	81	33	---
27	77	43	44	35	34	-17	12	67	68	68	4.7	---
28	34	27	50	-3.7	7.8	-7.1	46	46	113	32	26	---
29	6.6	80	25	-.26	---	45	20	67	58	49	11	---
30	62	14	-2.7	20	---	54	44	39	40	27	21	---
31	13	---	32	27	---	47	---	42	---	12	46	---
TOTAL	1128.16	1169.1	913.6	983.34	407.7	1014.64	399.56	1031.8	1326	1320.08	1557.7	3154
MEAN	36.4	39.0	29.5	31.7	14.6	32.7	13.3	33.3	44.2	42.6	67.7	197
MAX	160	125	85	118	85	149	52	102	113	146	162	1350
MIN	-49	-6.6	-44	-16	-28	-18	-29	-33	12	-29	4.7	11

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

	1999	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	
MEAN	6.06	18.2	-5.91	-21.8	-6.51	10.4	12.5	27.5	44.2	42.6	---	---
MAX	36.4	39.0	29.5	31.7	14.6	32.7	13.3	33.3	44.2	42.6	---	---
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	---	---
MIN	-24.3	-2.53	-41.3	-75.2	-26.9	-11.9	11.8	21.6	44.2	42.6	---	---
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2001	2001	---	---

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL		14405.7	
ANNUAL MEAN		42.0	42.0
HIGHEST ANNUAL MEAN			42.0
LOWEST ANNUAL MEAN			-6.5
HIGHEST DAILY MEAN		1350	Sep 15
LOWEST DAILY MEAN	-264	Mar 15	-49 Oct 7
ANNUAL SEVEN-DAY MINIMUM	-130	Jan 8	-10 Feb 17
MAXIMUM PEAK STAGE		16.79	Sep 14
10 PERCENT EXCEEDS	65		83
50 PERCENT EXCEEDS	17		32
90 PERCENT EXCEEDS	-55		-5.5

* 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 mi².

PERIOD OF RECORD.--April to June 1958 (discharge measurements only), April 1999 to current year.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	2.9	.51	.60	2.7	.29	8.9	.16	.16	1.3	21	1.6
2	47	1.9	.51	.57	5.3	.29	6.1	.15	.16	.85	23	3.4
3	36	1.3	.48	.56	4.6	.25	4.6	.14	.12	.54	91	14
4	31	1.0	.44	.55	4.7	1.5	3.6	.12	.12	.39	145	8.9
5	27	.83	.42	.55	4.7	1.8	3.0	.11	.11	.34	76	6.8
6	21	.72	.40	.56	3.6	1.0	2.3	.10	.17	.38	67	5.8
7	19	.63	.38	.56	2.8	.66	1.6	.14	.20	.29	47	6.6
8	15	.55	.35	.59	2.3	.47	1.2	.18	.28	.26	33	6.2
9	11	.48	.35	.59	1.9	.38	.88	.19	.19	.37	22	6.2
10	7.4	.48	.35	.54	1.6	.45	.70	.18	.17	2.5	15	7.0
11	5.6	.44	.38	.53	1.4	.44	.54	.15	.41	5.4	13	6.1
12	4.4	.37	.44	.59	1.2	.37	.43	.13	.62	1.9	9.9	31
13	3.5	.33	.45	.58	1.1	.39	.37	.12	.48	1.0	8.1	122
14	2.8	.32	.48	.57	1.1	.46	.31	.11	.34	4.7	11	447
15	2.2	.40	.50	.56	1.0	.41	.29	.11	.25	2.6	11	861
16	1.6	.36	.57	.55	.89	.40	.24	.11	.41	1.4	19	530
17	1.0	.34	.70	.54	.79	.42	.19	.10	.51	1.8	14	322
18	.70	.29	.73	.54	.71	.65	.16	.09	.31	1.4	9.8	207
19	.52	.28	.74	.55	.63	18	.15	.09	.24	3.3	7.3	138
20	.60	.31	.74	1.4	.56	73	.14	.09	.21	20	6.9	99
21	1.3	.31	.72	1.1	.50	53	.13	.09	.18	40	5.7	74
22	1.0	.27	.71	.85	.47	39	.13	.10	.18	16	4.3	56
23	4.7	.27	.67	.76	.40	27	.12	.10	.18	9.0	4.8	46
24	12	.26	.66	.71	.41	18	.12	.10	.19	7.0	4.2	37
25	10	.52	.66	.61	.41	13	.27	.08	.17	4.5	2.8	40
26	14	.89	.64	.54	.39	12	.74	.08	.15	3.0	2.1	44
27	11	1.1	.64	.51	.33	8.7	.40	.08	.18	2.2	1.7	37
28	7.4	.79	.72	.47	.32	6.5	.28	.08	7.8	1.4	1.4	31
29	5.3	.67	.78	.43	---	6.6	.22	.09	5.0	1.0	1.2	25
30	4.2	.60	.72	.43	---	13	.19	.11	2.4	.81	1.1	20
31	3.4	---	.65	1.2	---	13	---	.11	---	10	1.1	---
TOTAL	373.62	19.91	17.49	19.69	46.81	311.43	38.30	3.59	21.89	145.63	680.4	3239.6
MEAN	12.1	.66	.56	.64	1.67	10.0	1.28	.12	.73	4.70	21.9	108
MAX	62	2.9	.78	1.4	5.3	73	8.9	.19	7.8	40	145	861
MIN	.52	.26	.35	.43	.32	.25	.12	.08	.11	.26	1.1	1.6
CFSM	1.63	.09	.08	.09	.23	1.36	.17	.02	.10	.63	2.97	14.6
IN.	1.88	.10	.09	.10	.24	1.57	.19	.02	.11	.73	3.42	16.29

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

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	18.1	1.18	.48	.62	1.06	5.25	1.07	.19	1.81	2.21	7.37	43.3
MAX	24.2	1.69	.56	.64	1.67	10.0	1.29	.42	4.46	4.70	21.9	108
(WY)	2000	2000	2001	2001	2001	2001	1999	1999	1999	2001	2001	2001
MIN	12.1	.66	.39	.60	.46	.45	.66	.023	.24	.28	.076	9.32
(WY)	2001	2001	2000	2000	2000	2000	2000	2000	2000	2000	1999	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL	874.69	4918.36	
ANNUAL MEAN	2.39	13.5	8.47
HIGHEST ANNUAL MEAN			13.5
LOWEST ANNUAL MEAN			3.49
HIGHEST DAILY MEAN	75	Sep 30	861
LOWEST DAILY MEAN	.00	Many days	.08
ANNUAL SEVEN-DAY MINIMUM	.00	May 17	.09
MAXIMUM PEAK FLOW			a992
MAXIMUM PEAK STAGE			Sep 15
ANNUAL RUNOFF (CFSM)	.32	19.58	Sep 15
ANNUAL RUNOFF (INCHES)	4.40	1.82	19.58
10 PERCENT EXCEEDS	4.8	21	1.15
50 PERCENT EXCEEDS	.38	.71	15.56
90 PERCENT EXCEEDS	.00	.15	12
			.44
			.04

a From rating curve extended above 330 ft³/s

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

02247258 LEHIGH CANAL NEAR FLAGLER BEACH, FL

LOCATION.--Lat 29°29'50", long 81°11'23", in NW¹/₄ 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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 8.54 ft above sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	11	7.4	2.6	1.3	2.6	14	2.3	2.1	9.8	36	12
2	79	10	7.2	2.6	1.5	2.5	13	2.2	2.5	9.3	29	18
3	59	9.5	7.0	2.5	1.9	2.3	12	2.1	2.6	9.1	55	18
4	53	9.0	6.5	2.4	2.2	2.4	11	2.0	2.7	8.5	42	24
5	46	8.5	6.3	2.3	2.4	2.6	9.9	1.9	2.8	8.0	34	99
6	41	7.8	5.8	2.2	2.5	2.7	8.9	1.8	2.8	8.6	38	46
7	38	7.4	5.5	2.2	2.4	2.7	8.1	1.7	3.0	8.4	28	64
8	35	6.9	5.2	2.1	2.4	2.7	7.5	1.7	3.4	8.5	23	40
9	42	6.3	5.0	2.1	2.4	2.8	6.9	1.7	5.3	8.0	23	37
10	49	5.5	5.0	2.0	2.3	3.0	6.3	1.8	5.7	8.3	26	36
11	28	5.1	5.0	2.0	2.0	3.1	5.3	1.8	5.0	8.6	24	35
12	25	6.9	5.0	2.0	2.0	3.2	4.8	1.9	4.0	8.7	21	58
13	20	7.2	5.0	1.9	2.4	3.3	4.4	1.9	3.0	9.3	17	323
14	16	6.6	5.0	1.9	2.9	3.5	4.1	1.8	2.9	11	16	885
15	14	6.7	5.0	1.8	2.9	3.4	3.8	1.7	2.8	13	17	897
16	13	6.7	5.0	1.7	3.0	3.3	3.5	1.5	2.8	13	20	415
17	13	6.9	4.8	1.6	3.5	3.3	3.2	1.4	3.2	15	22	255
18	12	6.6	4.8	1.5	3.2	3.3	2.9	1.4	4.1	14	22	207
19	12	6.4	4.9	1.5	3.0	8.2	2.7	1.4	4.6	13	20	181
20	12	6.3	4.9	1.5	3.4	8.3	2.6	1.4	4.6	113	21	153
21	14	6.1	4.8	1.6	4.5	4.0	2.5	1.4	5.0	149	18	131
22	14	6.0	4.8	1.6	4.2	29	2.4	1.4	6.8	36	17	119
23	13	5.8	4.5	1.6	3.9	24	2.3	1.4	7.1	29	16	113
24	13	5.6	4.0	1.5	3.7	20	2.3	1.3	6.9	28	14	96
25	16	6.1	3.5	1.4	3.4	18	2.4	1.3	7.1	21	18	80
26	20	7.2	3.3	1.3	3.2	16	3.1	1.2	7.0	32	21	79
27	17	7.7	3.1	1.3	3.1	14	3.1	1.2	7.1	61	18	74
28	14	7.7	2.9	1.2	2.8	12	3.0	1.2	8.5	29	12	67
29	13	7.7	2.9	1.2	---	12	2.8	1.3	10	21	11	62
30	13	7.8	2.8	1.1	---	13	2.5	1.5	10	18	9.5	57
31	12	---	2.7	1.2	---	14	---	1.9	---	33	9.0	---
TOTAL	871	215.0	149.6	55.4	78.4	355.9	161.3	50.5	145.4	762.1	697.5	4681
MEAN	28.1	7.17	4.83	1.79	2.80	11.5	5.38	1.63	4.85	24.6	22.5	156
MAX	105	11	7.4	2.6	4.5	83	14	2.3	10	149	55	897
MIN	12	5.1	2.7	1.1	1.3	2.3	2.3	1.2	2.1	8.0	9.0	12
CFSM	1.34	.34	.23	.09	.13	.55	.26	.08	.23	1.17	1.07	7.43
IN.	1.54	.38	.27	.10	.14	.63	.29	.09	.26	1.35	1.24	8.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

MEAN	30.6	7.48	6.61	5.79	6.07	5.85	3.42	1.45	1.76	7.85	9.57	75.8
MAX	55.3	11.9	13.6	14.5	14.3	11.5	5.38	3.84	4.85	24.6	22.5	156
(WY)	1999	1999	1999	1999	1999	2001	2001	1998	2001	2001	2001	2001
MIN	8.38	3.33	1.38	1.02	1.31	.78	2.33	.16	.018	.071	.015	3.27
(WY)	2000	2000	2000	2000	2000	2000	1999	2000	2000	2000	2000	1999

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1998 - 2001

ANNUAL TOTAL	3753.78		8223.1		
ANNUAL MEAN	10.3		22.5		13.6
HIGHEST ANNUAL MEAN					22.5
LOWEST ANNUAL MEAN					7.98
HIGHEST DAILY MEAN	191	Sep 10	897	Sep 15	897
LOWEST DAILY MEAN	.00	Many days	1.1	Jan 30	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 13	1.2	Jan 26	.00
MAXIMUM PEAK FLOW			*1480	Sep 14	1480
MAXIMUM PEAK STAGE			9.46	Sep 14	9.46
INSTANTANEOUS LOW FLOW			1.1	Jan 30,31	1.1
ANNUAL RUNOFF (CFSM)	.49		1.07		.65
ANNUAL RUNOFF (INCHES)	6.65		14.57		8.82
10 PERCENT EXCEEDS	18		40		23
50 PERCENT EXCEEDS	.85		6.3		2.9
90 PERCENT EXCEEDS	.00		1.7		.09

* From rating curve extended above 574 ft³/s

02247480 TIGER BAY CANAL NEAR DAYTONA BEACH, FL

LOCATION.--Lat 29°09'58", long 81°09'18", in SW¹/₄ 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 mi², approximately.

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

GAGE.--Water-stage recorder. Datum of gage is at sea level.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	13	.00	.00	.00	.00	1.3
2	.00	.00	.00	.00	.00	.00	15	.00	.00	.00	.00	1.4
3	.00	.00	.00	.00	.00	.00	13	.00	.00	.00	.00	1.4
4	.00	.00	.00	.00	.00	.00	11	.00	.00	.00	1.5	1.4
5	.00	.00	.00	.00	.00	.00	7.8	.00	.00	.00	16	4.6
6	.00	.00	.00	.00	.00	.00	6.0	.00	.00	.00	24	25
7	.00	.00	.00	.00	.00	.00	5.3	.00	.00	.00	24	59
8	.00	.00	.00	.00	.00	.00	4.7	.00	.00	.00	19	85
9	.00	.00	.00	.00	.00	.00	3.8	.00	.00	.00	15	96
10	.00	.00	.00	.00	.00	.00	3.3	.00	.00	.00	12	95
11	.00	.00	.00	.00	.00	.00	2.7	.00	.00	.00	22	93
12	.00	.00	.00	.00	.00	.00	2.2	.00	.00	.00	34	89
13	.00	.00	.00	.00	.00	.00	1.8	.00	.00	.00	37	102
14	.00	.00	.00	.00	.00	.00	1.4	.00	.00	.00	32	274
15	.00	.00	.00	.00	.00	.00	1.2	.00	.00	.00	27	349
16	.00	.00	.00	.00	.00	.00	.93	.00	.00	.00	23	344
17	.00	.00	.00	.00	.00	.00	.69	.00	.00	.00	19	332
18	.00	.00	.00	.00	.00	.00	.47	.00	.00	.00	23	316
19	.00	.00	.00	.00	.00	.00	.28	.00	.00	.00	26	298
20	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	19	277
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	15	255
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	12	244
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.6	237
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.3	217
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.0	204
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.1	189
27	.00	.00	.00	.00	.00	.19	.00	.00	.00	.00	3.2	174
28	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.00	2.5	159
29	.00	.00	.00	.00	---	1.9	.00	.00	.00	.00	2.0	168
30	.00	.00	.00	.00	---	3.6	.00	.00	.00	.00	1.6	174
31	.00	---	.00	.00	---	6.8	---	.00	---	.00	1.3	---
TOTAL	0.00	0.00	0.00	0.00	0.00	13.89	94.65	0.00	0.00	0.00	435.10	4865.1
MEAN	.000	.000	.000	.000	.000	.45	3.15	.000	.000	.000	14.0	162
MAX	.00	.00	.00	.00	.00	6.8	15	.00	.00	.00	37	349
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	33.9	16.3	13.5	20.1	19.4	20.4	12.9	3.10	5.22	8.97	17.2	32.2													
MAX	92.0	71.1	78.2	89.2	74.2	80.7	90.1	39.1	67.6	61.2	92.5	162													
(WY)	1980	1995	1998	1998	1978	1979	1983	1979	1991	1991	1978	2001													
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000													
(WY)	1988	1987	1991	1991	1991	1985	1985	1980	1981	1981	1981	1987													

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1978 - 2001

ANNUAL TOTAL	482.50	5408.74	
ANNUAL MEAN	1.32	14.8	16.3
HIGHEST ANNUAL MEAN			37.1
LOWEST ANNUAL MEAN			.003
HIGHEST DAILY MEAN	42	Apr 2	349
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 16	.00
MAXIMUM PEAK FLOW			355
MAXIMUM PEAK STAGE			32.81
10 PERCENT EXCEEDS	3.7		19
50 PERCENT EXCEEDS	.00		.00
90 PERCENT EXCEEDS	.00		.00

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

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 left 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 mi², approximately.

PERIOD OF RECORD.--December 1982 to September 1988 (gage heights and discharge measurements only). October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is at sea level. (Savage Engineering Co. bench mark).

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	.03	.00	.00	.00	.00	2.7	.05	.00	.01	8.1	5.0
2	.43	.02	.00	.00	.00	.00	2.0	.02	.00	.00	3.9	7.6
3	.40	.02	.00	.00	.00	.00	1.5	.00	.00	.00	3.3	8.1
4	.59	.01	.00	.00	.00	.00	1.2	.00	.00	.00	6.5	7.4
5	.49	.01	.00	.00	.00	.00	1.1	e.00	.00	.17	15	15
6	.36	.00	.00	.00	.00	.00	.94	e.00	.05	.23	6.4	34
7	.27	.00	.00	.00	.00	.00	.75	e.00	.10	.20	4.9	66
8	.20	.00	.00	.00	.00	.00	.62	e.00	.08	.18	4.8	62
9	.17	.00	.00	.00	.00	.00	.53	.00	.03	.17	13	68
10	.14	.00	.00	.00	.00	.00	.47	.00	.05	.26	20	67
11	.13	.00	.00	.00	.00	.00	.41	.00	.09	.31	31	64
12	.12	.00	.00	.00	.00	.00	.36	.00	.06	.33	29	65
13	.11	.00	.00	.00	.00	.00	.32	.00	.05	.57	30	80
14	.11	.00	.00	.00	.00	.00	.29	.00	.12	.61	36	224
15	.10	.00	.00	.00	.00	.00	.27	.00	.14	.47	38	252
16	.09	.00	.00	.00	.00	.00	.25	.00	.13	.38	37	171
17	.08	.00	.00	.00	.00	.00	.23	.00	.14	.35	35	132
18	.08	.00	.00	.00	.00	.00	.22	.00	.13	.48	34	114
19	.07	.00	.00	.00	.00	.72	.22	.00	.11	.72	47	104
20	.07	.00	.00	.00	.00	1.3	.21	.00	.11	.95	44	98
21	.07	.00	.00	.00	.00	.74	.21	.00	.10	1.7	37	93
22	.07	.00	.00	.00	.00	.62	.20	.00	.10	1.3	31	90
23	.06	.00	.00	.00	.00	.52	.20	.00	.09	.94	25	89
24	.06	.00	.00	.00	.00	.45	.19	.00	.09	.78	21	86
25	.07	.00	.00	.00	.00	.41	.19	.00	.08	.72	17	85
26	.07	.00	.00	.00	.00	.36	.18	.00	.04	1.4	14	83
27	.06	.00	.00	.00	.00	.32	.16	.00	.01	3.1	11	80
28	.05	.00	.00	.00	.00	.30	.14	.00	.02	3.2	9.1	78
29	.04	.00	.00	.00	---	.38	.11	.00	.07	2.3	7.3	91
30	.04	.00	.00	.00	---	.91	.08	.00	.04	1.5	5.9	95
31	.04	---	.00	.00	---	1.9	---	.00	---	12	4.9	---
TOTAL	5.25	0.09	0.00	0.00	0.00	8.93	16.25	0.07	2.03	35.33	630.1	2514.1
MEAN	.17	.003	.000	.000	.000	.29	.54	.002	.068	1.14	20.3	83.8
MAX	.61	.03	.00	.00	.00	1.9	2.7	.05	.14	12	47	252
MIN	.04	.00	.00	.00	.00	.00	.08	.00	.00	.00	3.3	5.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	20.4	12.5	10.3	12.3	8.52	10.3	4.72	.51	2.19	4.10	5.80	17.1	
MAX	47.7	39.6	47.7	65.3	45.7	50.2	30.1	5.75	22.8	27.7	23.3	83.8	
(WY)	1996	1995	1998	1998	1998	1998	1996	1996	1991	1991	1991	2001	
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
(WY)	1994	1991	1989	1991	1991	1997	1997	1994	1989	1989	2000	1990	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1989 - 2001

ANNUAL TOTAL	396.90	3212.15	
ANNUAL MEAN	1.08	8.80	9.06
HIGHEST ANNUAL MEAN			25.0
LOWEST ANNUAL MEAN			.024
HIGHEST DAILY MEAN	28	Apr 6	252
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 9	.00
MAXIMUM PEAK FLOW			290
MAXIMUM PEAK STAGE			27.50
10 PERCENT EXCEEDS	2.3		29
50 PERCENT EXCEEDS	.02		.04
90 PERCENT EXCEEDS	.00		.00

e Estimated

02247509 ELEVENTH STREET CANAL AT HOLLY HILL, FL

LOCATION.--Lat 29°14'44", long 81°02'30", in SE $\frac{1}{4}$ 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 mi².

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

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at sea level (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.

EXTREMES FOR PERIOD DECEMBER 2000 TO SEPTEMBER 2001.--Maximum daily discharge, 263 ft³/s, Sept. 14; maximum gage height, 4.35 ft, Sept. 15; minimum daily discharge, 0.81 ft³/s, Aug. 13; minimum gage height, 0.07 ft, Jan. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	1.4	1.8	3.3	13	e7.4	5.4	5.2	e25	7.8
2	---	---	---	1.5	1.8	3.8	8.5	e7.0	5.5	4.4	17	9.6
3	---	---	---	1.9	2.0	2.6	7.6	e6.4	3.4	3.8	16	6.7
4	---	---	---	2.1	3.4	3.8	7.0	e5.6	2.8	3.2	16	8.2
5	---	---	---	1.9	3.9	3.8	7.0	e5.3	2.1	8.2	25	18
6	---	---	---	1.9	3.2	2.9	8.0	e4.9	2.6	7.1	12	26
7	---	---	---	2.1	3.1	2.4	7.4	e4.5	2.9	4.3	6.3	25
8	---	---	---	3.1	2.9	2.3	6.4	4.2	3.2	7.4	8.3	18
9	---	---	---	2.7	3.1	2.8	6.1	7.9	4.6	7.6	6.6	21
10	---	---	---	1.2	3.9	.83	6.8	8.3	18	16	4.6	15
11	---	---	---	2.5	2.6	5.4	6.1	5.7	15	10	2.7	12
12	---	---	---	4.7	3.3	7.2	6.7	4.2	9.1	8.1	1.5	12
13	---	---	---	2.7	4.2	24	5.9	3.4	5.5	16	.81	42
14	---	---	---	4.4	2.9	9.8	4.5	2.9	5.9	16	3.2	263
15	---	---	---	4.9	2.4	5.2	5.4	4.1	6.8	13	6.8	177
16	---	---	---	3.6	2.0	7.4	5.4	3.8	9.7	10	16	86
17	---	---	e6.0	2.9	2.4	4.8	5.2	3.3	13	10	11	60
18	---	---	e3.1	3.1	2.5	5.2	4.6	3.4	5.8	9.5	7.9	44
19	---	---	e3.8	3.6	3.1	52	3.9	4.5	6.1	11	9.1	39
20	---	---	e2.4	4.2	3.4	48	3.0	3.7	6.5	10	9.1	33
21	---	---	e2.7	2.1	2.5	16	2.6	3.4	6.1	8.8	10	29
22	---	---	e2.7	2.2	2.3	12	2.3	8.6	6.4	9.9	9.2	23
23	---	---	2.6	1.4	1.6	9.3	2.4	7.8	6.9	14	9.4	21
24	---	---	e3.2	4.0	3.5	9.9	2.6	3.6	6.2	12	9.0	21
25	---	---	e3.5	2.1	4.0	8.1	3.5	3.5	5.8	8.4	7.3	19
26	---	---	e3.7	2.7	3.8	6.6	4.4	2.4	6.0	7.7	7.3	14
27	---	---	e4.9	3.8	2.7	7.5	5.6	5.2	5.6	6.9	7.0	15
28	---	---	e5.1	2.4	3.1	7.3	e8.5	4.6	6.0	5.6	7.1	15
29	---	---	e6.1	2.5	---	15	e7.3	3.0	5.7	5.6	6.4	62
30	---	---	e4.6	2.5	---	21	e6.3	3.3	5.2	5.4	5.7	42
31	---	---	2.4	2.5	---	16	---	3.8	---	e34	6.1	---
TOTAL	---	---	56.8	84.6	81.4	326.23	174.0	149.7	193.8	299.1	289.41	1184.3
MEAN	---	---	3.79	2.73	2.91	10.5	5.80	4.83	6.46	9.65	9.34	39.5
MAX	---	---	6.1	4.9	4.2	52	13	8.6	18	34	25	263
MIN	---	---	2.4	1.2	1.6	.83	2.3	2.4	2.1	3.2	.81	6.7

e Estimated

02247598 TOMOKA RIVER NEAR ORMOND BEACH, FL

LOCATION.--Lat 29°20'26", long 81°05'11", in NW $\frac{1}{4}$ 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 mi².

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

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 not published some days due to missing velocity record.

EXTREMES FOR PERIOD OCTOBER 2000 TO SEPTEMBER 2001.--Maximum daily discharge, 2,830 ft³/s, Sept. 15, maximum gage height 5.05 ft Sept. 15; maximum daily reverse flow, -1,000 ft³/s, Mar. 19; minimum gage height, 0.23 ft, Mar. 6.

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	49	86	-43	105	133	116	373	-62	95	-32	41	152
2	-68	-37	-107	44	130	156	94	-78	240	36	218	190
3	225	1.6	-181	-8.6	123	273	188	29	210	114	235	104
4	140	-50	-313	58	-18	333	106	57	208	54	272	141
5	-73	-184	-197	226	118	477	-113	111	237	386	333	359
6	86	-246	25	132	225	255	56	66	267	325	272	268
7	34	255	24	128	225	-127	318	-127	269	254	106	266
8	-279	57	38	244	160	-166	313	-157	224	183	99	364
9	-411	82	117	242	216	-18	299	112	158	265	144	390
10	-21	159	-57	29	402	34	227	59	155	179	116	273
11	81	-97	-90	119	239	64	174	65	202	153	210	222
12	-288	-293	195	241	23	233	140	126	268	193	195	61
13	12	110	-13	-118	171	607	243	64	143	222	150	-105
14	-28	---	116	-94	214	255	141	-183	184	-198	48	1700
15	151	---	231	203	118	264	105	1.2	207	239	80	2830
16	-71	---	-126	91	210	269	152	-16	168	55	28	2220
17	-130	---	444	14	95	-19	219	-270	218	-23	214	2070
18	-170	---	44	-2.8	-143	-115	29	-79	91	153	284	1590
19	-158	---	131	146	-139	-1000	72	33	58	227	301	1230
20	-281	---	e500	363	113	966	114	65	5.1	249	248	918
21	-146	---	26	113	253	684	162	76	134	19	209	597
22	-280	---	92	81	208	315	248	164	157	-32	216	355
23	-420	---	-89	-202	52	259	238	115	198	228	123	191
24	-281	---	20	28	-22	308	194	164	111	271	23	181
25	199	---	-65	149	155	267	249	210	-7.7	-7.7	-1.7	204
26	386	---	-91	34	291	134	-49	119	-29	1.5	-118	230
27	26	---	224	342	211	144	47	142	-52	224	-218	-87
28	335	---	308	287	201	-42	110	139	-7.6	97	6.5	-156
29	238	---	-278	129	---	243	15	139	-62	-54	76	299
30	-30	---	194	343	---	635	-209	-8.2	-39	85	16	867
31	287	---	113	286	---	423	---	-94	---	-97	75	---
TOTAL	-886	---	1192	3751.6	3964	6227	4255	982.0	4009.8	3768.8	4000.8	17924
MEAN	-28.6	---	38.5	121	142	201	142	31.7	134	122	129	597
MAX	386	---	500	363	402	966	373	210	269	386	333	2830
MIN	-420	---	-313	-202	-143	-1000	-209	-270	-62	-198	-218	-156

e Estimated

Note.--Negative figures indicate reverse flow.

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

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 40A, 1.8 mi north of Samsula, 8 mi west of New Smyrna Beach, 10 mi upstream from Turnbull Bay, and 13 mi upstream from mouth.

DRAINAGE AREA.--33.4 mi².

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 sea level (Florida Department of Transportation bench mark). Prior to Nov. 13, 1971, at sites within 100 ft at same datum.

REMARKS.--Records fair. Some diversions for irrigation above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	1.7	1.3	1.2	1.4	1.8	71	1.2	17	6.2	299	5.7
2	50	1.7	1.2	1.1	1.4	1.9	45	1.2	10	5.4	243	8.1
3	39	1.6	1.2	1.0	1.3	1.9	30	1.4	3.8	4.6	220	19
4	67	1.6	1.2	1.0	1.3	2.1	21	1.5	2.7	4.1	208	9.2
5	52	1.5	1.2	1.0	1.4	2.2	16	1.3	2.3	3.8	227	44
6	34	1.5	1.1	1.0	1.4	2.1	12	1.2	3.3	4.1	227	51
7	23	1.5	1.1	.95	1.3	2.1	9.7	1.1	6.9	4.7	170	153
8	15	1.4	1.1	.97	1.3	2.1	7.9	1.1	9.2	5.7	130	209
9	11	1.4	1.0	1.1	1.3	2.1	6.6	1.1	7.6	5.9	107	197
10	8.6	1.4	1.0	1.0	1.3	2.1	5.7	1.1	4.2	6.6	104	209
11	6.6	1.3	1.0	.98	1.3	1.9	4.9	1.1	3.2	7.7	81	211
12	5.8	1.3	1.3	1.0	1.4	1.9	4.4	1.0	3.5	7.5	61	168
13	5.7	1.3	1.3	1.1	1.4	17	3.9	1.0	3.1	7.6	48	404
14	4.6	1.3	1.2	1.1	1.5	16	3.5	.98	2.9	17	38	883
15	3.8	1.3	1.1	1.0	1.5	4.6	3.2	.97	5.1	31	29	824
16	3.2	1.2	1.1	.95	1.5	4.4	2.8	.98	18	25	24	746
17	3.0	1.2	1.1	.96	1.6	4.3	2.5	.94	13	18	22	639
18	2.8	1.2	1.1	1.0	1.6	3.6	2.2	.92	9.9	42	35	515
19	2.6	1.2	1.2	1.1	1.6	163	2.1	.98	9.9	135	70	408
20	2.5	1.3	1.2	1.3	1.7	439	2.0	1.0	7.0	100	58	329
21	2.4	1.2	1.1	1.4	1.7	188	1.9	1.0	5.4	109	48	255
22	2.3	1.2	1.2	1.2	1.7	106	1.8	19	4.6	72	40	202
23	2.2	1.1	1.1	1.3	1.7	65	1.6	28	4.2	63	33	154
24	2.3	1.1	1.1	1.2	1.7	43	1.6	5.9	4.0	52	25	117
25	2.2	1.2	1.1	1.1	1.9	31	1.5	3.5	4.0	38	18	107
26	2.2	1.8	1.1	1.1	1.9	23	1.6	2.8	3.9	47	15	87
27	2.1	2.5	1.1	1.0	1.9	16	1.5	2.4	3.5	142	12	76
28	2.0	1.7	1.3	.97	1.9	13	1.4	2.2	3.6	137	9.6	73
29	1.9	1.4	1.6	.94	---	13	1.3	2.0	4.0	74	7.6	616
30	1.8	1.3	1.4	1.0	---	81	1.3	1.9	5.1	47	6.4	599
31	1.8	---	1.3	1.3	---	83	---	2.9	---	330	5.8	---
TOTAL	436.4	42.4	36.4	33.32	42.9	1338.1	271.9	93.67	184.9	1552.9	2621.4	8318.0
MEAN	14.1	1.41	1.17	1.07	1.53	43.2	9.06	3.02	6.16	50.1	84.6	277
MAX	73	2.5	1.6	1.4	1.9	439	71	28	18	330	299	883
MIN	1.8	1.1	1.0	.94	1.3	1.8	1.3	.92	2.3	3.8	5.8	5.7
CFSM	.42	.04	.04	.03	.05	1.29	.27	.09	.18	1.50	2.53	8.30
IN.	.49	.05	.04	.04	.05	1.49	.30	.10	.21	1.73	2.92	9.26

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

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	58.4	22.3	17.2	26.1	28.1
MAX	248	174	120	134	121
(WY)	1970	1995	1984	1964	1978
MIN	.57	.77	.48	.44	.49
(WY)	1981	1981	1991	1991	1962

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1951 - 2001

ANNUAL TOTAL	1682.63	14972.29	
ANNUAL MEAN	4.60	41.0	31.4
HIGHEST ANNUAL MEAN			72.9
LOWEST ANNUAL MEAN			2.90
HIGHEST DAILY MEAN	96	Mar 31	883
LOWEST DAILY MEAN	.47	Jun 10	.92
ANNUAL SEVEN-DAY MINIMUM	.50	Jun 4	.97
MAXIMUM PEAK FLOW			932
MAXIMUM PEAK STAGE			13.95
INSTANTANEOUS LOW FLOW			a.89
ANNUAL RUNOFF (CFSM)	.14		1.23
ANNUAL RUNOFF (INCHES)	1.87		16.68
10 PERCENT EXCEEDS	7.3		108
50 PERCENT EXCEEDS	1.7		2.5
90 PERCENT EXCEEDS	.66		1.1

* 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 mi².

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

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at sea level (City of Daytona benchmark).

REMARKS.--Records fair except for period of estimated daily discharge, which is poor. Flow affected by tides in the Intracoastal Waterway.

EXTREMES FOR PERIOD DECEMBER 2000 TO SEPTEMBER 2001.--Maximum daily discharge, 364 ft³/s, Sept. 14; maximum gage height, 4.12 ft, Sept. 15; minimum daily flow, 0.37 ft³/s, Mar. 10; minimum gage height, -0.06 ft, Feb. 2,3,4, Mar. 3,4.

DISCHARGE, CUBIC FEET PER SECOND, PERIOD DECEMBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	7.4	9.6	11	34	e15	14	13	e48	22
2	---	---	---	8.2	10	12	25	e12	16	12	37	26
3	---	---	---	8.6	11	9.8	24	e11	11	11	35	17
4	---	---	---	8.9	12	14	23	e10	9.6	8.6	39	20
5	---	---	---	7.2	12	16	18	e9.8	7.3	27	59	39
6	---	---	---	8.3	11	12	19	e8.9	9.9	26	30	63
7	---	---	---	7.2	10	5.2	19	e7.5	11	17	17	57
8	---	---	---	11	8.8	4.0	19	11	13	24	22	40
9	---	---	---	9.8	9.4	4.9	19	16	16	25	17	46
10	---	---	---	2.5	13	.37	21	19	37	48	12	38
11	---	---	---	6.1	10	9.9	18	14	39	32	7.4	32
12	---	---	---	13	9.8	14	19	12	25	27	4.6	29
13	---	---	---	5.7	13	51	19	11	17	51	2.7	75
14	---	---	---	9.0	11	26	17	7.3	18	42	9.4	364
15	---	---	---	12	10	16	17	10	21	31	19	253
16	---	---	---	11	9.2	21	17	10	29	25	44	125
17	---	---	20	9.4	11	15	16	7.0	37	26	28	92
18	---	---	14	8.6	7.9	16	13	7.0	17	24	20	72
19	---	---	16	10	7.5	94	13	10	18	29	23	66
20	---	---	11	15	9.9	84	10	8.4	18	27	23	60
21	---	---	12	11	8.5	35	8.6	7.7	17	21	28	55
22	---	---	15	8.9	7.9	33	7.8	23	17	19	25	47
23	---	---	7.1	3.7	4.8	28	8.8	21	19	26	24	42
24	---	---	e6.6	9.2	8.8	28	9.2	8.0	17	25	24	43
25	---	---	e6.0	5.2	10	26	13	8.1	15	20	21	40
26	---	---	e5.5	6.9	11	21	15	5.8	16	19	18	31
27	---	---	e5.1	11	9.2	23	17	13	15	18	16	33
28	---	---	e5.3	8.6	11	21	e15	12	15	15	18	32
29	---	---	e7.0	9.1	---	36	e12	9.2	14	14	18	113
30	---	---	e10	11	---	54	e13	10	13	14	16	73
31	---	---	9.4	14	---	41	---	9.6	---	e70	17	---
TOTAL	---	---	---	277.5	277.3	782.17	499.4	344.3	541.8	786.6	722.1	2045
MEAN	---	---	---	8.95	9.90	25.2	16.6	11.1	18.1	25.4	23.3	68.2
MAX	---	---	---	15	13	94	34	23	39	70	59	364
MIN	---	---	---	2.5	4.8	.37	7.8	5.8	7.3	8.6	2.7	17

e Estimated

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

02248030 HALIFAX CANAL NEAR HARBOR OAKS, FL

LOCATION.--Lat 29°06'56", long 80°59'15", in NW¹/₄ 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 mi².

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

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is at sea level.

REMARKS.--Records fair. Flow affected by tides in the Intracoastal Waterway.

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	12	6.3	3.7	2.7	2.8	8.0	4.3	5.3	4.7	23	5.7
2	13	7.0	4.7	2.6	2.7	3.7	5.6	3.8	4.6	4.5	18	6.1
3	14	7.8	-0.9	2.3	1.2	2.8	6.6	3.8	3.8	3.8	18	4.6
4	13	6.8	-0.82	2.5	1.6	2.9	5.8	3.4	3.8	3.6	18	6.1
5	14	5.0	6.6	3.3	1.9	2.9	4.3	4.0	3.8	7.6	19	7.0
6	11	5.2	6.6	3.4	2.9	1.7	6.0	4.3	3.6	5.1	20	10
7	9.2	7.2	6.3	2.7	1.1	1.1	6.2	2.2	3.4	3.9	18	8.3
8	6.1	7.9	6.3	3.4	.93	1.1	5.3	5.9	2.3	5.4	14	9.2
9	8.9	7.7	6.6	2.9	-1.3	3.3	6.0	7.3	2.9	6.5	15	9.7
10	14	7.7	4.2	3.1	-1.2	2.3	6.4	8.0	4.4	11	13	8.5
11	13	-.62	8.2	3.3	-.24	5.8	5.5	6.5	5.7	9.7	12	7.7
12	11	-2.8	9.3	6.4	-2.6	6.9	6.4	6.2	4.6	11	8.5	8.9
13	12	9.1	7.4	4.1	-1.6	9.2	6.0	4.3	4.1	19	8.0	19
14	12	10	8.6	5.8	-1.6	6.3	5.4	3.1	4.3	13	8.2	89
15	10	7.6	6.1	4.2	-.40	3.3	4.4	5.8	4.5	10	7.8	59
16	11	10	5.4	3.2	.75	8.9	4.6	3.9	5.2	9.1	21	26
17	12	9.6	6.8	2.7	.84	5.0	5.5	2.9	4.9	9.7	18	22
18	15	6.9	3.5	2.6	-.90	3.4	5.3	4.8	4.0	12	15	21
19	13	4.9	2.9	3.7	1.2	8.9	4.3	4.4	4.2	13	12	17
20	11	4.8	2.7	5.0	1.5	25	3.3	5.0	3.8	9.4	13	21
21	11	9.1	2.8	2.7	2.5	18	3.8	4.9	4.9	6.4	13	15
22	7.3	6.8	2.7	1.9	2.6	11	3.4	8.5	5.7	6.9	11	15
23	8.3	5.0	3.1	.87	1.7	7.7	3.2	4.7	6.1	12	9.1	13
24	13	4.9	3.8	4.6	6.5	9.0	4.2	5.8	5.5	10	8.9	18
25	12	9.0	3.7	2.8	4.4	8.4	4.8	5.7	6.1	8.6	9.4	19
26	5.6	10	3.8	3.3	2.9	8.0	6.0	4.8	7.6	8.1	5.0	12
27	9.2	10	5.0	2.3	3.5	8.4	8.0	5.3	6.5	6.4	5.9	12
28	19	8.6	5.3	2.6	2.6	5.7	7.0	4.3	4.0	6.3	7.3	11
29	9.4	7.6	-1.1	2.3	---	10	3.0	3.8	3.8	4.7	6.6	94
30	7.7	6.7	7.7	2.2	---	13	6.4	3.0	4.2	6.8	5.4	39
31	8.9	---	3.5	2.6	---	8.3	---	3.4	---	48	5.9	---
TOTAL	347.6	211.48	147.89	99.07	36.18	214.8	160.7	148.1	137.6	296.2	387.0	613.8
MEAN	11.2	7.05	4.77	3.20	1.29	6.93	5.36	4.78	4.59	9.55	12.5	20.5
MAX	19	12	9.3	6.4	6.5	25	8.0	8.5	7.6	48	23	94
MIN	5.6	-2.8	-1.1	.87	-2.6	1.1	3.0	2.2	2.3	3.6	5.0	4.6

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

	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MEAN	11.2	7.05	4.77	3.20	1.29	6.93	5.36	4.78	4.59	9.55	12.5	20.5
MAX	11.2	7.05	4.77	3.20	1.29	6.93	5.36	4.78	4.59	9.55	12.5	20.5
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	11.2	7.05	4.77	3.20	1.29	6.93	5.36	4.78	4.59	9.55	12.5	20.5
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2001 WATER YEAR

ANNUAL TOTAL	2800.42
ANNUAL MEAN	7.67
HIGHEST DAILY MEAN	94 Sep 29
LOWEST DAILY MEAN	-2.8 Nov 12
ANNUAL SEVEN-DAY MINIMUM	-1.3 Feb 9
MAXIMUM PEAK STAGE	4.09 Sep 15
10 PERCENT EXCEEDS	13
50 PERCENT EXCEEDS	5.9
90 PERCENT EXCEEDS	2.5

Note.--Negative figures indicate reverse flow.

02248053 SPRUCE CREEK NEAR NEW SMYRNA BEACH, FL

LOCATION.--Lat 29°04'21", long 80°59'25", in NW $\frac{1}{4}$ 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 mi².

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

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.

EXTREMES FOR PERIOD DECEMBER 2000 TO SEPTEMBER 2001.--Maximum daily discharge, 2,770 ft³/s, Sept. 15; maximum gage height, 4.05 ft, Sept. 15; maximum daily reverse flow, 342 ft³/s, Mar. 19; minimum gage height, -0.59 ft, Mar. 6.

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	---	---	---	200	-.46	171	214	-174	75	30	691	150
2	---	---	---	133	3.9	218	1.0	-105	171	-35	438	131
3	---	---	---	85	87	142	111	-167	180	-93	382	52
4	---	---	---	145	90	158	108	-215	46	8.9	261	89
5	---	---	---	189	74	119	-70	-178	-8.7	249	351	172
6	---	---	---	48	23	62	34	-145	127	277	361	214
7	---	---	---	54	-.63	-4.5	53	-290	201	62	195	154
8	---	---	---	99	3.0	-104	108	-89	186	190	139	382
9	---	---	---	51	18	-69	214	-17	121	290	125	293
10	---	---	---	-21	123	-137	187	-45	146	227	168	252
11	---	---	---	11	2.0	16	174	-32	146	231	112	199
12	---	---	---	102	13	52	238	34	205	281	32	107
13	---	---	---	-79	31	228	357	62	275	299	-19	191
14	---	---	---	6.8	85	143	215	-85	159	-15	68	2680
15	---	---	---	41	194	201	257	31	202	-96	126	2770
16	---	---	---	54	128	321	228	70	220	-70	118	2160
17	---	---	---	22	39	61	192	-73	175	-48	92	1620
18	---	---	---	34	-112	-28	-35	-93	.41	183	126	1130
19	---	---	---	57	-94	-342	-35	-101	-18	232	193	867
20	---	---	---	113	36	1310	-50	-70	-67	108	251	701
21	---	---	---	-16	13	579	-85	-67	-6.8	62	266	515
22	---	---	---	28	98	164	-94	45	161	57	160	374
23	---	---	---	-138	-61	19	-93	-88	234	274	116	283
24	---	---	---	32	-6.4	27	28	-26	187	208	200	160
25	---	---	---	60	59	113	92	51	108	159	173	110
26	---	---	---	-20	31	32	-73	30	42	174	-11	87
27	---	---	---	78	122	25	44	-70	160	-2.2	266	50
28	---	---	---	184	89	181	-30	29	153	32	212	96
29	---	---	---	-102	117	---	270	-104	188	-39	40	59
30	---	---	---	248	128	---	330	-200	117	-23	166	70
31	---	---	---	217	164	---	180	---	-8.3	---	594	194
TOTAL	---	---	---	1910.8	1082.41	4245.5	1931.0	-1127.3	3234.71	4522.9	5583	17696
MEAN	---	---	---	61.6	38.7	137	64.4	-36.4	108	146	180	590
MAX	---	---	---	200	194	1310	357	188	275	594	691	2770
MIN	---	---	---	-138	-112	-342	-200	-290	-67	-96	-19	-48

Note.--Negative figures indicate reverse flow.

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

02248060 TURNBULL CREEK NEAR NEW SMYRNA BEACH, FL

LOCATION.--Lat 29°03'03", long 80°57'35", in SW $\frac{1}{4}$ 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 mi².

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

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 not published some days due to missing velocity or gage height record.

EXTREMES FOR PERIOD OCTOBER 2000 TO SEPTEMBER 2001.--Maximum daily discharge, 891 ft³/s, Sept. 15; maximum gage height 14.53 ft, Sept. 15; maximum daily reverse flow, 65 ft³/s, Feb. 23; minimum gage height, 9.93 ft, Mar. 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	48	-3.9	-12	-5.9	-15	18	-2.6	---	-3.8	114	-3.2
2	248	46	-8.0	-21	-10	-8.3	7.2	-7.5	---	-1.8	97	-2.3
3	142	43	-6.7	-27	-27	-11	-1.6	-12	---	-18	93	-22
4	123	27	52	-22	-42	-13	-12	-18	---	-12	61	14
5	81	18	90	-20	-30	-9.2	-30	-31	---	13	59	48
6	57	33	51	-27	-28	-45	-3.9	-21	---	7.3	69	56
7	13	48	24	-33	-37	7.2	.20	-62	---	-7.6	44	51
8	-56	16	5.5	-21	-43	---	-9.4	59	---	8.9	46	93
9	59	.16	-9.9	-55	-33	---	-11	83	---	34	57	104
10	135	-4.2	-36	-47	-7.5	---	6.1	27	---	6.9	46	80
11	80	-44	-.68	-16	-27	---	12	36	---	14	25	56
12	17	51	9.9	-2.4	-28	---	11	19	---	17	15	29
13	12	59	-7.0	-37	-8.0	---	5.0	5.3	-3.1	---	5.9	214
14	49	74	35	53	-12	---	-8.1	-12	-9.8	---	-4.5	872
15	68	40	16	21	-14	---	-3.7	7.0	-7.4	---	-16	891
16	47	59	-2.7	-8.9	-10	---	-6.0	.37	-16	---	56	822
17	55	31	5.4	-13	-26	---	-9.0	-22	-18	---	---	665
18	51	4.4	-23	-20	-36	---	-5.7	-.77	-27	---	---	437
19	51	-22	-20	-16	-20	---	1.0	8.2	-16	---	---	405
20	39	29	-21	-5.9	-15	460	-17	-10	-22	---	---	318
21	31	69	-20	-24	-22	126	-19	-17	-16	---	---	232
22	15	26	-23	-44	-31	33	-16	31	-2.1	---	---	162
23	-3.2	1.9	-29	-59	-65	2.8	-16	-5.9	17	---	---	138
24	46	-18	-26	32	-1.5	29	.98	41	16	---	53	114
25	98	-9.2	-16	-41	-.66	5.7	-9.0	51	10	---	9.7	95
26	69	17	17	-11	-2.2	-18	-38	28	11	---	-12	84
27	133	7.7	14	5.5	-14	6.4	30	30	1.7	---	27	56
28	115	-5.3	-2.1	-11	-14	.65	4.0	18	.17	---	25	46
29	42	-3.5	-28	-18	---	52	-9.7	2.0	-2.9	---	8.3	620
30	61	-2.5	36	-4.1	---	48	-15	-8.6	-2.0	---	-1.1	694
31	73	---	-12	-1.2	---	27	---	8.7	---	136	5.2	---
TOTAL	2152.8	639.46	60.82	-506.0	-609.76	---	-144.62	224.20	---	---	---	7368.5
MEAN	69.4	21.3	1.96	-16.3	-21.8	---	-4.82	7.23	---	---	---	246
MAX	248	74	90	53	-.66	---	30	83	---	---	---	891
MIN	-56	-44	-36	-59	-65	---	-38	-62	---	---	---	-22

Note.--Negative figures indicate reverse flow.

02248380 HAULOVER CANAL NEAR MIMS, FL

LOCATION.--Lat 28°44'10", long 80°45'18", in SE 1/4 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 sea level.

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-4230	-1090	67	-329	-398	-960	-624	-1290	1570	1980	499	1160
2	-3770	-850	-995	-1800	-1300	1090	-1840	660	1630	1170	1470	660
3	2230	-1670	-2810	-2790	-2520	3070	3440	-889	1300	1040	3280	-414
4	7100	-768	-4220	-1860	-926	3830	144	-1490	1890	1130	3330	812
5	-369	-675	-4250	1330	-1230	-856	-1450	-1060	2770	1180	3210	-548
6	2910	827	-3240	38	-124	-2980	1540	-1480	1660	350	1870	-171
7	-1480	2400	-2300	72	-513	-2680	878	-1940	1730	449	-154	74
8	-3510	2870	435	1890	269	-1350	1380	-2180	1050	540	-9.7	142
9	-4890	3220	1070	-2540	1230	-301	1950	-823	-629	1620	891	2250
10	-3910	218	200	-3010	632	-2620	558	-452	-212	50	960	1570
11	-2840	-3050	662	-171	-2330	-640	2160	1090	1120	441	2030	1650
12	-1720	-1770	-710	1220	-2630	2350	2290	1110	3540	2250	2500	2930
13	-1760	587	246	-3590	-2370	2950	2090	1510	826	1990	2300	-461
14	-2410	1670	1310	-2770	1350	-1340	-1500	e700	340	-2140	1570	2770
15	-2800	-3200	-243	-1030	2280	4210	100	e900	792	-2020	1340	-2020
16	-1490	843	4020	-1.1	2980	3810	-1740	1070	647	1320	407	-4560
17	-1760	1280	2550	-592	297	-1930	-979	-54	167	812	1080	-2320
18	-1800	-2760	-2850	1290	-3710	-3120	-3780	-309	-590	1240	1180	517
19	-1240	1890	1050	2910	-1360	e-3400	-1430	1250	-1170	1470	938	2370
20	-2180	-4120	-2290	1380	1210	e-2700	2160	1030	-1110	865	449	2510
21	-254	e-4200	-879	-3250	967	-1560	1640	4280	15	1510	-449	1520
22	-1710	e-2000	-1030	-2600	1410	-2170	802	2940	474	1990	107	795
23	-2370	-354	-2010	-3510	-2070	-1480	1820	-1160	874	5910	-964	74
24	-3250	2590	-2280	-1940	995	309	1700	-1890	14	3480	-901	3620
25	-2390	3840	-3760	-2060	3820	422	29	2380	471	2490	-347	-307
26	-2930	-1810	43	-1380	-262	-1990	-3540	1350	178	2630	-2920	-1000
27	-3450	-1470	1030	340	-583	-2700	-1880	1950	-266	1810	-1900	815
28	-407	-1740	1770	-69	1090	-448	355	1150	-523	577	886	-1820
29	63	-1020	-3070	2100	---	4120	228	1630	548	917	192	-1660
30	-2100	-1910	-2350	4030	---	3560	-373	399	1890	1410	1800	-4630
31	-1530	---	-1750	900	---	166	---	-348	---	-454	2140	---
TOTAL	-50247	-12222	-26584	-17792.1	-3796	-5338	6128	10034	20996	38007	26784.3	6328
MEAN	-1621	-407	-858	-574	-136	-172	204	324	700	1226	864	211
MAX	7100	3840	4020	4030	3820	4210	3440	4280	3540	5910	3330	3620
MIN	-4890	-4200	-4250	-3590	-3710	-3400	-3780	-2180	-1170	-2140	-2920	-4630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	-661	-524	-847	-416	-354	-195	286	172	423	585	136	648
MAX	939	571	506	144	416	158	611	622	1118	1226	864	2139
(WY)	2000	1999	1996	1998	1998	1998	1997	2000	2000	2001	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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	-30299.1		-7701.8			
ANNUAL MEAN	-83.7		-21.1		-37.9	
HIGHEST ANNUAL MEAN					211 1996	
LOWEST ANNUAL MEAN					-247 1997	
HIGHEST DAILY MEAN	7100	Oct 4	7100	Oct 4	9420	Sep 8 1996
LOWEST DAILY MEAN	-5360	Mar 23	-4890	Oct 9	-7260	Mar 12 1996
ANNUAL SEVEN-DAY MINIMUM	-3010	Oct 8	-3010	Oct 8	-4530	Mar 8 1996
MAXIMUM PEAK STAGE			2.00	Sep 19	2.32	Oct 17 1999
10 PERCENT EXCEEDS	2460		2440		2500	
50 PERCENT EXCEEDS	52		100		117	
90 PERCENT EXCEEDS	-2850		-2760		-2920	

e Estimated
Note.--Negative figures indicate reverse flow

COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET

02249007 EAU GALLIE RIVER AT HEATHER GLEN CIRCLE AT MELBOURNE, FL

LOCATION.--Lat 28°07'36", long 80°38'49", in NW¹/₄ 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 mi².

PERIOD OF RECORD.--January 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level.

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	4.1	3.2	3.8	2.9	27	3.2	8.2	6.1	20	5.8
2	41	20	3.8	3.2	4.1	2.9	12	2.9	4.5	5.8	42	5.8
3	115	20	3.1	3.1	3.9	2.5	7.7	4.9	3.3	5.8	36	5.8
4	168	20	2.8	2.9	4.2	2.8	6.3	3.4	3.0	7.2	58	5.8
5	86	20	2.8	2.8	2.6	3.8	5.8	2.8	2.8	16	49	9.6
6	60	19	2.8	2.8	2.1	4.6	5.5	2.7	3.0	22	35	9.9
7	48	16	2.8	3.0	2.1	3.3	5.2	5.1	3.4	19	34	56
8	40	15	3.2	3.2	2.4	3.2	5.1	3.8	5.5	14	28	31
9	31	15	3.2	3.1	2.4	3.9	4.7	2.9	3.7	45	26	18
10	29	15	3.2	2.8	2.4	5.7	4.1	2.8	4.1	42	26	16
11	27	14	3.2	2.8	2.4	5.6	3.2	2.5	14	33	30	14
12	25	13	3.2	3.0	2.2	3.4	3.2	2.4	13	19	29	28
13	24	13	3.2	2.8	2.4	2.3	3.2	2.4	6.6	17	26	55
14	21	16	3.2	2.8	2.2	3.5	3.2	2.2	8.6	15	31	156
15	9.9	15	3.2	2.6	1.9	3.1	4.0	2.3	9.1	16	31	60
16	8.4	14	3.2	2.4	1.8	3.3	4.0	2.4	8.6	13	21	31
17	8.6	13	4.0	2.4	1.8	2.3	2.8	2.7	7.3	17	17	23
18	9.3	11	3.3	2.5	1.7	3.6	2.9	2.7	9.5	81	18	18
19	9.3	9.0	3.4	2.5	1.5	12	2.9	1.9	6.2	62	17	16
20	9.6	7.6	3.2	2.3	1.5	6.8	2.4	1.8	5.5	62	14	15
21	30	6.1	3.2	2.1	1.5	5.4	2.4	1.8	4.9	118	16	13
22	15	5.5	3.0	2.9	1.7	5.2	2.4	3.9	37	104	15	12
23	11	5.2	2.8	2.5	2.0	4.3	2.6	6.4	19	43	12	11
24	10	5.4	2.8	2.2	15	2.8	2.8	4.3	37	30	12	20
25	10	5.2	2.8	2.7	3.0	2.8	5.3	26	18	23	12	39
26	18	6.8	2.9	2.8	2.8	3.3	3.2	31	11	19	12	50
27	11	8.3	3.2	3.3	2.8	3.8	3.3	4.2	11	17	12	63
28	14	4.9	3.4	4.1	3.0	4.0	2.4	3.3	13	16	12	41
29	21	4.6	3.6	3.0	---	24	2.4	14	9.3	14	11	47
30	20	4.4	3.2	2.8	---	42	4.0	5.3	7.0	12	10	89
31	20	---	3.2	3.2	---	31	---	3.5	---	32	7.6	---
TOTAL	971.1	362.0	99.0	87.8	81.2	210.1	146.0	161.5	297.1	945.9	719.6	964.7
MEAN	31.3	12.1	3.19	2.83	2.90	6.78	4.87	5.21	9.90	30.5	23.2	32.2
MAX	168	20	4.1	4.1	15	42	27	31	37	118	58	156
MIN	8.4	4.4	2.8	2.1	1.5	2.3	2.4	1.8	2.8	5.8	7.6	5.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	21.8	12.0	7.52	8.75	8.44	10.0	7.31	6.96	12.0	15.4	19.3	23.6
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	4.60	3.53	3.80	3.34	3.35	4.24	7.69
(WY)	1994	1996	2001	2001	2001	1994	1999	2000	1993	1993	1993	1993

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1991 - 2001

ANNUAL TOTAL	4203.2	5046.0		
ANNUAL MEAN	11.5	13.8	12.8	
HIGHEST ANNUAL MEAN			17.7	1998
LOWEST ANNUAL MEAN			7.88	1993
HIGHEST DAILY MEAN	168	Oct 4	a501	Aug 2 1995
LOWEST DAILY MEAN	1.4	Jun 4		Aug 19 1996
ANNUAL SEVEN-DAY MINIMUM	1.7	Jun 16	1.6	Feb 16 2001
MAXIMUM PEAK FLOW			322	Jul 18
MAXIMUM PEAK STAGE			14.87	Jul 18
INSTANTANEOUS LOW FLOW			1.5	Jan 19, Feb 17-22
10 PERCENT EXCEEDS	23		31	
50 PERCENT EXCEEDS	7.4		5.5	7.8
90 PERCENT EXCEEDS	3.0		2.4	3.3

a From rating curve extended above 298 ft³/s

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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	-1.0	5.4	2.5	3.0	-4.0	31	13	e5.7	e24	50	30
2	17	-6.0	1.6	.66	5.7	-4.9	18	3.3	e20	e9.1	105	28
3	136	-2.4	-6.9	3.6	7.5	-2.8	23	17	e35	e15	119	26
4	377	-2.6	-1.6	4.1	9.2	5.7	8.2	16	e25	e25	499	26
5	114	7.3	6.4	5.8	7.9	-5.9	9.9	-1.8	e20	e30	394	31
6	76	-4.5	-2.8	5.2	6.7	-.71	8.0	-4.7	e15	e46	163	52
7	60	5.4	-4.4	5.7	5.9	-6.1	4.2	e.50	e10	e81	118	77
8	44	-2.8	-1.7	2.4	7.6	-1.9	5.5	e4.7	e10	e59	90	63
9	50	-9.4	-3.6	-1.9	13	.98	5.4	e2.3	e23	e113	73	41
10	43	-13	-4.7	3.7	7.6	-8.6	3.5	e1.8	e26	e205	64	36
11	33	-11	-3.9	7.0	4.0	-5.5	6.3	e-1.9	e16	e193	63	39
12	38	-9.0	-9.3	13	5.1	-2.0	12	e12	e12	e119	61	99
13	27	-9.1	-2.2	-1.5	4.0	-14	2.8	e18	e13	e103	53	397
14	17	-12	-6.6	2.6	1.7	-8.4	-2.6	e1.2	e12	e125	77	868
15	14	-6.8	-4.7	1.4	-.97	-6.2	-5.9	e-.30	e11	e184	190	305
16	13	-4.6	-1.5	-.85	2.5	e-12	-6.2	e.60	e27	e179	146	179
17	6.2	-8.9	-11	-1.3	-8.0	e-.60	-9.6	e-4.0	e25	e182	83	123
18	7.9	-2.4	-2.8	1.5	2.3	e1.0	-4.5	e-2.3	e8.6	e244	104	97
19	2.6	-11	14	-1.1	.64	e.20	5.7	e10	e8.3	e389	111	81
20	18	-11	15	-6.0	-3.6	e-.80	9.4	e12	e10	e380	73	75
21	82	1.5	8.6	-2.6	-4.4	e.30	2.2	e-.20	e13	e201	62	70
22	34	-1.9	16	4.9	4.9	e.00	.61	e.70	e17	e243	63	56
23	23	1.9	14	1.6	-7.5	e-12	.83	e4.2	e31	e133	57	48
24	24	4.4	2.5	3.0	38	-6.2	-.18	e3.5	e34	108	53	48
25	16	10	16	9.7	13	-9.1	5.7	e6.2	e21	84	41	98
26	3.7	-.80	19	2.6	-4.2	-9.2	2.0	e21	e14	69	38	136
27	6.7	1.4	1.2	-.96	-2.0	-8.9	6.1	e19	e14	64	37	256
28	3.0	-1.30	8.9	2.4	-1.3	-1.6	-1.3	e6.8	e66	60	35	154
29	-.20	1.1	.10	9.2	---	31	7.0	e11	e87	50	33	161
30	3.3	4.4	-3.4	.58	---	80	11	e10	e56	45	32	404
31	1.7	---	1.9	12	---	37	---	e5.9	---	41	29	---
TOTAL	1310.90	-93.10	59.50	88.93	118.27	24.77	158.06	185.50	685.6	3803.1	3116	4104
MEAN	42.3	-3.10	1.92	2.87	4.22	.80	5.27	5.98	22.9	123	101	137
MAX	377	10	19	13	38	80	31	21	87	389	499	868
MIN	-.20	-13	-11	-6.0	-8.0	-14	-9.6	-4.7	5.7	9.1	29	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	MEAN	78.4	50.4	29.5	31.4	31.6	37.0	26.4	23.0	35.1	56.6	69.2	74.5
MAX	248	169	74.4	67.5	66.0	89.5	40.6	82.1	74.6	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	.80	5.27	.97	1.42	7.46	14.0	10.8	
(WY)	1997	2001	2001	2001	2001	2001	2001	1994	1998	1999	2000	1996	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1987 - 2001

ANNUAL TOTAL		6412.72		13561.53									
ANNUAL MEAN		17.5		37.2						43.4			
HIGHEST ANNUAL MEAN										60.2			1988
LOWEST ANNUAL MEAN										34.5			1994
HIGHEST DAILY MEAN				377	Oct 4	868	Sep 14	2150	Aug 2	1995			
LOWEST DAILY MEAN				-18	Sep 16	-14	Mar 13	*-20	Apr 5	1995			
ANNUAL SEVEN-DAY MINIMUM				-10	Nov 9	-10	Nov 9	-10	Nov 9	2000			
MAXIMUM PEAK STAGE						12.29	Sep 15	13.85	Oct 16	1999			
10 PERCENT EXCEEDS				38		106		86					
50 PERCENT EXCEEDS				14		8.0		32					
90 PERCENT EXCEEDS				-3.5		-4.7		3.7					

e Estimated

* May have been lower during period of no gage-height record, Apr. 6-21, 1995

Note.--Negative figures indicate reverse flow

COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET

02250005 MELBOURNE-TILLMAN CANAL AT PALM BAY, FL

LOCATION.--Lat 28°00'46", long 80°36'20", in SW¹/₄ sec.27, T.28 S., R.37 E., Brevard County, Hydrologic Unit 03080202, on left bank on downstream side of bridge on Babcock Street, 1.2 mi north of Palm Bay Boulevard, 2.5 mi southwest of Palm Bay and 1.2 mi upstream from mouth.

DRAINAGE AREA.--100 mi², approximately.

PERIOD OF RECORD.--October 1992 to February 1996 (gage heights only), March 1996 to September 2001 (discontinued).

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is undetermined. Prior to March 1996, water-stage recorder 1 mi downstream at structure MS-1.

REMARKS.--Records fair. Summary of statistics based on incomplete record. Discharge regulated by structure MS-1, 1 mi downstream.

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	86	13	9.2	29	-3.4	-7.7	11	4.0	15	162	481	238
2	81	7.8	.36	7.6	-5.9	-1.4	2.1	-1.4	40	163	528	233
3	122	1.5	6.8	-8.5	-1.9	1.3	4.3	-4.6	34	180	640	222
4	463	-6.2	-.06	-8.7	7.1	.16	17	29	50	153	812	215
5	406	-1.0	7.4	7.1	-1.5	-10	24	41	45	174	1170	219
6	269	-5.5	8.4	-.95	7.5	-17	24	31	45	213	1120	266
7	197	-4.1	-2.3	-8.4	10	-14	17	15	43	211	859	309
8	161	-9.3	-1.9	19	8.2	-3.9	13	4.9	71	208	708	387
9	130	7.5	14	8.1	7.4	-10	-1.6	3.8	156	288	597	387
10	122	-2.6	-4.7	-3.8	5.9	-19	-2.3	12	115	482	542	408
11	119	-5.0	3.6	32	8.9	-25	2.5	17	125	635	480	417
12	112	-6.5	-4.4	-2.8	6.4	-15	4.9	17	249	556	445	609
13	107	-5.7	9.2	4.7	4.5	-30	.10	3.5	190	516	413	860
14	92	-22	10	.98	-3.4	-15	.43	5.4	162	477	384	1310
15	80	-8.9	6.3	4.9	1.0	-28	-11	2.7	152	573	489	1070
16	71	-.93	6.9	.88	-8.7	-26	-13	5.4	158	484	578	824
17	63	-8.1	-1.2	12	-17	-8.1	-20	-18	140	720	498	660
18	65	.65	5.9	6.9	-7.8	-17	-20	-16	113	917	416	577
19	57	-6.1	1.8	-9.3	-11	-18	-13	-10	103	1030	434	519
20	47	-4.9	-10	-4.3	7.5	-31	-2.0	-7.7	99	1030	415	450
21	78	-13	-1.5	-3.5	-1.8	-20	-2.4	1.8	97	1240	461	406
22	90	-11	-.40	.18	.07	-32	4.3	-3.6	118	1450	474	363
23	75	5.7	9.0	-5.1	1.6	-18	4.4	33	113	1210	394	334
24	67	3.1	6.2	-4.0	10	-21	24	55	111	991	346	316
25	56	-11	13	4.0	14	-28	51	25	113	835	305	366
26	48	9.4	16	8.2	-8.4	-23	19	66	136	760	291	434
27	7.7	e2.3	11	2.7	1.8	-8.3	-1.2	51	146	709	271	754
28	9.1	e6.1	8.0	20	-27	-14	-4.6	40	143	749	261	716
29	13	e6.4	-12	-2.8	---	-13	1.7	22	180	638	257	605
30	9.0	e6.6	-5.5	3.7	---	44	-4.2	17	147	552	247	759
31	13	---	8.3	-8.6	---	34	---	14	---	500	239	---
TOTAL	3315.8	-61.78	117.40	101.19	4.07	-393.94	129.43	455.2	3409	18806	15555	15233
MEAN	107	-2.06	3.79	3.26	.15	-12.7	4.31	14.7	114	607	502	508
MAX	463	13	16	32	14	44	51	66	249	1450	1170	1310
MIN	7.7	-22	-12	-9.3	-27	-32	-20	-18	15	153	239	215

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	143	170	169	77.0	55.6	118	75.8	74.8	181	343	298	276
MAX	230	496	630	228	131	285	121	174	299	607	502	508
(WY)	1997	1999	1998	1998	1999	1996	1996	1997	1999	2001	2001	2001
MIN	80.1	-2.06	3.79	3.26	.15	-12.7	4.31	14.7	43.4	96.2	146	87.9
(WY)	1999	2001	2001	2001	2001	2001	2001	2001	1998	1998	2000	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1996 - 2001

ANNUAL TOTAL	20559.44	56670.37		
ANNUAL MEAN	78.2	155	173	
HIGHEST ANNUAL MEAN			254	1998
LOWEST ANNUAL MEAN			101	2000
HIGHEST DAILY MEAN	527	Jul 27	1450	Jul 22
LOWEST DAILY MEAN	-22	Nov 14	-32	Mar 22
ANNUAL SEVEN-DAY MINIMUM	-8.2	Nov 11	-25	Mar 20
MAXIMUM PEAK STAGE			10.84	Jul 22
10 PERCENT EXCEEDS	188		546	
50 PERCENT EXCEEDS	60		13	
90 PERCENT EXCEEDS	-.97		-10	4.3

e Estimated

Note.--Negative figures indicate reverse flow

02250030 TURKEY CREEK AT PALM BAY, FL

LOCATION.--Lat 28°01'00", long 80°35'46", in SE¹/₄ sec.26, T.28 S., R.37 E., Brevard County, Hydrologic Unit 03080202, near right bank on downstream side of bridge on Port Malabar Boulevard, 1.6 mi southwest of the intersection of U.S. Highway 1 and State Highway 516 in Palm Bay, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--105 mi², approximately.

PERIOD OF RECORD.--February 1981 to September 1983, October 1983 to 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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	e65	17	50	38	7.5	91	16	82	277	483	e195
2	116	e60	28	21	36	40	48	21	125	249	461	e180
3	150	58	31	11	35	50	54	22	112	235	371	e170
4	674	48	18	22	37	48	74	80	123	205	386	e160
5	566	44	22	23	38	35	82	92	114	217	328	e165
6	380	47	20	17	34	21	73	83	111	291	246	e190
7	333	18	13	36	36	8.3	59	57	113	274	209	228
8	292	36	7.7	54	35	2.7	47	53	136	258	190	287
9	235	69	18	33	35	1.6	22	52	237	369	469	299
10	215	55	30	27	37	2.6	37	63	210	670	536	328
11	196	47	40	30	32	1.6	40	71	202	881	470	353
12	177	46	26	33	30	5.2	39	65	340	720	417	529
13	e160	37	23	32	32	-1.49	37	53	286	663	359	1130
14	e155	41	27	38	20	-4.7	35	51	230	597	340	1870
15	e145	4.6	26	37	15	4.6	37	50	233	732	439	1430
16	e140	53	37	38	15	-1.1	35	53	215	810	641	961
17	e135	55	23	38	18	-2.9	22	26	193	802	508	691
18	e130	50	35	37	26	-1.4	2.0	4.0	157	1020	399	578
19	e125	42	27	36	25	.50	13	13	152	1290	407	479
20	e120	37	20	32	45	-2.9	53	12	162	1900	379	396
21	113	22	25	26	32	-2.8	48	15	162	1080	419	363
22	129	50	24	32	27	.55	40	12	160	669	420	323
23	115	49	19	29	22	-6.0	32	105	193	658	367	289
24	104	46	20	34	48	-5.1	63	132	223	449	314	257
25	95	44	26	35	50	-8.2	111	107	235	372	278	292
26	91	41	28	36	23	-4.6	38	186	259	625	257	340
27	90	22	23	34	31	-3.2	15	149	229	1330	236	785
28	83	12	30	39	29	2.3	16	134	270	900	232	e700
29	81	9.5	21	38	---	24	21	102	304	571	221	e620
30	e75	24	31	37	---	120	19	84	294	441	213	e760
31	e70	---	43	39	---	106	---	81	---	338	e200	---
TOTAL	5614	1232.1	778.7	1024	881	438.06	1303.0	2044.0	5862	19893	11195	15348
MEAN	181	41.1	25.1	33.0	31.5	14.1	43.4	65.9	195	642	361	512
MAX	674	69	43	54	50	120	111	186	340	1900	641	1870
MIN	70	4.6	7.7	11	15	-8.2	2.0	4.0	82	205	190	160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2001, BY WATER YEAR (WY)

	304	179	104	116	105	141	91.7	75.7	136	224	254	278
MEAN	304	179	104	116	105	141	91.7	75.7	136	224	254	278
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1981 - 2001

ANNUAL TOTAL	34959.4	65612.86	
ANNUAL MEAN	95.5	180	167
HIGHEST ANNUAL MEAN			303
LOWEST ANNUAL MEAN			75.7
HIGHEST DAILY MEAN	674	Oct 4	1900
LOWEST DAILY MEAN	-2.1	Apr 11	Jul 20
ANNUAL SEVEN-DAY MINIMUM	3.6	Jun 13	-8.2
MAXIMUM PEAK STAGE			Mar 25
10 PERCENT EXCEEDS	190		-4.2
50 PERCENT EXCEEDS	68		Mar 21
90 PERCENT EXCEEDS	22		9.44
			Jul 20, Sep 14
			12.29
			Aug 2 1995
			367
			97
			15
			39

e Estimated
Note.--Negative figures indicate reverse flow

COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET

02250030 TURKEY CREEK AT PALM BAY, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.69	6.38	5.60	5.39	5.19	5.34	5.65	5.45	5.53	5.68	6.25	5.53
2	6.69	6.33	5.59	5.41	5.20	5.29	5.54	5.43	5.53	5.67	6.25	5.57
3	6.70	6.31	5.79	5.41	5.26	5.14	5.26	5.54	5.50	5.65	6.08	5.64
4	7.58	6.23	5.94	5.30	5.11	5.04	5.33	5.70	5.44	5.58	6.16	5.59
5	7.41	6.23	6.05	5.12	5.08	5.21	5.45	5.74	5.35	5.61	6.04	5.71
6	6.95	6.22	5.91	5.08	5.02	5.31	5.35	5.70	5.33	5.75	5.89	5.78
7	6.83	6.17	5.95	5.13	5.02	5.28	5.33	5.70	5.28	5.67	5.81	5.90
8	6.81	6.17	5.82	5.08	4.99	5.26	5.29	5.80	5.35	5.60	5.64	6.11
9	7.25	6.17	5.77	5.30	4.97	5.26	5.22	5.76	5.56	5.78	6.33	6.10
10	6.66	6.21	5.77	5.38	4.97	5.49	5.25	5.73	5.56	6.48	6.52	6.20
11	6.54	6.40	5.78	5.19	5.13	5.50	5.21	5.72	5.57	7.08	6.32	6.26
12	6.52	6.37	5.87	5.12	5.21	5.39	5.17	5.68	5.79	6.72	6.12	6.64
13	---	6.27	5.84	5.47	5.23	5.32	5.16	5.60	5.66	6.58	5.95	7.93
14	---	6.15	5.80	5.45	5.10	5.58	5.34	5.59	5.58	6.49	5.88	8.98
15	---	6.42	5.81	5.46	4.98	5.35	5.31	5.46	5.56	6.97	6.10	8.54
16	---	6.20	5.65	5.40	4.92	5.31	5.39	5.52	5.52	7.10	6.57	8.08
17	---	6.12	5.64	5.39	5.04	5.49	5.40	5.61	5.43	7.18	6.29	7.66
18	---	6.25	5.86	5.33	5.38	5.65	5.63	5.68	5.38	7.64	6.07	7.44
19	6.43	6.06	5.61	5.24	5.19	5.46	5.33	5.63	5.42	8.12	6.11	7.24
20	6.35	6.45	5.69	5.29	5.13	5.68	5.14	5.70	5.42	8.92	6.05	7.07
21	6.36	6.39	5.56	5.52	5.13	5.78	5.16	5.57	5.37	7.93	6.17	6.99
22	6.42	6.22	5.46	5.43	5.11	5.80	5.20	5.61	5.38	7.09	6.16	6.84
23	6.48	5.98	5.49	5.56	5.29	5.74	5.12	5.85	5.41	7.00	6.08	6.73
24	6.59	5.80	5.63	5.32	5.26	5.64	5.12	6.01	5.50	6.44	5.97	6.55
25	6.57	5.71	5.78	5.37	5.14	5.57	5.27	5.75	5.57	6.33	5.87	6.64
26	6.65	5.86	5.52	5.35	5.29	5.64	5.55	5.84	5.60	6.96	5.95	6.74
27	6.71	5.91	5.38	5.29	5.35	5.69	5.32	5.71	5.61	8.32	5.82	7.43
28	6.54	5.88	5.32	5.29	5.28	5.51	5.18	5.68	5.73	7.46	5.71	7.38
29	6.45	5.79	5.60	5.17	---	5.33	5.20	5.55	5.78	6.66	5.67	7.26
30	6.47	5.76	5.64	5.05	---	5.55	5.27	5.55	5.72	6.27	5.57	7.73
31	6.45	---	5.57	5.12	---	5.64	---	5.57	---	5.93	5.52	---
MEAN	6.68	6.15	5.70	5.30	5.14	5.46	5.30	5.66	5.51	6.67	6.03	6.81
MAX	7.58	6.45	6.05	5.56	5.38	5.80	5.65	6.01	5.79	8.92	6.57	8.98
MIN	6.35	5.71	5.32	5.05	4.92	5.04	5.12	5.43	5.28	5.58	5.52	5.53
CAL YR 2000	MEAN 5.79	MAX 7.58	MIN 5.00									
WTR YR 2001	MEAN 5.86	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 SW¹/₄, 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 mi², 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 sea level. Auxiliary water-stage recorder at site 6.6 mi downstream.

REMARKS.--Records fair except those below 100 ft³/s and periods of estimated daily discharge, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	22	26	31	32	24	e66	26	32	102	97	50
2	101	20	27	32	32	23	e32	32	34	65	317	48
3	484	22	23	40	35	23	e22	29	53	52	749	60
4	1270	26	21	33	35	24	e35	34	69	48	810	79
5	875	26	15	31	34	27	39	37	68	47	826	70
6	529	27	17	34	32	25	41	34	61	71	884	121
7	256	29	18	34	30	19	40	27	51	118	769	146
8	210	28	19	32	30	18	38	29	46	97	609	230
9	182	24	23	28	28	17	36	26	44	108	511	227
10	153	22	27	24	29	17	32	22	41	182	414	228
11	122	13	28	27	31	18	30	16	47	269	313	186
12	107	14	27	27	32	23	31	17	42	275	307	538
13	94	19	32	24	28	22	29	21	42	242	276	842
14	86	18	34	27	28	21	29	20	41	235	243	925
15	79	11	35	28	27	20	30	19	40	534	214	793
16	71	16	35	31	26	22	27	18	47	572	196	625
17	61	18	35	35	27	22	22	12	42	235	172	516
18	59	16	34	39	28	22	23	11	37	126	150	423
19	57	16	33	38	29	18	23	11	34	418	133	295
20	53	8.5	31	40	26	21	25	9.0	37	450	116	186
21	56	5.3	32	41	27	24	25	13	38	475	102	144
22	56	8.6	33	42	28	24	25	15	41	569	112	119
23	48	18	33	43	27	21	25	22	47	535	94	114
24	37	26	32	42	27	18	24	28	56	456	73	128
25	28	30	34	38	31	21	25	31	65	304	65	118
26	18	31	34	37	28	19	23	37	59	149	64	118
27	16	32	33	37	26	20	27	34	57	118	60	387
28	24	35	33	36	25	20	24	34	131	120	55	508
29	31	30	27	35	---	19	23	39	196	109	53	401
30	26	28	25	31	---	e60	23	41	166	107	51	615
31	24	---	29	32	---	e160	---	36	---	105	50	---
TOTAL	5325	639.4	885	1049	818	832	894	780.0	1764	7293	8885	9240
MEAN	172	21.3	28.5	33.8	29.2	26.8	29.8	25.2	58.8	235	287	308
MAX	1270	35	35	43	35	160	66	41	196	572	884	925
MIN	16	5.3	15	24	25	17	22	9.0	32	47	50	48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	2000	2001	1994	1995	1996	1997	1998	1999	2000	2001		
MEAN	215	117	76.6	60.4	70.6	73.0	56.3	40.2	83.7	113	170	217
MAX	469	428	221	122	206	188	126	66.5	153	235	319	463
(WY)	2000	1995	1995	1998	1998	1998	1996	1994	1996	2001	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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1994 - 2001

ANNUAL TOTAL	20187.8	38404.4		
ANNUAL MEAN	55.2	105	108	
HIGHEST ANNUAL MEAN			158	1995
LOWEST ANNUAL MEAN			77.2	1999
HIGHEST DAILY MEAN	1270	Oct 4	1270	Oct 4
LOWEST DAILY MEAN	5.3	Nov 21	5.3	Nov 21
ANNUAL SEVEN-DAY MINIMUM	8.2	Sep 10	13	Nov 16
MAXIMUM PEAK FLOW			1410	Oct 4
MAXIMUM PEAK STAGE			18.31	Oct 4
10 PERCENT EXCEEDS	100		284	
50 PERCENT EXCEEDS	35		34	
90 PERCENT EXCEEDS	19		19	

e Estimated

COASTAL AREA BETWEEN SEBASTIAN INLET AND ST. LUCIE RIVER

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 mi².

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 sea level.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	21	14	11	11	8.2	22	8.1	20	45	108	36
2	93	20	12	11	11	8.0	15	9.5	21	36	175	35
3	333	20	12	10	11	7.8	17	15	21	31	278	35
4	773	19	11	11	11	8.1	16	19	20	25	331	37
5	484	19	11	11	11	8.6	13	23	18	23	424	47
6	e276	19	11	11	11	8.8	13	23	26	30	396	47
7	e178	18	11	11	11	8.9	13	19	37	29	297	84
8	e145	18	11	11	11	8.9	12	17	34	30	211	176
9	e127	18	11	11	15	13	11	17	34	44	164	165
10	e105	17	11	11	13	9.7	11	15	28	107	135	172
11	e88	17	10	11	12	8.9	13	19	23	136	122	143
12	e77	16	10	11	12	8.9	12	13	19	147	125	399
13	69	15	11	11	11	9.7	11	11	17	120	110	643
14	60	15	11	11	12	9.4	10	11	16	100	90	770
15	53	15	10	11	11	7.9	11	11	14	296	106	659
16	49	15	10	13	11	8.6	11	11	13	422	121	432
17	44	15	11	11	11	9.2	9.9	9.8	12	443	101	285
18	40	15	11	12	9.2	9.2	9.1	8.9	10	473	79	218
19	36	15	11	11	10	9.3	8.5	8.9	11	343	72	174
20	33	15	11	11	10	9.5	8.3	8.4	11	300	64	146
21	41	14	11	11	10	8.9	7.9	7.7	10	480	59	123
22	36	13	11	11	9.5	9.5	7.3	8.3	10	605	58	107
23	32	13	11	13	10	9.5	6.7	22	11	523	53	92
24	30	13	11	13	9.4	9.6	6.8	18	23	400	51	81
25	28	13	11	12	9.3	9.2	6.9	23	32	295	48	75
26	36	13	11	12	9.0	8.3	7.1	30	38	225	45	74
27	33	13	11	12	8.6	9.4	6.9	33	32	187	43	172
28	28	14	12	12	8.4	8.9	6.6	32	42	287	43	239
29	26	17	13	12	---	11	6.9	30	63	224	41	303
30	23	13	12	10	---	28	8.0	28	56	169	39	302
31	22	---	11	12	---	21	---	23	---	133	37	---
TOTAL	3538	478	346	352	299.4	313.9	317.9	532.6	722	6708	4026	6271
MEAN	114	15.9	11.2	11.4	10.7	10.1	10.6	17.2	24.1	216	130	209
MAX	773	21	14	13	15	28	22	33	63	605	424	770
MIN	22	13	10	10	8.4	7.8	6.6	7.7	10	23	37	35
CFSM	4.00	.56	.39	.40	.38	.36	.37	.60	.84	7.59	4.56	7.33
IN.	4.62	.62	.45	.46	.39	.41	.41	.70	.94	8.76	5.25	8.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	100	68.7	34.7	33.0	35.0	44.2	27.6	17.8	31.7	49.0	56.7	76.2			
MAX	250	251	125	80.2	150	105	77.8	32.8	98.1	216	152	209			
(WY)	2000	1998	1998	1998	1998	1988	1996	1997	1994	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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1987 - 2001

ANNUAL TOTAL	10724.8	23904.8	
ANNUAL MEAN	29.3	65.5	47.7
HIGHEST ANNUAL MEAN			87.2
LOWEST ANNUAL MEAN			15.6
HIGHEST DAILY MEAN	773	Oct 4	1740
LOWEST DAILY MEAN	e6.6	Jun 2	6.3
ANNUAL SEVEN-DAY MINIMUM	7.2	Jun 4	6.5
MAXIMUM PEAK FLOW			907
MAXIMUM PEAK STAGE			9.21
INSTANTANEOUS LOW FLOW			6.2
ANNUAL RUNOFF (CFSM)	1.03		2.30
ANNUAL RUNOFF (INCHES)	14.00		31.20
10 PERCENT EXCEEDS	42		100
50 PERCENT EXCEEDS	18		25
90 PERCENT EXCEEDS	11		11

e Estimated

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 sea level (levels by St. Johns River Water Management District).

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	55	42	38	58	41	90	102	40	60	98	81
2	115	59	36	40	56	45	71	62	70	35	191	79
3	226	56	36	36	46	47	40	48	59	22	488	80
4	750	56	35	36	46	54	44	63	118	16	772	76
5	529	54	36	31	44	59	37	61	94	18	749	68
6	297	51	37	31	36	53	36	54	42	27	500	60
7	202	53	42	31	39	51	31	42	30	26	531	128
8	130	58	40	32	49	47	32	57	34	28	292	357
9	154	52	36	30	66	47	32	45	24	94	171	232
10	104	51	33	31	55	45	31	41	18	214	139	286
11	98	47	31	42	51	48	33	38	39	196	152	196
12	87	45	36	40	54	47	36	37	32	176	128	634
13	76	44	39	34	50	46	45	35	22	125	110	800
14	65	50	41	31	50	39	49	39	17	128	97	857
15	62	50	41	38	52	38	44	35	13	548	151	647
16	62	53	35	41	49	41	50	31	13	887	299	378
17	62	53	34	47	48	40	49	33	12	427	193	240
18	65	52	33	74	40	46	46	36	11	213	126	168
19	62	48	29	49	42	50	45	34	9.6	388	105	140
20	59	40	33	36	42	52	48	37	9.5	265	102	125
21	65	39	41	36	42	50	49	30	9.9	730	100	123
22	65	40	56	37	37	40	49	30	21	800	121	113
23	60	45	36	41	42	32	55	91	59	700	110	101
24	58	49	30	38	54	36	49	94	69	455	104	98
25	59	48	28	36	43	38	59	54	76	240	91	101
26	69	47	30	35	45	43	52	66	49	165	89	102
27	73	49	34	35	43	41	48	64	38	165	86	374
28	64	42	41	36	40	43	48	54	209	275	84	413
29	57	42	40	47	---	43	49	152	222	145	79	417
30	54	42	38	54	---	121	65	128	99	117	83	706
31	53	---	34	53	---	170	---	62	---	96	82	---
TOTAL	4038	1470	1133	1216	1319	1593	1412	1755	1559.0	7781	6423	8180
MEAN	130	49.0	36.5	39.2	47.1	51.4	47.1	56.6	52.0	251	207	273
MAX	750	59	56	74	66	170	90	152	222	887	772	857
MIN	53	39	28	30	36	32	31	30	9.5	16	79	60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

MEAN	149	96.1	61.2	60.9	57.7	73.8	60.3	47.6	88.5	118	129	154
MAX	380	260	147	112	150	193	102	62.9	152	251	207	273
(WY)	2000	1995	1998	1998	1998	1993	1993	1994	1992	2001	2001	2001
MIN	33.2	38.7	31.8	29.3	29.5	27.0	31.9	30.2	40.1	51.1	39.0	66.6
(WY)	1998	1997	1992	1992	1996	1997	1992	1995	1998	1993	1993	1997

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1992 - 2001

ANNUAL TOTAL	28648	37879.0	
ANNUAL MEAN	78.3	104	93.6
HIGHEST ANNUAL MEAN			112 1995
LOWEST ANNUAL MEAN			78.2 1997
HIGHEST DAILY MEAN	750	887	1780 Jul 16 1994
LOWEST DAILY MEAN	28	9.5	9.5 Jun 20 2001
ANNUAL SEVEN-DAY MINIMUM	31	11	11 Jun 15 2001
MAXIMUM PEAK FLOW		1030	1900 Jul 15,16 1994
MAXIMUM PEAK STAGE		4.94	6.52 Jul 15,16 1994
INSTANTANEOUS LOW FLOW		*9.0	*9.0
10 PERCENT EXCEEDS	157	217	173
50 PERCENT EXCEEDS	49	50	56
90 PERCENT EXCEEDS	34	32	31

* June 19,20,21, 2001

275017080295600 ST. SEBASTIAN RIVER NEAR RAILROAD BRIDGE AT ROSELAND, FL--Continued

SPECIFIC CONDUCTANCE BOTTOM (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7520	43100	24600	23400	42100	48400	---	30300	38800	---	---	39400
2	28700	41900	26800	24500	40200	48500	---	28000	42300	---	---	38500
3	22200	39800	29000	24900	38200	46300	21200	24000	39600	---	---	38000
4	---	41500	29600	22500	34000	43500	24400	20000	36300	---	---	38400
5	---	43400	29500	22700	30100	39800	---	18200	34300	---	---	42700
6	---	46500	28500	26800	35100	42900	---	15700	36100	---	---	40800
7	---	51200	28300	30500	36800	43100	---	15400	37800	---	---	40200
8	1520	51400	32900	35700	33300	43700	---	16200	36100	---	---	24600
9	4100	50000	32600	38100	37200	46700	---	15700	38200	---	---	20000
10	916	50400	39700	---	40000	44100	---	26900	35600	---	---	19400
11	1150	48300	46200	---	34400	49100	17600	40100	33900	---	---	20700
12	1790	45600	48200	---	36300	52100	33500	44200	---	---	1330	4560
13	2010	46800	47000	---	32400	42800	30400	47500	---	---	752	---
14	6240	47200	38900	---	36900	45100	25100	47400	39600	---	---	---
15	15900	46000	38100	---	36800	45600	---	49200	38600	---	---	---
16	33700	47300	38100	41200	42800	46600	---	50400	36800	---	---	---
17	38600	46400	33300	42400	40500	45500	31000	52100	35300	---	---	---
18	39000	41500	33900	46300	40200	45700	---	51200	37400	---	---	---
19	41100	42400	35100	45300	40300	46300	39600	49400	31900	---	---	26700
20	42900	41600	34900	40500	42900	48300	39100	50900	31100	---	---	32700
21	37500	36500	32500	40500	41900	50400	37800	48700	23700	---	---	29500
22	21000	34000	31300	---	43600	47500	37600	48100	---	---	---	25200
23	18200	31000	33200	---	38900	46100	39200	43600	---	---	8210	18200
24	17100	33800	33200	---	45300	45400	44000	37100	---	---	7450	26400
25	14900	34800	30100	---	46000	---	41900	37700	---	---	17900	33200
26	31200	39000	28700	---	43900	23000	39300	41500	---	---	20200	23100
27	44100	37500	24300	43200	44000	23200	35700	43900	---	---	14900	9790
28	48800	32900	23700	46100	44000	19200	33900	43900	---	---	19200	1810
29	51100	23900	27300	46600	---	21100	31600	39600	---	---	22400	695
30	48400	22900	25200	40400	---	30600	30600	38900	---	---	29100	---
31	43300	---	28800	44300	---	30300	---	38500	---	---	37700	---
MEAN	24600	41300	32700	36300	39200	41700	33300	37200	36000	---	16300	25900
MAX	51100	51400	48200	46600	46000	52100	44000	52100	42300	---	37700	42700
MIN	916	22900	23700	22500	30100	19200	17600	15400	23700	---	752	695

CAL YR 2000 MEAN 37100 MAX 52700 MIN 916
WTR YR 2001 MEAN 34300 MAX 52100 MIN 695

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.1	24.4	20.0	10.5	21.0	24.9	22.6	22.3	29.5	30.3	28.7	31.5
2	27.1	23.9	21.3	12.0	20.5	25.5	21.5	23.7	29.0	30.1	26.5	32.1
3	26.0	23.7	19.3	12.4	18.2	25.3	23.5	23.2	29.5	30.3	25.4	31.9
4	25.2	24.4	17.8	11.8	19.4	23.7	23.4	23.3	30.5	29.0	25.8	31.4
5	26.4	25.0	17.6	12.5	17.1	21.0	24.1	23.9	31.2	27.3	26.3	30.8
6	27.5	25.1	17.8	14.3	16.4	18.1	25.2	24.4	31.0	27.5	26.7	30.4
7	27.8	25.7	18.4	15.4	18.7	17.0	25.7	24.5	30.4	28.3	27.5	29.1
8	27.4	26.1	20.2	16.9	20.7	17.4	26.1	23.7	29.9	26.8	28.6	26.8
9	23.8	25.9	21.3	15.0	21.5	19.5	26.0	23.6	30.2	---	---	26.6
10	22.1	25.3	22.1	11.2	22.2	20.4	26.0	24.6	30.6	---	29.3	27.2
11	22.0	23.4	23.0	14.9	22.2	21.7	26.6	24.7	30.2	---	28.6	27.4
12	22.0	23.1	22.8	17.0	22.9	23.0	26.8	25.2	---	---	29.6	26.5
13	22.2	23.8	23.3	14.7	23.5	23.8	27.1	27.0	---	---	30.4	25.8
14	23.1	24.1	23.8	17.3	24.7	23.5	27.3	27.5	30.6	---	---	25.6
15	23.5	21.5	24.4	18.6	24.8	24.4	28.4	27.7	31.6	---	---	24.7
16	23.6	22.1	24.2	19.4	24.3	24.3	27.0	27.2	30.7	---	---	25.0
17	23.8	23.5	22.8	19.9	24.2	23.9	26.4	28.5	31.0	---	---	25.9
18	24.3	23.3	19.1	20.7	22.5	22.8	---	28.2	31.0	---	---	26.4
19	25.2	23.9	19.8	22.0	21.1	22.4	22.0	28.1	30.4	---	---	27.0
20	25.8	21.8	14.7	18.9	22.2	22.4	23.5	27.8	30.6	26.6	---	27.3
21	25.3	18.0	13.6	12.1	23.1	19.4	24.0	28.9	30.8	26.2	---	27.7
22	24.2	16.0	15.8	13.1	23.5	18.9	24.7	29.2	30.1	26.2	---	28.2
23	23.6	16.6	17.0	12.4	23.3	20.4	25.5	28.3	28.9	25.5	30.4	28.4
24	23.5	18.9	17.3	13.1	24.3	21.8	26.2	28.4	27.6	26.8	30.6	28.4
25	23.6	20.9	17.7	13.0	24.4	22.6	26.7	28.6	28.0	28.1	30.6	29.0
26	24.0	20.6	17.4	13.7	24.5	22.0	24.8	28.2	29.6	29.2	30.0	29.0
27	24.1	20.1	17.6	15.2	25.4	21.0	23.7	28.7	29.0	29.6	30.4	26.7
28	24.2	19.3	18.3	16.5	25.6	21.6	23.8	28.2	27.4	29.7	31.1	25.7
29	24.7	19.7	16.4	18.3	---	22.2	22.6	28.6	28.6	30.2	31.5	24.9
30	25.0	19.5	13.7	20.5	---	22.5	21.3	29.4	29.5	30.6	31.8	24.4
31	24.3	---	10.9	21.9	---	23.5	---	29.9	---	30.0	31.2	---
MEAN	24.6	22.3	19.0	15.7	22.2	22.0	24.9	26.6	29.9	28.4	29.1	27.7
MAX	27.8	26.1	24.4	22.0	25.6	25.5	28.4	29.9	31.6	30.6	31.8	32.1
MIN	22.0	16.0	10.9	10.5	16.4	17.0	21.3	22.3	27.4	25.5	25.4	24.4

CAL YR 2000 MEAN 24.6 MAX 31.6 MIN 10.9
WTR YR 2001 MEAN 24.1 MAX 32.1 MIN 10.5

02251800 INDIAN RIVER AT WABASSO, FL

LOCATION.--Lat 27°45'15", long 80°25'40", in SW $\frac{1}{4}$ 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 sea level (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, 2.89 ft, Oct. 9; minimum, -.53 ft, Feb. 16,17.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
1	2.20	1.49	1.74	1.13	.95	.36	.47	-.06	.11	-.20	.53	-.09
2	2.16	1.48	1.60	1.04	.95	.42	.50	.08	.32	-.30	.50	-.10
3	1.78	1.20	1.67	1.11	1.51	.50	.63	.24	.62	.01	.40	-.33
4	1.50	1.01	1.55	1.05	1.54	1.15	.64	.31	.35	-.08	.18	-.50
5	1.92	1.37	1.53	1.03	1.75	1.15	.45	.01	.53	-.10	.31	-.51
6	1.64	1.14	1.46	1.05	1.46	1.04	.23	-.36	.38	-.20	.77	-.13
7	1.73	1.11	1.25	.84	1.49	.76	.42	-.21	.34	-.32	.93	.16
8	2.12	1.48	1.47	.76	1.17	.62	.29	-.27	.21	-.37	.87	.21
9	2.89	2.02	1.28	.72	1.02	.45	.78	-.21	.14	-.42	.82	.18
10	2.35	1.48	1.48	.72	1.07	.35	1.02	.30	.17	-.42	1.14	.13
11	1.88	1.32	1.75	1.08	1.03	.32	.57	-.10	.26	-.33	---	---
12	1.83	1.49	1.88	1.22	1.08	.29	.34	-.26	.43	.00	---	---
13	1.80	1.28	1.60	.95	1.07	.33	1.06	.17	.55	-.03	---	---
14	1.83	1.13	1.51	.76	.93	.24	1.13	.18	.40	-.36	---	---
15	1.92	1.30	1.80	1.12	.85	.21	.75	.10	.12	-.50	---	---
16	1.82	1.19	1.53	.81	.63	.03	.54	.02	.06	-.53	---	---
17	1.75	1.07	1.20	.73	.74	.05	.45	.03	.31	-.53	---	---
18	1.76	1.10	1.50	.93	1.04	.62	.48	.07	.72	.13	---	---
19	1.68	1.04	1.24	.70	1.95	.31	.38	-.14	.68	.17	---	---
20	1.71	1.02	2.07	.92	.94	.19	.23	-.29	.37	-.14	---	---
21	1.50	1.03	2.02	1.47	.87	.37	.62	.01	.34	-.20	.94	.60
22	1.75	1.12	1.76	1.14	.74	.11	.73	.22	.37	-.17	.97	.49
23	1.87	1.29	1.55	.89	.85	.30	1.01	.40	.60	-.18	.87	.41
24	2.04	1.49	1.02	.36	1.19	.12	.79	.18	.58	-.05	.84	.29
25	2.01	1.50	.84	.24	1.38	.70	.81	.00	.26	-.31	.63	.12
26	2.20	1.45	1.13	.43	.84	.26	.83	.18	.43	-.12	.75	.25
27	2.25	1.61	1.49	.75	.60	.04	.59	.07	.42	.02	.83	.40
28	2.01	1.33	1.28	.61	.43	-.01	.49	.04	.37	-.08	1.01	.07
29	1.73	1.15	1.15	.57	.99	.27	.34	-.22	---	---	.59	.03
30	1.78	1.15	1.14	.57	1.13	.48	.02	-.33	---	---	.79	-.12
31	1.72	1.18	---	---	.86	.21	.07	-.33	---	---	.52	.17
MAX	2.89	2.02	2.07	1.47	1.95	1.15	1.13	.40	.72	.17	1.14	.60
MIN	1.50	1.01	.84	.24	.43	-.01	.02	-.36	.06	-.53	.18	-.51

COASTAL AREA BETWEEN SEBASTIAN INLET AND ST. LUCIE RIVER

02251800 INDIAN RIVER AT WABASSO, FL--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
1	.72	-.19	.66	.12	.72	.07	.54	.04	---	---	.54	.01
2	.71	-.31	.69	.20	.56	.02	.59	.09	---	---	.64	.05
3	.50	-.17	.74	.14	.45	.00	.62	.08	---	---	.77	.23
4	.34	-.36	.88	.28	.35	-.18	.62	.06	---	---	.80	.17
5	.66	.02	1.01	.40	.21	-.30	.68	.00	---	---	.82	.38
6	.51	-.08	1.03	.45	.09	-.44	---	.20	---	---	.80	.35
7	.41	-.15	.88	.48	.15	-.42	---	---	---	---	.93	.46
8	.36	-.25	1.12	.53	.19	-.20	---	---	---	---	1.18	.61
9	.25	-.30	1.17	.47	.33	-.19	---	---	---	---	.99	.51
10	.27	-.25	1.05	.32	.44	.02	---	---	---	---	.95	.46
11	.32	-.30	.89	.24	.55	.00	---	---	---	---	1.04	.52
12	.19	-.41	.77	.25	.41	-.13	---	---	---	---	1.28	.60
13	.16	-.38	.76	.11	.33	-.18	---	---	---	---	1.61	.77
14	.35	.00	.69	.25	.29	-.03	---	---	---	---	1.68	.82
15	.53	.07	.70	.04	.35	-.03	---	---	---	---	2.57	.85
16	.65	.27	.62	.25	.30	-.09	---	---	---	---	2.67	2.04
17	.75	.21	.81	.43	.30	-.13	---	---	---	---	2.39	1.79
18	1.00	.74	.89	.36	.41	-.10	---	---	---	---	2.23	1.49
19	.71	.15	.73	.32	.47	-.04	---	---	---	---	2.04	1.32
20	.24	-.20	.80	.28	.58	-.02	---	---	---	---	1.95	1.33
21	.20	-.24	.66	.12	.39	-.12	---	---	---	---	1.88	1.23
22	.18	-.27	.74	.17	.47	-.10	---	---	---	---	1.83	1.24
23	.12	-.34	1.03	.25	.53	-.12	---	---	---	---	1.77	1.13
24	.12	-.36	1.01	.62	.61	.01	---	---	---	---	1.44	1.05
25	.13	-.24	1.09	.11	.62	-.04	---	---	---	---	1.56	.94
26	.72	.20	.80	.12	.54	-.01	---	---	---	---	1.77	1.18
27	.95	.02	.75	.07	.62	.04	---	---	1.05	---	1.51	1.12
28	.52	-.17	.70	.10	.70	.18	---	---	.76	.31	1.74	1.10
29	.36	-.20	.65	.01	.74	.20	---	---	.78	.26	2.34	1.17
30	.37	-.05	.60	.15	.61	.07	---	---	.54	.13	2.66	1.79
31	---	---	.64	-.05	---	---	---	---	.50	-.08	---	---
MAX	1.00	.74	1.17	.62	.74	.20	.68	.20	1.05	.31	2.67	2.04
MIN	.12	-.41	.60	-.05	.09	-.44	.54	.00	.50	-.08	.54	.01
YEAR	HIGH		MAXIMUM	2.89	MINIMUM	.02						
	LOW		MAXIMUM	2.04	MINIMUM	-.53						

02252500 NORTH CANAL NEAR VERO BEACH, FL

LOCATION.--Lat 27°41'35", long 80°25'46", in SW¹/₄ 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 sea level. 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 except for period of estimated daily discharge, which is poor. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	21	16	18	16	15	39	17	15	30	108	25
2	71	22	16	21	16	15	30	17	15	e32	284	25
3	892	21	15	18	16	15	30	17	19	e31	322	24
4	1210	18	15	16	16	15	29	19	18	e29	360	25
5	418	20	14	16	16	15	26	20	17	e30	e313	28
6	124	23	14	16	16	16	24	19	15	e31	e213	31
7	73	22	13	16	16	16	21	18	15	e34	e174	43
8	93	21	14	15	16	16	20	18	16	e36	e107	134
9	90	20	14	15	16	15	19	17	17	e46	e79	70
10	76	19	13	15	16	15	19	17	e17	102	e25	65
11	66	21	13	15	16	15	18	17	e17	124	e43	45
12	61	22	13	15	16	15	18	17	e17	43	e48	257
13	54	20	13	16	16	15	18	16	e16	39	e48	284
14	49	17	14	15	16	15	17	16	16	78	e51	522
15	45	17	14	15	16	15	17	16	16	117	e42	231
16	42	18	13	15	16	15	17	16	19	62	e33	116
17	39	19	13	16	15	15	17	16	18	27	e34	55
18	37	19	13	16	16	15	17	16	16	23	e33	33
19	35	20	13	16	16	15	17	16	14	81	e34	43
20	33	20	13	17	16	16	17	15	13	32	e37	51
21	33	18	13	17	16	16	17	15	13	136	e43	52
22	32	18	13	18	16	16	17	15	13	95	e69	50
23	30	18	13	19	15	16	17	15	13	57	e38	54
24	30	18	13	19	15	16	17	15	20	40	e28	56
25	29	19	13	18	15	15	17	16	25	13	e24	49
26	29	19	13	17	15	15	17	19	23	13	e23	49
27	29	19	14	17	15	15	17	19	23	15	e26	70
28	26	18	14	17	15	15	17	17	43	17	e29	109
29	24	17	14	16	---	21	17	16	51	23	26	229
30	24	16	14	16	---	204	17	16	31	27	26	213
31	22	---	14	16	---	55	---	15	---	29	25	---
TOTAL	3883	580	424	512	441	708	600	518	581	1492	2745	3038
MEAN	125	19.3	13.7	16.5	15.8	22.8	20.0	16.7	19.4	48.1	88.5	101
MAX	1210	23	16	21	16	204	39	20	51	136	360	522
MIN	22	16	13	15	15	15	17	15	13	13	23	24

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

	MEAN	MAX	(WY)	MIN	(WY)
	60.0	220	2000	8.18	1959
	30.5	133	1985	7.00	1956
	19.9	71.1	1995	6.24	1962
	22.4	54.3	1970	4.52	1956
	24.5	100	1991	4.83	1956
	28.0	136	1993	3.97	1956
	19.0	65.9	1951	4.78	1963
	20.7	68.3	1979	5.23	1956
	39.9	226	1968	4.98	1964
	33.3	118	1991	8.12	1981
	39.3	119	1981	9.26	1958
	55.9	280	1960	7.61	1961

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	13063		15522			
ANNUAL MEAN	35.7		42.5		32.8	
HIGHEST ANNUAL MEAN					57.7	
LOWEST ANNUAL MEAN					13.1	
HIGHEST DAILY MEAN	1210		1210		1580	
LOWEST DAILY MEAN	13		13		.60	
ANNUAL SEVEN-DAY MINIMUM	13		13		2.3	
MAXIMUM PEAK STAGE			11.94		11.94	
10 PERCENT EXCEEDS	48		70		61	
50 PERCENT EXCEEDS	20		18		17	
90 PERCENT EXCEEDS	14		15		7.6	

e Estimated

02253500 SOUTH CANAL NEAR VERO BEACH, FL

LOCATION.--Lat 27°36'11", long 80°23'24", in SW¹/₄ 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 sea level. 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 except for periods of estimated daily discharge, which are poor. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	e14	e20	40	e9.2	e15	31	16	16	27	141	23
2	49	e9.8	e18	43	e11	e10	26	16	16	22	267	21
3	519	e13	e12	33	e12	e8.8	33	37	17	19	255	20
4	e1250	e18	e7.0	29	e15	e12	33	50	18	16	149	19
5	e420	e21	e9.0	34	e9.5	e18	28	38	17	13	156	19
6	e200	e26	17	35	e7.2	e12	28	29	18	11	96	32
7	e120	e24	19	31	e6.5	e5.8	27	23	17	11	83	209
8	e79	e18	32	31	e5.7	e4.5	26	17	18	11	47	308
9	e61	e17	36	22	e5.2	e3.2	22	16	19	21	17	292
10	e46	e13	37	15	e9.1	e3.6	21	15	20	163	16	217
11	e41	e9.2	40	24	e12	e4.2	19	15	20	379	18	104
12	39	e12	31	28	e21	e8.2	19	14	20	234	23	157
13	38	e17	35	16	e15	e7.4	19	14	19	190	24	175
14	36	e10	46	16	e12	e6.0	20	14	18	287	22	453
15	26	e19	43	16	e12	e4.9	19	14	19	219	22	182
16	31	e24	53	19	e9.4	e6.0	14	13	26	116	21	63
17	31	e19	46	18	e13	e6.5	12	9.1	23	42	21	24
18	29	e16	21	18	e16	e8.0	5.4	8.6	19	18	18	8.2
19	30	e15	28	19	e18	e3.2	13	11	16	16	17	11
20	e31	e10	25	20	e14	e4.3	e19	11	16	15	16	16
21	e32	e7.2	30	17	e18	e5.5	e26	12	16	110	129	18
22	e23	e9.2	37	17	e24	5.9	e32	11	17	102	404	17
23	e18	e13	34	13	e24	6.7	e18	19	19	71	66	16
24	e15	e17	28	15	e23	7.6	e28	19	20	51	24	20
25	e12	e23	14	e9.8	e33	9.8	e19	26	24	14	22	19
26	e11	e29	31	e8.8	e22	7.5	13	40	23	13	25	21
27	e12	e33	40	e8.5	e19	7.1	14	34	21	12	25	25
28	e20	e29	42	e8.3	e17	9.0	17	28	314	12	23	7.7
29	e26	e26	25	e8.0	---	29	19	25	143	17	22	89
30	e20	e25	17	e7.7	---	236	18	22	28	20	23	127
31	e18	---	25	e7.5	---	51	---	19	---	20	23	---
TOTAL	3314	536.4	898.0	627.6	412.8	526.7	638.4	635.7	997	2272	2215	2712.9
MEAN	107	17.9	29.0	20.2	14.7	17.0	21.3	20.5	33.2	73.3	71.5	90.4
MAX	1250	33	53	43	33	236	33	50	314	379	404	453
MIN	11	7.2	7.0	7.5	5.2	3.2	5.4	8.6	16	11	16	7.7

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

MEAN	70.4	36.2	22.9	25.2	25.5	30.5	21.8	27.9	53.8	41.4	50.5	68.5
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1951 - 2001

ANNUAL TOTAL	11233.4	15786.5	
ANNUAL MEAN	30.7	43.3	39.6
HIGHEST ANNUAL MEAN			61.6
LOWEST ANNUAL MEAN			15.2
HIGHEST DAILY MEAN	e1250	Oct 4	1780
LOWEST DAILY MEAN	2.1	Jan 14	.54
ANNUAL SEVEN-DAY MINIMUM	5.8	Sep 10	1.1
MAXIMUM PEAK STAGE			9.41
10 PERCENT EXCEEDS	44		85
50 PERCENT EXCEEDS	17		19
90 PERCENT EXCEEDS	8.9		8.8
			6.4

e Estimated
a Observed

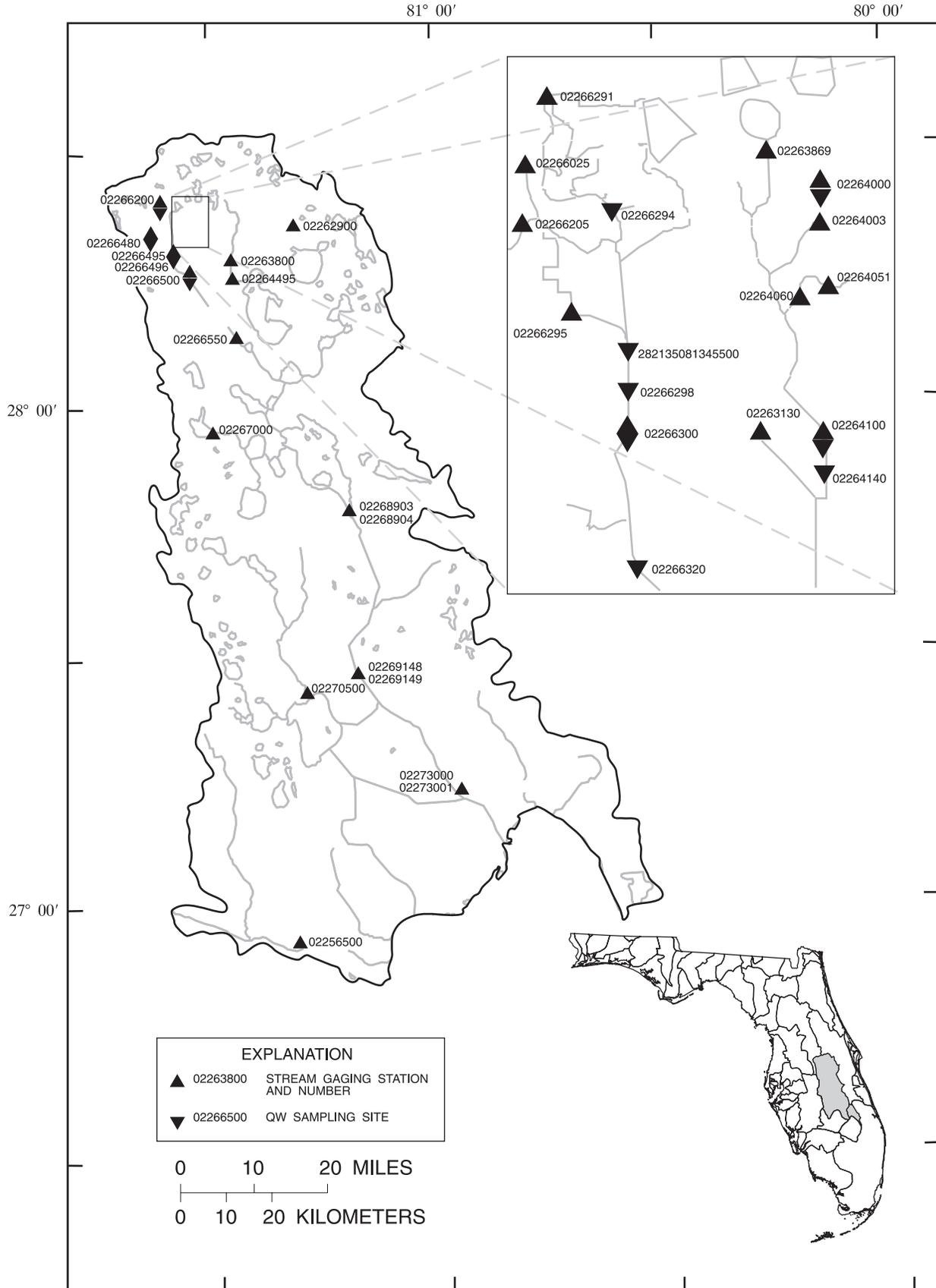


Figure 8.--Location of stream gaging stations in the Kissimmee River basin, the Taylor Creek basin and inflow to Lake Okeechobee from the north, and Fisheating Creek basin and inflow to Lake Okeechobee from the northwest.

02256500 FISHEATING CREEK AT PALMDALE, FL

LOCATION.--Lat 26°55'56", long 81°18'54" in SW¹/₄ 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 mi².

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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	12	.70	.10	.99	.00	.00	.00	.00	26	1600	342
2	207	11	.64	.13	.90	.00	.07	.00	.00	28	1510	292
3	180	10	.51	.16	.82	.00	.11	.00	.00	29	1480	241
4	182	9.5	.39	.14	.81	.00	.03	.00	.00	31	1480	208
5	195	8.7	.36	.10	.90	.00	.00	.00	.00	31	1640	185
6	216	8.1	.30	.12	.88	.00	.00	.00	.00	29	1820	212
7	182	7.3	.30	.10	.80	.00	.35	.00	.00	27	1860	364
8	146	6.8	.30	.12	.81	.00	.99	.00	.00	26	1730	641
9	112	6.2	.29	.31	.80	.00	1.5	.00	.00	28	1570	774
10	87	5.6	.28	.26	.76	.00	1.8	.00	.00	31	1420	1270
11	73	5.2	.40	.34	.70	.00	2.0	.00	.00	36	1400	2170
12	65	4.6	.51	.52	.61	.00	2.1	.00	.00	44	1280	2270
13	60	4.2	.50	.99	.56	.00	2.0	.00	.00	56	1100	2800
14	55	3.8	.49	1.5	.48	.00	1.8	.00	.00	82	964	3110
15	49	3.5	.40	2.1	.42	.00	1.5	.00	.00	373	859	4190
16	43	3.2	.39	2.6	.38	.00	1.1	.00	.00	814	771	5150
17	37	2.9	.28	3.1	.26	.00	.72	.00	.00	1030	774	4380
18	31	2.7	.11	3.4	.06	.00	.33	.00	.00	1140	824	3320
19	27	2.5	.05	3.4	.00	.00	.02	.00	.00	1080	808	2530
20	24	2.2	.00	3.4	.00	.00	.00	.00	.00	1260	1080	2050
21	21	2.0	.00	3.2	.00	.00	.00	.00	.49	1180	983	1740
22	20	1.7	.00	3.2	.00	.00	.00	.00	1.5	1040	1380	1520
23	19	1.5	.00	3.1	.00	.00	.00	.00	2.4	1030	1800	1380
24	18	1.4	.00	2.8	.00	.00	.00	.00	5.7	1280	1600	1260
25	17	1.3	.00	2.5	.00	.00	.00	.00	11	3430	1280	1160
26	17	1.3	.00	2.2	.00	.00	.00	.00	18	3750	996	1100
27	16	1.3	.00	2.0	.00	.00	.00	.00	23	3020	790	1040
28	15	1.1	.00	1.7	.00	.00	.00	.00	27	2510	642	955
29	15	1.0	.07	1.5	---	.00	.00	.00	28	2180	536	896
30	14	.90	.11	1.3	---	.00	.00	.00	26	1950	455	819
31	13	---	.10	1.1	---	.00	---	.00	---	1710	387	---
TOTAL	2398	133.50	7.48	47.49	11.94	0.00	16.42	0.00	143.09	29281	36819	48369
MEAN	77.4	4.45	.24	1.53	.43	.000	.55	.000	4.77	945	1188	1612
MAX	242	12	.70	3.4	.99	.00	2.1	.00	28	3750	1860	5150
MIN	13	.90	.00	.10	.00	.00	.00	.00	.00	26	387	185
MED	43	3.3	.28	1.5	.45	.00	.02	.00	.00	814	1280	1210
CFSM	.25	.01	.00	.00	.00	.00	.00	.00	.02	3.04	3.82	5.18
IN.	.29	.02	.00	.01	.00	.00	.00	.00	.02	3.50	4.40	5.79

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

	508	121	64.5	90.6	120	161	54.3	19.5	238	402	471	758
MEAN	508	121	64.5	90.6	120	161	54.3	19.5	238	402	471	758
MAX	3822	750	770	939	1596	1234	505	362	1995	2525	1475	3253
(WY)	1952	1988	1998	1998	1998	1970	1941	1958	1982	1974	1953	1947
MIN	8.05	1.11	.24	.26	.082	.000	.000	.000	.000	.000	.34	16.1
(WY)	1973	1962	2001	1992	1962	1956	1935	1935	1935	1935	1950	1996

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1931 - 2001

ANNUAL TOTAL	8461.50	117226.92	
ANNUAL MEAN	23.1	321	253
HIGHEST ANNUAL MEAN			671
LOWEST ANNUAL MEAN			13.6
HIGHEST DAILY MEAN	300	Sep 29	5150
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Apr 5	.00
MAXIMUM PEAK FLOW			5290
MAXIMUM PEAK STAGE			8.01
ANNUAL RUNOFF (CFSM)	.074		1.03
ANNUAL RUNOFF (INCHES)	1.01		14.02
10 PERCENT EXCEEDS	60		1280
50 PERCENT EXCEEDS	5.4		1.3
90 PERCENT EXCEEDS	.00		.00

* From rating curve extended above 21,000 ft³/s

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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is at sea level.

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	.20	.12	.13	.13	.03	.37	.02	.15	.21	2.5	1.4
2	.53	.18	.10	.14	.14	.02	.33	.01	.05	.19	1.9	1.4
3	.57	.15	.10	.15	.14	.01	.30	.06	.10	.19	1.8	1.3
4	.61	.13	.12	.14	.15	.38	.29	.06	.05	.20	5.1	1.3
5	.52	.12	.12	.11	.16	.15	.31	.02	.03	.70	2.4	1.5
6	.50	.12	.11	.15	.14	.15	.28	.01	.59	.32	1.9	2.8
7	.47	.12	.10	.13	.13	.13	.26	.01	.22	.27	1.8	2.0
8	.44	.11	.09	.17	.13	.14	.25	.01	.27	.84	1.5	2.3
9	.39	.11	.08	.03	.15	.11	.24	.00	.24	.76	1.5	2.1
10	.38	.11	.07	.01	.30	.10	.23	.00	.20	.52	7.5	2.7
11	.36	.10	.15	.01	.11	.08	.23	.00	.19	.46	4.0	2.9
12	.35	.09	.16	.19	.12	.06	.24	.00	.17	.58	3.0	2.8
13	.37	.09	.12	.21	.11	.07	.21	.00	.14	.47	2.7	3.9
14	.31	.12	.10	.18	.10	.07	.20	.00	.29	.58	2.4	2.2
15	.30	.11	.09	.15	.10	.06	.17	.20	.46	.50	2.1	1.4
16	.29	.10	.11	.15	.09	.04	.14	.24	.29	.47	2.1	7.7
17	.29	.10	.26	.16	.09	.03	.11	.04	.63	.49	1.9	5.6
18	.29	.08	.12	.16	.08	.04	.10	.03	.33	.61	2.9	4.5
19	.28	.07	.13	.14	.08	.38	.10	.03	.31	.57	2.5	4.0
20	.27	.07	.15	.19	.07	.20	.09	.02	.28	1.5	2.2	3.6
21	.27	.07	.13	.16	.06	.13	.08	.02	.26	.89	4.5	3.7
22	.26	.07	.13	.17	.07	.11	.08	.07	.29	.85	3.6	3.4
23	.25	.08	.13	.18	.10	.10	.07	.04	.29	.74	2.8	3.3
24	.24	.07	.19	.31	.05	.09	.07	.01	.29	.72	2.4	3.0
25	.24	.08	.18	.54	.04	.08	.06	.53	.27	.73	2.0	2.9
26	.25	.40	.13	.76	.03	.07	.08	.11	.26	.69	1.8	2.8
27	.24	.21	.12	.60	.04	.06	.04	.07	.26	.76	1.6	2.7
28	.22	.17	.22	.14	.03	.05	.03	.31	.23	.67	1.5	2.6
29	.21	.14	.17	.11	---	1.3	.02	.13	.23	.63	1.4	2.5
30	.21	.13	.15	.11	---	.64	.02	.06	.22	.61	1.3	2.4
31	.21	---	.13	.12	---	.46	---	.04	---	4.0	1.3	---
TOTAL	10.67	3.70	4.08	5.90	2.94	5.34	5.00	2.15	7.59	21.72	77.9	119.1
MEAN	.34	.12	.13	.19	.11	.17	.17	.069	.25	.70	2.51	3.97
MAX	.61	.40	.26	.76	.30	1.3	.37	.53	.63	4.0	7.5	2.2
MIN	.21	.07	.07	.01	.03	.01	.02	.00	.03	.19	1.3	1.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	1.92	1.36	2.59	1.60	1.42	1.32	.95	.62
MAX	4.09	4.38	8.26	3.26	4.13	3.99	2.18	1.03
(WY)	1996	1995	2000	2000	1998	1998	1996	1998
MIN	.34	.12	.13	.19	.10	.17	.17	.040
(WY)	2001	2001	2001	2001	2001	2001	2001	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1994 - 2001

ANNUAL TOTAL	237.25	266.09	
ANNUAL MEAN	.65	.73	1.63
HIGHEST ANNUAL MEAN			2.62
LOWEST ANNUAL MEAN			.73
HIGHEST DAILY MEAN	6.1 Jan 16	22 Sep 14	36 Nov 16 1994
LOWEST DAILY MEAN	.00 Many days	.00 Many days	.00 Many days
ANNUAL SEVEN-DAY MINIMUM	.00 May 19	.00 May 8	.00 Many days
MAXIMUM PEAK STAGE		82.83 Aug 10	83.03 Sep 28 1995
INSTANTANEOUS LOW FLOW			.00 May 19 2000
10 PERCENT EXCEEDS	1.9	2.4	3.4
50 PERCENT EXCEEDS	.28	.19	.99
90 PERCENT EXCEEDS	.05	.04	.23

KISSIMMEE RIVER BASIN

02263800 SHINGLE CREEK AT AIRPORT, NEAR KISSIMMEE, FL

LOCATION.--Lat 28°18'14", long 81°27'04", in NW¹/₄ 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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 60.66 ft above sea level.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	9.9	15	12	10	6.0	113	32	43	151	194	96
2	35	9.8	14	13	19	5.5	137	29	43	123	261	131
3	32	9.6	12	11	25	5.3	152	27	39	103	348	145
4	32	9.4	9.9	10	26	7.4	146	31	37	89	377	135
5	33	9.0	8.8	8.8	24	11	127	32	36	81	384	139
6	33	8.7	7.8	8.0	22	12	112	34	36	80	377	e165
7	33	8.6	7.3	7.8	21	17	100	34	40	79	343	e192
8	32	8.0	6.6	7.7	20	17	96	32	55	80	302	e275
9	29	7.7	6.1	8.0	19	15	94	28	62	110	280	e443
10	27	7.3	5.7	8.4	18	13	86	22	82	165	271	e757
11	26	6.8	5.5	9.4	17	11	75	19	114	197	234	e738
12	24	6.1	5.2	11	15	11	67	16	132	221	204	e717
13	22	5.8	5.5	11	14	10	58	14	128	232	186	e693
14	21	5.5	7.1	11	14	11	50	12	107	231	178	e972
15	19	5.5	8.5	11	14	12	42	11	88	326	175	1100
16	17	5.3	9.6	11	13	10	37	9.8	98	378	180	1050
17	16	5.2	9.8	11	12	9.6	32	8.9	107	e400	184	1000
18	14	5.0	11	10	11	8.9	27	7.8	112	e420	186	889
19	14	5.0	12	9.8	10	9.4	24	6.9	103	e360	184	734
20	13	4.8	13	12	9.5	12	22	6.7	107	e430	169	603
21	12	4.8	12	12	8.9	19	20	6.5	116	e489	153	498
22	12	4.5	12	11	8.2	30	18	5.8	186	e422	146	435
23	11	4.4	11	11	7.6	32	17	5.6	255	e378	133	417
24	11	4.4	9.1	12	7.4	32	15	5.1	290	e368	119	386
25	11	4.4	8.2	12	7.2	27	13	8.8	292	e348	105	343
26	11	6.6	7.5	11	6.8	23	14	23	282	353	94	301
27	11	11	7.2	10	6.6	19	21	30	264	316	87	259
28	10	10	7.4	10	6.4	15	38	38	237	278	81	226
29	10	14	9.3	10	---	25	40	42	206	240	76	195
30	9.9	16	9.6	10	---	67	36	43	177	207	76	167
31	10	---	11	10	---	86	---	44	---	179	99	---
TOTAL	631.9	223.1	284.7	320.9	392.6	589.1	1829	664.9	3874	7834	6186	14201
MEAN	20.4	7.44	9.18	10.4	14.0	19.0	61.0	21.4	129	253	200	473
MAX	41	16	15	13	26	86	152	44	292	489	384	1100
MIN	9.9	4.4	5.2	7.7	6.4	5.3	13	5.1	36	79	76	96
CFSM	.23	.08	.10	.12	.16	.21	.68	.24	1.45	2.83	2.24	5.31
IN.	.26	.09	.12	.13	.16	.25	.76	.28	1.62	3.27	2.58	5.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

	MEAN	86.1	52.8	50.7	58.6	63.5	81.4	48.7	26.0	66.2	108	136	152
MAX	268	323	451	228	308	506	259	150	272	369	354	564	
(WY)	1970	1988	1998	1986	1998	1960	1987	1991	1982	1991	1966	1960	
MIN	1.36	2.90	3.12	6.23	10.3	8.73	1.63	.000	.000	5.65	9.31	16.0	
(WY)	1959	1968	1962	1962	1968	2000	1963	1962	1961	1962	1961	1965	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1959 - 2001

ANNUAL TOTAL		9509.58		37031.2									
ANNUAL MEAN		26.0		101						77.7			
HIGHEST ANNUAL MEAN										151			1960
LOWEST ANNUAL MEAN										16.4			1962
HIGHEST DAILY MEAN		161		Aug 10		1100		Sep 15		3160			Mar 18 1960
LOWEST DAILY MEAN		.00		Jun 3-6		4.4		Nov 23-25		.00			Many days
ANNUAL SEVEN-DAY MINIMUM		.06		May 31		4.6		Nov 19		.00			Many days
MAXIMUM PEAK FLOW						1120		Sep 15		3320			Mar 18 1960
MAXIMUM PEAK STAGE						9.08		Sep 15		11.00			Mar 18 1960
INSTANTANEOUS LOW FLOW						4.1		May 25					
ANNUAL RUNOFF (CFSM)		.29				1.14				.87			
ANNUAL RUNOFF (INCHES)		3.97				15.44				11.83			
10 PERCENT EXCEEDS		69				301				190			
50 PERCENT EXCEEDS		12				22				40			
90 PERCENT EXCEEDS		2.0				7.2				7.5			

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 to September 2001.
 WATER TEMPERATURE: July to September 2001.
 DISSOLVED OXYGEN: July to September 2001.

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, 98 µS/cm @ 25 °C, Sept. 15, 2001.
 WATER TEMPERATURE: Maximum daily mean, 25.9 °C, Aug. 17, 2001; minimum daily mean, 22.2 °C, Sept. 30, 2001.
 DISSOLVED OXYGEN: Maximum daily mean, 2.5 mg/L, Aug. 10, 2001; minimum daily mean, 1.3 mg/L, July 30, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 527 µS/cm @ 25 °C, July 13; minimum daily mean, 98 µS/cm @ 25 °C, Sept. 15.
 WATER TEMPERATURE: Maximum daily mean, 25.9 °C, Aug. 17; minimum daily mean, 22.2 °C, Sept. 30.
 DISSOLVED OXYGEN: Maximum daily mean, 2.5 mg/L, Aug. 10; minimum daily mean, 1.3 mg/L, July 30.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD JULY TO SEPTEMBER 2001
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	304	186
2	---	---	---	---	---	---	---	---	---	---	289	188
3	---	---	---	---	---	---	---	---	---	---	274	194
4	---	---	---	---	---	---	---	---	---	---	262	188
5	---	---	---	---	---	---	---	---	---	---	241	181
6	---	---	---	---	---	---	---	---	---	---	231	171
7	---	---	---	---	---	---	---	---	---	---	227	146
8	---	---	---	---	---	---	---	---	---	---	223	137
9	---	---	---	---	---	---	---	---	---	---	220	124
10	---	---	---	---	---	---	---	---	---	---	204	119
11	---	---	---	---	---	---	---	---	---	---	163	112
12	---	---	---	---	---	---	---	---	---	526	157	111
13	---	---	---	---	---	---	---	---	---	527	152	110
14	---	---	---	---	---	---	---	---	---	505	152	101
15	---	---	---	---	---	---	---	---	---	472	150	98
16	---	---	---	---	---	---	---	---	---	457	151	102
17	---	---	---	---	---	---	---	---	---	462	149	106
18	---	---	---	---	---	---	---	---	---	453	149	108
19	---	---	---	---	---	---	---	---	---	451	150	110
20	---	---	---	---	---	---	---	---	---	451	150	110
21	---	---	---	---	---	---	---	---	---	431	151	111
22	---	---	---	---	---	---	---	---	---	415	152	111
23	---	---	---	---	---	---	---	---	---	409	152	110
24	---	---	---	---	---	---	---	---	---	405	154	110
25	---	---	---	---	---	---	---	---	---	398	156	111
26	---	---	---	---	---	---	---	---	---	395	160	111
27	---	---	---	---	---	---	---	---	---	384	163	112
28	---	---	---	---	---	---	---	---	---	381	168	113
29	---	---	---	---	---	---	---	---	---	373	172	114
30	---	---	---	---	---	---	---	---	---	372	178	115
31	---	---	---	---	---	---	---	---	---	351	183	---
MEAN	---	---	---	---	---	---	---	---	---	431	187	127
MAX	---	---	---	---	---	---	---	---	---	527	304	194
MIN	---	---	---	---	---	---	---	---	---	351	149	98

WTR YR 2001 MEAN 222 MAX 527 MIN 0

KISSIMMEE RIVER BASIN

02264000 CYPRESS CREEK AT VINELAND, FL--Continued

TEMPERATURE, WATER (DEG. C), PERIOD JULY TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	23.8	25.3
2	---	---	---	---	---	---	---	---	---	---	23.3	25.2
3	---	---	---	---	---	---	---	---	---	---	23.4	25.2
4	---	---	---	---	---	---	---	---	---	---	23.5	25.1
5	---	---	---	---	---	---	---	---	---	---	23.9	25.0
6	---	---	---	---	---	---	---	---	---	---	24.1	24.6
7	---	---	---	---	---	---	---	---	---	---	24.3	24.4
8	---	---	---	---	---	---	---	---	---	---	24.8	24.1
9	---	---	---	---	---	---	---	---	---	---	24.7	24.3
10	---	---	---	---	---	---	---	---	---	---	24.3	24.3
11	---	---	---	---	---	---	---	---	---	---	24.3	24.5
12	---	---	---	---	---	---	---	---	---	23.9	24.8	24.4
13	---	---	---	---	---	---	---	---	---	23.9	25.3	23.9
14	---	---	---	---	---	---	---	---	---	24.0	25.5	23.3
15	---	---	---	---	---	---	---	---	---	23.9	25.5	22.8
16	---	---	---	---	---	---	---	---	---	23.8	25.5	22.4
17	---	---	---	---	---	---	---	---	---	24.0	25.9	22.5
18	---	---	---	---	---	---	---	---	---	24.1	25.7	22.9
19	---	---	---	---	---	---	---	---	---	24.3	25.4	23.5
20	---	---	---	---	---	---	---	---	---	24.4	25.7	24.0
21	---	---	---	---	---	---	---	---	---	24.3	25.0	24.2
22	---	---	---	---	---	---	---	---	---	24.3	24.8	24.3
23	---	---	---	---	---	---	---	---	---	24.1	25.1	24.2
24	---	---	---	---	---	---	---	---	---	24.0	25.1	24.3
25	---	---	---	---	---	---	---	---	---	24.2	25.0	24.2
26	---	---	---	---	---	---	---	---	---	24.2	25.0	23.9
27	---	---	---	---	---	---	---	---	---	24.3	24.6	23.5
28	---	---	---	---	---	---	---	---	---	24.2	24.8	23.4
29	---	---	---	---	---	---	---	---	---	24.3	25.1	22.9
30	---	---	---	---	---	---	---	---	---	24.5	25.3	22.2
31	---	---	---	---	---	---	---	---	---	24.5	25.4	---
MEAN	---	---	---	---	---	---	---	---	---	24.2	24.8	24.0
MAX	---	---	---	---	---	---	---	---	---	24.5	25.9	25.3
MIN	---	---	---	---	---	---	---	---	---	23.8	23.3	22.2

WTR YR 2001 MEAN 24.3 MAX 25.9 MIN 22.2

OXYGEN DISSOLVED (MG/L), PERIOD JULY TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	2.2	1.7
2	---	---	---	---	---	---	---	---	---	---	2.3	1.6
3	---	---	---	---	---	---	---	---	---	---	2.3	1.5
4	---	---	---	---	---	---	---	---	---	---	2.4	1.6
5	---	---	---	---	---	---	---	---	---	---	2.3	1.8
6	---	---	---	---	---	---	---	---	---	---	2.3	2.2
7	---	---	---	---	---	---	---	---	---	---	2.2	2.1
8	---	---	---	---	---	---	---	---	---	---	2.1	2.4
9	---	---	---	---	---	---	---	---	---	---	2.0	1.9
10	---	---	---	---	---	---	---	---	---	---	2.5	2.2
11	---	---	---	---	---	---	---	---	---	---	1.8	1.9
12	---	---	---	---	---	---	---	---	---	---	1.7	2.0
13	---	---	---	---	---	---	---	---	---	---	1.8	2.0
14	---	---	---	---	---	---	---	---	---	---	1.8	2.1
15	---	---	---	---	---	---	---	---	---	---	1.8	1.5
16	---	---	---	---	---	---	---	---	---	---	1.8	1.6
17	---	---	---	---	---	---	---	---	---	2.0	1.8	1.7
18	---	---	---	---	---	---	---	---	---	2.4	1.9	1.8
19	---	---	---	---	---	---	---	---	---	2.2	1.9	1.8
20	---	---	---	---	---	---	---	---	---	2.0	1.9	1.9
21	---	---	---	---	---	---	---	---	---	2.2	2.0	2.0
22	---	---	---	---	---	---	---	---	---	2.1	2.1	1.8
23	---	---	---	---	---	---	---	---	---	2.2	2.1	1.8
24	---	---	---	---	---	---	---	---	---	2.1	2.1	1.8
25	---	---	---	---	---	---	---	---	---	1.8	2.1	1.9
26	---	---	---	---	---	---	---	---	---	1.9	2.0	2.0
27	---	---	---	---	---	---	---	---	---	1.9	2.0	2.0
28	---	---	---	---	---	---	---	---	---	1.7	2.0	2.1
29	---	---	---	---	---	---	---	---	---	1.6	1.9	2.2
30	---	---	---	---	---	---	---	---	---	1.3	1.8	2.3
31	---	---	---	---	---	---	---	---	---	1.7	1.7	---
MEAN	---	---	---	---	---	---	---	---	---	1.9	2.0	1.9
MAX	---	---	---	---	---	---	---	---	---	2.4	2.5	2.4
MIN	---	---	---	---	---	---	---	---	---	1.3	1.7	1.5

WTR YR 2001 MEAN 2.0 MAX 2.5 MIN 1.3

KISSIMMEE RIVER BASIN

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02264000 CYPRESS CREEK AT VINELAND, FL--Continued

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	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)	
JUL 30...	1115	1.55	.26	--	--	2.6	3.5	374	25.2	--	--	--	--	
AUG 30...	0930	1.80	1.1	1100	.74	2.3	4.1	167	25.1	26	3.3	4.3	3.9	
SEP 17...	1115	2.40	10	--	--	1.9	4.6	107	22.5	--	--	--	--	
DATE	TIME	ANC UNFLTRD SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	TIT 4.5 LAB (MG/L AS CAC03) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	
JUL 30...	--	--	--	--	--	.160	2.7	--	<.02	--	<.01	--	<.01	
AUG 30...	14	<1.0	25	<.1	3.0	--	3.1	.12	--	.02	--	.01	--	
SEP 17...	--	--	--	--	--	.07	2.2	--	<.02	--	<.01	--	.03	
DATE	TIME	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L AS AL) (70953)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	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)	
JUL 30...	--	<.02	66	<.1	--	--	--	--	--	--	--	--	--	
AUG 30...	.03	<.02	93	--	551	1.3	<1.0	<1.0	<1.0	1.2	802	2.9	11	
SEP 17...	--	<.02	68	<.1	--	--	--	--	--	--	--	--	--	
DATE	TIME	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ALDRIN, TOTAL (UG/L) (39330)	CARBO-PHENO-THION WATER UNFLTRD TOTAL (UG/L) (39786)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI-AZINON, TOTAL (UG/L) (39570)	DI-ELDRIN TOTAL RECOVER (UG/L) (39380)	DISUL-FOTON UNFILT I TOTAL (UG/L) (39011)	ENDO-SULFAN I TOTAL (UG/L) (39388)
AUG 30...	<.1	<1.0	<1.0	2.3	<.01	<.02	<.1	<.01	<.02	<.02	<.006	<.03	<.01	
DATE	TIME	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY-FONATE) TOT.REC (UG/L) (82614)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	LINDANE TOTAL (UG/L) (39340)	MALA-THON, TOTAL (UG/L) (39530)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	METHYL PARA-THON, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDE, TOTAL RECOVER (UG/L) (39365)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)
AUG 30...	<.01	<.01	<.007	<.009	<.01	<.006	<.06	<.01	<.01	<.006	<.007	<.006	<.009	

< -- Less than

KISSIMMEE RIVER BASIN

02264000 CYPRESS CREEK AT VINELAND, FL--Continued

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

DATE	PARA-THION, TOTAL (UG/L) (39540)	PCB, TOTAL (UG/L) (39516)	PHORATE TOTAL (UG/L) (39023)	TOX-APHENE, TOTAL (UG/L) (39400)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDO-SULFAN I TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	HEPTA-CHLOR EPOXIDE TOT. IN BOT-TOM MA-TERIAL (UG/KG) (39423)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOT-TOM MA-TERIAL (UG/KG) (39481)
AUG 30...	<.01	<.1	<.02	<1	<.2	<3	<.2	<.2	<.2	<.2	<.2	<.2	<2.5
DATE	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39758)	BI-PHENYL, NONA-CHLORO-SUR SCD PERCENT (90575)	BI-PHENYL, DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39363)	P,P'-DDD, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39368)	P,P'-DDE, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39373)	P,P'-DDT, RECOVER IN BOT-TOM MA-TERIAL (UG/KG) (39519)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)					
AUG 30...	<.2	53	<.5	<.2	<.5	<5	<50						

< -- Less than

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 mi².

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 sea level (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 ft³/s, Sept. 22, 1994; unknown amount of leakage many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90.78	89.56	89.68	89.73	89.59	89.52	89.84	89.61	89.76	89.85	92.94	91.55
2	90.64	89.56	89.66	89.71	89.60	89.51	89.79	89.63	89.81	89.86	93.01	91.47
3	90.61	89.56	89.65	89.68	89.61	89.50	89.76	89.64	89.76	89.85	93.02	91.26
4	90.99	89.56	89.63	89.67	89.63	89.62	89.73	89.67	89.77	89.82	93.04	91.27
5	90.84	89.56	89.62	89.65	89.65	89.82	89.81	89.66	89.72	89.86	93.06	92.53
6	90.65	89.57	89.60	89.64	89.64	89.80	89.98	89.64	89.79	89.89	93.05	92.66
7	90.49	89.57	89.59	89.63	89.63	89.77	89.93	89.63	90.02	89.85	93.07	93.07
8	90.37	89.57	89.59	89.66	89.62	89.73	89.88	89.61	90.01	89.87	93.05	93.07
9	90.24	89.57	89.59	89.75	89.61	89.70	89.84	89.60	89.78	90.20	93.06	93.01
10	90.11	89.58	89.60	89.75	89.61	89.68	89.81	89.59	89.75	90.22	---	93.00
11	90.03	89.57	89.62	89.73	89.61	89.66	89.78	89.58	89.73	90.22	---	93.10
12	89.96	89.55	89.74	89.68	89.61	89.64	89.75	89.57	89.71	90.13	---	93.08
13	89.90	89.54	89.82	89.63	89.61	89.64	89.73	89.56	89.69	90.13	---	93.09
14	89.85	89.54	89.79	89.58	89.61	89.64	89.72	89.54	89.70	90.25	---	93.15
15	89.81	89.54	89.77	89.55	89.60	89.64	89.70	89.53	89.82	90.65	---	93.16
16	89.77	89.53	89.76	89.52	89.60	89.63	89.68	89.57	89.99	90.69	---	93.14
17	89.74	89.53	89.78	89.50	89.59	89.61	89.65	89.56	89.91	90.80	---	93.11
18	89.71	89.53	89.76	89.49	89.57	89.59	89.62	89.55	89.87	91.28	---	93.09
19	89.68	89.54	89.74	89.50	89.55	89.65	89.60	89.54	89.89	91.57	---	93.04
20	89.67	89.54	89.71	89.52	89.53	89.90	89.58	89.52	89.86	91.26	---	93.01
21	89.66	89.53	89.70	89.52	89.52	89.75	89.57	89.51	89.83	91.13	---	93.00
22	89.66	89.53	89.69	89.51	89.50	89.56	89.57	89.50	89.85	91.57	---	93.07
23	89.63	89.53	89.66	89.51	89.49	89.55	89.57	89.53	89.82	91.54	---	93.07
24	89.61	89.54	89.64	89.50	89.49	89.56	89.57	89.52	89.83	91.12	---	93.00
25	89.60	89.55	89.64	89.50	89.50	89.56	89.57	89.61	89.84	90.80	---	92.94
26	89.59	89.63	89.63	89.49	89.51	89.55	89.62	89.94	89.78	90.93	---	92.85
27	89.59	89.78	89.64	89.50	89.52	89.54	89.61	89.84	89.73	90.97	---	92.79
28	89.58	89.76	89.68	89.51	89.52	89.53	89.60	89.82	89.71	91.34	91.88	92.71
29	89.57	89.73	89.74	89.51	---	89.74	89.59	89.84	89.71	90.90	91.78	92.69
30	89.57	89.71	89.74	89.53	---	90.16	89.58	89.79	89.78	90.62	91.61	92.61
31	89.57	---	89.73	89.56	---	89.97	---	89.75	---	91.07	91.67	---
MEAN	89.98	89.58	89.68	89.59	89.58	89.67	89.70	89.63	89.81	90.59	92.63	92.75
MAX	90.99	89.78	89.82	89.75	89.65	90.16	89.98	89.94	90.02	91.57	93.07	93.16
MIN	89.57	89.53	89.59	89.49	89.49	89.50	89.57	89.50	89.69	89.82	91.61	91.26
CAL YR 2000	MEAN 90.18	MAX 93.07	MIN 89.35									
WTR YR 2001	MEAN 90.15	MAX 93.16	MIN 89.49									

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)
SEP 15...	1336	25

KISSIMMEE RIVER BASIN

02264051 BLACK LAKE OUTLET AT S-101A, AT LAKE BUENA VISTA, FL

LOCATION.--Lat 28°22'28", long 81°31'01", in NE¹/₄ 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 mi².

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 sea level (Reedy Creek Improvement District bench mark).

REMARKS.--Records good except for those below 5.0 ft³/s, which are poor. Flow can be regulated by manipulation of sluice gate.

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	.16	.16	.38	.38	.74	.28	1.6	.66	1.2	3.8	18	.68
2	.12	.16	.38	.38	.56	.23	1.1	.52	.83	3.1	14	.88
3	.11	.16	.38	.38	.38	.16	.81	.49	.71	2.3	8.8	.68
4	.16	.16	.38	.38	.38	4.1	.75	.65	.91	1.5	9.9	2.9
5	.16	.16	.38	.38	.38	1.9	2.2	.45	.56	4.2	10	7.0
6	.16	.16	.38	.38	.38	.54	2.1	.34	7.3	3.3	5.2	16
7	.16	.16	.38	.38	.36	.37	.89	.25	8.3	1.5	3.4	16
8	.16	.21	.38	1.3	.34	.33	.74	.20	4.4	2.1	3.1	10
9	.13	.26	.38	.84	.32	.26	.64	.24	1.6	16	4.8	12
10	.10	.26	.38	.38	.38	.32	.63	.34	1.1	11	15	11
11	.14	.26	.38	.38	.38	.27	.56	.26	.90	4.0	35	10
12	.16	.26	1.9	.38	.39	.29	.51	.26	.80	2.6	20	9.1
13	.16	.26	.59	.38	.38	.39	.51	.26	.72	2.3	14	9.0
14	.16	.26	.38	.38	.38	.44	.50	.26	1.1	5.7	13	30
15	.16	.35	.38	.39	.40	.36	.46	.27	4.8	5.5	11	22
16	.12	.38	.38	.38	.39	.35	.42	.47	5.4	2.9	9.0	10
17	.08	.38	.99	.38	.39	.33	.33	.45	4.7	3.9	7.9	5.0
18	.08	.38	.38	.38	.33	.28	.20	.34	5.7	6.6	6.8	3.1
19	.08	.38	.38	.38	.26	3.4	.17	.26	2.7	6.8	6.9	2.5
20	.08	.38	.38	.38	.26	3.9	.18	.22	1.7	3.1	5.0	1.9
21	.08	.38	.38	.38	.31	.98	.28	.15	2.2	2.9	8.8	2.5
22	.08	.38	.38	.45	.38	.64	.37	.17	3.4	3.4	11	6.8
23	.08	.38	.38	.50	.39	.57	.42	.59	2.5	3.1	7.5	4.4
24	.08	.38	.38	.50	.36	.50	.36	.43	3.5	2.0	3.3	3.8
25	.08	.38	.38	.52	.38	.49	.31	6.6	3.1	2.1	.66	2.3
26	.08	1.8	.38	.50	.38	.47	.73	9.8	2.0	2.8	.60	1.8
27	.08	1.8	.38	.50	.38	.38	.33	1.6	2.0	2.0	.50	1.8
28	.08	.38	.62	.54	.34	.33	.26	1.2	2.0	1.3	.55	1.7
29	.13	.38	.38	.58	---	9.1	.24	1.5	2.6	.93	.59	1.4
30	.16	.38	.38	.50	---	17	.25	.91	4.5	.82	.60	1.2
31	.16	---	.38	.76	---	3.6	---	.73	---	8.5	.55	---
TOTAL	3.73	11.78	14.36	14.72	10.70	52.56	18.85	30.87	83.23	122.05	255.45	207.44
MEAN	.12	.39	.46	.47	.38	1.70	.63	1.00	2.77	3.94	8.24	6.91
MAX	.16	1.8	1.9	1.3	.74	1.7	2.2	9.8	8.3	16	35	30
MIN	.08	.16	.38	.38	.26	.16	.17	.15	.56	.82	.50	.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	2.46	1.68	1.42	1.17	1.06	1.87	1.28	1.18	2.27	4.42	4.47	3.99
MAX	11.7	7.02	7.71	3.25	3.85	6.86	3.23	4.44	5.99	12.1	8.30	11.7
(WY)	2000	1988	1998	1996	1998	1987	1992	1991	1994	2000	1995	1998
MIN	.12	.39	.46	.37	.33	.25	.080	.24	.22	.61	.44	.82
(WY)	2001	2001	2001	2000	2000	2000	2000	2000	1998	1989	1989	1997

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1987 - 2001

ANNUAL TOTAL	842.73	825.74	
ANNUAL MEAN	2.30	2.26	2.28
HIGHEST ANNUAL MEAN			3.41
LOWEST ANNUAL MEAN			1.11
HIGHEST DAILY MEAN	66 Jul 26	35 Aug 11	67 Nov 23 1988
LOWEST DAILY MEAN	.00 Many days	.08 Oct 17-28	*.00
ANNUAL SEVEN-DAY MINIMUM	.00 Apr 6	.08 Oct 17	.00 Jun 29 1998
MAXIMUM PEAK FLOW		48 Aug 10,11	127 Nov 23 1988
MAXIMUM PEAK STAGE		95.05 Aug 10,11	95.84 Nov 23 1988
10 PERCENT EXCEEDS	3.1	6.9	5.5
50 PERCENT EXCEEDS	.28	.47	.84
90 PERCENT EXCEEDS	.00	.16	.28

* 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 NE¹/₄ 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 mi².

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 sea level (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 ft³/s, around structure or gates.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	64	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	36	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	17	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	29	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.2	24	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	18	.35	11	29
7	.00	.00	.00	.00	.00	.00	.00	.00	29	.00	4.8	22
8	.00	.00	.00	.00	.00	.00	.00	.00	20	4.3	3.4	35
9	.00	.00	.00	.00	.00	.00	.00	.00	2.7	40	5.1	29
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	11	57	41
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.7	73	26
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	22	32
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.6	9.9	33
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	15	11	142
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.4	11	79
16	.00	.00	.00	.00	.00	.00	.00	.00	5.5	.00	.00	34
17	.00	.00	.00	.00	.00	.00	.00	.00	3.8	12	3.1	19
18	.00	.00	.00	.00	.00	.00	.00	.00	4.7	14	2.5	9.6
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.5	1.2	10
20	.00	.00	.00	.00	.00	.72	.00	.00	.00	.00	.00	4.5
21	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	4.6	.15
22	.00	.00	.00	.00	.00	.33	.00	.00	.00	.00	4.2	13
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	13
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.1	13
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.6
26	.00	.00	.00	.00	.00	.00	.00	7.7	.00	.00	.00	3.1
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.2
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.70	.00	.68
29	.00	.00	.00	.00	---	12	.00	.00	.00	.57	.00	.36
30	.00	.00	.00	.00	---	33	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	7.4	---	.00	---	42	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	54.45	0.00	7.70	83.70	162.32	397.70	595.19
MEAN	.0000	.0000	.0000	.0000	.0000	1.76	.0000	.25	2.79	5.24	12.8	19.8
MAX	.00	.00	.00	.00	.00	33	.00	7.7	29	42	73	142
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	13.5	10.5	11.2	14.1	11.6	16.2	11.0	5.00	7.24	12.7	17.0	18.8			
MAX	35.3	39.7	66.5	98.0	91.1	103	35.9	17.2	16.8	30.1	39.4	44.5			
(WY)	1992	1988	1998	1998	1998	1998	1998	1991	1991	1991	1991	1995			
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.61	.000	3.17			
(WY)	2001	2001	2001	2000	2000	2000	2000	2000	2000	1989	1989	1989			

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	1457.10		1301.06			
ANNUAL MEAN	3.98		3.56		12.5	
HIGHEST ANNUAL MEAN					40.7	
LOWEST ANNUAL MEAN					3.56	
HIGHEST DAILY MEAN	78	Jul 8	142	Sep 14	290	Nov 23 1988
LOWEST DAILY MEAN	.00	Many days	.00	Many days	.00	Many days
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Many days
MAXIMUM PEAK STAGE			90.16		90.59	
10 PERCENT EXCEEDS	13		11		32	
50 PERCENT EXCEEDS	.00		.00		6.0	
90 PERCENT EXCEEDS	.00		.00		.00	

KISSIMMEE RIVER BASIN

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.

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 sea level (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 fair. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	1.8	3.1	2.9	2.3	1.8	12	1.0	.47	1.5	195	15
2	9.6	1.6	2.9	2.9	3.1	1.7	4.9	1.1	.67	1.5	131	15
3	9.8	1.9	2.9	3.0	3.6	1.6	4.0	1.0	.88	1.6	86	15
4	9.1	2.2	2.7	3.8	2.1	4.7	4.0	1.1	.95	1.5	100	15
5	8.0	2.7	2.4	3.7	2.4	3.7	3.5	.84	.54	5.4	96	15
6	7.6	2.9	2.5	3.4	3.1	3.6	3.1	.70	29	5.5	66	56
7	8.3	2.4	2.4	3.1	4.2	3.6	2.9	.60	51	2.4	43	98
8	7.6	1.9	2.8	3.0	3.3	3.9	2.9	.59	66	5.9	18	106
9	9.4	1.9	2.9	4.0	2.9	3.4	3.4	.60	16	92	11	114
10	8.3	2.0	2.9	4.3	2.4	2.5	3.2	.42	2.8	61	117	117
11	6.9	1.1	3.1	3.9	2.4	3.0	2.6	.40	1.6	58	204	127
12	6.6	1.1	3.5	6.9	2.5	2.4	2.4	.39	1.1	37	94	107
13	6.5	2.3	5.8	6.2	2.4	2.7	2.2	.38	.43	15	62	126
14	6.6	3.1	4.6	4.8	2.4	2.9	2.7	.36	.42	15	38	428
15	6.5	3.4	3.8	4.0	1.9	2.7	2.6	.40	1.1	34	42	288
16	6.7	3.1	3.1	4.6	1.8	2.4	2.4	.90	6.5	30	36	161
17	6.4	2.7	3.6	4.7	1.8	2.6	3.1	.10	8.0	22	24	97
18	6.2	2.4	3.7	4.4	1.8	3.1	3.0	.00	13	34	26	53
19	5.3	2.3	3.7	4.0	1.8	3.8	2.7	.00	3.7	95	30	60
20	4.0	2.2	4.4	4.4	1.8	5.4	2.4	.00	3.3	1.1	28	54
21	4.2	1.8	4.0	4.0	2.3	8.2	2.2	.00	2.5	15	35	46
22	4.4	1.6	4.0	3.7	2.4	6.1	1.9	.11	2.2	35	49	71
23	3.1	1.6	3.5	2.7	2.3	2.5	1.8	.09	3.0	40	38	59
24	2.3	1.6	3.3	2.3	2.0	1.6	1.8	.00	2.9	27	33	65
25	2.0	1.8	3.3	2.0	2.0	1.6	1.8	.64	2.9	1.0	28	52
26	2.9	5.2	3.1	2.0	2.0	1.6	1.6	9.0	2.8	7.3	24	45
27	2.9	3.6	2.9	2.0	2.0	1.7	1.4	1.3	2.1	12	23	43
28	2.1	4.0	3.7	2.0	2.0	1.6	1.3	.99	2.0	8.2	21	43
29	1.9	5.1	3.6	2.0	---	19	1.1	1.2	2.0	14	19	36
30	2.1	3.9	3.4	2.0	---	85	.95	.89	1.8	5.2	18	16
31	1.9	---	2.9	2.1	---	30	---	.44	---	82	16	---
TOTAL	178.8	75.2	104.5	108.8	67.0	220.4	85.85	25.54	231.66	766.1	1751	2543
MEAN	5.77	2.51	3.37	3.51	2.39	7.11	2.86	.82	7.72	24.7	56.5	84.8
MAX	9.8	5.2	5.8	6.9	4.2	85	12	9.0	66	95	204	428
MIN	1.9	1.1	2.4	2.0	1.8	1.6	.95	.00	.42	1.0	11	15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

MEAN	30.2	20.1	18.4	21.3	22.2	24.0	17.0	11.6	21.8	31.2	38.2	42.6
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	.96	1.27	1.40	.30	.000	.42	4.12	2.71	6.34
(WY)	1968	1968	1967	1967	1968	1968	2000	2000	1967	1989	1989	1984

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1966 - 2001

ANNUAL TOTAL	2221.59	6157.85	
ANNUAL MEAN	6.07	16.9	24.9
HIGHEST ANNUAL MEAN			62.2
LOWEST ANNUAL MEAN			10.1
HIGHEST DAILY MEAN	116	428	610
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.03	.00
MAXIMUM PEAK FLOW		727	1230
MAXIMUM PEAK STAGE		74.94	78.58
10 PERCENT EXCEEDS	14	51	53
50 PERCENT EXCEEDS	2.7	3.1	15
90 PERCENT EXCEEDS	.00	1.1	3.6

02264100 BONNET CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961, 1963, 1966, 1968-94, 1996 to current year.

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)
OCT 24...	1300	72.82	2.4	--	--	4.5	7.2	240	24.3	--	--	--	--
NOV 21...	0950	72.77	2.0	--	--	4.7	7.3	263	18.5	--	--	--	--
DEC 19...	0830	72.82	3.4	--	--	5.4	7.4	270	17.2	--	--	--	--
JAN 17...	1151	72.81	4.7	--	--	7.6	7.2	247	16.7	--	--	--	--
FEB 15...	1205	72.77	1.8	--	--	7.3	7.3	252	20.7	--	--	--	--
MAR 21...	1426	72.88	8.8	--	--	6.9	7.3	239	21.0	--	--	--	--
APR 09...	1420	72.83	3.4	--	--	8.1	7.3	236	25.5	--	--	--	--
MAY 08...	0900	72.75	.73	--	--	8.0	7.6	269	25.1	--	--	--	--
JUN 07...	1040	73.09	24	--	--	7.1	7.4	238	29.5	--	--	--	--
JUL 03...	1310	73.09	1.6	--	--	1.8	6.9	251	28.6	--	--	--	--
JUL 31...	1507	72.98	4.7	--	--	.6	6.6	211	29.7	--	--	--	--
AUG 30...	1330	73.01	18	320	1.3	.2	6.2	205	28.2	56	16	4.0	3.3
SEP 19...	1030	73.32	82	--	--	4.0	6.5	149	25.8	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 24...	--	--	--	--	--	.03	.76	--	.11	--	<.01	--	.02
NOV 21...	--	--	--	--	--	.02	.67	--	.10	--	<.01	--	<.01
DEC 19...	--	--	--	--	--	<.010	.67	--	.07	--	<.01	--	.01
JAN 17...	--	--	--	--	--	<.01	.6	--	.05	--	<.01	--	<.01
FEB 15...	--	--	--	--	--	<.01	.7	--	<.02	--	<.01	--	<.01
MAR 21...	--	--	--	--	--	<.010	.62	--	<.02	--	<.01	--	.01
APR 09...	--	--	--	--	--	<.010	.63	--	<.02	--	<.01	--	<.01
MAY 08...	--	--	--	--	--	.020	.68	--	<.02	--	<.01	--	<.01
JUN 07...	--	--	--	--	--	<.010	.52	--	<.02	--	<.01	--	<.01
JUL 03...	--	--	--	--	--	.020	.65	--	.02	--	<.01	--	<.01
JUL 31...	--	--	--	--	--	.058	.76	--	.05	--	<.01	--	.02
AUG 30...	15	19	27	<.1	19	--	2.3	.62	--	.04	--	<.01	--
SEP 19...	--	--	--	--	--	.71	2.6	--	.25	--	.01	--	.11

< -- Less than

KISSIMMEE RIVER BASIN

02264100 BONNET CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

DATE	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	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...	--	.03	15	5.6	--	--	--	--	--	--	--	--	--
NOV 21...	--	.04	14	6.8	--	--	--	--	--	--	--	--	--
DEC 19...	--	.05	11	11	--	--	--	--	--	--	--	--	--
JAN 17...	--	.02	9.7	9.1	--	--	--	--	--	--	--	--	--
FEB 15...	--	<.02	7.7	<.1	--	--	--	--	--	--	--	--	--
MAR 21...	--	.03	8.6	8.8	--	--	--	--	--	--	--	--	--
APR 09...	--	<.02	10	8.4	--	--	--	--	--	--	--	--	--
MAY 08...	--	<.02	9.0	<.1	--	--	--	--	--	--	--	--	--
JUN 07...	--	.02	7.8	5.0	--	--	--	--	--	--	--	--	--
JUL 03...	--	.02	11	6.9	--	--	--	--	--	--	--	--	--
JUL 31...	--	.04	9.7	5.9	--	--	--	--	--	--	--	--	--
AUG 30...	.07	.08	40	--	684	3.5	<1.0	<1.0	1.8	2.1	1100	<1.0	63
SEP 19...	--	.13	46	4.4	--	--	--	--	--	--	--	--	--

DATE	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
AUG 30...	<1.0	<1.0	8.8

< -- Less than

KISSIMMEE RIVER BASIN

02264140 BONNET CREEK NEAR KISSIMMEE, FL

WATER-QUALITY RECORDS

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.

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
24...	1220	66.66	3.6	7.6	233	23.2	.09	.94	.08	<.01	.02	.04	21
NOV													
21...	1120	66.50	4.9	7.3	246	18.7	.08	.70	.06	.01	.02	.03	17
DEC													
19...	1020	66.72	5.1	7.0	243	17.5	<.010	.80	.07	<.01	<.01	.02	13
JAN													
17...	1243	66.75	9.2	7.3	257	15.7	<.01	.6	.05	<.01	<.01	.02	12
FEB													
15...	1320	66.60	7.3	7.2	245	21.7	.03	.7	.03	<.01	<.01	<.02	11
MAR													
21...	1329	66.82	6.5	7.3	244	21.1	.014	.62	<.02	<.01	.01	.02	9.6
APR													
09...	1309	66.27	3.2	6.2	270	23.0	.042	1.5	.08	<.01	.04	.05	31
JUN													
07...	1010	67.97	5.7	7.3	243	29.0	<.010	.49	<.02	<.01	<.01	<.02	7.6
JUL													
03...	1230	--	2.7	6.8	240	29.3	.022	.90	<.02	<.01	<.01	<.02	19
31...	1300	--	.7	6.2	201	27.6	.042	1.8	<.02	<.01	.04	.05	30
SEP													
19...	0900	70.09	.3	6.6	143	24.4	.16	1.7	.04	<.01	.07	.08	40

DATE	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)
OCT	
24...	3.0
NOV	
21...	4.5
DEC	
19...	12
JAN	
17...	8.2
FEB	
15...	<.1
MAR	
21...	7.1
APR	
09...	6.4
JUN	
07...	5.7
JUL	
03...	6.0
31...	<.1
SEP	
19...	<.1

< -- Less than

02266025 REEDY CREEK AT S-46 NEAR VINELAND, FL

LOCATION.--Lat 28°24'18", long 81°36'42", in NE¹/₄ 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 mi².

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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.75	.00	.00	.00	1.1	2.1
2	.22	.00	.00	.00	.00	.00	.39	.00	.00	.00	1.8	3.0
3	.37	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	2.6
4	e.52	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	2.5
5	e.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.6	2.9
6	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	4.3
7	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5	2.4
8	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	1.6	2.1
9	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.3	2.3
10	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.5	2.3
11	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.0	2.3
12	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	2.0
13	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	2.3
14	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.7	3.8
15	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	3.8
16	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	3.5
17	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	3.4
18	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	2.7	3.3
19	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.2	3.3
20	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.32	3.0	3.2
21	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.64	2.8	3.3
22	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.53	2.9	3.1
23	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.70	2.7	3.4
24	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.89	2.8	3.5
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.66	2.9	3.5
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.65	2.7	3.5
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.74	2.8	3.5
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.76	1.6	3.5
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.69	.77	3.6
30	.00	.00	.00	.00	---	1.1	.00	.00	.00	.64	1.2	3.8
31	.00	---	.00	.00	---	.90	---	.00	---	1.0	1.3	---
TOTAL	1.41	0.00	0.00	0.00	0.00	2.00	1.14	0.00	0.00	8.45	64.27	92.1
MEAN	.045	.000	.000	.000	.000	.065	.038	.000	.000	.27	2.07	3.07
MAX	.52	.00	.00	.00	.00	1.1	.75	.00	.00	1.0	3.2	4.3
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.77	2.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	2.79	2.94	2.59	4.09	4.51	5.02	2.42	.97	.73	1.87	3.04	3.25
MAX	10.2	10.8	20.6	49.2	54.0	52.8	17.8	8.04	4.19	9.12	11.6	9.56
(WY)	1997	1995	1998	1998	1998	1998	1998	1998	1998	1997	1997	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1987	1987	1987	1987	1987	1990	1989	1989	1989	1990	1989	1989

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1987 - 2001

ANNUAL TOTAL	199.20	169.37	
ANNUAL MEAN	.54	.46	2.84
HIGHEST ANNUAL MEAN			19.0 1998
LOWEST ANNUAL MEAN			.091 1990
HIGHEST DAILY MEAN	3.9 Feb 3	4.3 Sep 6	e115 Feb 17 1998
LOWEST DAILY MEAN	.00 Many days	.00 Many days	.00 Many days
ANNUAL SEVEN-DAY MINIMUM	.00 Mar 11	.00 Oct 6	.00 Many days
MAXIMUM PEAK STAGE		96.15 Sep 29	96.51 Mar 31 1987
10 PERCENT EXCEEDS	2.7	2.3	5.9
50 PERCENT EXCEEDS	.00	.00	.14
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated

KISSIMMEE RIVER BASIN

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL

LOCATION.--Lat 28°23'05", long 81°37'00", in NW¹/₄ 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.

PERIOD OF RECORD.--May 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.23 ft above sea level.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.2
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	2.0
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.27	2.9
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.35	3.0
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.40	3.1
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45	3.7
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.56	4.5
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.56	4.6
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.57	4.9
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.53	15
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.53	25
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.52	27
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.54	26
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.91	25
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.6	22
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5	21
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.7	20
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	19
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	18
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	17
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.7	17
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.7	16
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5	15
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4	14
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	1.3	14
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	1.1	13
31	.00	---	.00	.00	---	.00	---	.00	---	.00	1.1	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.41	359.6
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.85	12.0
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	27
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.2
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.97
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	1.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001			
MEAN	6.72	3.80	4.33	4.90	4.94	5.39	3.52	1.14	1.70	4.90	6.88	7.22																											
MAX	38.3	16.0	45.1	45.9	37.5	43.0	23.0	11.9	20.2	31.6	38.0	28.1																											
(WY)	1996	1988	1998	1998	1998	1998	1987	1991	1991	1991	1995	1995																											
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000																											
(WY)	1979	1968	1968	1968	1968	1968	1968	1967	1967	1967	1973	1980																											

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1966 - 2001

ANNUAL TOTAL	54.66	386.01	
ANNUAL MEAN	.15	1.06	4.62
HIGHEST ANNUAL MEAN			17.2
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	2.6	Jan 1	27
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 1	.00
MAXIMUM PEAK FLOW			27
MAXIMUM PEAK STAGE			94.65
ANNUAL RUNOFF (CFSM)	.012	.085	.37
ANNUAL RUNOFF (INCHES)	.16	1.16	5.06
10 PERCENT EXCEEDS	.74	1.4	14
50 PERCENT EXCEEDS	.00	.00	.74
90 PERCENT EXCEEDS	.00	.00	.00

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-73, 1977, 1979-80, 1982-98, 2001.

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)	
AUG 29...	1350	93.68	1.2	400	1.6	.4	5.4	351	26.9	120	25	13	14	
SEP 17...	1400	94.63	26	--	--	.4	6.2	301	24.7	--	--	--	--	
DATE	TIME	ANC UNFLTRD SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	
AUG 29...	18	8.9	28	<.1	110	--	7.1	1.8	--	<.02	--	<.01	--	
SEP 17...	--	--	--	--	--	.77	3.2	--	<.02	--	<.01	--	.12	
DATE	TIME	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	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)
AUG 29...		.05	.08	56	--	331	2.2	<1.0	<1.0	<1.0	<1.0	762	<1.0	49
SEP 17...		--	.16	43	<.1	--	--	--	--	--	--	--	--	--
DATE	TIME	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALDRIN, TOTAL (UG/L) (39330)	CARBO- PHENO- THION WATER UNFLTRD TOTAL (UG/L) (39786)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L) (39350)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL RECOVER (UG/L) (39380)	DISUL- FOTON UNFILT TOTAL RECOVER (UG/L) (39011)	ENDO- SULFAN I TOTAL (UG/L) (39388)
AUG 29...		<.1	1.0	<1.0	<2.0	<.01	<.02	<.1	<.01	<.02	<.02	<.006	<.03	<.01
DATE	TIME	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	METHYL PARA- THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	P,P'- DDD UNFILT TOTAL RECOVER (UG/L) (39360)	P,P'- DDE, TOTAL RECOVER (UG/L) (39365)	P,P'- DDT UNFILT TOTAL RECOVER (UG/L) (39370)
AUG 29...		<.01	<.01	<.007	<.009	<.01	<.006	<.03	<.01	<.01	<.006	<.007	<.006	<.009

< -- Less than

KISSIMMEE RIVER BASIN

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL--Continued

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

DATE	PARA- THION, TOTAL (UG/L) (39540)	PCB, TOTAL (UG/L) (39516)	PHORATE TOTAL (UG/L) (39023)	TOX- APHENE, TOTAL (UG/L) (39400)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATH. (UG/KG) (39423)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOTTOM MATH. (UG/KG) (39481)
AUG 29...	<.01	<.1	<.02	<1	<.2	<3	<.2	<.2	<.2	<.2	<.2	<.2	<2.5
DATE	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39758)	BI- PHENYL, NONA- CHLORO- SUR SCD PERCENT (90575)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39368)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)						
SEP 29...	<.2	80	<.5	<.2	<.5	<5	<50						

< -- Less than

02266205 WHITTENHORSE CREEK AT S-411, NEAR VINELAND, FL

LOCATION.--Lat 28°23'34", long 81°36'40", in SE 1/4 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 mi², approximately.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage and gate-opening recorder. Datum of gage is at sea level (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, Whitttenhorse Creek, and Boggy Creek.

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	.54	.00	.00	.01	.00	.00	3.5	.00	.00	.00	3.0	.98
2	.31	.00	.00	.30	.00	.00	2.7	.00	.00	.00	3.6	1.7
3	.49	.00	.00	.45	.00	.00	2.4	.00	.00	.00	3.3	1.2
4	.84	.00	.00	.49	.00	.00	2.0	.00	.00	.00	3.1	.75
5	.43	.00	.00	.63	.00	.00	1.8	.00	.00	.00	2.8	1.4
6	.08	.00	.00	.84	.00	.00	1.6	.00	.00	.00	3.1	3.4
7	.00	.00	.00	.70	.00	.00	1.1	.00	.00	.00	3.4	3.7
8	.00	.00	.00	1.4	.00	.00	.72	.00	.00	1.8	3.2	3.3
9	.00	.00	.00	1.5	.00	.00	.32	.00	.00	1.8	3.0	2.8
10	.00	.00	.00	1.3	.00	.00	.00	.00	.00	1.5	3.5	3.1
11	.00	.00	.00	1.3	.00	.00	.00	.00	.00	.94	3.6	3.8
12	.00	.00	.00	1.3	.00	.00	.00	.00	.00	1.0	2.7	3.8
13	.00	.00	.00	1.2	.00	.00	.00	.00	.00	1.2	2.3	4.4
14	.00	.00	.00	1.3	.00	.00	.00	.00	.00	.86	2.1	7.7
15	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.44	1.8	4.9
16	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.48	1.4	3.4
17	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.39	1.2	3.3
18	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.92	3.0	3.2
19	.00	.00	.00	1.4	.00	.00	.00	.00	.00	1.2	3.3	3.6
20	.00	.00	.00	1.4	.00	.00	.00	.00	.00	.87	2.7	3.6
21	.00	.00	.00	.64	.00	.00	.00	.00	.00	1.7	3.3	3.5
22	.00	.00	.00	.45	.00	.00	.00	.00	.00	1.8	3.4	3.4
23	.00	.00	.00	.28	.00	.60	.00	.00	.00	1.3	2.8	4.1
24	.00	.00	.00	.00	.00	2.1	.00	.00	.00	.95	2.4	4.2
25	.00	.00	.00	.00	.00	2.2	.00	.00	.00	.59	2.3	3.9
26	.00	.00	.00	.00	.00	2.3	.00	.00	.00	.55	1.8	3.8
27	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.25	1.6	3.9
28	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.94	3.8
29	.00	.00	.00	.00	---	2.8	.00	.00	.00	.00	.00	3.9
30	.00	.00	.00	.00	---	4.8	.00	.00	.00	.00	.00	3.9
31	.00	---	.00	.00	---	4.0	---	.00	---	1.2	.00	---
TOTAL	2.69	0.00	0.01	22.49	0.00	20.20	16.14	0.00	0.00	21.74	74.64	102.43
MEAN	.087	.000	.000	.73	.000	.65	.54	.000	.000	.70	2.41	3.41
MAX	.84	.00	.01	1.5	.00	4.8	3.5	.00	.00	1.8	3.6	7.7
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	9.48	5.36	5.02	8.83	3.95	5.64	2.15	.71	1.38	3.10	5.97	4.46			
MAX	66.1	22.2	23.5	71.8	23.4	25.5	8.87	2.55	8.97	26.6	59.3	27.6			
(WY)	1996	1995	1995	1996	1998	1998	1987	1995	1991	1991	1995	1995			
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000			
(WY)	1998	1990	1990	1997	2001	1997	1997	1996	1996	1996	1996	1996			

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1987 - 2001

ANNUAL TOTAL	355.95	260.34	
ANNUAL MEAN	.97	.71	4.69
HIGHEST ANNUAL MEAN			17.9
LOWEST ANNUAL MEAN			.21
HIGHEST DAILY MEAN	7.1	Feb 10	131
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 26	.00
MAXIMUM PEAK STAGE			96.59
10 PERCENT EXCEEDS	4.9		3.1
50 PERCENT EXCEEDS	.00		.00
90 PERCENT EXCEEDS	.00		.00

KISSIMMEE RIVER BASIN

02266291 LATERAL 405 AT S-405A, NEAR DOCTOR PHILLIPS, FL

LOCATION.--Lat 28°25'37", long 81°36'19" in SW¹/₄ 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 mi².

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 sea level (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 ft³/s, around structure or gates.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.58	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.52	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.39	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.34	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.18	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	1.4	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	1.2	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.84	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.74	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.63	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	7.01	3.42	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.23	.11	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	1.4	.58	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	4.63	4.16	9.58	8.49	8.65	9.04	6.67	3.43	3.07	3.62	2.62	3.97
MEAN	4.63	4.16	9.58	8.49	8.65	9.04	6.67	3.43	3.07	3.62	2.62	3.97
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1990	1990	1999	1999	2000	1999	1990	1990	1989	1989	1989	1989

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1987 - 2001

ANNUAL TOTAL	199.59	10.43	
ANNUAL MEAN	.55	.029	5.65
HIGHEST ANNUAL MEAN			32.7 1998
LOWEST ANNUAL MEAN			.029 2001
HIGHEST DAILY MEAN	29	Mar 23	e200 Dec 27 1997
LOWEST DAILY MEAN	.00	Many days	.00 Many days
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00 Many days
MAXIMUM PEAK STAGE		96.08	Sep 29 96.57 Dec 27 1997
10 PERCENT EXCEEDS	.00	.00	12
50 PERCENT EXCEEDS	.00	.00	1.5
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated

KISSIMMEE RIVER BASIN

273

02266294 LATERAL 405 BELOW S-405, NEAR VINELAND, FL

WATER-QUALITY RECORDS

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 2000 TO SEPTEMBER 2001

DATE	TIME	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 TOTAL (MG/L) (00610)	NITRO- GEN, NITRITE TOTAL (MG/L) (00615)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) (00625)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) (00630)	PHOS- PHORUS TOTAL (MG/L) (00665)	CARBON, ORGANIC TOTAL (MG/L) (00680)	
AUG 30...	1030	272	6.7	28.9	1.2	200	1.9	.35	<.01	2.0	<.02	.120	26	
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 SULFATE DIS- SOLVED (MG/L) AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	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)	
AUG 30...	.090	73	21.0	5.00	21.0	6.10	42	16.0	40.0	<.1	8	<1.00	190	
DATE		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)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L) AS SE) (01147)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG) (71900)	CHLOR- PYRIFOS TOTAL RECOV- ERABLE (UG/L) AS SE) (38932)	DISUL- FOTON UNFILTR RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)
AUG 30...	<1.00	1	3.5	330	<1	23	<1	<2	<1.0	<.10	<.01	<.03	<.02	
DATE		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 UNFILTR RECOVER (UG/L) (39360)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39365)	P,P'- DDT UNFILTR RECOVER (UG/L) (39370)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	
AUG 30...	<.02	<.013	<.006	.3	<.2	<.1	3	<.007	<.5	<.006	<.2	<.009	<.5	
DATE		DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L) (39380)	DI- ELDRIN TOTAL (UG/KG) (39383)	ENDO- SULFAN TOTAL (UG/L) (39388)	ENDO- SULFAN TOTAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L) (39398)	ETHION, TOTAL (UG/L) (39400)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L) (39410)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	HEPTA- CHLOR TOTAL IN BOT- TOM MA- TERIAL (UG/L) (39420)	HEPTA- CHLOR EPOXIDE TOT. IN BOT- TOM MA- TERIAL (UG/KG) (39423)	
AUG 30...	<.006	2.9	<.015	<.2	<.014	<.2	<.01	<1	<50	<.014	<.2	<.009	<.2	
DATE		METH- OXY- CHLOR, TOTAL (UG/L) (39480)	METH- OXY- CHLOR, TOT. IN BOT- TOM MA- TERIAL (UG/KG) (39481)	PCB, TOTAL (UG/L) (39516)	PCB, TOTAL (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)	MIREX, TOTAL (UG/L) (39758)	CARBO- PHENO- THION WATER WHOLE UNFLTRD TOT. REC (UG/L) (82614)	FONOFOS (DY- FONATE) WATER WHOLE TOT. REC 1325 PERCENT (90575)	
AUG 30...	<.01	<2	<.1	<5	.08	<.01	<.02	<.01	<.01	<.2	<.02	<.01	35.0	

< -- Less than

KISSIMMEE RIVER BASIN

02266295 LATERAL 410 AT S-410, NEAR VINELAND, FL

LOCATION.--Lat 28°21'58", long 81°35'55" in SE¹/₄ 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 mi².

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 sea level. Auxilliary gage at downstream side of control structure 410.

REMARKS.--Records good. 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 ft³/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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	6.8
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	12
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	22
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	21
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	15
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	14
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	12
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	12
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	10
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	10
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	10
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	194.80
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	6.49
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	22
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	1987	1988	1989	1993	1993	1993	1993	1999	1999	1999	1998	1998	1998	1999
MEAN	5.10	4.40	5.90	3.24	2.84	5.23	5.06	2.34	2.71	5.43	6.48	7.14		
MAX	23.5	24.7	18.9	14.1	10.4	23.4	19.8	11.2	19.3	26.2	31.4	15.9		
(WY)	1993	1988	1989	1993	1993	1993	1993	1991	1991	1991	1997	1994		
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		
(WY)	1987	1987	1987	1987	1987	1999	1999	1999	1998	1998	1998	1999		

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1987 - 2001

ANNUAL TOTAL						194.80								
ANNUAL MEAN						.53				4.67				
HIGHEST ANNUAL MEAN										12.4				1993
LOWEST ANNUAL MEAN										.14				2000
HIGHEST DAILY MEAN							22	Sep 17		114			Apr 1	1987
LOWEST DAILY MEAN				.00	Many days		.00	Many days		.00			Many days	
ANNUAL SEVEN-DAY MINIMUM				.00	Jan 1		.00	Oct 1		.00			Many days	
MAXIMUM PEAK STAGE							96.49	Sep 16		97.26			Oct 12	1995
10 PERCENT EXCEEDS				.00			.00			15				
50 PERCENT EXCEEDS				.00			.00			2.0				
90 PERCENT EXCEEDS				.00			.00			.00				

e Estimated

KISSIMMEE RIVER BASIN

275

282135081345500 LATERAL 405 BELOW L410 NEAR VINELAND, FL

LOCATION.--Lat 28°21'35", long 81°34'55", in SW¹/₄ sec. 23, T.24 S., R.27 E., Orange County, Hydrologic Unit 03090101, in center of stream, 3.5 mi south of Walt Disney World Magic Kingdom, and 5.0 mi southwest of Vineland, and 3 mi upstream from mouth.

PERIOD OF RECORD.--Water years 1974-77, 1979-94, 1997 to current year.

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

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)	ANC UNFLTRD TIT 4.5 LAB (MG/L) AS CACO3 (90410)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)		
AUG 30...	1200	320	2.2	.5	296	28.1	88	24	6.8	4.9	22	29	40		
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L) AS N (00630)	NITRO- GEN, NITRITE TOTAL (MG/L) AS N (00615)	PHOS- PHORUS ORTHO TOTAL (MG/L) AS P (70507)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)	CARBON, ORGANIC TOTAL (MG/L) AS C (00680)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L) AS AL (01105)	ARSENIC TOTAL (UG/L) AS AS (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE (01012)	CADMIUM WATER TOTAL RECOV- ERABLE (UG/L) AS CD (01027)	
AUG 30...	<.1	33	2.9	.45	.21	.01	.18	.22	51	604	5.6	<1.0	<1.0		
DATE	TIME	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)	MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L) AS SE (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)	ALDRIN, TOTAL (UG/L) (39330)	CARBO- PHENO- THION WATER UNFLTRD (UG/L) (39786)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L) (39350)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	
AUG 30...	1.2	2.0	547	<1.0	23	<.1	<1.0	<1.0	2.5	<.01	<.02	<.1	<.01		
DATE	TIME	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)	DISUL- FOTON UNFLTR TOTAL (UG/L) (39011)	ENDO- SULFAN I TOTAL (UG/L) (39388)	ENDRIN WATER REC UNFLTRD TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	
AUG 30...	<.02	<.02	<.006	<.03	<.01	<.01	<.01	<.01	<.007	<.009	<.01	<.006	E.02	<.01	
DATE	TIME	METHYL PARA- THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	P,P'- DDD UNFLTR RECOVER (UG/L) (39360)	P,P'- DDE, TOTAL RECOVER (UG/L) (39365)	P,P'- DDT UNFLTR RECOVER (UG/L) (39370)	PARA- THION, TOTAL (UG/L) (39540)	PCB, TOTAL (UG/L) (39516)	PHORATE TOTAL (UG/L) (39023)	APHENE, TOTAL (UG/L) (39400)	TOX- IN BOT- TOM MA- TERIAL (UG/KG) (39333)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)
AUG 30...	<.01	<.006	<.007	<.006	<.009	<.01	<.1	<.02	<1	<.2	7	<.2	<.2		
DATE	TIME	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR, EPOXIDE TOT. IN BOTTOM MTRL. (UG/KG) (39423)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOTTOM MTRL. (UG/KG) (39481)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39758)	BI- PHENYL, NONA- CHLORO- SUR SCD 1325 PERCENT (90575)	P,P'- DDD RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39368)	P,P'- DDT RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)		
AUG 30...	<.2	<.2	<.2	<.2	<2.5	<.2	47	<.5	.4	<.5	<5	<50			

< -- Less than
E -- Estimated value

02266298 REEDY CREEK ABOVE U.S. HIGHWAY 192 NEAR VINELAND, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.5	20.1	15.0	8.1	18.9	21.4	19.5	20.3	23.1	25.9	24.6	27.5
2	24.3	19.6	15.9	9.1	17.3	21.6	19.0	20.5	23.6	26.6	24.1	27.2
3	24.6	19.5	15.7	9.3	14.6	21.6	19.5	20.2	24.0	27.0	24.4	27.4
4	24.9	19.4	13.5	9.0	14.5	20.9	20.4	20.2	24.0	26.9	24.4	27.5
5	25.4	19.9	13.7	8.4	15.2	18.0	20.9	20.5	24.5	25.4	24.8	27.1
6	25.8	20.7	12.7	10.4	13.5	15.4	20.9	20.7	24.4	25.2	25.2	26.0
7	25.7	21.0	14.0	10.1	14.8	14.4	21.3	20.6	24.1	25.5	25.6	25.5
8	24.8	21.5	15.5	12.2	16.4	14.7	22.0	20.6	24.0	25.1	26.4	25.3
9	21.5	21.6	17.8	11.8	17.6	15.4	22.6	20.3	24.9	24.9	26.2	25.2
10	19.7	21.9	18.4	9.6	18.9	17.4	23.0	20.4	25.2	25.8	25.9	25.3
11	20.5	18.9	19.4	11.3	19.9	18.2	23.3	20.3	25.0	---	26.2	25.5
12	21.2	18.3	19.7	13.4	20.4	19.4	24.0	20.3	25.3	---	26.3	25.4
13	21.4	18.6	20.1	12.9	20.5	21.2	24.5	20.9	25.5	---	26.6	24.6
14	21.7	19.7	20.4	14.3	21.1	20.3	25.0	21.7	24.2	---	26.7	24.2
15	21.6	16.8	20.9	15.9	21.0	20.6	25.2	22.5	23.7	---	26.8	23.4
16	20.5	16.3	20.7	16.6	20.8	21.5	24.7	22.8	23.9	---	26.8	22.9
17	20.2	19.2	19.4	17.8	20.3	20.5	22.7	22.8	24.5	26.2	27.1	23.4
18	20.7	19.1	14.2	18.7	18.4	18.1	19.7	22.9	24.5	25.9	26.8	23.9
19	20.7	19.7	12.9	18.6	17.7	18.5	18.8	22.5	24.3	26.1	26.1	24.5
20	21.7	17.4	9.9	17.5	18.5	19.1	19.4	22.1	24.7	26.4	26.7	24.9
21	21.7	13.8	10.0	11.5	19.5	16.4	19.9	22.7	25.1	26.0	25.7	25.2
22	21.3	12.2	12.4	11.5	19.4	16.0	20.7	24.2	24.0	26.0	25.7	25.3
23	21.8	12.6	12.7	12.3	19.6	17.0	21.5	24.4	23.5	26.0	26.2	25.2
24	22.1	14.6	15.0	11.7	19.9	18.1	22.0	24.0	23.7	25.6	26.5	25.3
25	22.1	18.5	14.1	11.7	21.2	18.6	21.5	23.1	24.4	26.4	26.6	25.3
26	22.0	18.8	14.5	11.5	22.0	18.4	20.4	23.3	25.4	26.1	26.8	25.0
27	21.5	16.4	15.2	12.3	22.0	17.4	18.7	23.3	25.5	26.2	26.4	24.6
28	20.6	15.0	16.3	13.6	22.0	17.7	19.0	22.8	25.1	26.4	26.7	24.5
29	20.9	15.4	14.0	15.2	---	18.4	19.4	23.1	25.2	27.0	27.0	23.9
30	21.5	15.4	10.9	17.3	---	18.8	19.7	24.0	25.4	27.7	27.4	23.0
31	21.2	---	8.4	19.1	---	20.1	---	24.0	---	26.6	27.4	---
MEAN	22.2	18.1	15.3	13.0	18.8	18.6	21.3	22.0	24.5	26.1	26.1	25.1
MAX	25.8	21.9	20.9	19.1	22.0	21.6	25.2	24.4	25.5	27.7	27.4	27.5
MIN	19.7	12.2	8.4	8.1	13.5	14.4	18.7	20.2	23.1	24.9	24.1	22.9

CAL YR 2000 MEAN 21.4 MAX 27.0 MIN 8.4
WTR YR 2001 MEAN 20.8 MAX 27.7 MIN 8.1

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	5.8	8.0	10.9	4.1	3.0	4.2	5.1	4.9	5.4	3.7	3.4
2	4.7	5.9	7.5	10.6	5.1	2.8	4.9	5.1	5.2	5.3	3.7	3.1
3	4.7	6.0	7.3	10.7	6.3	2.5	5.3	5.1	5.6	5.3	3.7	2.9
4	4.8	5.9	7.9	10.7	6.6	3.4	5.4	5.7	5.1	5.4	3.5	2.9
5	4.6	5.7	7.4	11.1	6.7	5.5	5.5	5.2	5.2	5.5	3.3	3.2
6	4.5	5.6	7.3	10.2	7.4	6.8	5.5	4.6	5.5	5.3	3.3	3.4
7	4.5	5.6	6.5	10.3	7.2	7.4	5.6	3.7	5.3	5.6	3.1	3.1
8	4.7	5.3	5.4	9.2	6.8	7.4	5.4	3.1	4.8	5.6	2.9	3.3
9	5.2	4.3	4.9	8.9	6.3	7.2	5.2	2.9	5.1	3.8	2.9	3.0
10	5.6	4.1	3.9	10.2	5.9	6.4	5.1	2.3	5.3	3.3	3.1	3.1
11	5.5	5.2	2.8	9.7	5.6	6.2	5.0	2.0	5.5	---	3.3	3.3
12	5.3	5.5	2.3	8.8	5.3	6.0	4.7	1.9	5.5	---	3.0	3.0
13	5.4	5.7	4.0	8.6	5.2	5.1	4.8	1.5	5.6	---	2.7	3.7
14	5.5	5.2	4.2	8.2	5.1	5.6	4.8	1.2	5.4	---	2.7	4.5
15	5.5	6.3	3.7	7.4	4.9	4.8	4.7	.9	4.8	---	2.8	3.7
16	5.7	6.6	3.3	6.6	4.7	3.1	4.9	1.3	4.5	---	3.0	3.7
17	5.8	5.3	3.5	5.7	4.2	2.6	5.4	1.3	5.0	4.5	3.0	3.6
18	5.7	6.0	5.7	5.0	5.2	2.4	6.1	.9	5.2	4.4	3.2	3.5
19	5.6	6.0	6.3	3.9	5.2	4.1	6.5	.9	4.9	3.6	2.8	3.2
20	5.4	6.4	7.6	4.6	4.8	5.5	6.5	.9	5.0	3.5	2.9	3.1
21	5.1	7.7	7.9	6.7	4.1	6.8	6.2	.9	5.2	3.8	3.5	3.1
22	5.3	8.3	7.3	6.6	4.2	7.5	5.7	1.0	5.3	3.8	3.2	3.1
23	5.3	8.0	7.2	6.4	4.0	7.3	5.1	1.9	5.3	3.9	2.9	3.0
24	5.1	6.6	6.4	6.4	4.2	7.0	4.2	2.2	5.3	4.0	3.0	3.0
25	5.0	4.1	7.0	6.3	3.8	6.9	3.6	2.0	5.4	4.1	3.2	3.0
26	5.0	4.4	7.0	6.4	3.4	6.9	3.8	1.5	5.4	4.1	3.3	3.0
27	5.3	6.5	6.7	6.4	3.2	6.9	4.2	1.3	5.4	4.1	3.3	3.1
28	5.7	7.9	5.8	5.9	3.4	6.7	5.0	2.4	5.4	4.2	3.2	3.0
29	5.7	8.0	6.6	5.3	---	6.3	4.9	5.0	5.5	4.2	3.3	3.1
30	5.6	7.9	8.7	4.6	---	4.8	4.8	5.1	5.5	4.2	3.3	3.3
31	5.6	---	10.3	4.0	---	3.9	---	5.3	---	4.5	3.4	---
MEAN	5.2	6.1	6.1	7.6	5.1	5.4	5.1	2.7	5.2	4.5	3.2	3.2
MAX	5.8	8.3	10.3	11.1	7.4	7.5	6.5	5.7	5.6	5.6	3.7	4.5
MIN	4.5	4.1	2.3	3.9	3.2	2.4	3.6	.9	4.5	3.3	2.7	2.9

CAL YR 2000 MEAN 5.2 MAX 10.3 MIN 2.0
WTR YR 2001 MEAN 5.0 MAX 11.1 MIN .9

KISSIMMEE RIVER BASIN

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.3	19.6	15.1	7.9	19.2	21.6	19.3	20.1	23.4	25.3	24.4	27.0
2	24.0	19.0	15.8	9.1	17.9	21.8	18.9	20.5	23.4	26.0	23.7	26.7
3	24.4	18.8	16.0	9.2	15.1	21.5	18.9	20.5	24.2	26.3	23.9	26.8
4	24.7	18.7	13.9	9.2	14.5	21.3	19.5	20.1	24.1	26.3	24.1	26.9
5	25.1	19.1	13.8	8.2	15.1	18.2	20.5	20.6	24.5	25.1	24.3	26.7
6	25.5	19.9	12.8	10.5	13.6	15.7	20.7	20.8	24.5	25.0	24.8	25.7
7	25.5	20.4	13.9	10.1	14.5	14.2	21.0	20.8	24.1	25.4	25.2	25.1
8	24.2	20.9	14.5	12.1	16.2	14.3	21.7	21.1	24.1	25.0	25.8	24.8
9	---	21.3	17.0	12.3	17.5	14.9	22.3	20.9	24.7	24.4	25.8	24.8
10	---	21.8	18.3	9.7	18.8	17.2	22.5	20.8	25.1	25.5	25.4	24.9
11	---	19.2	19.3	11.3	19.9	17.8	22.9	20.5	25.0	25.1	25.7	25.1
12	---	17.9	20.2	13.6	20.4	18.9	23.5	20.4	25.2	25.3	26.0	25.0
13	20.9	17.8	20.4	13.2	20.7	21.0	24.2	20.7	25.4	25.3	26.3	24.3
14	21.3	19.0	20.7	14.2	21.1	20.5	24.4	21.3	24.3	25.4	26.3	23.8
15	21.2	17.3	21.5	16.0	21.3	20.3	24.8	22.1	23.7	24.9	26.3	23.2
16	20.0	15.6	21.1	16.8	21.0	21.5	24.1	22.5	23.6	25.1	26.3	22.5
17	19.6	17.7	20.2	18.1	20.5	21.2	22.1	22.7	24.3	25.7	26.7	22.8
18	20.2	18.9	14.8	19.0	18.8	18.9	19.0	22.8	24.3	25.4	26.5	23.5
19	20.2	19.4	13.1	18.8	17.8	18.4	17.4	22.8	24.2	25.5	25.7	24.1
20	21.3	18.0	10.3	18.1	18.2	19.3	18.7	22.5	24.4	25.7	26.3	24.5
21	21.5	14.3	9.6	12.6	19.3	16.8	19.5	22.6	24.8	25.4	25.4	24.8
22	21.2	12.1	11.9	11.6	19.2	15.7	20.2	23.0	23.8	25.4	25.0	24.9
23	21.4	12.1	12.7	12.1	19.7	16.5	21.0	23.1	23.3	25.3	25.6	24.8
24	21.7	13.2	14.5	11.9	19.9	17.5	21.5	23.5	23.4	24.9	25.9	24.9
25	21.7	15.9	14.5	11.7	21.0	18.2	21.7	23.4	24.0	25.9	25.9	24.8
26	21.6	18.2	14.5	11.6	22.0	18.1	21.1	23.5	24.9	25.6	26.1	24.4
27	21.2	16.7	15.3	12.1	22.0	16.9	19.5	23.5	25.1	25.7	25.7	24.0
28	19.8	15.3	16.4	13.3	22.2	16.8	19.1	23.5	24.7	25.9	26.1	23.9
29	20.2	15.5	14.7	14.8	---	18.3	19.5	22.7	24.9	26.4	26.4	23.3
30	21.0	15.5	11.4	16.8	---	18.7	19.7	23.9	24.9	27.0	26.9	22.3
31	20.9	---	8.7	18.8	---	19.9	---	24.1	---	26.4	27.0	---
MEAN	22.0	17.6	15.4	13.1	18.8	18.4	21.0	22.0	24.3	25.5	25.7	24.7
MAX	25.5	21.8	21.5	19.0	22.2	21.8	24.8	24.1	25.4	27.0	27.0	27.0
MIN	19.6	12.1	8.7	7.9	13.6	14.2	17.4	20.1	23.3	24.4	23.7	22.3

CAL YR 2000 MEAN 21.2 MAX 26.8 MIN 8.7
WTR YR 2001 MEAN 20.7 MAX 27.0 MIN 7.9

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.5	5.9	8.8	3.1	1.5	2.7	1.4	4.1	4.5	3.2	3.2
2	3.4	4.3	5.4	8.5	3.7	1.4	3.3	2.4	4.7	4.0	3.2	3.1
3	3.5	4.1	4.8	8.5	5.2	1.2	4.1	1.8	4.8	3.7	3.2	2.9
4	3.5	3.6	5.3	8.4	5.7	1.9	4.4	3.2	4.9	3.4	3.1	2.9
5	3.4	3.1	5.3	8.9	6.0	4.9	4.6	2.4	5.0	3.9	2.9	2.9
6	3.3	2.8	5.2	7.9	6.7	6.6	5.0	1.4	5.0	4.9	2.8	2.9
7	3.4	2.3	4.7	8.1	6.5	7.6	5.0	.8	5.0	5.1	2.8	2.6
8	3.8	2.1	3.9	7.1	5.8	7.7	4.9	---	4.8	5.4	2.7	2.7
9	---	2.0	4.1	6.5	5.1	7.4	4.7	---	4.8	3.6	2.6	2.7
10	---	2.1	3.8	7.9	4.6	6.3	4.6	---	5.0	3.0	3.4	2.8
11	---	3.2	2.6	7.6	4.1	5.8	4.4	---	5.1	2.9	2.8	2.7
12	---	3.6	2.6	6.7	3.8	5.3	4.1	---	5.0	3.3	2.6	2.5
13	4.7	3.9	3.3	6.5	3.7	4.1	4.1	---	4.7	3.3	2.7	2.9
14	4.6	3.6	3.5	6.4	3.5	4.5	4.0	---	4.6	3.6	2.7	3.6
15	4.6	4.2	3.3	5.6	3.3	4.0	3.9	---	4.8	3.2	2.8	2.7
16	4.9	4.8	3.3	5.2	3.2	2.6	4.0	---	4.0	3.7	2.9	2.3
17	5.1	3.7	3.2	4.5	2.7	2.0	4.7	---	4.4	4.1	2.8	1.8
18	5.0	3.8	5.1	4.1	3.5	2.2	5.8	---	4.6	4.2	3.0	1.6
19	4.9	4.0	6.2	3.6	4.0	3.1	6.5	---	4.7	3.3	2.6	1.2
20	4.7	4.3	7.8	3.7	3.6	4.7	5.9	---	4.6	3.2	2.6	1.1
21	4.6	5.3	8.3	6.0	2.9	6.0	5.5	---	4.5	3.4	3.0	1.1
22	4.6	6.2	6.4	6.8	2.8	7.3	4.5	---	4.6	3.5	2.9	1.1
23	4.5	6.1	6.1	6.6	2.6	7.0	3.6	---	4.9	3.6	2.7	1.2
24	4.2	5.0	5.6	6.7	2.6	6.5	2.5	---	4.9	3.9	2.7	1.1
25	4.2	2.7	5.3	6.7	2.3	6.1	1.4	---	4.8	4.0	3.0	1.1
26	4.2	2.5	5.3	6.8	1.9	6.0	1.1	4.7	4.3	3.7	3.1	1.2
27	4.3	4.6	5.0	6.7	1.6	6.4	.9	4.0	4.2	3.8	3.3	1.4
28	4.7	5.9	4.2	6.1	1.5	6.3	1.4	3.5	4.3	3.9	3.3	1.4
29	4.6	6.0	4.6	5.4	---	5.7	1.3	4.5	4.5	4.0	3.3	1.6
30	4.4	5.9	6.4	4.2	---	3.9	1.0	4.4	4.6	4.0	3.2	1.8
31	4.3	---	8.0	3.3	---	2.5	---	4.2	---	3.9	3.2	---
MEAN	4.2	4.0	5.0	6.4	3.8	4.8	3.8	3.0	4.7	3.8	2.9	2.1
MAX	5.1	6.2	8.3	8.9	6.7	7.7	6.5	4.7	5.1	5.4	3.4	3.6
MIN	3.2	2.0	2.6	3.3	1.5	1.2	.9	.8	4.0	2.9	2.6	1.1

CAL YR 2000 MEAN 4.4 MAX 8.3 MIN .3
WTR YR 2001 MEAN 4.1 MAX 8.9 MIN .8

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)
OCT													
24...	1130	8.58	4.8	--	--	4.4	7.4	281	21.4	--	--	--	--
NOV													
20...	1455	8.42	1.6	--	--	4.5	7.1	287	17.8	--	--	--	--
DEC													
18...	1125	8.64	4.1	--	--	5.5	7.1	395	12.8	--	--	--	--
JAN													
18...	1327	8.57	4.4	--	--	5.9	7.0	361	19.0	--	--	--	--
FEB													
12...	1403	8.37	1.9	--	--	4.5	6.9	309	20.4	--	--	--	--
MAR													
21...	1217	8.58	4.8	--	--	5.7	6.9	306	16.6	--	--	--	--
APR													
09...	1153	8.92	14	--	--	4.3	6.7	291	22.2	--	--	--	--
JUN													
06...	1350	8.61	5.4	--	--	5.1	6.8	382	25.2	--	--	--	--
JUL													
03...	1134	8.44	2.1	--	--	3.8	6.8	282	26.1	--	--	--	--
31...	1230	8.90	11	--	--	3.9	6.8	269	26.7	--	--	--	--
AUG													
29...	1230	9.24	21	320	.74	3.7	6.7	258	26.4	75	21	5.4	3.9
SEP													
18...	1230	10.86	198	--	--	2.2	6.6	202	23.4	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD LAB TIT 4.5 (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT													
24...	--	--	--	--	--	.04	.75	--	.13	--	<.01	--	.04
NOV													
20...	--	--	--	--	--	.01	.52	--	<.02	--	<.01	--	.02
DEC													
18...	--	--	--	--	--	<.010	.76	--	<.02	--	<.01	--	.04
JAN													
18...	--	--	--	--	--	<.01	.8	--	<.02	--	<.01	--	<.01
FEB													
12...	--	--	--	--	--	<.01	.6	--	.03	--	<.01	--	.03
MAR													
21...	--	--	--	--	--	.050	.85	--	.11	--	<.01	--	.06
APR													
09...	--	--	--	--	--	.032	1.2	--	.18	--	<.01	--	.07
JUN													
06...	--	--	--	--	--	.015	.91	--	.07	--	<.01	--	.04
JUL													
03...	--	--	--	--	--	.025	1.0	--	.13	--	<.01	--	.03
31...	--	--	--	--	--	.020	1.6	--	.16	--	<.01	--	.07
AUG													
29...	21	E30c1	38	.1	22	--	2.1	.03	--	.31	--	<.01	--
SEP													
18...	--	--	--	--	--	.06	2.3	--	.18	--	<.01	--	.14

< -- Less than
 E -- Estimated value
 c1-- Holding time exceeded by the laboratory

KISSIMMEE RIVER BASIN

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

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

DATE	PHOS- PHORUS ORTH TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	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...	--	.05	19	8.5	--	--	--	--	--	--	--	--	--
NOV 20...	--	.04	14	<.1	--	--	--	--	--	--	--	--	--
DEC 18...	--	.08	17	<.1	--	--	--	--	--	--	--	--	--
JAN 18...	--	.07	18	<.1	--	--	--	--	--	--	--	--	--
FEB 12...	--	.02	16	<.1	--	--	--	--	--	--	--	--	--
MAR 21...	--	.07	19	<.1	--	--	--	--	--	--	--	--	--
APR 09...	--	.08	25	1.4	--	--	--	--	--	--	--	--	--
JUN 06...	--	.04	22	<.1	--	--	--	--	--	--	--	--	--
JUL 03...	--	.05	24	<.1	--	--	--	--	--	--	--	--	--
JUL 31...	--	.09	25	<.1	--	--	--	--	--	--	--	--	--
AUG 29...	.16	.16	46	--	406	3.6	<1.0	<1.0	<1.0	<1.0	492	<1.0	14
SEP 18...	--	.14	65	<.1	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALDRIN, TOTAL (UG/L) (39330)	CARBO- PHENO- THION WATER UNFLTRD TOTAL (UG/L) (39786)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L) (39350)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)	DISUL- FOTON UNFILTR RECOVER (UG/L) (39011)	ENDO- SULFAN I TOTAL (UG/L) (39388)
AUG 29...	<.1	<1.0	<1.0	3.0	<.01	<.02	<.1	<.01	<.02	<.02	<.006	<.03	<.01

DATE	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	METHYL THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	P,P'- DDD UNFILTR RECOVER (UG/L) (39360)	P,P'- DDE, TOTAL (UG/L) (39365)	P,P'- DDT UNFILTR RECOVER (UG/L) (39370)
AUG 29...	<.01	<.01	<.007	<.009	<.01	<.006	<.06	<.01	<.01	<.006	<.007	<.006	<.009

DATE	PARA- THION, TOTAL (UG/L) (39540)	PCB, TOTAL (UG/L) (39516)	PHORATE TOTAL (UG/L) (39023)	TOX- APHENE, TOTAL (UG/L) (39400)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR EPOXIDE TOT. IN BOT- TOM MA- TERIAL (UG/KG) (39423)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOT- TOM MA- TERIAL (UG/KG) (39481)
AUG 29...	<.01	<.1	<.02	<1	<.2	<3	<.2	<.2	<.2	<.2	<.2	<.2	<2.5

DATE	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39758)	BI- PHENYL, NONA- CHLORO- SUR SCD 1325 PERCENT (90575)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39368)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)
AUG 29...	<.2	77	<.5	<.2	<.5	<5	<50

< -- Less than

KISSIMMEE RIVER BASIN

02266320 REEDY CREEK AT I-4 NEAR LOUGHMAN, FL--Continued

TEMPERATURE, WATER (DEG. C), PERIOD OCTOBER 2000 TO MAY 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	19.0	14.7	7.8	19.4	21.6	19.2	20.2	---	---	---	---
2	23.7	18.5	15.4	8.5	18.3	21.7	18.1	20.4	---	---	---	---
3	24.0	18.2	15.4	9.0	15.4	21.6	18.1	20.1	---	---	---	---
4	24.5	18.3	13.6	8.8	14.9	21.0	19.0	20.2	---	---	---	---
5	25.0	18.9	13.8	6.7	15.1	18.3	19.9	20.6	---	---	---	---
6	25.3	19.8	12.4	---	13.2	15.5	20.2	20.9	---	---	---	---
7	25.2	20.4	13.6	---	14.3	13.9	20.5	20.9	---	---	---	---
8	24.3	20.9	14.7	---	15.8	13.6	21.2	21.3	---	---	---	---
9	21.3	21.2	16.4	---	17.1	14.0	21.7	22.2	---	---	---	---
10	18.9	21.4	17.4	---	18.6	16.3	22.0	22.5	---	---	---	---
11	19.5	18.7	19.2	---	19.8	17.3	22.2	22.8	---	---	---	---
12	20.4	17.5	20.1	---	20.7	18.4	22.8	---	---	---	---	---
13	20.7	17.4	20.7	---	20.9	20.5	23.5	---	---	---	---	---
14	21.0	18.9	20.9	---	21.5	20.2	24.0	---	---	---	---	---
15	20.9	16.5	21.5	---	21.5	20.5	24.1	---	---	---	---	---
16	19.6	15.3	21.2	---	21.1	21.7	23.7	---	---	---	---	---
17	19.0	18.3	20.1	---	20.9	21.0	21.6	---	---	---	---	---
18	19.4	18.7	15.2	19.1	18.8	18.4	18.6	---	---	---	---	---
19	19.6	19.2	13.1	18.9	17.9	18.6	16.7	---	---	---	---	---
20	20.5	17.6	10.1	18.1	18.4	19.3	17.4	---	---	---	---	---
21	21.0	13.7	9.4	12.6	19.4	16.8	18.6	---	---	---	---	---
22	21.1	11.9	11.1	12.0	19.3	15.8	19.7	---	---	---	---	---
23	21.1	11.7	11.8	12.0	19.6	15.9	20.7	---	---	---	---	---
24	21.3	13.5	13.9	11.3	20.1	16.8	21.5	---	---	---	---	---
25	21.5	17.4	13.9	11.1	21.3	17.4	21.2	---	---	---	---	---
26	21.3	18.3	14.4	10.7	22.3	17.6	20.5	---	---	---	---	---
27	20.9	16.5	15.2	11.6	22.3	16.7	18.7	---	---	---	---	---
28	19.4	15.1	16.2	12.8	22.2	16.5	18.8	---	---	---	---	---
29	19.5	15.1	14.6	14.4	---	18.0	19.1	---	---	---	---	---
30	20.1	15.2	11.6	16.6	---	18.7	19.3	---	---	---	---	---
31	20.3	---	8.8	18.8	---	19.7	---	---	---	---	---	---
MEAN	21.4	17.4	15.2	12.7	18.9	18.2	20.4	21.1	---	---	---	---
MAX	25.3	21.4	21.5	19.1	22.3	21.7	24.1	22.8	---	---	---	---
MIN	18.9	11.7	8.8	6.7	13.2	13.6	16.7	20.1	---	---	---	---

CAL YR 2000 MEAN 20.9 MAX 26.5 MIN 8.8
WTR YR 2001 MEAN 18.2 MAX 25.3 MIN 6.7

OXYGEN DISSOLVED (MG/L), PERIOD OCTOBER 2000 TO MAY 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	5.7	7.9	10.6	5.0	---	2.8	4.0	---	---	---	---
2	3.5	5.6	7.5	10.6	4.4	---	2.9	4.6	---	---	---	---
3	3.5	5.5	7.4	10.4	4.6	---	3.2	4.7	---	---	---	---
4	3.3	5.2	7.9	10.3	3.7	---	3.3	4.4	---	---	---	---
5	3.6	5.2	7.8	10.7	4.9	---	3.7	5.0	---	---	---	---
6	3.5	4.7	8.4	---	7.4	---	4.1	5.2	---	---	---	---
7	3.7	4.7	7.4	---	7.4	---	4.6	4.8	---	---	---	---
8	3.9	4.9	6.9	---	7.5	---	4.7	3.8	---	---	---	---
9	4.6	4.7	6.6	---	6.7	---	4.9	4.0	---	---	---	---
10	5.3	4.6	6.5	---	6.4	---	5.0	3.7	---	---	---	---
11	5.3	5.5	5.6	---	6.0	---	5.2	---	---	---	---	---
12	4.9	6.2	5.0	---	4.8	---	5.1	---	---	---	---	---
13	5.0	6.3	5.3	---	3.8	---	5.0	---	---	---	---	---
14	5.3	5.9	5.4	---	3.8	---	4.9	---	---	---	---	---
15	5.3	6.7	5.4	---	4.8	---	4.9	---	---	---	---	---
16	5.6	7.5	5.4	---	5.1	---	4.9	---	---	---	---	---
17	6.0	6.5	5.2	---	4.5	---	5.4	---	---	---	---	---
18	6.0	6.1	6.4	---	5.4	---	6.3	---	---	---	---	---
19	5.9	6.1	7.5	---	5.7	---	7.0	---	---	---	---	---
20	5.7	6.3	8.6	---	5.6	---	6.9	---	---	---	---	---
21	5.4	8.3	9.4	---	5.1	---	6.4	---	---	---	---	---
22	5.5	9.7	9.1	---	5.2	---	6.1	---	---	---	---	---
23	5.5	---	8.9	---	4.8	---	5.6	---	---	---	---	---
24	5.4	8.4	8.3	---	4.7	---	5.1	---	---	---	---	---
25	5.2	6.3	8.1	---	4.3	---	4.9	---	---	---	---	---
26	5.1	5.3	8.0	---	3.2	---	4.7	---	---	---	---	---
27	5.2	6.1	7.7	---	2.9	---	4.9	---	---	---	---	---
28	5.6	7.0	6.7	---	---	6.7	4.7	---	---	---	---	---
29	5.8	7.6	7.0	7.9	---	6.2	4.8	---	---	---	---	---
30	5.3	7.7	8.2	6.5	---	4.7	4.5	---	---	---	---	---
31	5.5	---	9.7	5.8	---	3.3	---	---	---	---	---	---
MEAN	4.9	6.2	7.3	9.1	5.1	5.2	4.9	4.4	---	---	---	---
MAX	6.0	9.7	9.7	10.7	7.5	6.7	7.0	5.2	---	---	---	---
MIN	3.2	4.6	5.0	5.8	2.9	3.3	2.8	3.7	---	---	---	---

CAL YR 2000 MEAN 5.2 MAX 9.7 MIN .1
WTR YR 2001 MEAN 5.8 MAX 10.7 MIN 2.8

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 2000 TO SEPTEMBER 2001

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)	
OCT														
24...	1020	4.57	1.2	--	--	6.5	7.0	138	20.9	--	--	--	--	
NOV														
20...	1250	4.55	1.0	--	--	7.5	7.5	135	16.9	--	--	--	--	
DEC														
18...	1342	4.58	1.2	--	--	8.3	7.5	144	14.1	--	--	--	--	
JAN														
17...	1040	4.59	1.2	--	--	7.4	7.3	19	18.0	--	--	--	--	
FEB														
12...	1258	4.58	1.1	--	--	7.7	7.3	154	21.1	--	--	--	--	
MAR														
21...	1110	4.62	1.4	--	--	8.2	7.3	142	16.4	--	--	--	--	
APR														
09...	1110	4.62	1.4	--	--	7.0	7.2	192	21.8	--	--	--	--	
MAY														
07...	0915	4.57	.91	--	--	8.5	7.4	111	19.9	--	--	--	--	
JUN														
06...	1215	4.51	.54	--	--	6.9	7.4	130	25.6	--	--	--	--	
JUL														
03...	1015	4.54	.80	--	--	6.5	7.3	142	26.0	--	--	--	--	
30...	1330	4.64	1.6	--	--	6.8	7.3	174	27.6	--	--	--	--	
AUG														
29...	1130	5.08	3.4	480	.66	5.7	6.9	208	25.2	93	26	6.7	3.3	
SEP														
18...	1030	7.33	60	--	--	4.3	6.5	161	22.5	--	--	--	--	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT														
24...	--	--	--	--	--	.03	.22	--	.73	--	<.01	--	.02	
NOV														
20...	--	--	--	--	--	.01	<.20	--	.65	--	<.01	--	<.01	
DEC														
18...	--	--	--	--	--	<.010	.24	--	.46	--	<.01	--	.02	
JAN														
17...	--	--	--	--	--	<.01	.4	--	.59	--	<.01	--	<.01	
FEB														
12...	--	--	--	--	--	.01	.3	--	.68	--	<.01	--	.02	
MAR														
21...	--	--	--	--	--	.020	.39	--	.50	--	<.01	--	.04	
APR														
09...	--	--	--	--	--	.028	.70	--	.56	--	<.01	--	.05	
MAY														
07...	--	--	--	--	--	.018	.41	--	.48	--	<.01	--	.03	
JUN														
06...	--	--	--	--	--	.022	.34	--	.29	--	<.01	--	.05	
JUL														
03...	--	--	--	--	--	.020	.27	--	.49	--	<.01	--	.03	
30...	--	--	--	--	--	.026	.51	--	.53	--	<.01	--	.04	
AUG														
29...	8.2	27	16	<.1	37	--	2.6	.03	--	.33	--	<.01	--	
SEP														
18...	--	--	--	--	--	.06	3.2	--	.05	--	<.01	--	.10	

< -- Less than

02266480 DAVENPORT CREEK NEAR LOUGHMAN, FL--Continued

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

DATE	PHOS- PHORUS ORTHOTOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L AS AL) (70953)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	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...	--	.03	3.4	<.1	--	--	--	--	--	--	--	--	--
NOV 20...	--	.02	2.8	<.1	--	--	--	--	--	--	--	--	--
DEC 18...	--	<.02	4.9	<.1	--	--	--	--	--	--	--	--	--
JAN 17...	--	<.02	5.8	9.2	--	--	--	--	--	--	--	--	--
FEB 12...	--	<.02	7.1	<.1	--	--	--	--	--	--	--	--	--
MAR 21...	--	.06	5.9	<.1	--	--	--	--	--	--	--	--	--
APR 09...	--	.05	16	<.1	--	--	--	--	--	--	--	--	--
MAY 07...	--	.03	3.9	<.1	--	--	--	--	--	--	--	--	--
JUN 06...	--	.05	2.6	--	--	--	--	--	--	--	--	--	--
JUL 03...	--	.04	5.4	<.1	--	--	--	--	--	--	--	--	--
JUL 30...	--	.04	10	<.1	--	--	--	--	--	--	--	--	--
AUG 29...	.11	.10	58	--	300	1.0	<1.0	<1.0	<1.0	1.2	579	<1.0	15
SEP 18...	--	.09	76	<.1	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALDRIN, TOTAL (UG/L) (39330)	CARBO- PHENO- THION WATER UNFLTRD (UG/L) (39786)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L) (39350)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)	DISUL- FOTON UNFILTR TOTAL (UG/L) (39011)	ENDO- SULFAN I TOTAL (UG/L) (39388)
AUG 29...	.2	<1.0	<1.0	5.4	<.01	<.02	<.1	<.01	<.02	<.02	<.006	<.03	<.01

DATE	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	METHYL THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	P,P'- DDD UNFILTR RECOVER (UG/L) (39360)	P,P'- DDE, TOTAL (UG/L) (39365)	P,P'- DDT UNFILTR RECOVER (UG/L) (39370)
AUG 29...	<.01	E.009	<.007	<.009	<.01	<.006	<.06	<.01	<.01	<.006	<.007	<.006	<.009

DATE	PARA- THION, TOTAL (UG/L) (39540)	PCB, TOTAL (UG/L) (39516)	PHORATE TOTAL (UG/L) (39023)	TOX- APHENE, TOTAL (UG/L) (39400)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATERIAL (UG/KG) (39423)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOTTOM MATERIAL (UG/KG) (39481)
AUG 29...	<.01	<.1	<.02	<1	<.2	<3	<.2	<.2	<.2	<.2	<.2	<.2	<2.5

DATE	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39758)	BI- PHENYL, NONA- CHLORO- SUR SCD 1325 PERCENT (90575)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39368)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)
AUG 29...	<.2	80	<.5	<.2	<.5	<5	<50

< -- Less than
E -- Estimated value

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 μ S/cm @ 25 °C, Apr. 3, 2001; minimum daily mean, 74 μ S/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.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 389 μ S/cm @ 25 °C, Apr. 3; minimum daily mean, 147 μ S/cm @ 25 °C, Sept. 16.
 WATER TEMPERATURE: Maximum daily mean, 26.8 °C, May 24; minimum daily mean, 8.7 °C, Jan. 5.
 DISSOLVED OXYGEN: Maximum daily mean, 9.8 mg/L, Jan. 4,5; minimum daily mean 0.1 mg/L, Sept. 30.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	233	218	279	236	198	296	220	180	248	217	184
2	229	233	222	275	236	196	362	213	168	225	214	187
3	224	232	221	271	237	194	389	205	162	228	200	189
4	224	230	220	258	237	191	386	192	177	235	191	191
5	224	227	216	248	242	186	377	182	220	231	183	178
6	226	223	213	238	244	188	361	176	250	226	178	177
7	228	220	209	238	244	205	340	174	272	229	182	176
8	229	217	207	239	237	223	328	174	290	241	183	170
9	229	212	204	239	233	236	317	173	267	266	189	152
10	230	209	200	238	231	240	307	173	290	252	194	157
11	231	207	198	236	231	238	299	174	313	276	183	162
12	230	204	201	243	232	236	293	174	310	316	187	164
13	231	203	210	244	232	232	290	175	291	320	196	170
14	230	202	283	243	230	230	288	179	251	311	203	158
15	230	201	320	243	228	227	285	187	208	281	206	148
16	230	202	314	244	225	223	283	202	203	284	205	147
17	229	202	309	245	224	222	281	213	233	290	204	151
18	229	202	306	245	223	220	278	218	254	281	204	151
19	228	202	295	243	221	216	274	226	269	266	201	151
20	227	202	282	241	218	208	271	233	278	258	199	155
21	226	201	276	240	214	195	266	239	274	251	193	158
22	227	202	267	240	211	198	262	245	273	242	180	158
23	226	206	265	240	208	215	259	242	268	230	177	161
24	226	208	263	240	206	231	256	221	261	223	176	164
25	228	206	263	240	204	236	252	226	255	220	180	167
26	230	200	265	238	201	236	248	221	254	216	184	172
27	231	195	272	237	200	234	241	258	257	214	189	176
28	230	187	316	237	199	232	234	271	261	210	193	177
29	230	194	328	236	---	226	229	269	261	210	193	178
30	231	208	322	235	---	213	225	231	255	214	194	178
31	232	---	294	235	---	236	---	197	---	218	194	---
MEAN	228	209	257	244	224	218	293	209	250	249	193	167
MAX	232	233	328	279	244	240	389	271	313	320	217	191
MIN	224	187	198	235	199	186	225	173	162	210	176	147
CAL YR 2000	MEAN 236	MAX 377	MIN 170									
WTR YR 2001	MEAN 228	MAX 389	MIN 147									

KISSIMMEE RIVER BASIN

02266495 REEDY CREEK AT S-40, NEAR LOUGHMAN, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.6	19.6	15.0	10.2	16.6	22.1	19.5	20.9	25.7	25.4	25.3	25.6
2	24.3	19.2	14.9	9.4	17.9	22.1	19.1	21.1	25.4	25.8	24.8	25.7
3	24.1	18.8	15.2	9.2	17.5	22.0	18.3	21.2	25.6	26.2	23.7	25.7
4	24.3	18.5	14.6	9.2	16.6	21.9	18.4	21.1	25.9	26.5	23.5	25.7
5	24.7	18.4	14.5	8.7	16.0	20.5	19.1	21.4	26.2	26.6	23.7	25.5
6	25.1	18.7	13.9	8.8	14.9	18.6	19.8	21.8	26.2	26.2	24.3	25.1
7	25.3	19.1	13.8	8.9	14.5	16.5	20.1	22.1	25.8	26.1	24.7	24.9
8	25.1	19.7	14.0	9.8	14.7	15.1	20.5	22.3	25.5	25.9	25.2	24.6
9	23.9	20.4	14.4	10.8	15.3	14.2	21.0	22.3	25.4	25.4	25.4	24.6
10	21.7	20.9	15.2	10.9	16.4	14.7	21.5	22.2	25.7	24.9	25.2	24.8
11	20.3	20.3	16.4	10.8	17.6	15.6	21.8	22.0	25.8	25.0	25.2	24.9
12	20.1	19.4	17.7	11.2	18.8	16.9	22.2	21.9	25.8	25.1	25.5	24.9
13	20.5	18.7	18.8	12.2	19.8	18.1	22.8	22.4	26.2	25.1	25.8	24.4
14	20.8	18.6	19.8	13.1	20.6	19.1	23.4	23.1	26.5	25.1	26.0	23.8
15	21.0	17.9	20.5	13.9	21.0	20.0	23.9	23.9	26.0	24.6	26.1	23.2
16	20.6	16.8	20.9	15.0	21.1	20.8	24.2	24.8	25.3	24.6	26.1	22.8
17	20.0	17.1	21.0	16.1	21.0	21.2	23.6	25.4	25.4	24.5	26.4	23.0
18	19.5	17.6	18.8	17.3	20.4	20.8	22.0	25.5	25.7	24.5	26.2	23.3
19	19.3	18.1	16.5	18.1	19.7	20.0	20.2	25.4	25.6	24.6	25.8	23.7
20	19.5	18.7	13.7	18.5	19.0	19.9	18.9	25.2	25.3	25.0	26.0	24.1
21	20.0	17.0	11.7	16.4	19.0	19.0	18.4	25.3	25.4	24.8	25.6	24.4
22	20.5	15.1	11.0	14.7	18.8	18.0	18.8	26.0	25.3	24.6	25.0	24.6
23	21.0	14.0	11.0	13.5	19.1	17.2	19.5	26.7	24.5	24.6	25.3	24.8
24	21.3	13.4	12.4	12.4	19.5	16.9	20.3	26.8	23.9	24.0	25.5	25.0
25	21.5	14.0	13.4	11.8	19.9	17.2	21.0	26.4	23.9	24.1	25.5	24.9
26	21.6	14.8	13.9	11.2	20.7	17.6	21.7	26.3	24.5	24.5	25.5	24.8
27	21.4	15.5	14.2	11.1	21.4	17.8	21.5	26.6	25.0	24.6	25.0	24.4
28	20.7	15.8	14.8	11.5	21.9	17.7	21.0	26.4	25.2	24.5	24.9	24.1
29	20.2	15.5	14.8	12.2	---	17.7	21.0	26.0	25.3	24.7	25.1	23.6
30	20.0	15.3	13.6	13.4	---	17.9	20.9	25.8	25.3	25.1	25.4	22.7
31	20.0	---	11.9	15.1	---	18.8	---	25.8	---	25.5	25.7	---
MEAN	21.7	17.6	15.2	12.4	18.6	18.6	20.8	24.0	25.4	25.1	25.3	24.5
MAX	25.3	20.9	21.0	18.5	21.9	22.1	24.2	26.8	26.5	26.6	26.4	25.7
MIN	19.3	13.4	11.0	8.7	14.5	14.2	18.3	20.9	23.9	24.0	23.5	22.7

CAL YR 2000 MEAN 21.6 MAX 29.7 MIN 10.2
WTR YR 2001 MEAN 20.8 MAX 26.8 MIN 8.7

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	5.0	6.0	7.3	7.0	4.3	4.4	4.2	3.8	3.6	---	---
2	---	5.2	6.0	8.5	6.2	3.8	3.5	4.4	3.7	3.3	---	---
3	2.9	5.2	6.3	9.2	5.7	4.3	3.2	5.0	4.0	3.2	---	---
4	2.9	5.3	6.5	9.8	5.0	4.5	3.2	5.2	3.7	3.2	---	---
5	2.5	5.4	6.8	9.8	5.1	4.5	3.0	5.8	3.6	3.1	---	---
6	2.2	5.3	6.8	9.4	5.9	4.7	3.2	6.2	3.6	2.9	---	---
7	2.0	5.1	6.6	9.6	6.5	5.3	3.3	6.5	3.1	2.7	---	---
8	2.1	5.1	6.3	9.1	6.8	5.8	3.4	5.7	3.0	3.3	---	---
9	2.9	4.7	6.3	9.1	7.0	6.5	3.5	5.1	3.3	3.4	---	---
10	3.6	3.8	6.1	8.8	6.9	6.9	3.5	5.3	3.4	3.8	---	---
11	3.9	4.3	5.6	8.2	6.5	6.8	3.7	5.7	3.1	3.2	---	---
12	4.3	4.3	4.7	8.5	5.8	6.8	3.5	5.7	3.1	2.1	---	---
13	4.4	4.3	4.2	8.6	5.0	5.9	3.1	5.1	3.4	1.7	---	---
14	4.5	3.8	3.4	7.7	4.4	5.3	3.1	3.8	3.6	1.4	---	---
15	4.5	4.4	2.9	7.1	4.3	4.9	3.1	3.4	3.5	1.3	---	---
16	4.5	5.1	3.0	7.0	4.6	4.2	3.2	3.7	3.4	---	---	---
17	4.6	4.6	2.9	6.4	4.6	4.3	3.7	3.8	3.7	---	---	---
18	4.7	4.4	3.7	5.7	5.3	4.6	4.5	3.7	3.5	---	---	---
19	4.9	4.8	4.1	5.4	6.1	4.6	5.6	3.5	3.1	---	---	---
20	4.9	5.2	4.6	5.2	6.0	4.2	6.3	3.5	3.0	---	---	.2
21	5.0	5.3	5.6	5.3	5.7	5.0	6.8	3.6	3.2	---	---	.3
22	5.2	5.5	6.7	5.5	5.6	5.7	7.3	2.9	3.2	---	---	.6
23	5.4	5.7	7.6	6.2	5.8	6.3	7.0	2.2	3.3	---	---	.2
24	5.0	6.0	8.0	7.3	4.6	6.7	6.1	2.7	3.6	---	---	.4
25	4.7	6.5	8.1	8.1	4.3	7.1	4.9	3.1	3.8	---	---	.7
26	4.3	6.6	7.8	8.6	3.9	7.5	5.2	3.0	4.0	---	---	.5
27	4.2	6.5	7.1	8.9	3.9	7.6	5.5	2.9	3.7	---	---	.4
28	4.4	5.8	6.3	9.1	4.0	7.7	5.0	2.6	3.5	---	---	.2
29	4.6	5.5	6.2	9.1	---	6.8	4.6	2.5	3.1	---	---	.2
30	4.4	5.8	6.0	8.8	---	6.4	4.3	2.6	3.3	---	---	.1
31	4.5	---	6.3	8.0	---	5.7	---	3.4	---	---	---	---
MEAN	4.1	5.2	5.8	7.9	5.4	5.6	4.4	4.1	3.4	2.8	---	.3
MAX	5.4	6.6	8.1	9.8	7.0	7.7	7.3	6.5	4.0	3.8	---	.7
MIN	2.0	3.8	2.9	5.2	3.9	3.8	3.0	2.2	3.0	1.3	---	.1

CAL YR 2000 MEAN 4.4 MAX 8.1 MIN 1.2
WTR YR 2001 MEAN 4.8 MAX 9.8 MIN .1

02266496 REEDY CREEK BELOW S-40, NEAR LOUGHMAN, FL

LOCATION.--Lat 28°16'32", long 81°32'39", in SE 1/4 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 mi².

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 sea level (Reedy Creek Improvement District bench mark).

REMARKS.--Records poor. Flow regulated by Structure 40.

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	2.1	1.4	1.3	1.3	.88	.84	2.1	1.2	1.2	1.6	2.5	13
2	2.1	1.5	1.4	1.3	.84	.85	2.0	1.2	1.3	1.5	2.9	13
3	2.1	1.5	1.4	1.3	.86	.90	2.0	1.2	1.2	1.4	3.3	13
4	2.1	1.4	1.6	1.3	.86	1.1	2.0	1.3	1.2	1.4	3.9	12
5	2.0	1.3	1.5	1.3	.84	1.2	2.0	1.3	1.3	1.5	4.8	12
6	1.8	1.4	1.5	1.3	.86	1.2	2.0	1.2	1.3	1.6	22	12
7	1.6	1.5	1.5	1.3	.87	1.2	1.9	1.2	1.5	1.6	45	14
8	1.6	1.5	1.4	1.3	.91	1.2	1.9	1.2	1.6	1.6	50	20
9	1.6	1.6	1.5	1.3	.92	1.2	1.8	1.2	1.6	1.9	50	21
10	1.7	1.6	1.4	1.3	.90	1.3	1.8	1.2	1.5	1.9	51	31
11	1.7	1.6	1.5	1.3	.87	1.3	1.7	1.2	1.4	1.9	70	52
12	1.7	1.6	1.5	1.3	.81	1.3	1.7	1.2	1.4	2.3	76	63
13	1.7	1.6	1.5	1.3	.78	1.3	1.5	1.1	1.4	2.2	80	72
14	1.7	1.6	1.5	1.2	.80	1.3	1.4	1.1	1.6	2.4	83	153
15	1.7	1.5	1.5	1.2	.75	1.3	1.4	1.0	1.7	2.5	81	252
16	1.6	1.4	1.5	1.2	.70	1.3	1.3	1.1	1.7	2.2	76	319
17	1.5	1.4	1.5	1.2	.66	1.3	1.3	1.1	1.7	2.5	68	330
18	1.6	1.4	1.5	1.1	.65	1.3	1.2	1.1	1.8	2.7	61	323
19	1.5	1.4	1.4	1.1	.65	1.4	1.3	1.1	1.9	2.6	58	317
20	1.5	1.6	1.4	1.2	.69	1.5	1.3	1.0	1.9	2.6	52	304
21	1.5	1.5	1.3	1.1	.69	1.5	1.3	1.0	1.8	2.6	50	264
22	1.5	1.4	1.3	1.1	.69	1.5	1.2	.99	1.9	2.6	59	248
23	1.6	1.4	1.3	1.1	.71	1.4	1.2	1.0	1.8	2.6	60	218
24	1.7	1.3	1.2	1.1	.77	1.4	1.2	1.0	1.9	2.3	59	187
25	1.7	1.3	1.2	1.0	.76	1.4	1.2	1.1	1.8	2.2	55	167
26	1.7	1.4	1.2	1.0	.77	1.4	1.2	1.2	1.7	2.2	47	147
27	1.7	1.5	1.2	.98	.82	1.3	1.2	1.2	1.6	2.2	37	131
28	1.7	1.4	1.3	.94	.84	1.4	1.2	1.2	1.6	2.3	27	114
29	1.6	1.4	1.3	.92	---	1.6	1.1	1.2	1.5	2.2	19	101
30	1.5	1.3	1.3	.90	---	2.3	1.1	1.2	1.6	2.1	15	88
31	1.5	---	1.3	.90	---	2.1	---	1.2	---	2.1	14	---
TOTAL	52.6	43.7	43.2	36.14	22.15	41.59	45.5	35.49	47.4	65.3	1382.4	4011
MEAN	1.70	1.46	1.39	1.17	.79	1.34	1.52	1.14	1.58	2.11	44.6	134
MAX	2.1	1.6	1.6	1.3	.92	2.3	2.1	1.3	1.9	2.7	83	330
MIN	1.5	1.3	1.2	.90	.65	.84	1.1	.99	1.2	1.4	2.5	12
CFSM	.01	.01	.01	.01	.00	.01	.01	.01	.01	.01	.26	.77
IN.	.01	.01	.01	.01	.00	.01	.01	.01	.01	.01	.30	.86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	43.9	21.8	62.5	52.9	48.2	55.2	22.0	11.3	24.8	64.1	71.5	81.4
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	.79	1.34	1.44	.87	1.49	2.11	2.01	2.10
(WY)	2001	1990	1994	2001	2001	2001	1990	1994	2000	2001	2000	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1990 - 2001

ANNUAL TOTAL	995.1	5826.47	
ANNUAL MEAN	2.72	16.0	46.7
HIGHEST ANNUAL MEAN			179
LOWEST ANNUAL MEAN			9.64
HIGHEST DAILY MEAN	30	Jan 1	330
LOWEST DAILY MEAN	1.1	Feb 13, Jun 5, 6, 22	1220
ANNUAL SEVEN-DAY MINIMUM	1.2	Feb 8	.65
MAXIMUM PEAK STAGE			.68
ANNUAL RUNOFF (CFSM)	.016		68.85
ANNUAL RUNOFF (INCHES)	.21		.68
10 PERCENT EXCEEDS	2.6		70.30
50 PERCENT EXCEEDS	1.8		.27
90 PERCENT EXCEEDS	1.3		1.25
			3.65
			115
			5.2
			1.3

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 2000 TO SEPTEMBER 2001

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)
OCT													
24...	0910	.60	.92	--	--	2.1	7.0	208	20.0	--	--	--	--
NOV													
20...	1120	.61	.85	--	--	2.2	7.0	204	23.7	--	--	--	--
DEC													
18...	1015	.30	1.3	--	--	6.4	7.1	301	16.7	--	--	--	--
JAN													
17...	0953	.77	1.2	--	--	3.5	6.8	248	16.0	--	--	--	--
FEB													
12...	1210	.73	.81	--	--	1.7	6.8	242	18.2	--	--	--	--
MAR													
20...	1015	.84	1.3	--	--	1.2	6.7	213	18.1	--	--	--	--
APR													
09...	1028	.83	1.2	--	--	1.2	6.0	345	20.8	--	--	--	--
MAY													
07...	0800	.55	.57	--	--	3.0	7.2	196	20.3	--	--	--	--
JUN													
06...	1134	.54	.85	--	--	<.6	6.5	164	25.0	--	--	--	--
AUG													
29...	0950	1.88	13	480	.70	.2	6.1	222	24.9	80	23	5.4	3.7
SEP													
18...	0830	3.34	397	--	--	.4	6.4	162	22.9	--	--	--	--

DATE	ANC UNFLTRD SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	TIT 4.5 LAB CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT													
24...	--	--	--	--	--	.04	.74	--	.11	--	<.01	--	.02
NOV													
20...	--	--	--	--	--	.02	.33	--	.14	--	<.01	--	<.01
DEC													
18...	--	--	--	--	--	<.010	.69	--	<.02	--	<.01	--	<.01
JAN													
17...	--	--	--	--	--	<.01	.6	--	.04	--	<.01	--	<.01
FEB													
12...	--	--	--	--	--	.02	.5	--	.10	--	<.01	--	<.01
MAR													
20...	--	--	--	--	--	.048	.66	--	.08	--	<.01	--	.03
APR													
09...	--	--	--	--	--	.064	2.0	--	.08	--	<.01	--	.06
MAY													
07...	--	--	--	--	--	.022	.77	--	.07	--	<.01	--	.02
JUN													
06...	--	--	--	--	--	.012	.41	--	.11	--	<.01	--	.02
AUG													
29...	14	22	24	<.1	28	--	3.7	.51	--	<.02	--	<.01	--
SEP													
18...	--	--	--	--	--	.11	2.8	--	<.02	--	<.01	--	.08

< -- Less than

KISSIMMEE RIVER BASIN

02266500 REEDY CREEK NEAR LOUGHMAN, FL--Continued

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

DATE	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	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...	--	.04	16	<.1	--	--	--	--	--	--	--	--	--
NOV 20...	--	.02	8.6	<.1	--	--	--	--	--	--	--	--	--
DEC 18...	--	.05	11	<.1	--	--	--	--	--	--	--	--	--
JAN 17...	--	<.02	12	<.1	--	--	--	--	--	--	--	--	--
FEB 12...	--	<.02	11	<.1	--	--	--	--	--	--	--	--	--
MAR 20...	--	.06	12	<.1	--	--	--	--	--	--	--	--	--
APR 09...	--	.08	43	2.4	--	--	--	--	--	--	--	--	--
MAY 07...	--	.04	10	<.1	--	--	--	--	--	--	--	--	--
JUN 06...	--	.03	6.7	2.6	--	--	--	--	--	--	--	--	--
AUG 29...	.16	.17	70	--	435	1.9	<1.0	<1.0	<1.0	1.5	960	<1.0	23
SEP 18...	--	.09	59	<.1	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL AS SE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALDRIN, TOTAL (UG/L) (39330)	CARBO- PHENO- THION WATER UNFLTRD TOTAL (UG/L) (39786)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L) (39350)	CHLOR- PYRIFOS RECOVER TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)	DISUL- FOTON UNFILTR RECOVER TOTAL (UG/L) (39011)	ENDO- SULFAN I TOTAL (UG/L) (39388)	
AUG 29...	<.1	<1.0	<1.0	4.0	<.01	<.02	<.1	<.01	<.02	<.02	<.006	<.03	<.01

DATE	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	METHYL PARA- THION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	P,P'- DDD UNFILTR RECOVER TOTAL (UG/L) (39360)	P,P'- DDE, UNFILTR RECOVER TOTAL (UG/L) (39365)	P,P'- DDT UNFILTR RECOVER TOTAL (UG/L) (39370)
AUG 29...	<.01	<.01	<.007	<.009	<.01	<.006	<.03	<.01	<.01	<.006	<.007	<.006	<.009

DATE	PARA- THION, TOTAL (UG/L) (39540)	PCB, TOTAL (UG/L) (39516)	PHORATE TOTAL (UG/L) (39023)	TOX- APHENE, TOTAL (UG/L) (39400)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39333)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39351)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39383)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39389)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39393)	HEPTA- CHLOR EPOXIDE TOT. IN BOT- TOM MA- MATL. (UG/KG) (39423)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39413)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39343)	METH- OXY- CHLOR, TOT. IN BOT- TOM MA- MATL. (UG/KG) (39481)
AUG 29...	<.01	<.1	<.02	<1	<.2	<3	<.2	<.2	<.2	<.2	<.2	<.2	<2

DATE	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39758)	BI- PHENYL, NONA- CHLORO- SUR SCD 1325 PERCENT (90575)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39363)	P,P'- DDE, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39368)	P,P'- DDT, RECOVER IN BOT- TOM MA- TERIAL (UG/KG) (39373)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39403)
AUG 29...	<.2	86	<.5	<.2	<.5	<5	<50

< -- Less than

02266550 REEDY CREEK AT STATE HIGHWAY 531 NEAR POINSIANNA, FL

LOCATION.--Lat 28°08'59", long 81°26'28", in SE $\frac{1}{4}$ 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 mi², approximately.

PERIOD OF RECORD.--October 1978 to current year (discharge measurements only).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 1,010 ft³/s, Aug. 26, 1991; no flow observed during most years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)
NOV 02...	1317	.21	JUN 04...	0947	.02
DEC 19...	1520	.00	JUL 31...	0730	1.6
FEB 15...	0700	.14	SEP 24...	1055	568
APR 12...	1000	.15			

KISSIMMEE RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 72.70 ft above sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	18	14	11	9.3	6.5	9.8	2.6	.91	2.2	14	20
2	34	18	14	11	9.4	6.2	8.8	2.5	.85	1.8	14	23
3	34	17	15	10	9.4	5.8	8.5	2.6	.64	1.7	18	22
4	35	17	14	11	9.6	6.3	8.6	2.7	.54	1.7	22	23
5	34	17	14	10	9.6	8.1	8.5	2.6	.60	2.4	23	22
6	34	17	14	9.8	9.3	7.1	8.2	2.4	.63	3.5	23	25
7	34	17	14	9.7	9.0	6.0	7.9	2.3	.76	3.4	24	32
8	33	16	13	10	8.8	5.5	7.9	2.2	1.3	3.4	23	36
9	32	16	13	11	8.8	5.4	7.7	2.1	1.6	4.2	23	42
10	29	17	13	10	9.0	5.4	7.5	1.9	1.5	5.0	23	43
11	28	16	13	9.8	8.9	5.3	7.2	1.6	1.3	5.5	24	43
12	27	16	14	10	8.8	5.1	6.9	1.6	1.2	5.3	24	44
13	27	16	14	10	8.7	5.2	6.9	1.6	1.1	5.7	23	45
14	26	16	14	9.9	8.7	5.3	6.9	1.5	1.1	7.3	23	59
15	25	16	14	9.9	8.6	5.2	6.5	1.4	1.6	8.5	22	66
16	25	15	14	9.8	8.4	5.2	6.1	1.4	2.3	8.3	22	64
17	24	16	14	9.9	8.6	5.1	5.9	1.4	2.3	8.8	21	64
18	24	15	13	9.8	8.1	4.8	5.2	1.2	2.6	9.1	21	63
19	23	15	13	9.7	7.4	4.7	4.6	1.0	2.5	9.2	24	63
20	22	15	13	11	7.3	5.2	4.4	.95	2.4	9.9	23	62
21	22	15	12	11	7.3	5.3	4.1	.80	2.4	10	24	63
22	21	14	12	11	7.3	5.0	3.9	.75	2.5	11	26	82
23	21	13	12	11	7.1	4.6	3.7	.69	2.6	10	25	83
24	20	13	12	10	6.7	4.5	3.7	.53	2.7	10	25	84
25	19	13	12	10	6.6	4.5	3.7	.44	2.7	11	24	84
26	19	14	11	9.5	6.6	4.5	3.6	.59	2.6	12	24	83
27	19	15	11	9.3	6.6	4.3	3.1	.42	2.5	12	22	82
28	19	15	12	9.1	6.7	4.0	2.8	.38	2.4	12	21	81
29	18	15	12	9.0	---	4.6	2.6	.42	2.4	11	21	81
30	18	15	12	9.1	---	8.0	2.6	.38	2.4	11	20	80
31	18	---	11	9.3	---	8.8	---	.51	---	12	20	---
TOTAL	799	468	403	311.6	230.6	171.5	177.8	43.46	52.93	228.9	686	1664
MEAN	25.8	15.6	13.0	10.1	8.24	5.53	5.93	1.40	1.76	7.38	22.1	55.5
MAX	35	18	15	11	9.6	8.8	9.8	2.7	2.7	12	26	84
MIN	18	13	11	9.0	6.6	4.0	2.6	.38	.54	1.7	14	20
CFSM	.44	.26	.22	.17	.14	.09	.10	.02	.03	.13	.38	.94
IN.	.50	.30	.25	.20	.15	.11	.11	.03	.03	.14	.43	1.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	56.2	44.6	39.9	39.7	39.4
MAX	190	119	129	102	100
(WY)	1961	1954	1954	1954	1998
MIN	10.4	7.17	11.6	10.1	8.24
(WY)	1990	1990	1990	2001	2001

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1948 - 2001

ANNUAL TOTAL	4502.69	5236.79	
ANNUAL MEAN	12.3	14.3	40.4
HIGHEST ANNUAL MEAN			104
LOWEST ANNUAL MEAN			9.47
HIGHEST DAILY MEAN	38	Sep 23-27	235
LOWEST DAILY MEAN	.08	Jun 6	.00
ANNUAL SEVEN-DAY MINIMUM	.20	May 31	.45
MAXIMUM PEAK STAGE			6.02
ANNUAL RUNOFF (CFSM)	.21		.69
ANNUAL RUNOFF (INCHES)	2.84		9.32
10 PERCENT EXCEEDS	24		27
50 PERCENT EXCEEDS	12		9.9
90 PERCENT EXCEEDS	1.0		1.7

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 mi² 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 sea level (levels by U.S. Army Corps of Engineers). Auxiliary water-stage recorder at downstream side of lock and control structure 65.

REMARKS.--Records good except for periods of estimated daily discharge, which are fair. 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 Aug. 7, 2001.

COOPERATION.--Gage-height record and gate-operation record provided by South Florida Water Management District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	.00	.00	.00	.00	.00	.00	.00	.00	.00	623	597
2	169	.00	.00	.00	.00	.00	.00	.00	.00	.00	736	592
3	168	.00	.00	.00	.00	.00	.00	.00	.00	.00	738	575
4	169	.00	.00	.00	.00	.00	.00	.00	.00	.00	739	529
5	167	.00	.00	.00	.00	.00	.00	.00	.00	.00	763	502
6	165	.00	.00	.00	.00	.00	.00	.00	.00	.00	952	506
7	166	.00	.00	.00	.00	.00	.00	.00	.00	.00	e1500	497
8	171	.00	.00	.00	.00	.00	.00	.00	.00	.00	e1760	481
9	180	.00	.00	.00	.00	.00	.00	.00	.00	.00	e1400	504
10	173	.00	.00	.00	.00	.00	.00	.00	.00	.00	1040	860
11	170	.00	.00	.00	.00	.00	.00	.00	.00	.00	1060	e1450
12	167	.00	.00	.00	.00	.00	.00	.00	.00	.00	1050	e2220
13	167	.00	.00	.00	.00	.00	.00	.00	.00	.00	1060	e2750
14	172	.00	.00	.00	.00	.00	.00	.00	.00	.00	1070	e3420
15	167	.00	.00	.00	.00	.00	.00	.00	.00	.00	1060	e3940
16	166	.00	.00	.00	.00	.00	.00	.00	.00	.00	938	e3990
17	163	.00	.00	.00	.00	.00	.00	.00	.00	.00	747	e4080
18	169	.00	.00	.00	.00	.00	.00	.00	.00	.00	760	e4140
19	166	.00	.00	.00	.00	.00	.00	.00	.00	.00	757	e4100
20	66	.00	.00	.00	.00	.00	.00	.00	.00	.00	760	e4090
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	758	e4090
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	769	e4120
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	762	e4140
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	108	755	e4140
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	132	762	e4180
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	132	743	e4220
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	379	702	e4180
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	555	633	e4160
29	.00	.00	.00	.00	---	.00	.00	.00	.00	554	589	e4130
30	.00	.00	.00	.00	---	.00	.00	.00	.00	556	585	e4200
31	.00	---	.00	.00	---	.00	---	.00	---	546	598	---
TOTAL	3274.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2962.00	27169	81383
MEAN	106	.000	.000	.000	.000	.000	.000	.000	.000	95.5	876	2713
MAX	180	.00	.00	.00	.00	.00	.00	.00	.00	556	1760	4220
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	585	481

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	719	332	664	1210	1423	1348	1413	911	226	489	1198	919																					
MAX	5652	3598	5797	6868	5076	8652	4320	2364	1965	4352	4537	4554																					
(WY)	1970	1995	1998	1998	1998	1998	1993	1984	1994	1974	1995	1995																					
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000																					
(WY)	1984	1984	1985	1985	1985	1991	2001	2001	1977	1985	1987	1970																					

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1970 - 2001

ANNUAL TOTAL	146818.00	114788.00	
ANNUAL MEAN	401	314	902
HIGHEST ANNUAL MEAN			2508
LOWEST ANNUAL MEAN			21.0
HIGHEST DAILY MEAN	2870	Feb 24	4220
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	May 2	.00
MAXIMUM PEAK STAGE			52.37
10 PERCENT EXCEEDS	1180		761
50 PERCENT EXCEEDS	.00		.00
90 PERCENT EXCEEDS	.00		.00

e Estimated

KISSIMMEE RIVER BASIN

02268903 KISSIMMEE RIVER AT S-65, NEAR LAKE WALES, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.83	49.37	49.15	49.03	48.90	48.72	48.87	48.33	48.52	48.71	50.37	50.73
2	49.75	49.36	49.14	49.04	48.95	48.67	48.76	48.31	48.55	48.71	50.44	50.72
3	49.71	49.37	49.24	49.06	48.98	48.58	48.66	48.35	48.57	48.71	50.62	50.70
4	49.71	49.34	49.32	49.06	48.97	48.58	48.71	48.40	48.55	48.70	50.75	50.68
5	49.74	49.33	49.22	48.97	48.94	48.94	48.70	48.42	48.55	48.74	50.85	50.67
6	49.75	49.29	49.15	48.96	48.90	48.93	48.66	48.40	48.56	48.80	50.97	50.68
7	49.76	49.25	49.13	48.95	48.86	48.82	48.66	48.39	48.59	48.80	51.04	50.74
8	49.81	49.22	49.09	48.91	48.84	48.64	48.64	48.36	48.65	48.81	51.06	50.87
9	49.97	49.24	49.06	49.11	48.82	48.57	48.63	48.35	48.67	48.90	51.12	50.99
10	49.78	49.30	49.06	49.06	48.85	48.59	48.62	48.33	48.68	48.96	51.14	51.14
11	49.69	49.35	49.05	48.94	48.85	48.57	48.57	48.32	48.62	48.96	51.13	51.20
12	49.67	49.29	49.12	48.95	48.86	48.46	48.57	48.34	48.58	48.93	51.10	51.22
13	49.64	49.23	49.11	49.03	48.84	48.47	48.60	48.36	48.60	48.95	51.09	51.29
14	49.65	49.22	49.10	48.96	48.84	48.55	48.62	48.35	48.61	49.00	51.08	51.16
15	49.62	49.31	49.09	48.93	48.81	48.47	48.62	48.32	48.62	49.07	51.07	51.71
16	49.58	49.22	49.04	48.93	48.77	48.48	48.66	48.38	48.68	49.03	51.02	51.69
17	49.55	49.21	49.17	48.92	48.84	48.56	48.68	48.40	48.71	---	50.98	51.69
18	49.54	49.24	49.18	48.90	48.89	48.59	48.69	48.38	48.72	---	50.98	51.70
19	49.51	49.18	49.18	48.84	48.77	48.48	48.47	48.35	48.68	49.32	50.96	51.70
20	49.51	49.35	49.24	49.06	48.73	48.55	48.40	48.33	48.68	49.35	50.95	51.72
21	49.50	49.43	49.13	49.08	48.74	48.61	48.40	48.30	48.68	49.47	51.00	51.73
22	49.51	49.26	49.10	49.10	48.74	48.62	48.37	48.31	48.69	49.59	50.98	51.80
23	49.51	49.17	49.12	49.14	48.77	48.51	48.33	48.43	48.72	49.58	50.97	51.88
24	49.51	49.07	49.19	48.97	48.68	48.47	48.34	48.45	48.79	49.79	50.97	51.92
25	49.50	49.06	49.16	49.01	48.67	48.47	48.37	48.40	48.79	49.93	50.94	51.96
26	49.49	49.16	49.08	48.95	48.72	48.47	48.48	48.43	48.77	50.05	50.97	52.02
27	49.50	49.22	49.01	48.91	48.71	48.50	48.37	48.37	48.78	50.12	50.90	52.05
28	49.41	49.18	49.02	48.90	48.72	48.37	48.32	48.41	48.77	50.21	50.85	52.06
29	49.39	49.18	49.15	48.85	---	48.35	48.28	48.43	48.76	50.26	50.82	52.12
30	49.41	49.19	49.24	48.83	---	48.61	48.30	48.49	48.73	50.31	50.76	52.16
31	49.40	---	49.16	48.86	---	48.74	---	48.47	---	50.38	50.75	---
MEAN	49.61	49.25	49.14	48.97	48.82	48.58	48.54	48.38	48.66	49.32	50.92	51.42
MAX	49.97	49.43	49.32	49.14	48.98	48.94	48.87	48.49	48.79	50.38	51.14	52.16
MIN	49.39	49.06	49.01	48.83	48.67	48.35	48.28	48.30	48.52	48.70	50.37	50.67
CAL YR 2000	MEAN 49.71	MAX 52.38	MIN 48.36									
WTR YR 2001	MEAN 49.30	MAX 52.16	MIN 48.28									

KISSIMMEE RIVER BASIN

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 town of Lake Wales.

DRAINAGE AREA.--1,607 mi², 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 sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Gage heights partially regulated by operation of structure 65.

COOPERATION.--Gage-height records 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.29	46.08	45.50	45.17	44.85	44.73	45.39	44.97	44.66	46.24	46.17	46.21
2	46.35	46.07	45.47	45.15	44.84	44.73	45.45	44.95	44.71	46.24	46.10	46.15
3	46.33	46.05	45.45	45.12	44.83	44.74	45.50	44.94	44.72	46.15	46.19	46.11
4	46.29	46.03	45.41	45.11	44.82	44.75	45.51	45.06	44.74	46.17	46.32	46.14
5	46.32	46.01	45.40	45.10	44.83	44.76	45.51	45.04	44.79	46.19	46.08	46.17
6	46.31	46.00	45.38	45.08	44.83	44.76	45.51	45.03	44.81	46.20	46.20	46.12
7	46.28	45.98	45.36	45.10	44.83	44.75	45.49	44.99	44.87	46.21	46.17	46.44
8	46.28	45.97	45.35	45.09	44.85	44.75	45.49	44.97	45.15	46.25	46.16	46.73
9	46.27	45.95	45.33	45.07	44.85	44.74	45.47	44.94	45.25	46.30	46.06	46.25
10	46.27	45.92	45.31	45.05	44.84	44.72	45.45	44.91	45.31	46.24	46.11	46.12
11	46.32	45.89	45.33	45.05	44.84	44.72	45.44	44.88	45.36	46.30	46.14	46.13
12	46.33	45.86	45.33	45.05	44.84	44.72	45.42	44.84	45.38	46.25	46.10	46.14
13	46.27	45.83	45.32	45.03	44.85	44.70	45.40	44.79	45.39	46.20	46.13	46.17
14	46.25	45.83	45.32	45.03	44.86	44.67	45.37	44.75	45.36	46.33	46.12	46.56
15	46.27	45.79	45.30	45.03	44.86	44.67	45.34	44.72	45.37	46.41	46.13	46.63
16	46.29	45.77	45.31	45.03	44.85	44.66	45.31	44.63	45.49	46.29	46.10	46.49
17	46.29	45.76	45.30	45.01	44.83	44.64	45.29	44.57	45.52	---	46.20	46.30
18	46.30	45.75	45.27	45.00	44.80	44.62	45.26	44.53	45.63	---	46.08	46.20
19	46.31	45.74	45.26	44.99	44.81	44.62	45.25	44.50	45.68	46.29	46.12	46.28
20	46.30	45.70	45.24	44.97	44.81	44.62	45.24	44.47	45.74	46.21	46.12	46.31
21	46.29	45.65	45.21	44.94	44.80	44.59	45.22	44.45	45.84	46.10	46.13	46.27
22	46.27	45.62	45.19	44.93	44.81	44.56	45.20	44.43	45.92	46.14	46.12	46.32
23	46.26	45.61	45.18	44.93	44.80	44.53	45.18	44.55	46.03	46.16	46.12	46.33
24	46.24	45.59	45.16	44.93	44.80	44.53	45.15	44.62	46.16	46.14	46.12	46.31
25	46.22	45.58	45.15	44.91	44.79	44.50	45.12	44.64	46.28	46.21	46.16	46.33
26	46.20	45.56	45.14	44.89	44.77	44.46	45.09	44.64	46.00	46.35	46.15	46.30
27	46.18	45.57	45.14	44.90	44.76	44.44	45.06	44.64	45.77	46.26	46.15	46.33
28	46.15	45.56	45.16	44.88	44.75	44.42	45.03	44.61	45.93	46.12	46.18	46.38
29	46.13	45.53	45.19	44.88	---	44.48	45.01	44.63	46.06	46.18	46.17	46.47
30	46.11	45.51	45.18	44.88	---	45.03	44.97	44.61	46.16	46.19	46.12	46.41
31	46.10	---	45.17	44.87	---	45.30	---	44.59	---	46.27	46.19	---
MEAN	46.26	45.79	45.28	45.01	44.82	44.67	45.30	44.74	45.47	46.23	46.14	46.30
MAX	46.35	46.08	45.50	45.17	44.86	45.30	45.51	45.06	46.28	46.41	46.32	46.73
MIN	46.10	45.51	45.14	44.87	44.75	44.42	44.97	44.43	44.66	46.10	46.06	46.11
CAL YR 2000	MEAN 46.10	MAX 46.50	MIN 44.97									
WTR YR 2001	MEAN 45.50	MAX 46.73	MIN 44.42									

KISSIMMEE RIVER BASIN

KISSIMMEE RIVER BASIN

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 sea level (levels by U.S. Army Corps of Engineers).

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.97	12.03	11.44	10.99	10.95	10.49	10.09	9.44	9.15	9.38	---	11.98
2	12.07	12.02	11.49	10.91	10.86	10.50	10.15	9.52	9.26	9.34	---	11.97
3	12.30	11.96	11.28	10.89	10.67	10.62	10.39	9.45	9.18	9.32	---	11.97
4	12.43	11.97	11.12	10.82	10.80	10.59	10.29	9.49	9.36	9.30	---	11.97
5	12.28	12.01	11.20	11.03	10.70	9.93	10.22	9.39	9.69	9.23	---	11.95
6	12.34	12.08	11.31	11.06	10.80	9.93	10.27	9.38	9.93	9.26	---	11.96
7	12.33	12.09	11.39	11.03	10.81	10.06	10.27	9.39	9.80	9.32	---	11.98
8	12.26	12.07	11.42	11.05	10.83	10.26	10.29	9.36	9.24	9.26	---	12.17
9	11.60	12.09	11.44	10.68	10.83	10.29	10.28	9.38	9.18	9.23	---	12.33
10	12.14	11.95	11.44	10.68	10.81	10.33	10.24	9.38	9.18	9.35	---	12.45
11	12.18	11.75	11.48	10.98	10.80	10.26	10.24	9.39	9.32	9.42	---	12.50
12	12.16	11.80	11.44	10.97	10.83	10.43	10.22	9.34	9.30	9.48	---	12.61
13	12.21	11.94	11.48	10.74	10.80	10.32	10.14	9.35	9.24	9.46	---	12.69
14	12.20	11.90	11.43	10.91	10.82	10.27	10.01	9.33	9.25	9.54	---	13.40
15	12.14	11.58	11.46	10.94	10.83	10.33	9.96	9.40	9.20	9.53	---	13.02
16	12.17	11.77	11.51	10.98	10.86	10.32	9.84	9.23	9.20	9.71	---	13.08
17	12.22	11.81	11.28	10.96	10.70	10.19	9.72	9.18	9.14	9.81	---	13.23
18	12.19	11.70	11.22	10.98	10.44	10.06	9.31	9.21	9.16	9.88	---	13.38
19	12.22	11.79	11.13	11.06	10.68	10.33	9.67	9.31	9.10	9.92	---	13.49
20	12.22	11.40	11.06	10.80	10.71	10.28	9.83	9.19	9.10	9.95	---	13.53
21	12.20	11.10	11.11	10.60	10.67	10.13	9.77	9.20	9.11	10.15	---	13.58
22	12.13	11.29	11.10	10.52	10.64	10.03	9.80	9.15	9.14	10.40	---	13.61
23	12.04	11.54	11.05	10.59	10.55	10.19	9.83	9.24	9.15	10.55	---	13.66
24	12.04	11.66	10.96	10.84	10.70	10.24	9.78	9.00	9.19	---	---	13.76
25	12.06	11.64	10.99	10.77	10.72	10.19	9.65	9.16	9.22	---	---	13.78
26	12.03	11.58	11.19	10.80	10.61	10.14	9.30	9.23	9.24	---	---	13.77
27	12.01	11.44	11.22	10.91	10.65	9.96	9.49	9.18	9.30	---	---	13.82
28	12.08	11.47	11.25	10.88	10.52	10.13	9.56	9.20	9.27	---	---	13.94
29	12.12	11.48	11.02	10.96	---	10.22	9.53	9.19	9.34	---	---	13.91
30	12.07	11.36	10.77	10.97	---	10.38	9.53	9.13	9.38	---	11.96	13.88
31	12.06	---	10.86	10.94	---	10.28	---	9.19	---	---	12.03	---
MEAN	12.14	11.74	11.24	10.88	10.74	10.25	9.92	9.29	9.28	9.60	11.99	12.98
MAX	12.43	12.09	11.51	11.06	10.95	10.62	10.39	9.52	9.93	10.55	12.03	13.94
MIN	11.60	11.10	10.77	10.52	10.44	9.93	9.30	9.00	9.10	9.23	11.96	11.95
CAL YR 2000	MEAN 13.16	MAX 16.15	MIN 10.77									
WTR YR 2001	MEAN 10.76	MAX 13.94	MIN 9.00									

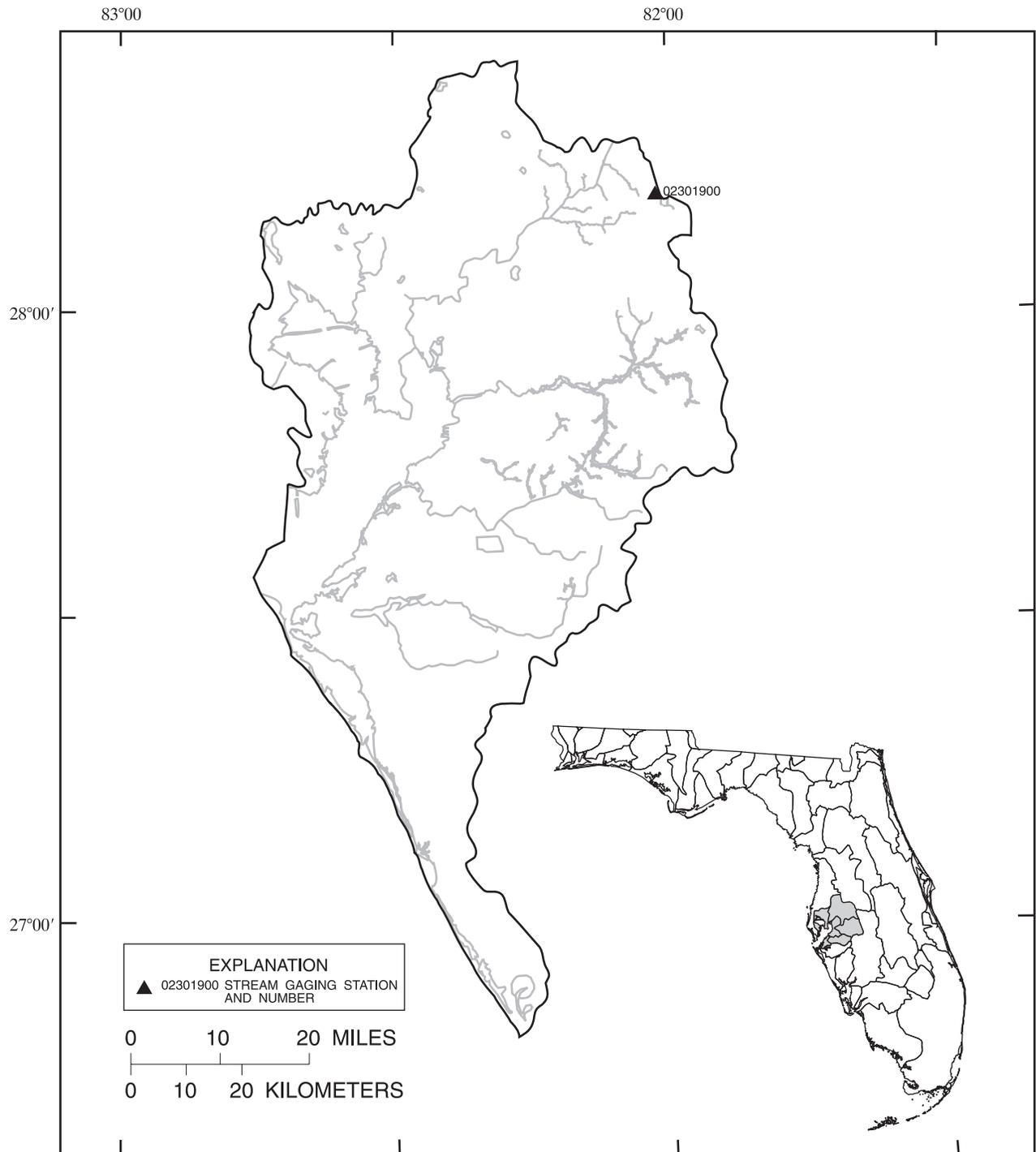


Figure 9.--Location of stream gaging stations in the Manatee, Little Manatee, Alafia, and Hillsborough River basins, and Tampa Bay and coastal areas.

HILLSBOROUGH RIVER BASIN

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 2000 TO SEPTEMBER 2001

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 08...	1720	1.2	3.42	340	7.2	20.3	3.5
DEC 26...	1815	1.5	3.58	340	7.2	13.0	7.0
APR 09...	1420	2.3	3.52	350	7.1	21.5	4.4
JUN 04...	1605	.29	3.42	355	7.0	25.1	3.1
AUG 01...	1020	18	4.38	203	6.8	24.2	3.6
SEP 27...	1440	11	4.37	242	6.7	24.0	4.1

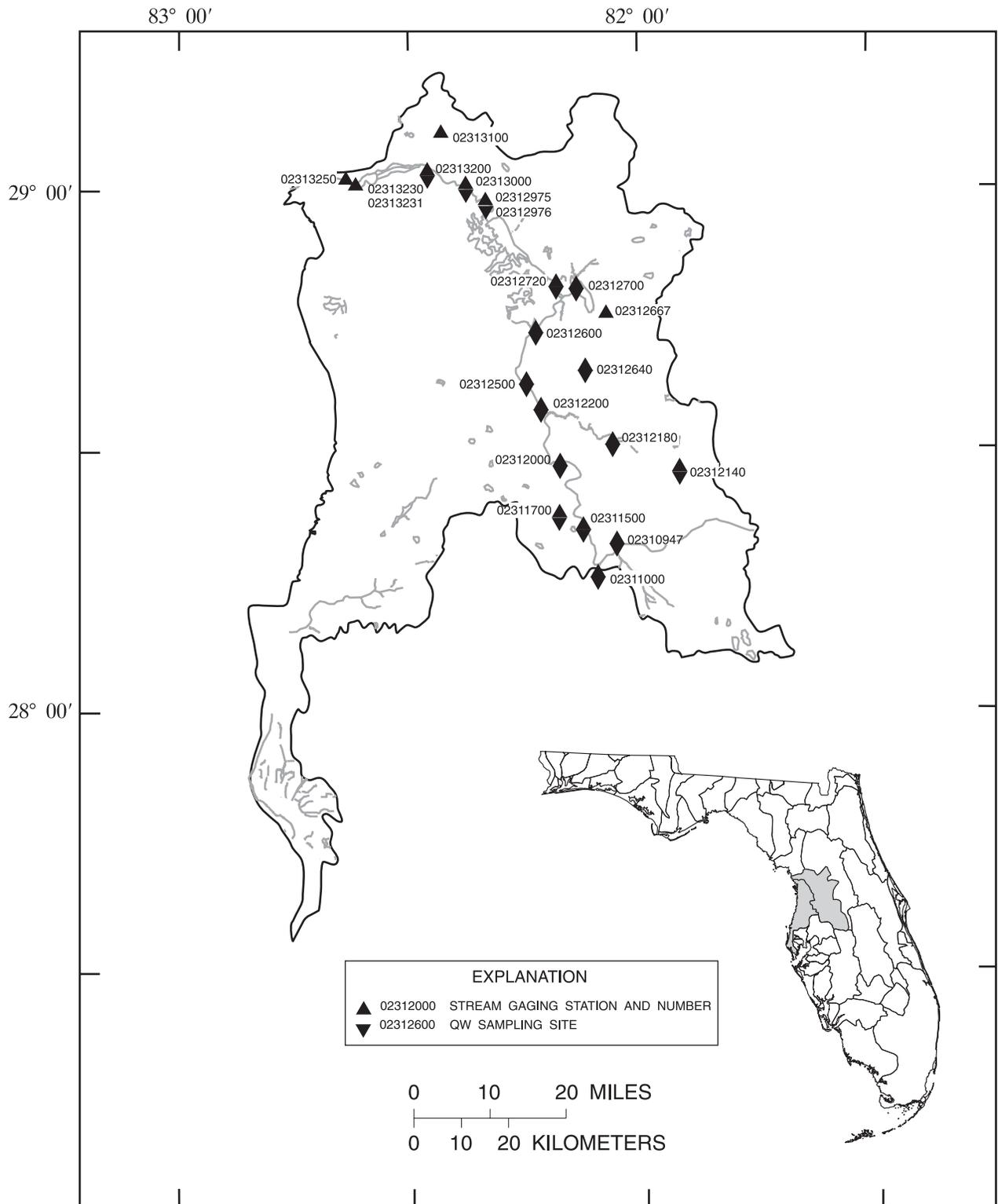


Figure 10.--Location of stream gaging stations in the Withlacoochee River basin and coastal areas.

WITHLACOCHEE RIVER BASIN

02310947 WITHLACOCHEE 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 2000 TO SEPTEMBER 2001

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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)	ANC UNFLTRD LAB (MG/L AS CACO3) (90410)
AUG 28...	1225	7.25	88	--	1.6	7.0	25.9	--	--	--	--	--	--
SEP 24...	1245	11.20	924	480	1.8	6.2	25.4	31	9.7	1.7	2.7	3.3	E18c1

DATE	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)
AUG 28...	--	--	--	--	--	E4.6c1	.44	.07	.03	.24	.29	--	--
SEP 24...	5.4	.1	4.9	1.4	156	2.3	.11	<.02	.01	.32	.35	50	478

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
SEP 24...	1.2	<1.0	2.1	721	792	1.3	<1.0	64	65	<1.0	42	5.8

< -- Less than
E -- Estimated value
c1-- Holding time exceeded by the laboratory

02311000 WITHLACOCHEE-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 from 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.

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 sea level (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. Flow is uncontrolled natural diversion from the Withlacoochee River basin to the Hillsborough River basin.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.41
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.9
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	40
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	128
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	216
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.0	252
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	21	245
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	37	371
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	38	705
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	37	902
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	36	959
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	29	937
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	24	902
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	29	826
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	34	724
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	25	644
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	602
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.2	476
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.8	401
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.59	313
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	248
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	197
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	157
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	121
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	335.59	10370.31
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	10.8	346
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	38	959
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

	MEAN	25.0	3.21	16.1	17.4	16.0	26.3	22.8	1.10	10.7	26.1	53.1	76.6
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1962	1962	1961	1961	1962	1961	1961	1961	1960	1969	1980	1970	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1930 - 2001

ANNUAL TOTAL		10705.90		
ANNUAL MEAN		29.3	21.7	
HIGHEST ANNUAL MEAN			98.1	1998
LOWEST ANNUAL MEAN			.005	2000
HIGHEST DAILY MEAN		959	Sep 17	1270
LOWEST DAILY MEAN	.00	Many days		Sep 14 1960
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1
MAXIMUM PEAK FLOW		965	Sep 17	1880
MAXIMUM PEAK STAGE		5.72	Sep 17	6.87
10 PERCENT EXCEEDS	.00		1.7	52
50 PERCENT EXCEEDS	.00		.00	.00
90 PERCENT EXCEEDS	.00		.00	.00

WITHLACOCHEE RIVER BASIN

02311000 WITHLACOCHEE-HILLSBOROUGH OVERFLOW NEAR RICHLAND, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	.78	2.65
2	---	---	---	---	---	---	---	---	---	---	.99	2.63
3	---	---	---	---	---	---	---	---	---	---	1.26	2.60
4	---	---	---	---	---	---	---	---	---	---	1.33	2.57
5	---	---	---	---	---	---	---	---	---	---	1.49	2.56
6	---	---	---	---	---	---	---	---	---	---	1.83	2.62
7	---	---	---	---	---	---	---	---	---	---	1.90	2.78
8	---	---	---	---	---	---	---	---	---	---	1.92	2.97
9	---	---	---	---	---	---	---	---	---	---	2.00	3.38
10	---	---	---	---	---	---	---	---	---	---	2.29	3.89
11	---	---	---	---	---	---	---	---	---	---	2.63	4.25
12	---	---	---	---	---	---	---	---	---	---	2.82	4.38
13	---	---	---	---	---	---	---	---	---	---	3.25	4.35
14	---	---	---	---	---	---	---	---	---	---	3.40	4.68
15	---	---	---	---	---	---	---	---	---	---	3.41	5.34
16	---	---	---	---	---	---	---	---	---	---	3.40	5.64
17	---	---	---	---	---	---	---	---	---	---	3.39	5.71
18	---	---	---	---	---	---	---	---	---	---	3.33	5.68
19	---	---	---	---	---	---	---	---	---	---	3.29	5.64
20	---	---	---	---	---	---	---	---	---	---	3.34	5.52
21	---	---	---	---	---	---	---	---	---	---	3.38	5.37
22	---	---	---	---	---	---	---	---	---	---	3.30	5.23
23	---	---	---	---	---	---	---	---	---	---	3.17	5.16
24	---	---	---	---	---	---	---	---	---	---	3.06	4.92
25	---	---	---	---	---	---	---	---	---	---	2.96	4.75
26	---	---	---	---	---	---	---	---	---	---	2.87	4.53
27	---	---	---	---	---	---	---	---	---	---	2.80	4.33
28	---	---	---	---	---	---	---	---	---	---	2.75	4.14
29	---	---	---	---	---	---	---	---	---	.66	2.72	3.97
30	---	---	---	---	---	---	---	---	---	.67	2.69	3.81
31	---	---	---	---	---	---	---	---	---	.57	2.67	---
MEAN	---	---	---	---	---	---	---	---	---	.63	2.59	4.20
MAX	---	---	---	---	---	---	---	---	---	.67	3.41	5.71
MIN	---	---	---	---	---	---	---	---	---	.57	.78	2.56
CAL YR 2000	MEAN	1.40	MAX	1.78	MIN	.71						
WTR YR 2001	MEAN	3.26	MAX	5.71	MIN	.57						

02311000 WITHLACOCHEE-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.

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	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)
SEP 19...	1755	5.62	890	280	1.9	6.1	56	24.5	28	9.0	1.3	2.1	2.0

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
SEP 19...	E19c1	3.0	<.1	3.2	1.4	E104c1	1.7	.07	<.02	<.01	.45	.49	33

STRON-TIUM, DIS-SOLVED (UG/L AS SR)
(01080)

DATE

SEP 19... 22

< -- Less than
E -- Estimated value
cl-- Holding time exceeded by the laboratory

WITHLACOCHEE RIVER BASIN

02311700 DADE CITY CANAL NEAR DADE CITY, FL

LOCATION.--Lat 28°22'55", long 82°10'48", in SW $\frac{1}{4}$ 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 mi².

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 sea level. 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 ft³/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 2000 TO SEPTEMBER 2001

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
NOV							
09...	1330	68.62	4.7	530	7.5	23.9	5.4
DEC							
27...	1505	68.56	4.5	458	7.5	19.5	7.1
FEB							
27...	0945	68.50	2.5	634	7.7	23.2	6.0
APR							
10...	1025	68.60	2.4	820	8.1	24.7	8.4
JUN							
05...	1150	68.56	4.9	586	6.9	27.7	4.8
JUL							
31...	1010	68.83	2.8	536	7.4	30.0	6.1
SEP							
27...	1100	70.90	.00	--	--	--	--

WITHLACOCHEE RIVER BASIN

02312000 WITHLACOCHEE RIVER AT TRILBY, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.20	.62	.46	.39	.38	.33	.48	.49	.53	.61	1.33	5.44
2	1.18	.58	.46	.38	.34	.33	.46	.49	.57	.59	1.37	5.02
3	1.15	.56	.46	.37	.32	.34	.44	.49	.55	.55	1.39	4.60
4	1.15	.55	.46	.36	.31	e.35	.44	.50	.52	.55	1.41	4.11
5	1.12	.55	.46	.35	.30	e.34	.45	.51	.52	.53	1.54	3.68
6	1.09	.55	.45	.34	.28	e.34	.45	.50	.52	.54	1.68	3.29
7	1.07	.54	.44	.34	.28	.34	.45	.50	.55	.57	1.85	2.96
8	1.05	.53	.43	.34	.29	.34	.46	.49	.53	.56	1.88	2.81
9	1.03	.52	.43	.35	.31	.34	.47	.49	.51	.55	1.84	2.75
10	1.01	.51	.44	.34	.31	.36	.47	.50	.49	.57	2.09	3.34
11	1.01	.50	.44	.33	.32	.36	.48	.50	.47	.63	2.17	3.30
12	1.00	.50	.45	.34	.32	.37	.48	.49	.47	.67	2.10	3.20
13	.99	.49	.43	.34	.32	.37	.49	.49	.45	.70	2.07	3.57
14	.98	.49	.43	.34	.31	.36	.50	.49	.48	.74	2.06	5.06
15	.97	.49	.44	.34	.31	.36	.50	.49	.52	.72	2.06	7.51
16	.94	.47	.43	.35	.31	.37	.50	.50	.50	.70	2.10	9.21
17	.91	.47	.44	.35	.31	.37	.51	.49	.48	.73	2.14	10.16
18	.91	.48	.43	.35	.30	.37	.50	.49	.49	.75	2.16	10.85
19	.90	.47	.44	.34	.30	.40	.50	.48	.62	.78	2.17	11.63
20	.88	.47	.43	.34	.30	.43	.51	.48	.61	.77	3.14	12.45
21	.87	.47	.43	.33	.31	.40	.52	.48	.56	.79	4.49	13.22
22	.86	.47	.42	.32	.31	.39	.51	.49	.52	.82	5.21	13.83
23	.85	.47	.41	.31	.31	.40	.50	.51	.59	.85	5.70	14.36
24	.73	.47	.40	.29	.31	.41	.49	.50	.66	.87	6.13	14.54
25	.69	.48	.40	.29	.31	.42	.49	.50	.64	.89	e6.51	14.70
26	.68	.57	.40	.29	.35	.42	.49	.49	.57	.95	e6.74	14.85
27	.67	.54	.40	.28	.32	.42	.49	.49	.53	e.98	e6.83	14.80
28	.65	.50	.42	.29	.32	.41	.49	.50	.53	e.98	6.76	14.62
29	.64	.48	.43	.30	---	.48	.48	.52	.54	e1.01	6.53	14.38
30	.63	.47	.42	.31	---	.54	.48	.52	.57	1.02	6.22	14.07
31	.62	---	.40	.39	---	.49	---	.50	---	1.05	5.86	---
MEAN	.92	.51	.43	.33	.31	.39	.48	.50	.54	.74	3.40	8.61
MAX	1.20	.62	.46	.39	.38	.54	.52	.52	.66	1.05	6.83	14.85
MIN	.62	.47	.40	.28	.28	.33	.44	.48	.45	.53	1.33	2.75

CAL YR 2000 MEAN .76 MAX 2.12 MIN .40
WTR YR 2001 MEAN 1.43 MAX 14.85 MIN .28

e Estimated

02312000 WITHLACOCHEE 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 2000 TO SEPTEMBER 2001

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 09...	1120	6.7	.52	422	7.2	21.7	5.5
DEC 27...	1815	6.9	.39	439	7.0	16.2	9.6
FEB 27...	1445	4.6	.30	430	7.6	23.5	8.5
APR 10...	1420	4.5	.45	383	7.2	27.0	12.1
JUN 05...	1630	1.6	.51	333	7.4	29.5	10.6
JUL 30...	1400	2.6	1.03	318	7.5	28.1	7.7
SEP 20...	1735	1790	12.52	84	5.9	24.8	2.0

WITHLACOCHEE RIVER BASIN

02312140 BAYROOT SLOUGH HEADWATERS NEAR BAY LAKE, FL

LOCATION.--Lat 28°27'23", long 81°55'14", in NW $\frac{1}{4}$ 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 mi², 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 ft³/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.

DISCHARGE MEASUREMENTS AND WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT						
23...	1303	.00	--	--	--	--
DEC						
18...	1322	.00	--	--	--	--
FEB						
12...	1017	.00	--	--	--	--
APR						
10...	1045	.00	--	--	--	--
JUN						
04...	1140	.00	--	--	--	--
JUL						
30...	1047	.00	--	--	--	--
SEP						
20...	0802	33	99	5.5	26.4	.7

02312180 LITTLE WITHLACOCHEE 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 mi², 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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.71
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.7
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	4.7
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.74	12
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.44	21
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.49	25
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.42	110
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30	e350
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30	e756
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	e722
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45	e500
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	e399
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	313
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.93	249
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.3	197
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.95	157
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.57	138
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.65	171
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	166
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	150
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.70	136
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.40	130
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.14	129
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.01	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.95	4841.91
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.48	161
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9	756
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	1.90
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	2.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2001, BY WATER YEAR (WY)

	63.2	20.7	28.4	42.0	41.6	55.1	36.1	5.77	10.3	25.9	56.4	94.5
MEAN	63.2	20.7	28.4	42.0	41.6	55.1	36.1	5.77	10.3	25.9	56.4	94.5
MAX	354	159	386	386	285	351	329	68.6	129	275	263	362
(WY)	1996	1970	1998	1998	1998	1998	1987	1987	1991	1991	1994	1994
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1981	1971	1971	1981	1981	1981	1968	1967	1971	1971	1987	1990

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1967 - 2001

ANNUAL TOTAL		4856.86	
ANNUAL MEAN		13.3	40.0
HIGHEST ANNUAL MEAN			130
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN		e756	Sep 16
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00
MAXIMUM PEAK FLOW		*873	Sep 16
MAXIMUM PEAK STAGE		*6.34	Sep 16
ANNUAL RUNOFF (CFSM)		.16	.47
ANNUAL RUNOFF (INCHES)		2.13	6.39
10 PERCENT EXCEEDS	.00	.52	128
50 PERCENT EXCEEDS	.00	.00	1.5
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated
* From floodmark

WITHLACOCHEE RIVER BASIN

02312180 LITTLE WITHLACOCHEE RIVER NEAR TARRYTOWN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-71, 1973, 1984, 1986-89, 1991, 1999, 2001.

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP 19...	1555	5.66	480	6.4	50	25.4	21	6.5	1.1	.9	2.3	7.1	2.6

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
SEP 19...	<.1	2.2	2.0	E127c1	2.4	.31	<.02	<.01	.04	.04	51	11

< -- Less than
E -- Estimated value
c1-- Holding time exceeded by the laboratory

02312200 LITTLE WITHLACOCHEE 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 mi², 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 sea level.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	1.3	.50	e.00	.00	.00	.88	.00	.00	.00	.00	.70
2	4.7	1.2	.46	e.00	.00	.00	1.1	.00	.00	.00	.00	.61
3	4.7	1.0	.54	.00	.00	.00	.97	.00	.00	.00	.00	.68
4	4.7	.99	.51	.00	.00	.00	.92	.00	.00	.00	1.4	.78
5	4.4	1.1	.41	.00	.00	.00	1.1	.00	.00	.00	2.5	3.3
6	4.2	1.0	.35	.00	.00	.00	1.0	.00	.00	.00	2.4	3.6
7	4.0	1.0	.37	.00	.00	.00	.98	.00	.00	.00	3.0	4.1
8	3.8	.98	.35	.00	.00	.00	1.0	.00	.00	.00	1.5	3.5
9	3.6	1.0	.31	.00	.00	.00	1.1	.00	.00	.00	2.1	11
10	3.3	1.0	.29	.00	.00	.00	1.1	.00	.00	.00	2.2	13
11	3.2	.82	.27	.00	.00	.00	1.1	.00	.00	.00	1.5	7.0
12	3.1	.73	.40	.00	.00	.00	.83	.00	.00	.00	1.4	6.1
13	2.9	.68	.40	.00	.00	.00	.59	.00	.00	.00	1.3	5.9
14	2.9	.97	.35	.00	.00	.00	.49	.00	.00	.00	1.3	46
15	2.7	.97	.33	.00	.00	.00	.40	.00	.00	.00	1.6	121
16	2.5	.78	.33	.00	.00	.00	.31	.00	.00	.00	2.0	146
17	2.4	.75	.28	.00	.00	.00	.25	.00	.00	.00	1.7	358
18	2.3	.79	.21	.00	.00	.00	.18	.00	.00	.00	1.3	503
19	2.2	.70	.12	.00	.00	.00	.13	.00	.00	.00	1.2	558
20	2.1	.69	.10	.00	.00	.00	.06	.00	.00	.00	1.1	529
21	2.1	.66	.09	.00	.00	.00	.03	.00	.00	.00	2.2	459
22	2.0	.59	.07	.00	.00	.00	.01	.00	.00	.00	1.8	394
23	2.0	.50	.05	.00	.00	.00	.00	.00	.00	.00	.73	366
24	1.9	.52	.05	.00	.00	.00	.00	.00	.00	.00	.75	297
25	1.9	.49	.05	.00	.00	.00	.00	.00	.00	.00	1.0	251
26	2.0	.83	.05	.00	.00	.00	.00	.00	.00	.00	1.6	219
27	1.9	1.2	.04	.00	.00	.00	.00	.00	.00	.00	.79	211
28	1.9	.80	e.01	.00	.00	.00	.00	.00	.00	.00	.67	202
29	1.7	.66	e.00	.00	---	.00	.00	.00	.00	.00	.92	186
30	1.5	.59	e.00	.00	---	.28	.00	.00	.00	.00	.74	171
31	1.4	---	e.00	.00	---	.80	---	.00	---	.00	.92	---
TOTAL	88.9	25.29	7.29	0.00	0.00	1.08	14.53	0.00	0.00	0.00	41.62	5077.27
MEAN	2.87	.84	.24	.000	.000	.035	.48	.000	.000	.000	1.34	169
MAX	4.9	1.3	.54	.00	.00	.80	1.1	.00	.00	.00	3.0	558
MIN	1.4	.49	.00	.00	.00	.00	.00	.00	.00	.00	.00	.61
CFSM	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.01	1.17
IN.	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.01	1.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
	99.2	488	1961	.24	1962
	34.9	242	1970	.53	1962
	39.6	461	1998	.24	2001
	67.8	661	1998	.000	2001
	78.9	518	1998	.000	2001
	127	1045	1960	.000	1985
	75.2	469	1987	.000	2000
	18.6	122	1959	.000	1985
	26.6	249	1966	.000	1981
	55.2	488	1959	.000	1992
	105	695	1960	.021	1997
	154	707	1960	.036	1997

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1958 - 2001

ANNUAL TOTAL	444.76	5255.98	
ANNUAL MEAN	1.22	14.4	73.7
HIGHEST ANNUAL MEAN			312
LOWEST ANNUAL MEAN			1.79
HIGHEST DAILY MEAN	9.8	Aug 14	558
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 25	.00
MAXIMUM PEAK FLOW			562
MAXIMUM PEAK STAGE			7.28
ANNUAL RUNOFF (CFSM)	.008		.099
ANNUAL RUNOFF (INCHES)	.11		1.35
10 PERCENT EXCEEDS	3.9		3.2
50 PERCENT EXCEEDS	.33		.00
90 PERCENT EXCEEDS	.00		.00

e Estimated

WITHLACOCHEE RIVER BASIN

02312200 LITTLE WITHLACOCHEE RIVER AT RERDELL, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958 to current year.

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)
NOV 09...	1730	1.14	.95	5	3.7	7.0	368	21.6	190	73	2.4	.5	6.9
APR 11...	1109	1.12	1.2	5	3.8	7.2	330	22.1	160	60	2.2	.7	6.0
SEP 19...	1225	7.28	585	480	3.0	5.8	65	23.5	32	11	1.2	1.1	2.6
DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN,AM- MONIA + ORGANIC (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV 09...	186	12	.12	5.8	1.6	226	.35	.01	.05	<.01	.02	.04	4.3
APR 11...	154	11	.12	4.2	1.8	196	.50	.04	.03	<.01	.05	.09	5.6
SEP 19...	E13c1	3.5	<.1	2.7	5.5	158	2.4	.16	.06	<.01	.05	.05	52
DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 09...	<3.0	1.1	<1.0	<1.0	16	278	<1	<1	37	40	<1.0	81	<2.0
APR 11...	3.5	2.0	<1	<1.0	61	833	<1	<1	21	26	<1	70	4
SEP 19...	548	<1.0	<1.0	2.2	545	637	1.7	6.9	54	55	2.2	20	11

< -- Less than

E -- Estimated value

c1-- Holding time exceeded by the laboratory

WITHLACOCHEE RIVER BASIN

02312500 WITHLACOCHEE 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 mi², 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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	7.4	6.2	2.5	6.5	.06	1.3	.00	.00	.00	.00	318
2	19	6.9	5.8	2.4	6.2	.04	1.1	.00	.00	.00	.00	306
3	19	6.6	5.6	2.3	5.2	.00	.94	.00	.00	.00	.00	292
4	19	6.4	5.3	2.1	4.5	.15	.72	.00	.00	.00	.00	272
5	19	6.2	5.1	1.9	3.8	.37	.52	.00	.00	.00	.00	254
6	18	6.0	4.8	1.9	3.2	.33	.41	.00	.00	.00	.03	237
7	17	5.8	4.8	1.9	2.5	.25	.29	.00	.00	.00	.33	216
8	16	5.6	4.7	2.2	2.1	.17	.19	.00	.00	.00	1.0	200
9	15	5.4	4.6	2.2	1.8	.14	.13	.00	.00	.00	3.9	195
10	15	5.7	4.6	1.9	1.6	.12	.07	.00	.00	.00	18	197
11	14	5.4	4.6	1.8	1.4	.09	.01	.00	.00	.00	26	200
12	14	5.1	5.6	1.9	1.2	.06	.00	.00	.00	.00	28	199
13	13	5.2	6.5	1.8	1.0	.08	.00	.00	.00	.00	31	199
14	13	5.9	6.7	1.7	.92	.11	.00	.00	.00	.00	36	238
15	13	6.7	6.3	1.6	.86	.10	.00	.00	.00	.00	37	369
16	12	6.4	5.8	1.6	.75	.10	.00	.00	.00	.00	39	529
17	12	6.6	5.5	1.7	.65	.08	.00	.00	.00	.00	39	836
18	12	6.9	4.5	1.7	.57	.04	.00	.00	.00	.00	39	1160
19	12	7.0	3.8	1.7	.47	.13	.00	.00	.00	.00	40	1410
20	12	7.0	3.5	1.9	.41	.42	.00	.00	.00	.00	41	1590
21	11	6.8	3.2	1.8	.36	.46	.00	.00	.00	.00	41	1700
22	10	6.3	3.0	1.7	.29	.39	.00	.00	.00	.00	42	1790
23	9.7	6.3	2.9	1.5	.25	.31	.00	.00	.00	.00	54	1880
24	9.1	6.5	2.8	1.2	.22	.19	.00	.00	.00	.00	97	1950
25	8.7	6.9	2.7	1.0	.20	.11	.00	.00	.00	.00	151	2100
26	9.1	8.7	2.6	.92	.16	.04	.00	.00	.00	.00	205	2240
27	8.9	11	2.7	.87	.13	.00	.00	.00	.00	.00	247	2360
28	8.7	8.5	3.0	.80	.10	.00	.00	.00	.00	.00	279	2410
29	8.6	7.3	3.1	.73	---	.01	.00	.00	.00	.00	301	2430
30	8.3	6.7	3.0	.76	---	.59	.00	.00	.00	.00	312	2380
31	7.9	---	2.7	2.9	---	1.2	---	.00	---	.00	322	---
TOTAL	404.0	199.2	136.0	52.88	47.34	6.14	5.68	0.00	0.00	0.00	2430.26	30457
MEAN	13.0	6.64	4.39	1.71	1.69	.20	.19	.000	.000	.000	78.4	1015
MAX	20	11	6.7	2.9	6.5	1.2	1.3	.00	.00	.00	322	2430
MIN	7.9	5.1	2.6	.73	.10	.00	.00	.00	.00	.00	.00	195

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	657	295	256	321	338	491	410	169	162	356	662	886
MEAN	657	295	256	321	338	491	410	169	162	356	662	886
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	.20	.19	.000	.000	.000	8.31	26.1
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	1992	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1940 - 2001

ANNUAL TOTAL	3740.81	33738.50	
ANNUAL MEAN	10.2	92.4	417
HIGHEST ANNUAL MEAN			1551
LOWEST ANNUAL MEAN			24.9
HIGHEST DAILY MEAN	41	Aug 15	2430
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	May 19	.00
MAXIMUM PEAK FLOW			2450
MAXIMUM PEAK STAGE			9.38
10 PERCENT EXCEEDS	26		169
50 PERCENT EXCEEDS	6.8		1.2
90 PERCENT EXCEEDS	.00		.00
			8630
			13.78
			1060
			196
			43
			Mar 23 1960
			Mar 23 1960

* During water years 2000, 2001

02312500 WITHLACOCHEE 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 2000 TO SEPTEMBER 2001

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)	
NOV	15...	1230	.75	6.2	10	5.2	6.8	288	19.5	150	55	2.6	.4	5.0
DEC	28...	1350	.43	3.25	--	9.2	7.2	273	14.0	--	--	--	--	--
JAN	02...	1200	.38	2.4	5	10.2	7.1	--	9.5	140	51	2.4	.1	4.4
FEB	28...	1010	.11	.11	10	6.0	7.0	264	22.0	120	46	2.2	.3	4.3
SEP	19...	1529	8.05	1430	480	2.9	6.2	94	24.5	50	17	1.7	1.5	3.5
DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	
NOV	15...	139	8.7	<.10	4.0	7.1	178	.80	.05	.02	<.01	<.01	.03	3.9
DEC	28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN	02...	129	7.7	<.10	.8	6.1	153	.31	.05	<.02	<.01	<.01	.03	3.2
FEB	28...	119	7.4	<.10	.4	6.3	155	.45	.08	<.02	<.01	.03	.38	5.1
SEP	19...	E20c1	4.7	<.1	3.8	8.6	194	3.3	.52	.06	.02	.13	.15	59
DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	
NOV	15...	14	<1.0	<1.0	<1.0	10	38	<1	<1	3.5	7.3	<1.0	160	<2.0
DEC	28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN	02...	15	<1.0	<1	1.7	12	33	<1	<1	<1.0	2.3	<1	150	<2
FEB	28...	19	<1.0	<1	<1.0	19	76	<1	<1	11	20	<1	140	<2
SEP	19...	592	1.4	<1.0	2.1	988	1240	2.2	3.1	72	74	1.2	40	12

< -- Less than
E -- Estimated value
c1-- Holding time exceeded by the laboratory

WITHLACOCHEE RIVER BASIN

02312600 WITHLACOCHEE 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 mi², 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 sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	3.6
2	3.3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.36	11
3	2.9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.96	21
4	2.9	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.0	31
5	2.7	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.8	42
6	2.4	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.2	53
7	2.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.3	69
8	1.8	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.4	71
9	1.2	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.7	73
10	1.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.5	74
11	.89	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.2	75
12	.72	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.7	75
13	.59	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.4	75
14	.43	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.2	101
15	.29	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.9	174
16	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.7	181
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6	194
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6	239
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.2	355
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	529
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.0	698
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.1	845
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8	963
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4	1090
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	1300
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	1470
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.81	1620
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.55	1750
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.34	1860
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	1930
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.73	---
TOTAL	27.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.79	15972.6
MEAN	.87	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.12	532
MAX	3.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.5	1930
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	3.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	487	264	304	468	369	386	491	153	104	182	352	626						
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	.87	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	3.47						
(WY)	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000						

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	1136.24		16065.45			
ANNUAL MEAN	3.10		44.0		348	
HIGHEST ANNUAL MEAN					1180	
LOWEST ANNUAL MEAN					17.0	
HIGHEST DAILY MEAN	26	Jan 1	1930	Sep 30	4900	Jan 8 1998
LOWEST DAILY MEAN	.00	Apr 4-Sep 4	.00	Oct 17-Jul 31	*.00	
ANNUAL SEVEN-DAY MINIMUM	.00	Apr 4	.00	Oct 17	*.00	
MAXIMUM PEAK FLOW			1950		5010	
MAXIMUM PEAK STAGE			42.31		a45.24	
10 PERCENT EXCEEDS	12		3.4	Sep 30	815	Mar 25 1960
50 PERCENT EXCEEDS	.00		.00		145	
90 PERCENT EXCEEDS	.00		.00		3.7	

* During water years 1992, 2000, 2001
a Observed

WITHLACOCHEE RIVER BASIN

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02312600 WITHLACOCHEE RIVER NEAR FLORAL CITY, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.17	36.53	36.18	36.19	36.31	36.09	36.73	36.07	35.32	35.72	36.61	36.90
2	37.15	36.51	36.17	36.19	36.35	36.08	36.70	36.05	35.30	35.71	36.65	37.28
3	37.12	36.52	36.16	36.18	36.31	36.07	36.70	36.03	35.28	35.69	36.71	37.65
4	37.12	36.46	36.15	36.19	36.35	36.11	36.67	36.03	35.26	35.68	36.80	37.94
5	37.11	36.44	36.14	36.21	36.36	36.13	36.64	36.00	35.27	35.65	36.86	38.23
6	37.09	36.42	36.13	36.21	36.35	36.10	36.63	35.98	35.36	35.64	36.89	38.44
7	37.07	36.40	36.13	36.18	36.34	36.08	36.61	35.96	35.40	35.71	36.89	38.66
8	37.04	36.38	36.12	36.24	36.33	36.07	36.59	35.94	35.39	35.70	36.90	38.69
9	37.00	36.36	36.12	36.24	36.33	36.05	36.57	35.92	35.37	35.68	36.91	38.72
10	36.98	36.34	36.11	36.24	36.31	36.04	36.55	35.89	35.34	35.72	36.96	38.73
11	36.97	36.32	36.11	36.24	36.29	36.03	36.53	35.87	35.31	35.80	36.94	38.74
12	36.95	36.33	36.14	36.26	36.28	36.02	36.52	35.85	35.34	35.85	36.92	38.74
13	36.93	36.33	36.13	36.25	36.27	36.08	36.48	35.83	35.30	35.85	36.90	38.74
14	36.91	36.34	36.14	36.24	36.27	36.06	36.46	35.81	35.27	35.95	36.89	38.98
15	36.90	36.30	36.14	36.24	36.26	36.05	36.44	35.79	35.31	35.93	36.86	39.48
16	36.88	36.26	36.14	36.24	36.21	36.04	36.42	35.78	35.32	35.94	36.85	39.52
17	36.85	36.25	36.22	36.24	36.22	36.05	36.40	35.76	35.29	35.91	36.85	39.59
18	36.83	36.21	36.14	36.26	36.20	36.02	36.34	35.73	35.34	35.35	36.84	39.78
19	36.81	36.23	36.13	36.28	36.20	36.02	36.32	35.70	35.36	35.91	36.81	40.14
20	36.78	36.21	36.13	36.31	36.18	36.30	36.30	35.67	35.49	35.91	36.79	40.56
21	36.76	36.20	36.13	36.28	36.17	36.43	36.28	35.64	35.48	35.96	36.80	40.88
22	36.74	36.19	36.12	36.26	36.17	36.45	36.24	35.62	35.48	36.08	36.81	41.12
23	36.71	36.18	36.12	36.26	36.15	36.45	36.24	35.59	35.52	36.15	36.78	41.29
24	36.69	36.18	36.11	36.26	36.14	36.45	36.22	35.56	35.57	36.20	36.75	41.44
25	36.68	36.16	36.11	36.24	36.13	36.44	36.20	35.52	35.57	36.20	36.73	41.66
26	36.66	36.18	36.10	36.23	36.12	36.43	36.18	35.48	35.56	36.26	36.73	41.83
27	36.64	36.23	36.10	36.22	36.11	36.40	36.16	35.46	35.55	36.25	36.70	41.98
28	36.63	36.22	36.22	36.20	36.10	36.38	36.14	35.42	35.61	36.25	36.67	42.11
29	36.60	36.21	36.20	36.19	---	36.52	36.12	35.40	35.64	36.50	36.64	42.22
30	36.58	36.22	36.20	36.19	---	36.66	36.09	35.38	35.68	36.53	36.63	42.29
31	36.56	---	36.19	36.28	---	36.71	---	35.36	---	36.56	36.69	---
MEAN	36.87	36.30	36.14	36.23	36.24	36.22	36.42	35.74	35.41	35.94	36.80	39.74
MAX	37.17	36.53	36.22	36.31	36.36	36.71	36.73	36.07	35.68	36.56	36.96	42.29
MIN	36.56	36.16	36.10	36.18	36.10	36.02	36.09	35.36	35.26	35.35	36.61	36.90
CAL YR 2000	MEAN	36.73	MAX	38.10	MIN	35.36						
WTR YR 2001	MEAN	36.50	MAX	42.29	MIN	35.26						

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 2000 TO SEPTEMBER 2001

DATE	TIME	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)
SEP 18...	0833	282	7.8	22.9	3.5	12

WITHLACOCHEE RIVER BASIN

02312667 SHADY BROOK NEAR SUMTERVILLE, FL

LOCATION.--Lat 28°46'12", long 82°03'50", in NW¹/₄ 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 mi², 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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.8	5.8	5.5	8.7	5.3	18	7.7	4.9	6.0	18	13
2	11	6.6	5.7	5.5	7.6	5.2	16	7.5	4.9	5.6	18	13
3	11	6.5	5.7	5.5	7.0	5.2	15	7.4	4.5	5.3	21	15
4	11	6.4	5.6	5.4	6.9	6.9	14	7.4	4.4	5.1	24	15
5	11	6.4	5.5	5.3	6.9	6.7	14	7.1	5.2	5.7	26	29
6	11	6.4	5.3	5.3	6.6	6.0	13	6.9	5.7	6.7	28	52
7	11	6.2	5.2	5.5	6.6	5.7	13	6.7	5.3	6.5	28	49
8	11	6.2	5.0	6.0	6.5	5.4	13	6.7	5.1	6.7	22	37
9	10	6.0	5.0	5.9	6.4	5.3	12	6.5	4.9	6.1	19	29
10	10	6.6	4.9	5.5	6.4	5.3	12	6.3	4.6	6.4	18	24
11	9.8	6.4	4.9	5.6	6.4	5.3	12	6.2	4.8	6.6	17	23
12	9.7	6.1	5.8	5.7	6.4	5.1	12	6.0	5.2	6.3	16	23
13	9.6	6.0	5.7	5.6	6.3	5.5	11	6.5	4.7	8.2	15	23
14	9.3	5.9	5.5	5.5	6.2	5.7	11	6.8	4.5	8.1	15	50
15	9.1	5.9	5.4	5.5	6.2	5.4	11	6.1	4.5	6.9	15	106
16	8.9	5.9	5.3	5.6	6.2	5.4	11	5.8	4.3	6.1	16	105
17	8.7	5.9	7.2	5.5	6.2	5.5	10	5.5	4.2	5.8	17	93
18	8.5	5.7	6.4	5.5	6.1	5.4	10	5.3	4.3	5.7	17	91
19	8.4	5.7	6.2	5.6	6.0	20	9.9	5.3	4.6	5.7	17	87
20	8.2	5.7	6.1	5.8	5.9	38	9.6	5.3	5.7	5.9	19	86
21	8.3	5.7	5.8	5.9	5.8	20	9.4	5.1	8.0	8.2	17	92
22	8.2	5.7	5.6	5.8	5.7	15	9.0	5.0	6.2	14	16	96
23	8.1	5.6	5.4	5.8	5.7	13	8.9	4.9	6.7	19	15	98
24	7.9	5.5	5.3	5.7	5.6	12	8.8	4.8	7.0	15	14	97
25	7.8	5.6	5.3	5.8	5.5	12	8.7	4.6	6.3	13	13	97
26	7.9	6.9	5.2	5.7	5.5	11	8.9	4.6	5.5	16	14	96
27	7.7	7.5	5.2	5.5	5.3	11	8.5	4.4	5.8	25	13	93
28	7.4	6.6	6.0	5.5	5.3	11	8.2	4.7	6.5	36	13	91
29	7.3	6.1	6.3	5.7	---	13	7.9	4.9	6.3	23	17	91
30	7.2	5.9	5.9	5.7	---	26	7.8	4.6	6.6	19	15	93
31	7.1	---	5.6	7.1	---	22	---	4.4	---	18	14	---
TOTAL	283.1	184.4	173.8	175.5	175.9	324.3	333.6	181.0	161.2	331.6	547	1907
MEAN	9.13	6.15	5.61	5.66	6.28	10.5	11.1	5.84	5.37	10.7	17.6	63.6
MAX	11	7.5	7.2	7.1	8.7	38	18	7.7	8.0	36	28	106
MIN	7.1	5.5	4.9	5.3	5.3	5.1	7.8	4.4	4.2	5.1	13	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	35.3	28.5	28.0	38.6	40.2	47.9	45.8	28.0	30.4	36.7	38.0	40.3
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	.68	3.19	5.22
(WY)	1994	1991	1991	1991	1991	1992	1992	1992	1992	1992	1992	1997

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1982 - 2001

ANNUAL TOTAL	2960.6	4778.4	
ANNUAL MEAN	8.09	13.1	36.5
HIGHEST ANNUAL MEAN			127 1982
LOWEST ANNUAL MEAN			5.39 1992
HIGHEST DAILY MEAN		106 Sep 15	243 Jul 8 1982
LOWEST DAILY MEAN	2.7 Jun 8	4.2 Jun 17	.38 Jul 27,30 1992
ANNUAL SEVEN-DAY MINIMUM	2.8 Jun 5	4.4 Jun 13	.39 Jul 24 1992
MAXIMUM PEAK FLOW		110 Sep 15	340 Apr 23 1983
MAXIMUM PEAK STAGE		49.44 Sep 15	50.76 Apr 23 1983
INSTANTANEOUS LOW FLOW		4.1 Jun 18	*.38
10 PERCENT EXCEEDS	15	22	90
50 PERCENT EXCEEDS	6.6	6.5	22
90 PERCENT EXCEEDS	3.7	5.2	4.6

* Jul 24, 25-31

02312700 OUTLET RIVER AT PANACOCHEE RETREATS, FL

LOCATION.--Lat 28°49'01", long 82°08'40", in SE 1/4 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 mi², 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 sea level (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 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 LAKE ELEVATIONS.

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	49	29	23	23	25	22	59	29	13	28	62	e52
2	50	29	22	22	25	19	62	28	15	26	61	e52
3	50	28	22	22	25	16	62	27	12	25	65	e53
4	48	28	22	21	25	22	60	27	12	23	69	e53
5	48	27	21	22	24	20	60	25	16	23	73	58
6	48	28	21	22	24	17	59	25	15	26	76	60
7	47	27	20	22	25	16	57	23	16	25	77	65
8	45	27	20	24	25	17	55	24	15	25	76	68
9	41	26	20	22	24	18	53	22	13	24	76	70
10	41	24	20	23	23	18	53	22	10	24	77	70
11	41	24	22	23	23	19	53	22	15	25	76	72
12	40	23	24	22	23	20	51	20	23	25	74	75
13	39	23	23	22	22	23	49	19	21	29	73	77
14	38	22	22	23	22	22	47	20	21	33	71	83
15	37	21	23	23	21	21	46	24	21	34	70	117
16	37	22	23	23	21	22	44	22	19	33	70	135
17	37	22	22	23	19	21	40	21	18	36	69	140
18	37	22	22	23	19	22	39	21	20	43	68	142
19	37	22	22	23	19	31	41	20	23	41	e66	143
20	36	20	20	19	19	41	40	19	23	40	e69	143
21	36	19	22	20	18	40	39	18	22	44	e65	144
22	35	20	22	19	17	41	37	17	22	51	62	146
23	34	21	21	20	18	42	36	16	24	61	53	150
24	33	22	21	23	19	41	33	16	25	59	50	152
25	32	23	21	21	17	40	33	15	25	57	55	155
26	32	23	22	21	17	39	35	13	25	57	56	159
27	31	23	21	22	18	38	34	8.7	26	59	e55	164
28	31	23	23	22	19	38	33	12	28	61	e53	170
29	31	23	22	21	---	44	33	14	27	62	51	177
30	31	24	22	21	---	56	31	10	28	60	51	187
31	30	---	22	24	---	62	---	7.7	---	60	51	---
TOTAL	1202	715	673	681	596	908	1374	607.4	593	1219	2020	3332
MEAN	38.8	23.8	21.7	22.0	21.3	29.3	45.8	19.6	19.8	39.3	65.2	111
MAX	50	29	24	24	25	62	62	29	28	62	77	187
MIN	30	19	20	19	17	16	31	7.7	10	23	50	52
CFSM	.09	.06	.05	.05	.05	.07	.11	.05	.05	.09	.16	.26
IN.	.11	.06	.06	.06	.05	.08	.12	.05	.05	.11	.18	.30

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

	208	158	144	168	194	199	194	147	138	153	186	212
MEAN	208	158	144	168	194	199	194	147	138	153	186	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	40.5	19.6	19.8	5.94	29.1	40.0
(WY)	1964	1998	1998	2001	2001	2001	2000	2001	2001	1963	1963	1997

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1963 - 2001

ANNUAL TOTAL	15310	13920.4	
ANNUAL MEAN	41.8	38.1	175
HIGHEST ANNUAL MEAN			360
LOWEST ANNUAL MEAN			38.1
HIGHEST DAILY MEAN	91	Jan 1	187
LOWEST DAILY MEAN	11	Jun 6	7.7
ANNUAL SEVEN-DAY MINIMUM	15	Jun 5	11
MAXIMUM PEAK FLOW			192
MAXIMUM PEAK STAGE			39.10
INSTANTANEOUS LOW FLOW			4.4
ANNUAL RUNOFF (CFSM)	.10	.091	.42
ANNUAL RUNOFF (INCHES)	1.36	1.23	5.66
10 PERCENT EXCEEDS	75	69	320
50 PERCENT EXCEEDS	37	25	150
90 PERCENT EXCEEDS	22	19	59

e Estimated
* June 27 to July 15, 1963 temporary dam in place
a From floodmark

WITHLACOCHEE RIVER BASIN

02312700 OUTLET RIVER AT PANACOCHEE RETREATS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1908, 1966 to current year.

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV 21...	0840	37.16	21	--	5.9	7.9	263	13.0	--	--	--	--	--
JAN 10...	1333	37.10	25	--	10	8.5	295	12.5	--	--	--	--	--
MAR 21...	1505	37.28	37	--	13	8.3	302	19.0	--	--	--	--	--
MAY 04...	0930	37.28	25	--	8.6	8.1	325	23.0	--	--	--	--	--
JUL 18...	0905	37.37	43	--	7.8	7.4	302	29.5	--	--	--	--	--
JUL 26...	0915	37.58	56	<5	--	--	--	--	130	43	6.5	1.5	7.1
SEP 06...	0945	37.74	--	10	5.6	8.3	275	29.5	120	40	5.0	.8	5.3

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
JUL 26...	51	12	.1	23	74	E221c1	1.2	.01	.02	<.01	<.01	<.02	8.3
SEP 06...	58	9.3	.1	18	60	E210c1	1.1	.05	<.02	<.01	<.01	<.02	8.9

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
JUL 26...	<3.0	<1.0	<1.0	<1.0	9.8	13	<1.0	<1.0	7.7	7.3	<.1	<1.0	410
SEP 06...	<3.0	<1.0	<1.0	<1.0	5.3	12	<1.0	<1.0	2.6	5.9	--	<1.0	410

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUL 26...	<2.0
SEP 06...	<2.0

< -- Less than
 E -- Estimated value
 cl-- Holding time exceeded by the laboratory

WITHLACOCHEE RIVER BASIN

337

02312720 WITHLACOCHEE 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 mi², approximately.

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 sea level (Florida Department of Transportation bench mark).

REMARKS.--Records fair except for period of estimated daily discharge, which is 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	45	33	32	40	18	90	35	17	37	85	e76
2	67	45	33	32	38	19	83	33	18	35	90	e78
3	66	45	33	31	37	19	84	31	16	33	86	e79
4	66	44	32	31	38	24	83	30	16	30	95	e90
5	64	43	31	30	36	25	82	28	24	28	97	e100
6	62	43	30	29	35	21	81	29	30	29	106	e110
7	61	43	30	30	35	20	77	30	26	32	114	124
8	62	42	30	34	35	20	76	27	25	32	113	142
9	62	40	30	33	35	20	76	24	24	29	108	149
10	60	41	30	32	34	20	76	23	23	29	100	152
11	60	38	30	33	33	21	76	22	22	31	95	159
12	59	38	31	33	32	20	74	22	24	32	94	167
13	59	37	31	32	32	23	73	21	24	44	93	173
14	56	36	30	32	32	23	67	19	27	42	95	242
15	55	35	30	32	30	22	64	20	27	39	89	384
16	54	35	31	32	29	22	61	21	27	37	88	397
17	53	35	33	32	29	23	58	19	23	44	e87	403
18	52	34	32	31	29	25	52	20	23	53	e86	405
19	52	34	32	32	28	54	54	19	31	47	e85	414
20	52	32	31	33	27	72	60	18	30	51	e90	436
21	52	31	31	30	25	63	55	19	30	59	e84	476
22	52	30	31	30	24	57	49	18	34	68	e78	530
23	51	29	30	29	24	53	47	16	32	87	e72	595
24	51	30	31	29	24	52	46	15	34	76	e68	657
25	51	33	30	28	23	52	41	14	35	81	e76	729
26	49	35	30	28	22	49	38	14	40	82	e84	795
27	49	36	30	28	21	49	40	14	37	85	e86	862
28	47	35	33	28	20	52	40	16	35	89	e80	926
29	47	34	33	29	---	63	40	17	34	98	e74	994
30	46	34	32	29	---	103	38	16	36	94	e74	1050
31	46	---	32	36	---	101	---	17	---	89	e75	---
TOTAL	1730	1112	966	960	847	1205	1881	667	824	1642	2747	11894
MEAN	55.8	37.1	31.2	31.0	30.2	38.9	62.7	21.5	27.5	53.0	88.6	396
MAX	67	45	33	36	40	103	90	35	40	98	114	1050
MIN	46	29	30	28	20	18	38	14	16	28	68	76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	834	518	456	620	662	733	685	399	334	496	671	857
MEAN	834	518	456	620	662	733	685	399	334	496	671	857
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1966 - 2001

ANNUAL TOTAL	21819	26475	605	1998
ANNUAL MEAN	59.6	72.5	72.5	2001
HIGHEST ANNUAL MEAN			1510	1998
LOWEST ANNUAL MEAN			72.5	2001
HIGHEST DAILY MEAN	158	Jan 8	1050	Sep 30
LOWEST DAILY MEAN	15	Jun 4,6-8,10	14	May 25-27
ANNUAL SEVEN-DAY MINIMUM	15	Jun 4	15	May 23
MAXIMUM PEAK STAGE			37.95	Sep 30
10 PERCENT EXCEEDS	135		95	1330
50 PERCENT EXCEEDS	44		35	416
90 PERCENT EXCEEDS	30		22	121

e Estimated

WITHLACOCHEE RIVER BASIN

02312720 WITHLACOCHEE RIVER AT WYSONG DAM, AT CARLSON, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.07	34.90	34.78	34.72	34.80	34.58	35.26	34.93	34.66	34.84	35.16	---
2	35.06	34.89	34.77	34.72	34.79	34.60	35.21	34.91	34.68	34.82	35.19	---
3	35.06	34.89	34.77	34.71	34.78	34.59	35.22	34.90	34.66	34.80	35.16	---
4	35.06	34.89	34.76	34.70	34.79	34.65	35.22	34.89	34.66	34.77	35.22	---
5	35.04	34.88	34.75	34.70	34.77	34.67	35.22	34.87	34.75	34.75	35.23	---
6	35.02	34.88	34.74	34.69	34.76	34.63	35.21	34.88	34.82	34.75	35.28	---
7	35.02	34.88	34.74	34.69	34.76	34.61	35.19	34.87	34.77	34.77	35.32	35.33
8	35.02	34.87	34.73	34.73	34.76	34.61	35.18	34.84	34.75	34.78	35.32	35.42
9	35.02	34.86	34.73	34.72	34.76	34.61	35.19	34.81	34.75	34.75	35.29	35.45
10	35.01	34.87	34.73	34.71	34.74	34.61	35.19	34.80	34.74	34.74	35.24	35.47
11	35.01	34.84	34.73	34.71	34.74	34.62	35.20	34.78	34.72	34.76	35.21	35.51
12	35.00	34.84	34.74	34.72	34.73	34.61	35.19	34.78	34.74	34.77	35.20	35.54
13	35.00	34.83	34.74	34.71	34.73	34.65	35.18	34.77	34.73	34.89	35.19	35.57
14	34.99	34.82	34.73	34.71	34.73	34.65	35.14	34.74	34.77	34.86	35.20	35.85
15	34.98	34.81	34.72	34.71	34.71	34.64	35.12	34.75	34.77	34.84	35.16	36.35
16	34.97	34.81	34.73	34.71	34.70	34.64	35.11	34.76	34.77	34.81	35.16	36.39
17	34.96	34.81	34.75	34.71	34.70	34.65	35.08	34.73	34.72	34.87	35.15	36.41
18	34.96	34.80	34.73	34.71	34.70	34.68	35.04	34.74	34.72	34.95	---	36.41
19	34.95	34.80	34.74	34.72	34.70	34.93	35.06	34.72	34.80	34.90	---	36.44
20	34.95	34.78	34.73	34.72	34.69	35.09	35.11	34.72	34.80	34.94	---	36.50
21	34.95	34.76	34.73	34.70	34.67	35.03	35.08	34.72	34.79	34.99	---	36.62
22	34.95	34.76	34.73	34.70	34.65	34.99	35.03	34.70	34.83	35.06	---	36.76
23	34.95	34.75	34.72	34.69	34.64	34.97	35.01	34.68	34.81	35.19	---	36.93
24	34.95	34.76	34.72	34.68	34.65	34.95	35.01	34.66	34.83	35.12	---	37.08
25	34.94	34.78	34.71	34.68	34.64	34.95	34.97	34.64	34.84	35.15	---	37.24
26	34.93	34.79	34.71	34.67	34.62	34.94	34.94	34.64	34.88	35.15	---	37.39
27	34.93	34.81	34.71	34.68	34.61	34.94	34.97	34.63	34.85	35.17	---	37.53
28	34.91	34.80	34.74	34.68	34.60	34.97	34.97	34.66	34.83	35.19	---	37.66
29	34.91	34.79	34.74	34.68	---	35.06	34.96	34.68	34.82	35.25	---	37.80
30	34.91	34.78	34.73	34.68	---	35.32	34.96	34.66	34.84	35.22	---	37.91
31	34.90	---	34.72	34.76	---	35.31	---	34.67	---	35.19	---	---
MEAN	34.98	34.82	34.74	34.70	34.71	34.80	35.11	34.76	34.77	34.94	35.22	36.48
MAX	35.07	34.90	34.78	34.76	34.80	35.32	35.26	34.93	34.88	35.25	35.32	37.91
MIN	34.90	34.75	34.71	34.67	34.60	34.58	34.94	34.63	34.66	34.74	35.15	35.33
CAL YR 2000	MEAN	35.28	MAX	36.26	MIN	34.71						
WTR YR 2001	MEAN	34.97	MAX	37.91	MIN	34.58						

02312720 WITHLACOCHEE 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 2000 TO SEPTEMBER 2001

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 21...	1045	28	34.76	289	7.4	16.5	9.6	--
JAN 10...	1600	32	34.71	393	7.6	11.0	8.4	--
MAR 21...	1250	59	35.03	733	7.2	17.5	10.5	--
MAY 04...	1350	31	34.90	348	8.0	26.0	8.7	--
JUL 18...	1358	52	34.94	387	8.5	33.0	10.4	--
JUL 26...	1102	78	35.13	--	--	--	--	8.8
SEP 06...	1230	102	35.20	972	7.4	28.9	3.3	11

WITHLACOCHEE RIVER BASIN

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.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is at sea level (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 ft³/s, around structure or gates. No gage height record published for 2001 water year. Water level below lowest recordable stage.

COOPERATION.--Gate-opening record provided by Southwest Florida Water Management District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	17.5	2.61	5.33	9.99	11.3	24.2	21.9	8.76	9.45	25.2	17.4	26.1														
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000														
(WY)	1982	1973	1973	1973	1973	1982	1982	1982	1982	1985	1993	1993														

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1968 - 2001

ANNUAL MEAN										15.1		
HIGHEST ANNUAL MEAN										86.0		1968
LOWEST ANNUAL MEAN										.000		2000
HIGHEST DAILY MEAN										410		Sep 4 1968
LOWEST DAILY MEAN				.00	Many days		.00	Many days		.00		Many days
ANNUAL SEVEN-DAY MINIMUM				.00	Jan 1		.00	Oct 1		.00		Many days
MAXIMUM PEAK STAGE				36.50	Oct 9					40.22		Feb 17 1998
10 PERCENT EXCEEDS				.00			.00			42		
50 PERCENT EXCEEDS				.00			.00			.10		
90 PERCENT EXCEEDS				.00			.00			.00		

WITHLACOCHEE RIVER BASIN

02313000 WITHLACOCHEE RIVER NEAR HOLDER, FL

LOCATION.--Lat 28°59'19", long 82°20'59", in NW¹/₄ 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 mi², 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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	59	45	98	132	56	166	77	86	137	206	144
2	99	60	49	97	125	53	148	74	96	146	202	161
3	92	64	51	97	94	53	142	79	96	116	213	183
4	93	69	50	88	70	72	140	83	92	98	246	193
5	93	73	51	84	69	92	133	85	101	83	284	191
6	89	71	52	84	75	82	127	83	129	68	374	192
7	81	57	52	81	81	66	121	86	131	66	272	177
8	75	49	53	92	85	53	119	88	127	52	224	166
9	60	47	53	97	92	43	116	88	119	47	191	163
10	57	62	57	81	97	39	109	87	113	59	184	162
11	62	55	58	71	93	36	104	85	106	83	200	153
12	69	53	64	71	91	33	105	88	108	106	209	149
13	75	54	63	65	90	47	108	91	102	150	208	158
14	82	58	70	63	88	53	112	88	92	163	208	282
15	87	59	75	63	86	53	114	85	90	170	210	629
16	82	59	78	64	83	59	114	87	85	172	222	568
17	72	62	99	64	82	56	110	85	76	173	225	528
18	65	56	85	67	76	50	102	83	70	202	207	501
19	57	62	85	69	68	110	95	81	71	199	185	494
20	55	62	86	88	67	184	90	80	74	201	168	506
21	59	64	83	79	68	148	87	80	78	230	143	526
22	62	59	85	78	69	104	88	85	90	269	125	549
23	65	59	82	78	63	82	86	85	118	272	125	578
24	69	54	83	75	56	79	87	81	127	261	119	632
25	70	67	83	76	60	84	94	81	124	222	112	789
26	70	82	81	74	63	93	95	82	123	212	102	801
27	71	79	82	78	59	94	90	83	137	214	95	800
28	63	60	93	75	59	92	84	82	126	227	87	810
29	55	51	102	77	---	105	79	87	133	249	97	839
30	53	45	104	85	---	151	76	87	139	222	115	881
31	57	---	102	108	---	173	---	84	---	204	135	---
TOTAL	2243	1811	2256	2467	2241	2495	3241	2600	3159	5073	5693	12905
MEAN	72.4	60.4	72.8	79.6	80.0	80.5	108	83.9	105	164	184	430
MAX	104	82	104	108	132	184	166	91	139	272	374	881
MIN	53	45	45	63	56	33	76	74	70	47	87	144
CFSM	.04	.03	.04	.04	.04	.04	.06	.05	.06	.09	.10	.24
IN.	.05	.04	.05	.05	.05	.05	.07	.05	.06	.10	.12	.26

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

MEAN	1607	1032	792	847	888	996	979	649	568	844	1220	1608
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1928 - 2001

ANNUAL TOTAL	40395	46184	
ANNUAL MEAN	110	127	1005
HIGHEST ANNUAL MEAN			3374
LOWEST ANNUAL MEAN			127
HIGHEST DAILY MEAN	258	Jan 2	8660
LOWEST DAILY MEAN	39	Jul 9	33
ANNUAL SEVEN-DAY MINIMUM	48	Jul 3	43
MAXIMUM PEAK FLOW			911
MAXIMUM PEAK STAGE			3.21
INSTANTANEOUS LOW FLOW			28
ANNUAL RUNOFF (CFSM)	.061	.070	.55
ANNUAL RUNOFF (INCHES)	.83	.94	7.50
10 PERCENT EXCEEDS	205	209	2120
50 PERCENT EXCEEDS	91	87	692
90 PERCENT EXCEEDS	57	56	247

WITHLACOCHEE RIVER BASIN

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02313000 WITHLACOCHEE RIVER NEAR HOLDER, FL--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.49	.34	.28	.48	.66	.55	.97	.47	.40	.51	.76	.56
2	.47	.35	.30	.48	.64	.55	.90	.45	.43	.54	.74	.62
3	.44	.36	.31	.48	.52	.56	.87	.46	.43	.42	.79	.71
4	.45	.38	.30	.44	.44	.64	.86	.48	.41	.35	.91	.75
5	.45	.40	.31	.42	.44	.73	.83	.48	.44	.29	1.04	.75
6	.43	.39	.31	.43	.47	.70	.80	.47	.55	.22	1.37	.75
7	.41	.34	.31	.41	.50	.64	.77	.47	.56	.21	1.01	.69
8	.39	.30	.32	.46	.53	.59	.75	.48	.54	.15	.84	.65
9	.33	.29	.32	.48	.56	.56	.74	.47	.50	.13	.71	.64
10	.31	.36	.33	.41	.59	.55	.71	.47	.48	.17	.69	.64
11	.34	.32	.34	.37	.58	.54	.68	.45	.45	.27	.75	.60
12	.36	.32	.36	.37	.58	.53	.68	.46	.45	.36	.78	.59
13	.39	.32	.36	.35	.58	.60	.69	.47	.43	.53	.78	.63
14	.41	.35	.39	.34	.58	.62	.69	.46	.38	.58	.78	1.08
15	.44	.35	.40	.34	.58	.62	.70	.44	.37	.61	.78	2.28
16	.42	.35	.41	.34	.57	.64	.69	.44	.35	.62	.84	2.07
17	.38	.37	.50	.33	.58	.62	.68	.44	.31	.63	.85	1.94
18	.35	.34	.44	.35	.56	.59	.64	.42	.28	.74	.79	1.85
19	.31	.36	.44	.35	.53	.82	.60	.41	.28	.73	.70	1.82
20	.32	.37	.44	.43	.53	1.10	.58	.41	.29	.73	.64	1.87
21	.33	.37	.43	.39	.55	.96	.56	.41	.31	.84	.54	1.94
22	.34	.35	.44	.39	.56	.79	.56	.42	.35	.98	.47	2.02
23	.36	.35	.43	.39	.54	.70	.55	.42	.46	.99	.48	2.12
24	.37	.33	.43	.38	.52	.68	.54	.40	.49	.95	.45	2.30
25	.38	.38	.43	.39	.54	.69	.57	.40	.48	.81	.42	2.81
26	.38	.44	.42	.39	.56	.72	.57	.40	.47	.77	.40	2.85
27	.38	.43	.42	.41	.55	.72	.54	.40	.52	.79	.37	2.85
28	.35	.35	.47	.41	.56	.71	.52	.39	.48	.84	.34	2.88
29	.31	.31	.50	.42	---	.76	.49	.41	.50	.92	.38	2.98
30	.31	.28	.51	.46	---	.92	.47	.41	.52	.82	.45	3.12
31	.32	---	.50	.56	---	1.01	---	.40	---	.75	.52	---
MEAN	.38	.35	.39	.41	.55	.69	.67	.44	.43	.59	.69	1.58
MAX	.49	.44	.51	.56	.66	1.10	.97	.48	.56	.99	1.37	3.12
MIN	.31	.28	.28	.33	.44	.53	.47	.39	.28	.13	.34	.56
CAL YR 2000	MEAN	.45	MAX	.77	MIN	.19						
WTR YR 2001	MEAN	.60	MAX	3.12	MIN	.13						

WITHLACOCHEE RIVER BASIN

02313100 RAINBOW SPRINGS NEAR DUNNELLO, FL

LOCATION.--Lat 29°06'08", long 82°26'16", in SE $\frac{1}{4}$ 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.

WATER-DISCHARGE RECORDS

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 sea level (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, $\frac{1}{4}$ 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	518	531	538	528	520	509	524	502	480	480	509	569
2	517	532	537	528	522	509	522	500	482	480	512	569
3	518	533	535	528	520	509	522	501	479	478	515	574
4	519	534	534	529	519	510	521	502	477	476	521	577
5	522	534	535	528	518	512	522	501	480	476	524	576
6	521	533	535	526	517	512	522	498	483	474	530	577
7	523	533	535	525	516	511	520	496	507	473	535	578
8	523	533	533	525	516	510	519	500	484	472	535	578
9	521	535	533	525	516	510	519	497	483	470	537	576
10	523	536	532	524	517	509	517	497	480	471	537	575
11	522	537	532	524	514	506	516	496	478	474	539	575
12	524	536	531	523	514	506	517	495	479	476	544	575
13	524	536	530	521	515	508	516	494	477	481	546	576
14	526	537	532	518	515	512	516	492	477	483	549	581
15	527	536	531	517	516	513	515	493	475	483	551	589
16	527	538	533	517	515	512	514	491	474	482	555	595
17	527	537	532	515	515	512	513	492	472	482	559	597
18	526	537	533	517	512	509	511	489	470	486	560	599
19	528	538	533	517	512	514	511	489	470	487	561	599
20	527	536	532	517	511	521	511	488	473	489	560	601
21	528	537	533	517	512	522	509	485	475	495	560	602
22	527	537	531	517	512	521	507	486	498	497	559	606
23	527	539	531	516	511	519	507	485	478	499	560	612
24	529	540	529	515	511	518	506	485	478	500	560	616
25	529	541	528	515	508	517	507	483	476	500	561	621
26	532	542	529	514	508	517	509	483	474	501	563	623
27	530	543	528	514	508	517	507	481	475	501	562	626
28	531	541	532	512	508	519	506	480	477	504	562	626
29	531	539	531	513	---	522	503	480	501	507	563	625
30	530	539	530	514	---	526	502	479	480	507	566	623
31	531	---	529	516	---	527	---	480	---	507	566	---
TOTAL	16288	16100	16497	16115	14398	15939	15411	15220	14392	15091	16961	17816
MEAN	525	537	532	520	514	514	514	491	480	487	547	594
MAX	532	543	538	529	522	527	524	502	507	507	566	626
MIN	517	531	528	512	508	506	502	479	470	470	509	569

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001			
MEAN	755	737	715	702	690	692	693	679	670	680	703	739																												
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001	
ANNUAL TOTAL	195198		190228			
ANNUAL MEAN	533		521		704	
HIGHEST ANNUAL MEAN					897	
LOWEST ANNUAL MEAN					521	
HIGHEST DAILY MEAN	576		Jan 1		1060	
LOWEST DAILY MEAN	489		Jun 11		a470	
ANNUAL SEVEN-DAY MINIMUM	491		Jun 5		473	
MAXIMUM PEAK FLOW					*1230	
MAXIMUM PEAK STAGE			2.13		Sep 20	
INSTANTANEOUS LOW FLOW					*460	
10 PERCENT EXCEEDS	561		561		863	
50 PERCENT EXCEEDS	534		518		686	
90 PERCENT EXCEEDS	503		480		570	

* Measured
a Jun 18, 19, Jul 9, 2001

WITHLACOCHEE RIVER BASIN

02313200 WITHLACOCHEE RIVER AT DUNNELLO, FL

LOCATION.--Lat 29°02'45", long 82°27'53", in NW¹/₄ 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 mi², approximately.

PERIOD OF RECORD.--February 1963 to current year (gage heights only).

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

GAGE.--Water-stage recorder. Datum of gage is at sea level. Prior to Oct. 4, 2000, nonrecording gage at same site and datum.

REMARKS.--Stage regulated by Lake Rousseau.

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 stage since at least 1931, 33.0 ft in April 1960, from floodmarks.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	27.77	27.72	27.68	27.90	28.06	27.99	28.12	27.89	---	27.89	28.02	27.89	
2	27.77	27.73	27.69	27.89	28.03	27.99	28.12	27.87	27.86	27.92	28.01	27.95	
3	27.77	27.75	27.69	27.89	27.91	28.00	28.13	27.87	27.86	27.79	28.04	28.03	
4	27.75	27.77	27.69	27.85	27.82	28.07	28.15	27.88	27.85	27.71	28.15	28.07	
5	27.74	27.79	27.70	27.84	27.83	28.13	28.13	27.89	27.88	27.66	28.19	28.04	
6	27.73	27.79	27.71	27.84	27.87	28.11	28.11	27.89	27.99	27.60	28.33	27.98	
7	27.71	27.73	27.71	27.83	27.92	28.07	28.09	27.89	27.98	27.57	28.15	27.91	
8	27.69	27.69	27.72	27.87	27.95	28.03	28.08	27.89	27.96	27.53	28.00	27.84	
9	27.64	27.68	27.72	27.87	27.98	28.00	28.06	27.89	27.93	27.51	27.90	27.78	
10	27.64	27.73	27.74	27.82	28.01	27.99	28.04	27.88	27.90	27.56	27.89	27.73	
11	27.66	27.71	27.75	27.78	28.01	27.98	28.03	27.87	27.88	27.66	27.97	27.66	
12	27.69	27.70	27.76	27.77	28.01	27.98	28.02	27.87	27.88	27.75	28.02	27.62	
13	27.73	27.72	27.76	27.74	28.01	28.04	28.01	27.88	27.85	27.93	28.04	27.63	
14	27.76	27.74	27.79	27.73	28.01	28.07	28.02	27.87	27.82	27.98	28.06	27.86	
15	27.78	27.74	27.81	27.74	28.00	28.06	28.03	27.86	27.79	28.01	28.08	28.31	
16	27.77	27.75	27.83	27.74	28.00	28.07	28.03	27.86	27.76	28.02	28.12	28.15	
17	27.73	27.76	27.90	27.74	28.01	28.05	28.01	27.85	27.73	28.03	28.13	27.96	
18	27.70	27.74	27.86	27.75	27.99	28.02	28.00	---	27.71	28.11	28.06	27.83	
19	27.68	27.76	27.85	27.77	27.97	28.19	28.00	---	27.70	28.11	27.98	27.85	
20	27.68	27.76	27.85	27.82	27.97	28.34	27.99	---	27.71	28.11	27.90	27.99	
21	27.69	27.76	27.84	27.80	27.98	28.22	27.98	---	27.72	28.18	27.81	28.12	
22	27.70	27.76	27.85	27.79	27.99	28.09	27.98	---	27.75	28.23	27.73	28.20	
23	27.71	27.76	27.84	27.79	27.98	28.04	27.97	---	27.87	28.22	27.75	28.26	
24	27.73	27.75	27.84	27.78	27.97	28.03	27.97	---	27.89	28.19	27.73	28.31	
25	27.74	27.79	27.84	27.80	27.98	28.06	27.96	---	27.87	28.08	27.70	28.42	
26	27.75	27.84	27.84	27.80	28.00	28.09	27.95	---	27.84	28.08	27.66	28.38	
27	27.75	27.82	27.84	27.82	27.99	28.10	27.94	---	27.89	28.08	27.64	28.21	
28	27.72	27.74	27.88	27.83	27.99	28.10	27.93	---	27.87	28.09	27.63	28.05	
29	27.69	27.69	27.91	27.85	---	28.14	27.92	---	27.88	28.13	27.68	28.01	
30	27.69	27.67	27.92	27.90	---	28.20	27.91	---	27.90	28.08	27.77	28.02	
31	27.70	---	27.91	27.98	---	28.14	---	---	---	28.04	27.85	---	
MEAN	27.72	27.74	27.80	27.82	27.97	28.08	28.02	27.88	27.85	27.93	27.94	28.00	
MAX	27.78	27.84	27.92	27.98	28.06	28.34	28.15	27.89	27.99	28.23	28.33	28.42	
MIN	27.64	27.67	27.68	27.73	27.82	27.98	27.91	27.85	27.70	27.51	27.63	27.62	
WTR YR 2001	MEAN	27.90	MAX	28.42	MIN	27.51							

WITHLACOCHEE RIVER BASIN

02313200 WITHLACOCHEE RIVER AT DUNNELLO, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-87, 1993, 1995 to current year.

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

DATE	TIME	GAGE HEIGHT (FEET) (00065)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
NOV 22...	1410	27.75	5.8	7.2	270	19.0	--
JAN 23...	1650	27.78	9.2	7.4	269	19.5	--
MAR 13...	1329	28.08	5.4	7.1	282	22.5	--
MAY 10...	1209	27.89	7.4	6.6	272	23.5	--
JUL 26...	1250	28.03	5.8	7.2	270	26.0	2.2
AUG 30...	1530	27.78	9.2	7.9	296	26.0	1.7

WITHLACOCHEE RIVER BASIN

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02313230 WITHLACOCHEE RIVER AT INGLIS DAM, NEAR DUNNELLO, FL

LOCATION.--Lat 29°00'35", long 82°37'01", in SW¹/₄ 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 mi², 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 sea level. 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 ft³/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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	70	70	70	70	70	70	70	70	70	460	70
2	70	70	70	70	70	70	70	70	70	70	460	70
3	70	70	70	209	70	70	70	70	70	70	460	70
4	70	70	70	152	70	70	70	70	70	70	460	134
5	70	70	70	70	70	70	70	70	70	70	460	290
6	70	201	70	70	70	70	70	70	70	70	599	290
7	70	146	70	70	70	70	70	70	70	70	792	290
8	70	70	70	70	70	70	70	70	70	70	599	290
9	70	70	70	70	70	70	70	70	70	70	382	290
10	70	70	70	70	70	70	70	70	70	70	290	290
11	70	70	70	70	70	70	70	70	70	70	290	290
12	70	70	70	70	70	70	70	70	70	70	290	244
13	70	70	70	70	70	70	70	70	70	70	290	265
14	70	70	70	70	70	70	70	70	70	70	290	479
15	70	70	70	70	70	70	70	70	70	70	290	1130
16	70	70	70	70	70	70	70	70	70	70	290	1300
17	70	139	70	70	70	70	70	70	70	70	375	1250
18	70	70	132	70	70	70	70	70	70	70	460	918
19	70	70	70	70	70	70	70	70	70	70	460	640
20	70	70	70	70	70	70	70	70	70	70	460	460
21	70	70	70	70	70	70	70	70	70	70	368	522
22	70	70	70	70	70	70	70	70	70	70	290	624
23	70	70	70	70	70	70	70	70	70	302	290	624
24	70	70	70	70	70	70	70	70	70	819	290	624
25	70	70	70	70	70	70	70	70	70	674	290	624
26	70	70	131	70	70	70	70	70	70	460	290	624
27	70	70	70	70	70	70	70	70	70	460	290	624
28	70	70	70	70	70	70	70	70	70	460	152	289
29	70	70	70	70	---	70	70	70	70	460	70	70
30	70	70	70	70	---	70	70	70	70	460	70	70
31	70	---	70	70	---	70	---	70	---	460	70	---
TOTAL	2170	2376	2293	2391	1960	2170	2100	2170	2100	6095	10927	13755
MEAN	70.0	79.2	74.0	77.1	70.0	70.0	70.0	70.0	70.0	197	352	458
MAX	70	201	132	209	70	70	70	70	70	819	792	1300
MIN	70	70	70	70	70	70	70	70	70	70	70	70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

MEAN	700	400	298	460	487	524	447	223	165	261	396	597
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1970 - 2001

ANNUAL TOTAL	42304	50507	
ANNUAL MEAN	116	138	413
HIGHEST ANNUAL MEAN			1645
LOWEST ANNUAL MEAN			78.8
HIGHEST DAILY MEAN	948	1300	6000
LOWEST DAILY MEAN	70	70	70
ANNUAL SEVEN-DAY MINIMUM	70	70	70
MAXIMUM PEAK STAGE		27.92	28.28
10 PERCENT EXCEEDS	290	328	1060
50 PERCENT EXCEEDS	70	70	70
90 PERCENT EXCEEDS	70	70	70

WITHLACOCHEE RIVER BASIN

02313250 WITHLACOCHEE RIVER BYPASS CHANNEL NEAR INGLIS, FL

LOCATION.--Lat 29°01'15", long 82°38'17", in NE 1/4 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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	554	436	436	436	780	397	406	436	358	648	318	476
2	554	436	436	436	948	372	358	411	358	751	318	476
3	554	436	436	436	785	358	409	397	358	678	318	490
4	554	436	436	436	526	358	514	397	358	633	318	594
5	554	436	436	436	331	383	554	397	358	633	318	594
6	554	488	436	436	279	397	554	397	411	559	318	594
7	554	515	436	436	279	397	554	397	436	515	318	594
8	554	515	436	470	334	397	528	397	410	515	318	594
9	514	515	436	515	382	397	515	397	397	404	318	594
10	424	515	436	515	397	397	488	397	397	318	318	594
11	397	466	436	515	397	397	476	397	397	318	318	594
12	397	436	436	515	397	397	476	397	371	318	318	594
13	397	436	436	463	449	397	476	397	397	318	318	490
14	397	436	436	436	476	448	476	397	397	318	361	318
15	497	436	436	436	449	476	476	397	397	318	397	298
16	554	436	436	436	409	476	455	397	372	367	397	318
17	554	436	436	436	397	476	436	397	358	397	397	318
18	554	436	436	436	397	476	436	397	358	465	397	318
19	477	436	436	436	397	720	436	370	358	515	397	318
20	436	436	436	436	397	1220	436	358	358	515	397	318
21	436	436	436	436	397	887	436	358	358	515	397	318
22	436	436	436	436	397	537	487	358	358	687	397	397
23	436	436	436	436	397	384	462	358	433	569	397	476
24	436	436	436	394	397	358	436	358	476	187	397	549
25	411	511	436	358	397	358	436	358	449	318	397	787
26	397	598	436	358	397	358	436	358	436	318	397	988
27	528	672	436	358	397	384	436	358	463	318	397	988
28	554	672	436	358	397	397	436	358	476	318	397	1290
29	516	593	436	358	---	555	436	358	523	318	397	1500
30	436	476	436	383	---	1230	436	358	633	318	397	1500
31	436	---	436	509	---	857	---	358	---	318	428	---
TOTAL	15052	14384	13516	13481	12382	15641	13896	11865	12209	13687	11275	18277
MEAN	486	479	436	435	442	505	463	383	407	442	364	609
MAX	554	672	436	515	948	1230	554	436	633	751	428	1500
MIN	397	436	436	358	279	358	358	358	358	187	318	298

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001			
MEAN	1051	1036	1027	1027	1070	1043	1041	964	953	1009	1067	1082																							
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	379	364	442	364	508																							
(WY)	1973	1973	2001	2001	2001	2000	2001	2000	2000	2001	2001	2000																							

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1970 - 2001
ANNUAL TOTAL	176892	165665	
ANNUAL MEAN	483	454	1031
HIGHEST ANNUAL MEAN			1488
LOWEST ANNUAL MEAN			454
HIGHEST DAILY MEAN	869	Feb 15	1500
LOWEST DAILY MEAN	200	Jun 15-18	187
ANNUAL SEVEN-DAY MINIMUM	227	Jun 12	299
MAXIMUM PEAK STAGE		27.84	Jul 23
10 PERCENT EXCEEDS	620	557	1500
50 PERCENT EXCEEDS	476	436	1030
90 PERCENT EXCEEDS	377	318	565

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 2001

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (Water years)	Measurements	
					Date	Dis-charge (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 1973-00	05-22-01 09-11-01	4.0 6.0
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 1972-00	05-22-01 09-27-01	13 27
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 1972-00	05-22-01 09-27-01	4.7 6.0
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 1972-00	05-22-01	12
284740081251701 Wekiva Springs Resort Flowing Borehole	Wekiva River	Lat 28°47'40", long 81°25'17", in NW ¹ / ₄ sec. 33, T.19 S., R.29 E., Lake County, Hydrologic Unit 03080101, at swimming area of Wekiva Falls Resort, 0.3 mi upstream from Wekiva River, and about 9 mi. west of Sanford.		1997, 1999	05-17-01 08-16-01	18 22
285038081270100 Palm Springs	Blackwater Creek	Lat 28°50'38", long 81°27'01", in SW ¹ / ₄ sec. 7, T.19 S., R.29 E., Lake County, Hydrologic Unit 03080101, in Seminole State Forest 20 ft below culvert, 0.3 mi upstream from Blackwater Creek, and 5.7 mi northeast of Mount Plymouth.		1997	05-17-01	0.24
285102081263900 Blueberry Springs	Blackwater Creek	Lat 28°51'02", long 81°26'39", in SE ¹ / ₄ sec. 7, T.19 S., R.29 E., Lake County Hydrologic Unit 03080101, in Seminole State Forest, 20 ft downstream from spring outlet, 300 ft upstream from Blackwater Creek, and 6.1 mi northeast of Mount Plymouth.		1997	05-17-01	0.00

Discharge measurements made at miscellaneous sites during water year 2001--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (Water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER--Continued						
285105081263800 Moccasin Springs	Blackwater Creek	Lat 28°51'05", long 81°26'38", in SW ¹ / ₄ sec. 8, T.19 S., R.29 E., Lake County, Hydrologic Unit 03080101, in Seminole State Forest, 100 ft downstream from spring outlet, 400 ft upstream from Blackwater Creek, and 6.2 mi northeast of Mount Plymouth.		1997	05-17-01	0.28
285224081262400 Sharks Tooth Springs	Blackwater Creek	Lat 28°52'24", long 81°26'24", in SE ¹ / ₄ sec. 32, T.18 S., R.29 E., Lake County, Hydrologic Unit 03080101, in Seminole State Forest, at spring outlet, 200 ft north of Grade Road, and 7.2 mi northeast of Mount Plymouth.		1997	05-17-01	0.10
285702081322400 Camp La-no-chee Springs	Lake Norris	Lat 28°57'02", long 81°32'24", in SW ¹ / ₄ sec. 5, T.18 S., R.28 E., Lake County, Hydrologic Unit 03080101, 60 ft downstream from spring outlet, 200 ft north of Lake Norris, and 2.4 mi south of Paisley.		1955, 1972 1997	05-16-01	0.52
290220081260400 Mosquito Springs Run	St. Johns River	Lat 29°02'20", long 81°26'04", in SE ¹ / ₄ sec.37, T.17 S., R.29 E., Lake County, Hydrologic Unit 03080101, 0.5 mi upstream from St. Johns River, 0.5 mi northwest of intersection of Forest Service Rd. 541 and unmarked Forest Service Rd, and 7.4 mi northeast of Paisley.		1997-98, 2000	05-16-01	1.1
02236095 Alexander Springs	St. Johns River	Lat 29°04'50", long 81°34'30", in Levy Land Grant, T.16 S., R.27 E., Lake County, Hydrologic Unit 03080101, at head of Alexander Springs Creek, 1.5 mi upstream from bridge on State Highway 445, and 6.5 mi southwest of Astor.		1931,1933 1935-36 1946,1956 1961 1966-67 1969,1972 1977 1981-00	05-22-01 09-12-01	96 94
02236110 Ponce DeLeon Springs	Spring Garden Creek	Lat 29°08'02", long 81°21'47", in land grant 42, T.16 S., R.29 E., Volusia County, Hydrologic Unit 03080101, at weir outlets to Spring Garden Lake, 1.8 mi upstream from Deep Creek, and 8.1 mi northwest of De Land.		1929,1932 1946-47 1956,1961 1965-80 [†] 1981-00	05-22-01 09-12-01	22 27
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 1935-37 1946,1956 1961,1972 1981-00	05-25-01 09-11-01	8.3 7.0
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.		1935-37, 1946,1956 1961,1972 1981-00	05-25-01 09-11-01	9.6 10

Discharge measurements made at miscellaneous sites during water year 2001--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (Water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN ABOVE OCKLAWAHA RIVER--Continued						
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 north-west of Astor Park.		1981-00	05-23-01 09-14-01	12 8.5
02236152 Morman Branch	Juniper Creek	Lat 29°11'30", long 81°39'20", in F.M Arredondo Grant, T.15 S., R.26 S., Marion County, Hydrologic Unit 03080101, at culvert on SR 19, and 8.2 mi west of Astor.		1929, 2000	05-18-01	1.1
291200081390601 Morman Branch	Juniper Creek	Lat 29°12'00", long 81°39'06", in sec. 37 of F.M. Arredondo Grant, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, at culvert on dirt trail, 0.4 mi upstream from Juniper Creek, 0.4 mi east of State Highway 19, and 8.0 mi northwest of Astor.		1981, 1997, 2000	05-18-01	5.9
291136081380100 Unnamed Tributary	Juniper Creek	Lat 29°11'36", long 81°38'01", in sec. 39 of F.M. Arredondo Grant, T.15 S., R.27 E., Lake County, Hydrologic Unit 03080101, at culvert on dirt trail, 0.6 mi upstream from Juniper Creek, 1.6 mi east of State Highway 19, and 6.8 mi northwest of Astor.		1981,1997, 2000	05-18-01	3.7
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 north-west of Astor.		1931-33 1935-36 1946,1956 1961,1972 1981-82 1984-00	05-24-01 09-13-01	115 109
02236205 Salt Springs	Lake George	Lat 29°21'00", long 81°43'40", in sec.42, Joseph M. Hernandez Grant, T.13 S., R.26 E., Marion County, Hydrologic Unit 03080101, 4.0 mi upstream from Lake George, and 10.9 mi east of Eureka.		1929-33 1935-36 1946,1956 1961 1966-67 1972 1981-00	05-24-01 09-13-01	82 67

† Operated as a periodic station.

a Also known as "The Aquarium".

ELEVATION OF LAKES

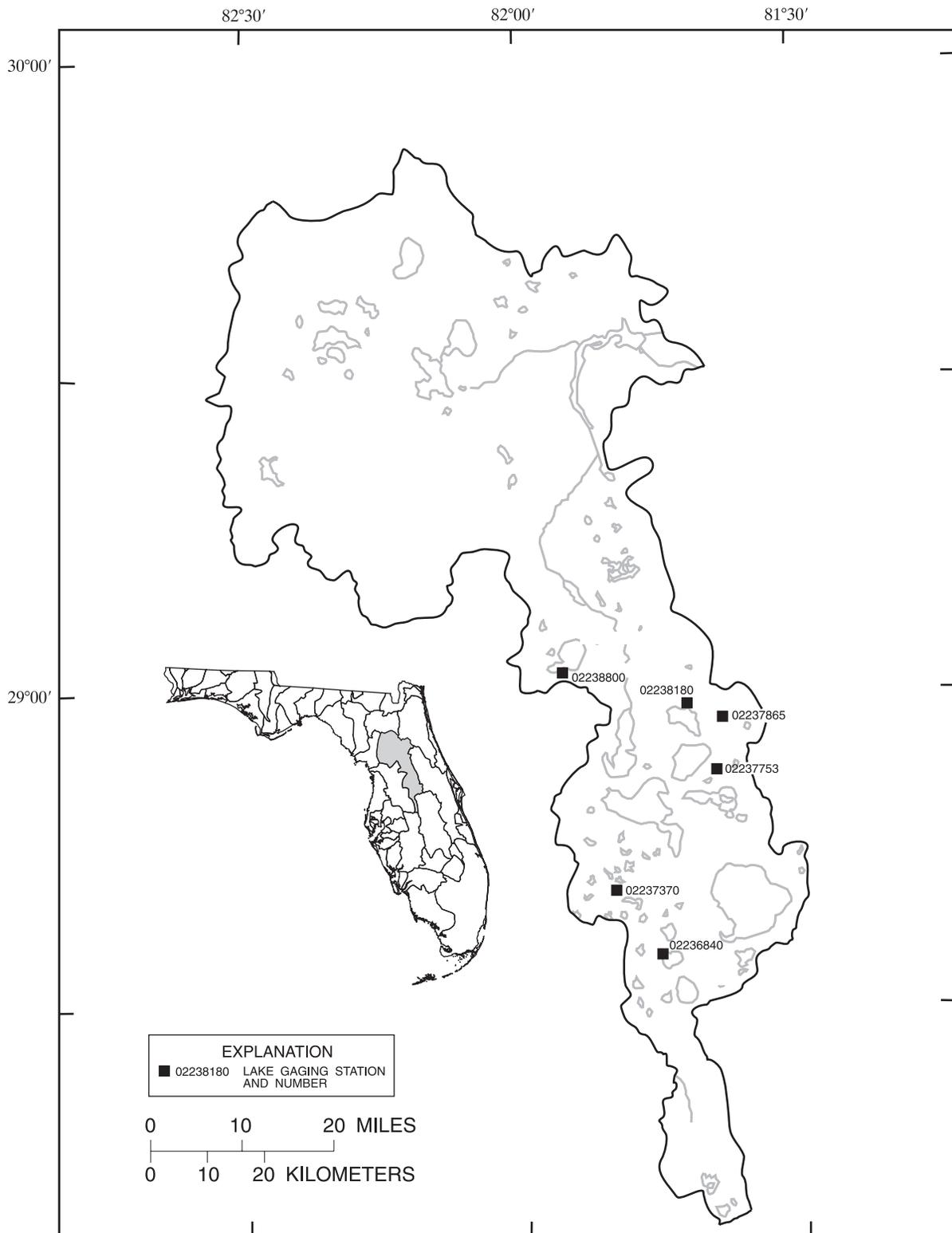


Figure 11.--Location of lake gaging stations in the Ocklawaha River basin.

OCKLAWAHA RIVER BASIN

02237370 CHURCH LAKE NEAR GROVELAND, FL

LOCATION.--Lat 28°38'40", long 81°50'47", in SE $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--1.66 mi².

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 sea level (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, 83.16 ft, Sept. 23; minimum observed, 77.96 ft, June 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	78.29	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	80.54
4	---	---	---	---	---	---	---	---	78.30	---	79.10	---
5	---	---	---	---	80.24	---	---	78.64	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	79.55	---	---	77.99	---	---
8	---	---	81.24	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	78.10	---	---	81.00
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	79.48	---	---	---	79.40	---
12	---	---	---	---	80.04	---	---	78.52	---	---	---	---
13	---	---	---	---	80.02	---	---	---	---	---	---	---
14	---	---	---	---	---	---	79.31	---	---	78.20	---	---
15	---	---	---	80.60	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	77.98	---	---	82.50
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	81.01	---	---	---	---	---	---	---	79.90	---
19	---	---	---	---	79.84	---	---	78.45	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	82.49
21	---	81.26	---	---	---	---	79.08	---	---	78.40	---	---
22	---	---	---	80.42	---	79.46	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	77.96	---	---	83.16
24	81.74	---	---	---	---	79.39	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	80.56	---
26	81.72	---	---	---	79.62	---	---	78.29	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	78.96	---	---	79.10	---	82.88
29	---	---	80.86	80.19	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	77.97	79.10	---	---
31	---	---	---	---	---	79.60	---	---	---	---	---	---
MAX	81.74	81.26	81.24	80.60	80.24	79.60	79.55	78.64	78.30	79.10	80.56	83.16
MIN	81.72	81.26	80.86	80.19	79.62	79.39	78.96	78.29	77.96	77.99	79.10	80.54

02237753 WEST CROOKED LAKE NEAR EUSTIS, FL

LOCATION.--Lat 28°49'49", long 81°40'20", in SW¹/₄ sec.13, T.19 S., R.26 E., Lake County, Hydrologic Unit 03080102, on east shore of southeast bay of lake, 1.7 mi southeast of Eustis.

SURFACE AREA.--107 acres (0.17 mi²).

DRAINAGE AREA.--0.67 mi², includes East Crooked Lake.

PERIOD OF RECORD.--February 1970 to current year (weekly).

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

GAGE.--Nonrecording gage. Datum of gage is at sea level.

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, 61.96 ft, Oct. 5; minimum observed, 58.16 ft, June 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	58.78
3	---	---	---	---	---	---	---	---	---	58.40	---	---
4	---	61.34	---	---	---	---	---	---	---	---	---	---
5	61.96	---	---	---	---	59.70	---	58.92	---	---	---	---
6	---	---	---	---	60.08	---	---	---	---	---	---	59.26
7	---	---	---	---	---	---	59.56	---	---	---	58.72	---
8	---	---	---	---	---	---	---	---	58.24	---	---	---
9	---	---	---	---	---	---	---	---	---	58.30	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	61.28	---	---	---	---	---	---	---	---	---	---
12	61.82	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	59.56	---	---	---	---	58.84	---
14	---	---	---	---	---	---	59.48	58.70	---	---	---	---
15	---	---	---	---	59.96	---	---	---	58.22	---	---	---
16	---	---	---	---	---	---	---	---	---	58.20	---	60.42
17	---	---	---	---	---	---	---	---	---	58.46	---	---
18	---	---	---	---	---	---	59.28	---	---	---	---	---
19	61.64	---	---	---	---	---	---	---	---	---	---	---
20	61.61	---	---	---	---	59.70	---	---	---	---	---	---
21	---	---	---	---	---	---	59.24	---	58.16	---	---	---
22	---	---	---	60.12	59.82	---	---	---	---	---	58.88	---
23	---	---	---	---	---	---	---	---	---	58.60	---	---
24	---	---	---	---	---	---	---	58.44	---	---	---	60.94
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	61.50	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	59.74	59.52	---	---	---	---	---	---
29	---	---	60.45	59.98	---	---	59.00	---	---	---	---	---
30	---	---	---	---	---	---	---	58.34	---	58.66	---	60.94
31	---	---	---	---	---	---	---	---	---	58.60	58.80	---
MAX	61.96	61.34	60.45	60.12	60.08	59.70	59.56	58.92	58.24	58.66	58.88	60.94
MIN	61.50	61.28	60.45	59.98	59.74	59.52	59.00	58.34	58.16	58.20	58.72	58.78

OCKLAWAHA RIVER BASIN

02237865 LAKE UMATILLA AT UMATILLA, FL

LOCATION.--Lat 28°55'06", long 81°39'44", in SE $\frac{1}{4}$ sec.13, T.18 S., R.26 E., Lake County, Hydrologic Unit 03080102, on south shore of lake, 0.8 mi south of Umatilla.

SURFACE AREA.--165 acres (0.26 mi²).

DRAINAGE AREA.--2.46 mi².

PERIOD OF RECORD.--March 1970 to current year (weekly).

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

GAGE.--Nonrecording gage. Datum of gage is at sea level. 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, 1995; minimum observed, 64.20 ft, Dec. 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 66.76 ft, Sept. 29, minimum observed, 64.32 ft, June 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	65.46	---	---	---	---	---	64.44	---	---	---
3	---	---	---	---	65.16	64.92	---	---	---	---	65.18	---
4	---	65.74	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	64.70	---	---	---	---
6	---	---	---	65.28	---	---	---	---	---	---	---	65.48
7	---	---	---	---	---	---	65.20	---	---	64.76	---	---
8	66.16	---	---	---	---	---	---	---	64.45	---	---	---
9	---	---	65.38	---	---	---	---	---	64.40	64.71	---	---
10	---	---	---	---	65.14	64.82	---	---	---	---	---	---
11	---	65.68	---	---	---	---	---	---	---	---	65.36	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	65.20	---	---	---	---	---	---	---	---
14	65.98	---	---	---	---	---	65.10	---	---	64.80	---	---
15	---	---	---	---	65.10	---	---	---	---	---	---	---
16	---	---	65.40	---	---	---	---	---	64.32	---	---	66.58
17	---	---	---	---	65.06	64.94	---	64.56	---	---	---	---
18	---	65.58	---	---	---	---	65.00	---	---	---	65.38	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	65.90	---	---	---	---	---	---	---	---	---	---	66.65
21	---	---	---	65.18	---	---	64.88	---	---	64.88	---	---
22	---	---	---	---	---	---	---	---	64.48	---	---	66.66
23	---	---	65.38	---	---	---	---	---	---	---	---	---
24	---	---	---	---	64.98	65.08	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	65.46	---	---	---	---	---	---	---	---	---	---
27	---	---	---	65.12	---	---	---	64.54	---	---	---	---
28	65.86	---	---	---	---	---	64.78	---	---	65.18	---	---
29	---	---	65.35	---	---	---	---	---	---	---	---	66.76
30	---	---	65.32	---	---	---	---	---	64.68	---	---	---
31	---	---	---	---	---	65.26	---	---	---	65.16	---	---
MAX	66.16	65.74	65.46	65.28	65.16	65.26	65.20	64.70	64.68	65.18	65.38	66.76
MIN	65.86	65.46	65.32	65.12	64.98	64.82	64.78	64.54	64.32	64.71	65.18	65.48

02238180 HOLLY LAKE NEAR UMATILLA, FL

LOCATION.--Lat 28°56'11", long 81°43'04", in SW¹/₄ 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 mi²).

DRAINAGE AREA.--0.78 mi².

PERIOD OF RECORD.--October 1967 to October 1968 (thrice weekly); November 1968 to February 1970 (weekly); August 1982 to March 1983 (fragmentary); April 1983 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is at sea level.

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, 56.36 ft, Oct. 4; minimum observed, 53.99 ft, June 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	54.61	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	56.36	---	---	55.15	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	55.18	---	54.12	---	---	54.81
6	---	---	---	---	---	---	---	---	---	54.53	54.83	---
7	---	---	55.38	---	55.01	---	---	---	---	---	---	---
8	---	55.73	---	---	---	---	---	---	54.10	---	---	---
9	---	---	---	---	---	---	---	54.52	---	---	---	---
10	56.18	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	55.08	---	---	---	---	---
12	---	---	---	---	---	---	---	---	53.99	---	---	---
13	---	---	55.39	---	---	---	---	---	---	---	55.12	54.97
14	---	---	---	---	54.97	54.79	---	---	---	---	---	---
15	---	---	---	---	54.96	---	---	---	---	---	---	---
16	56.08	55.59	---	---	---	---	---	---	---	54.54	---	---
17	---	---	---	55.08	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	54.95	---	---	---	---
19	---	---	---	---	---	---	---	54.89	54.31	---	---	---
20	56.06	---	55.30	---	---	---	---	---	---	---	---	56.12
21	---	---	---	---	54.88	---	---	---	54.31	---	55.03	---
22	---	---	---	---	---	54.96	---	---	---	---	---	---
23	---	55.48	---	---	---	---	---	---	---	---	---	---
24	---	---	---	54.99	---	---	---	---	---	---	---	56.12
25	55.96	---	---	---	---	---	---	---	---	54.88	---	---
26	---	---	---	---	---	---	54.67	---	54.33	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	55.24	---	54.82	54.88	---	---	---	---	54.96	---
29	---	55.51	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	54.12	---	---	---	56.19
31	---	---	---	54.98	---	---	---	---	---	54.87	---	---
MAX	56.36	55.73	55.39	55.15	55.01	54.96	55.18	54.61	54.33	54.88	55.12	56.19
MIN	55.96	55.48	55.24	54.98	54.82	54.79	54.67	54.12	53.99	54.53	54.83	54.81

OCKLAWAHA RIVER BASIN

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 mi²).

DRAINAGE AREA.--53.8 mi².

PERIOD OF RECORD.--April 1936 to October 1942 (monthly means only), November 1942 to September 1997, October 2000 to September 2001.

REVISED RECORDS.--WDR FL-74-1: Surface area, drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is at sea level (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, 51.55 ft, June 6, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e53.23	52.79	52.50	---	52.24	52.10	52.54	52.06	51.65	51.91	52.16	52.10
2	53.20	52.77	52.50	52.28	52.25	52.09	52.52	52.05	51.63	51.89	52.16	52.10
3	53.18	52.76	52.50	52.29	52.25	52.08	52.51	52.05	51.60	51.88	52.16	52.12
4	53.19	52.75	52.48	52.28	52.25	52.10	52.50	52.03	51.58	51.87	52.18	52.10
5	53.18	52.74	52.46	52.27	52.26	52.11	52.50	52.02	51.56	51.86	52.29	52.11
6	53.18	52.73	52.45	52.26	52.25	52.06	52.50	52.01	51.55	51.87	52.37	52.15
7	53.18	52.72	52.43	52.26	52.24	52.02	52.49	52.00	51.58	51.94	52.42	---
8	53.16	52.71	52.43	52.26	52.24	51.99	52.48	51.98	51.65	52.04	52.42	---
9	53.11	52.70	52.42	52.27	52.24	51.98	52.48	51.97	51.63	52.05	52.41	---
10	53.05	52.71	52.43	52.25	52.24	51.98	52.47	51.96	51.61	52.09	52.40	52.30
11	53.03	52.69	52.42	52.25	52.23	51.97	52.46	51.94	51.58	52.11	52.38	52.31
12	53.00	52.67	52.45	52.25	52.23	51.97	52.45	51.93	---	52.10	52.37	52.30
13	52.98	52.66	52.44	52.25	52.23	52.03	52.44	51.92	---	52.12	52.35	52.32
14	52.97	52.65	52.45	52.25	52.22	52.06	52.44	51.91	51.60	52.14	52.33	52.62
15	52.96	52.64	52.45	52.25	52.19	52.06	52.44	51.90	---	52.12	52.31	52.88
16	52.95	52.62	52.44	52.25	52.19	52.10	52.43	51.89	---	52.10	52.29	52.87
17	52.93	52.61	52.45	52.25	52.18	52.12	52.40	51.88	---	52.10	52.29	52.86
18	52.92	52.60	52.42	52.25	52.17	52.12	52.34	51.86	51.70	52.10	52.27	52.86
19	52.92	52.58	52.42	52.24	52.15	52.26	52.29	51.84	51.81	52.09	52.26	52.85
20	52.91	52.57	---	52.26	52.14	52.46	52.27	51.82	51.80	52.12	52.24	52.85
21	52.89	52.55	---	52.25	52.14	52.46	52.25	51.80	51.80	52.18	52.23	52.85
22	52.88	52.52	---	52.24	52.14	52.44	52.24	51.79	51.81	52.27	52.23	52.84
23	52.87	52.50	---	52.22	52.13	52.42	52.23	51.78	51.83	52.27	52.21	52.84
24	52.86	52.48	---	52.20	52.12	52.41	52.22	51.76	51.82	52.26	52.20	52.84
25	52.85	52.49	---	52.19	52.12	52.40	52.22	51.74	51.81	52.25	52.20	52.86
26	52.85	52.53	---	52.18	52.12	52.40	52.20	51.73	51.80	52.23	52.20	52.85
27	52.83	52.54	---	52.17	52.11	52.38	52.16	51.72	51.83	52.23	52.18	52.85
28	52.82	52.53	---	52.17	52.11	52.34	52.14	51.70	51.86	52.21	52.17	52.84
29	52.82	52.52	---	52.16	---	52.37	52.11	51.69	51.90	52.20	52.16	52.89
30	52.81	52.51	---	52.16	---	52.51	52.08	51.67	51.90	52.19	52.14	52.90
31	52.80	---	---	52.20	---	52.55	---	51.66	---	52.18	52.12	---
MEAN	52.98	52.63	52.45	52.24	52.19	52.20	52.36	51.87	51.72	52.10	52.26	52.60
MAX	53.23	52.79	52.50	52.29	52.26	52.55	52.54	52.06	51.90	52.27	52.42	52.90
MIN	52.80	52.48	52.42	52.16	52.11	51.97	52.08	51.66	51.55	51.86	52.12	52.10
CAL YR 2000	MEAN 52.72	MAX 53.23	MIN 52.42									
WTR YR 2001	MEAN 52.30	MAX 53.23	MIN 51.55									

e Estimated

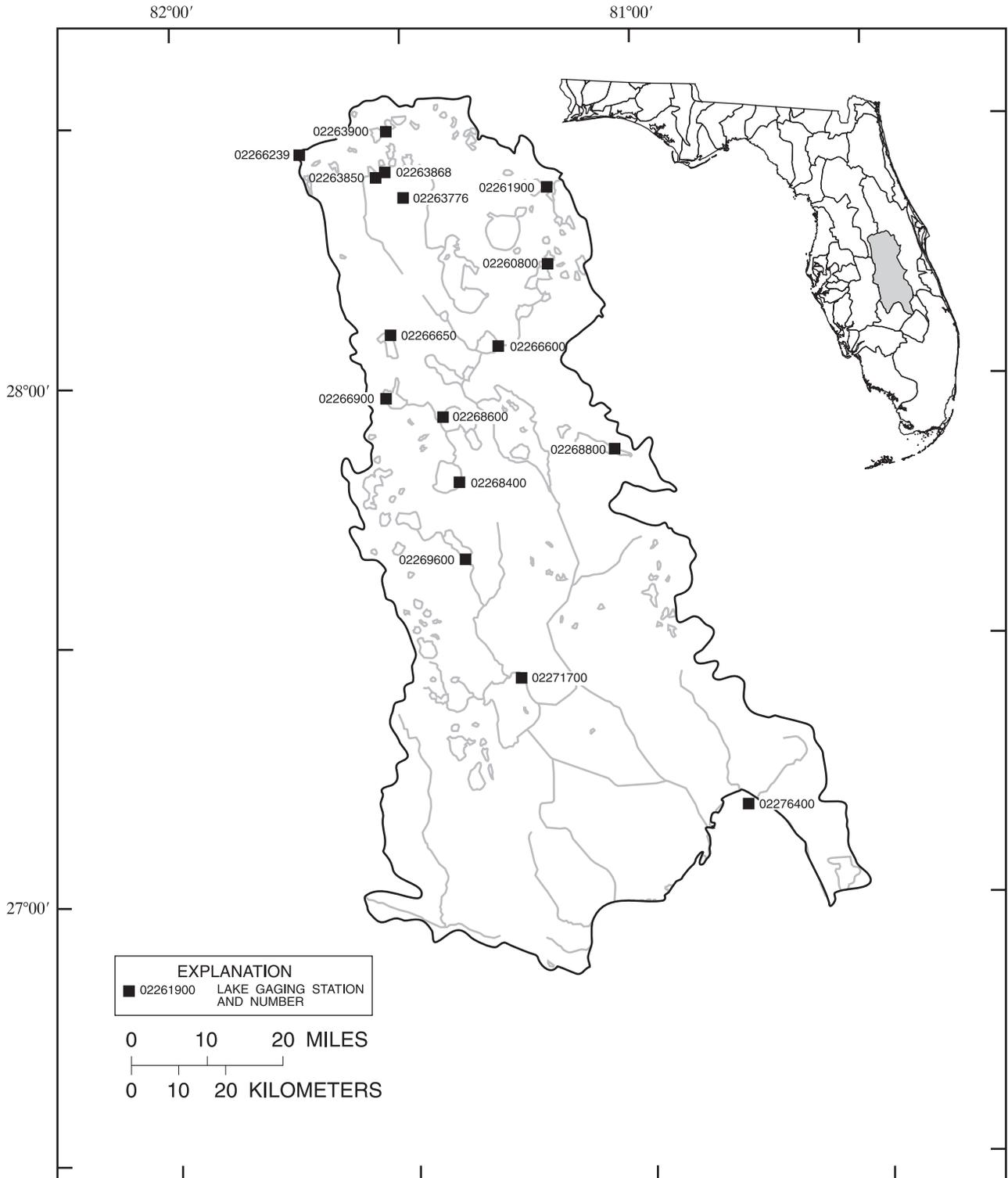


Figure 12.--Location of lake gaging stations in the Kissimmee River basin, the Taylor Creek basin and inflow to Lake Okeechobee from the north, and Fisheating Creek basin and inflow to Lake Okeechobee from the northwest.

02260800 ALLIGATOR LAKE NEAR ASHTON, FL

LOCATION.--Lat 28°13'53", long 81°11'20", in SW¹/₄ 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 mi²).

DRAINAGE AREA.--26.6 mi².

PERIOD OF RECORD.--November 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is at sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.68	59.52	59.32	59.05	59.00	58.72	58.88	58.59	---	---	59.66	60.15
2	59.74	59.50	59.32	59.05	59.00	58.70	58.87	58.55	---	58.90	59.65	60.14
3	59.78	59.50	59.32	59.06	59.00	58.68	58.86	58.55	---	---	59.67	60.15
4	59.80	59.48	59.32	59.05	58.98	58.68	58.86	58.53	---	---	59.70	60.16
5	59.82	59.46	59.32	59.05	58.98	58.68	58.85	58.52	---	---	59.74	60.18
6	59.80	59.44	59.32	59.05	58.96	58.68	58.84	58.50	---	---	59.77	60.24
7	59.76	59.43	59.32	59.05	58.96	58.67	58.83	58.50	---	---	59.83	60.33
8	59.74	59.41	59.32	59.05	58.96	58.66	58.82	58.49	---	---	59.88	60.40
9	59.70	59.38	59.32	59.04	58.96	58.67	58.80	58.48	---	---	59.92	60.47
10	59.70	59.37	59.30	59.04	58.96	58.67	58.80	58.46	---	---	59.95	60.51
11	59.70	59.35	59.28	59.04	58.95	58.67	58.79	58.45	---	---	59.99	60.56
12	59.70	59.35	59.28	59.04	58.94	58.67	58.79	58.45	---	---	60.03	60.63
13	59.70	59.34	59.25	59.04	58.93	58.66	58.76	58.42	---	---	60.05	60.67
14	59.70	59.33	59.22	59.04	58.92	58.65	58.75	58.41	---	---	60.07	60.86
15	59.70	59.34	59.21	59.03	58.92	58.64	58.75	58.40	---	---	60.06	60.97
16	59.70	59.33	59.22	59.03	58.90	58.62	58.74	58.40	---	---	60.04	61.03
17	59.70	59.32	59.20	59.03	58.89	58.62	58.73	58.40	---	---	60.03	61.10
18	59.70	59.32	59.18	59.03	58.89	58.60	58.72	58.38	---	---	60.03	61.17
19	59.69	59.31	59.16	59.03	58.88	58.60	58.71	58.38	---	---	60.02	61.24
20	59.68	59.32	59.15	59.03	58.87	58.60	58.70	58.36	---	---	60.03	61.30
21	59.68	59.33	59.13	59.03	58.86	58.60	58.70	58.38	---	---	60.08	61.36
22	59.65	59.33	59.12	59.02	58.84	58.60	58.69	58.38	---	---	60.13	61.50
23	59.65	59.32	59.12	59.03	58.82	58.60	58.68	58.38	---	---	60.15	61.74
24	59.64	59.32	59.10	59.03	58.82	58.72	58.67	58.36	---	---	60.17	61.83
25	59.62	59.32	59.09	59.02	58.80	58.78	58.65	58.35	---	---	60.17	61.90
26	59.62	59.33	59.08	59.02	58.78	58.82	58.64	58.35	---	---	60.17	61.92
27	59.60	59.32	59.07	59.02	58.76	58.88	58.64	58.34	---	---	60.16	61.96
28	59.58	59.33	59.07	59.01	58.74	58.88	58.62	58.34	---	---	60.15	62.05
29	59.55	59.32	59.06	59.01	---	58.90	58.60	58.33	---	---	60.14	62.13
30	59.54	59.32	59.05	59.01	---	58.89	58.60	58.32	---	---	60.13	62.22
31	59.52	---	59.05	59.01	---	58.88	---	58.31	---	---	60.14	---
MEAN	59.68	59.37	59.20	59.03	58.90	58.70	58.74	58.42	---	---	59.99	61.03
MAX	59.82	59.52	59.32	59.06	59.00	58.90	58.88	58.59	---	---	60.17	62.22
MIN	59.52	59.31	59.05	59.01	58.74	58.60	58.60	58.31	---	---	59.65	60.14
CAL YR 2000	MEAN 60.08	MAX 64.08	MIN 58.81									
WTR YR 2001	MEAN 59.31	MAX 62.22	MIN 58.31									

KISSIMMEE RIVER BASIN

02261900 LAKE MARY JANE NEAR NARCOOSSEE, FL

LOCATION.--Lat 28°22'46", long 81°11'15", in SW $\frac{1}{4}$ sec.23, T.24 S., R.31 E., Orange County, Hydrologic Unit 03090101, on west shore of lake, at public park about 1,000 ft south of Mary Jane-Hart Canal, 6.5 mi northeast of Narcoossee, and 11 mi northeast of St. Cloud.

SURFACE AREA.--1,161 acres (1.81 mi²).

DRAINAGE AREA.--124 mi².

PERIOD OF RECORD.--November 1949 to September 2001 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at sea level (U.S. Army Corps of Engineers bench mark). Prior to Nov. 26, 1973, at datum 56.66 ft higher.

REMARKS.--Lake is one of the Kissimmee River headwaters chain of lakes. 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 stages.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 64.81 ft, Mar. 20, 1960; minimum daily, 56.89 ft, May 31, 1981.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.09	58.75	58.45	58.26	58.15	57.96	57.92	57.40	57.35	---	---	---
2	59.08	58.74	58.45	58.26	58.15	57.95	57.88	57.39	57.31	---	---	---
3	59.11	58.73	58.44	58.25	58.14	57.94	57.86	57.43	57.30	57.47	---	---
4	59.19	58.71	58.43	58.24	58.13	57.97	57.85	57.43	57.29	57.53	---	59.20
5	59.19	58.69	58.42	58.23	58.13	58.00	57.84	57.41	57.27	57.57	---	59.20
6	59.19	58.69	58.40	58.23	58.12	57.94	57.83	57.40	57.25	57.52	---	59.24
7	59.18	58.69	58.37	58.22	58.12	57.90	57.82	57.38	57.24	57.47	---	59.31
8	59.18	58.67	58.37	58.22	58.11	57.87	57.81	57.38	---	57.46	---	59.44
9	59.13	58.66	58.36	58.24	58.11	57.86	57.79	57.36	---	57.61	---	59.65
10	59.10	58.66	58.36	58.22	58.11	57.85	57.78	57.34	---	57.63	---	59.72
11	59.08	58.64	58.37	58.21	58.10	57.84	57.76	57.33	---	57.53	---	59.77
12	59.06	58.62	58.40	58.22	58.09	57.84	57.75	57.32	---	57.54	---	59.88
13	59.04	58.61	58.41	58.21	58.08	57.85	57.74	57.31	---	57.56	---	60.00
14	59.03	58.60	58.41	58.21	58.08	57.84	57.73	57.29	---	57.66	---	60.30
15	59.02	58.59	58.40	58.21	58.08	57.83	57.71	57.27	---	57.91	---	60.61
16	59.01	58.57	58.40	58.20	58.07	57.83	57.69	57.25	---	57.92	---	60.71
17	59.01	58.57	58.40	58.20	58.06	57.81	57.66	57.24	---	57.94	---	60.76
18	59.00	58.55	58.37	58.20	58.04	57.80	57.61	57.22	---	57.98	---	60.71
19	58.99	58.54	58.36	58.20	58.02	57.81	57.57	57.20	---	58.06	---	60.61
20	58.96	58.52	58.34	58.23	58.01	57.82	57.55	57.18	---	58.10	---	60.51
21	58.95	58.50	58.32	58.22	58.00	57.80	57.53	57.16	---	58.14	---	60.41
22	58.93	58.49	58.32	58.21	58.00	57.77	57.52	57.19	---	58.17	---	60.39
23	58.89	58.47	58.31	58.21	57.99	57.74	57.50	57.27	---	58.19	---	60.46
24	58.85	58.46	58.30	58.19	58.00	57.73	57.49	57.22	---	58.19	---	60.38
25	58.84	58.45	58.29	58.18	57.99	57.72	57.48	57.29	---	58.20	---	60.34
26	58.83	58.45	58.29	58.16	57.98	57.71	57.50	57.39	---	58.25	---	60.26
27	58.82	58.45	58.28	58.16	57.98	57.69	57.47	57.35	---	58.26	---	60.18
28	58.80	58.45	58.30	58.15	57.97	57.67	57.44	57.34	---	---	---	60.08
29	58.80	58.45	58.32	58.15	---	57.76	57.42	57.35	---	---	---	59.99
30	58.78	58.45	58.30	58.15	---	57.95	57.40	57.34	---	---	---	59.89
31	58.77	---	58.28	58.15	---	57.93	---	57.33	---	---	---	---
MEAN	59.00	58.58	58.36	58.21	58.06	57.84	57.66	57.31	57.29	57.83	---	60.07
MAX	59.19	58.75	58.45	58.26	58.15	58.00	57.92	57.43	57.35	58.26	---	60.76
MIN	58.77	58.45	58.28	58.15	57.97	57.67	57.40	57.16	57.24	57.46	---	59.20
CAL YR 2000	MEAN 59.57	MAX 60.92	MIN 58.28									
WTR YR 2001	MEAN 58.26	MAX 60.76	MIN 57.16									

LOCATION.--Lat 28°21'46", long 81°29'57", in SE¹/₄ 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 mi²).

DRAINAGE AREA.--2.70 mi².

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 sea level (Florida Department of Transportation bench mark). Gage readings have been reduced to elevations above sea level. 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 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT		
30...	1150	98.34
JAN		
19...	1111	97.87
MAR		
14...	0942	97.55
MAY		
08...	0844	97.66
JUL		
03...	0843	98.93
AUG		
29...	0837	99.41

02263868 SOUTH LAKE NEAR VINELAND, FL

LOCATION.--Lat 28°24'45", long 81°32'17", in SW $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--4.0 mi², 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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	90.56	90.26	89.90	89.77	89.64	89.46	90.19	89.55	89.36	89.53	90.70	91.20	
2	90.56	90.24	89.89	89.76	89.64	89.44	90.17	89.52	89.36	89.50	90.76	91.18	
3	90.55	90.22	89.88	89.74	89.65	89.43	90.16	89.51	89.36	89.49	90.82	91.16	
4	90.57	90.20	89.86	89.73	89.65	89.49	90.15	89.53	89.36	89.46	90.89	91.14	
5	90.57	90.18	89.85	89.72	89.67	89.58	90.16	89.50	89.36	89.48	90.94	91.12	
6	90.57	90.16	89.83	89.71	89.67	89.57	90.19	89.46	89.36	89.56	90.98	91.14	
7	90.57	90.15	89.81	89.69	89.67	89.53	90.18	89.44	89.42	89.54	91.02	91.18	
8	90.55	90.13	89.80	89.69	89.67	89.47	90.17	89.42	89.72	89.58	91.09	91.20	
9	90.52	90.11	89.78	89.70	89.67	89.43	90.16	89.41	89.73	89.89	91.15	91.25	
10	90.48	90.10	89.77	89.69	89.66	89.41	90.15	89.40	89.71	90.06	91.22	91.28	
11	90.46	90.08	89.77	89.69	89.65	89.40	90.12	89.39	89.68	90.06	91.57	91.33	
12	90.45	90.06	89.83	89.68	89.65	89.39	90.11	89.39	89.65	90.06	91.64	91.36	
13	90.44	90.05	89.86	89.67	89.64	89.38	90.09	89.38	89.61	90.10	91.64	91.39	
14	90.43	90.03	89.86	89.66	89.64	89.37	90.07	89.37	89.59	90.15	91.62	91.64	
15	90.42	90.02	89.86	89.66	89.63	89.37	90.05	89.37	89.65	90.21	91.59	91.79	
16	90.42	89.99	89.86	89.65	89.62	89.36	90.02	89.36	89.74	90.21	91.57	91.79	
17	90.41	89.97	89.88	89.65	89.61	89.36	89.99	89.36	89.71	90.28	91.57	91.76	
18	90.40	89.95	89.88	89.63	89.59	89.35	89.94	89.35	89.68	90.44	91.53	91.73	
19	90.39	89.93	89.87	89.62	89.58	89.39	89.90	89.35	89.70	90.52	91.51	91.69	
20	90.38	89.91	89.86	89.61	89.57	89.54	89.86	89.35	89.68	90.53	91.48	91.64	
21	90.37	89.90	89.85	89.61	89.56	89.55	89.82	89.35	89.66	90.55	91.46	91.60	
22	90.37	89.88	89.85	89.60	89.55	89.54	89.79	89.35	89.69	90.61	91.44	91.57	
23	90.36	89.86	89.83	89.59	89.54	89.52	89.76	89.35	89.70	90.63	91.41	91.58	
24	90.34	89.84	89.82	89.58	89.53	89.50	89.73	89.34	89.70	90.63	91.38	91.61	
25	90.33	89.83	89.80	89.57	89.51	89.48	89.70	89.35	89.69	90.64	91.35	91.59	
26	90.33	89.86	89.79	89.56	89.49	89.46	89.68	89.39	89.65	90.65	91.32	91.56	
27	90.32	89.93	89.78	89.55	89.47	89.42	89.64	89.37	89.62	90.66	91.29	91.54	
28	90.31	89.93	89.78	89.54	89.47	89.38	89.61	89.39	89.60	90.66	91.27	91.51	
29	90.30	89.92	89.80	89.53	---	---	89.59	89.58	89.45	89.58	90.66	91.24	91.49
30	90.29	89.92	89.80	89.53	---	---	90.10	89.56	89.40	89.55	90.65	91.22	91.46
31	90.27	---	89.78	89.60	---	---	90.16	---	89.36	---	90.65	91.20	---
MEAN	90.43	90.02	89.83	89.64	89.60	89.50	89.96	89.40	89.60	90.18	91.29	91.45	
MAX	90.57	90.26	89.90	89.77	89.67	90.16	90.19	89.55	89.74	90.66	91.64	91.79	
MIN	90.27	89.83	89.77	89.53	89.47	89.35	89.56	89.34	89.36	89.46	90.70	91.12	
CAL YR 2000	MEAN	90.24	MAX	91.38	MIN	88.98							
WTR YR 2001	MEAN	90.08	MAX	91.79	MIN	89.34							

KISSIMMEE RIVER BASIN

02263900 LAKE BUTLER AT WINDERMERE, FL

LOCATION.--Lat 28°29'17", long 81°32'01", in NW $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--14.5 mi².

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 sea level; 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, 97.29 ft, Oct. 2; minimum observed, 95.50 ft, June 14, July 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	97.29	---	---	96.24	96.18	---	96.10	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	95.50	95.98	---
4	---	---	---	---	---	96.04	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	96.24
6	97.20	96.68	---	---	---	---	---	---	---	---	---	---
7	---	---	---	96.18	96.14	---	96.18	---	---	---	96.10	---
8	---	96.74	---	---	---	95.96	---	95.79	---	---	---	---
9	---	---	96.48	---	---	---	---	---	---	---	---	---
10	---	---	96.40	---	---	---	96.16	---	95.54	95.54	---	---
11	97.12	96.66	---	---	---	---	---	---	---	---	96.24	96.78
12	---	---	---	---	96.14	---	---	---	---	---	---	---
13	---	---	96.44	---	---	---	---	---	---	---	---	---
14	---	96.62	---	---	---	95.84	---	---	95.50	---	---	97.02
15	97.02	---	---	96.14	---	---	---	95.66	---	---	---	97.12
16	---	---	---	---	---	---	---	---	---	---	---	---
17	96.99	---	---	---	---	---	96.10	---	---	95.58	---	---
18	---	---	---	---	96.10	---	---	---	---	---	---	---
19	---	---	---	96.17	---	---	---	---	95.58	---	---	---
20	96.97	---	96.44	---	---	95.96	---	95.58	---	---	---	---
21	---	96.58	---	---	---	---	---	---	95.60	95.62	---	---
22	---	---	---	96.08	---	---	---	---	---	---	---	---
23	96.90	---	---	---	96.09	95.86	---	---	---	---	---	---
24	---	---	---	---	---	---	96.00	---	---	---	96.34	97.24
25	---	---	---	---	---	---	---	---	---	---	---	---
26	96.86	96.53	---	---	95.98	---	---	95.62	95.54	---	---	---
27	---	---	---	96.12	---	---	---	---	---	---	---	97.22
28	---	---	96.36	---	95.97	---	---	---	---	95.86	---	---
29	---	---	---	---	---	95.80	---	---	---	---	96.28	---
30	96.78	96.50	---	---	---	96.08	95.80	---	---	---	96.28	---
31	---	---	---	96.18	---	---	---	95.58	---	---	---	---
MAX	97.29	96.74	96.48	96.24	96.18	96.08	96.18	95.79	95.60	95.86	96.34	97.24
MIN	96.78	96.50	96.36	96.08	95.97	95.80	95.80	95.58	95.50	95.50	95.98	96.24

02266239 TROUT LAKE NEAR CLERMONT, FL

LOCATION.--Lat 28°27'04", long 81°43'00", in SW¹/₄ sec.28, T.23 S., R.26 E., Lake County, Hydrologic Unit 03090101, on northwest shore of lake, 7.8 mi southeast of Clermont.

SURFACE AREA.--163 acres (0.25 mi²).

DRAINAGE AREA.--1.31 mi².

PERIOD OF RECORD.--March 1970 to current year (weekly).

REVISED RECORDS.--WDR FL-81-1: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is at sea level.

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, 90.08 ft, Oct. 10, minimum observed, 86.90 ft, June 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	87.04	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	86.98	---	---	87.88
8	---	89.48	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	88.10	88.04	---	---	---	---	---
10	90.08	---	---	88.80	---	---	88.14	87.54	---	87.30	87.50	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	88.43	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	86.90	---	---	88.24
15	---	89.04	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	88.08	87.92	---	---	---	---	---
17	89.98	---	---	88.64	---	---	---	87.40	---	87.36	87.68	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	87.69
21	---	---	88.92	---	---	---	---	---	87.14	---	---	88.30
22	---	89.26	---	---	---	---	---	---	---	---	---	---
23	89.70	---	---	---	---	88.04	87.80	---	---	---	---	---
24	89.78	---	---	88.52	---	---	---	87.14	---	87.40	87.84	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	88.32
29	---	---	---	---	---	---	---	---	87.18	---	---	---
30	---	89.18	---	---	---	---	87.64	---	---	87.48	---	---
31	89.58	---	---	88.56	---	88.30	---	87.06	---	87.48	87.80	---
MAX	90.08	89.48	88.92	88.80	88.43	88.30	88.14	87.54	87.18	87.48	87.84	88.32
MIN	89.58	89.04	88.92	88.52	88.43	88.04	87.64	87.06	86.90	87.30	87.50	87.69

02266650 LAKE MARION NEAR HAINES CITY, FL

LOCATION.--Lat 28°05'56", long 81°31'51", in SE $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--35.7 mi².

PERIOD OF RECORD.--February to August 1958 (weekly); September 1958 to current year (once daily).

GAGE.--Nonrecording gage. Datum of gage is at sea level (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 2000 TO SEPTEMBER 2001
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.16	65.70	65.48	65.36	65.36	65.30	65.30	65.06	64.86	65.04	65.46	---
2	66.10	65.70	65.48	65.36	65.35	65.30	65.36	65.06	64.86	65.04	65.46	---
3	66.10	65.70	65.48	65.36	65.35	65.26	65.36	65.06	64.90	65.04	66.00	---
4	66.10	65.64	65.48	65.36	65.36	65.26	65.36	65.02	64.90	65.04	66.00	---
5	66.06	65.64	65.48	65.36	65.36	65.26	65.40	65.02	64.90	65.10	66.10	---
6	66.06	65.64	65.50	65.36	65.36	65.26	65.40	65.00	64.90	65.10	66.14	---
7	66.00	65.64	65.50	65.36	65.36	65.26	65.40	65.00	64.90	65.10	66.20	---
8	66.00	65.64	65.50	65.36	65.36	65.26	65.40	65.00	64.90	65.10	66.26	---
9	66.00	65.60	65.50	65.40	65.36	65.26	65.40	65.00	64.90	65.10	66.26	---
10	65.96	65.60	65.48	65.40	65.36	65.20	65.40	65.00	64.90	65.20	66.26	---
11	65.96	65.56	65.48	65.40	65.36	65.20	65.40	65.00	64.90	65.20	66.20	---
12	65.90	65.56	65.48	65.40	65.36	65.20	65.36	64.96	64.96	65.20	66.20	---
13	65.90	65.56	65.48	65.40	65.36	65.20	65.36	64.96	64.96	65.20	66.20	---
14	65.90	65.56	65.48	65.40	65.36	65.20	65.30	64.96	64.96	65.26	66.16	---
15	65.90	65.52	65.48	65.40	65.40	65.20	65.30	64.96	65.00	65.30	66.16	---
16	65.90	65.50	65.48	65.40	65.40	65.20	65.30	64.92	65.00	65.34	66.16	---
17	65.86	65.50	65.44	65.40	65.40	65.20	65.22	64.92	65.00	65.34	66.16	---
18	65.86	65.50	65.44	65.40	65.40	65.20	65.22	64.92	65.04	65.40	66.16	---
19	65.82	65.50	65.44	65.40	65.36	65.20	65.20	64.92	65.04	65.40	66.16	---
20	65.80	65.50	65.40	65.40	65.36	65.20	65.20	64.90	65.04	65.40	66.16	---
21	65.74	65.50	65.40	65.40	65.36	65.16	65.16	64.90	65.04	65.40	66.16	---
22	65.74	65.50	65.40	65.40	65.32	65.16	65.10	64.90	65.04	65.40	66.16	---
23	65.74	65.50	65.40	65.36	65.32	65.16	65.10	64.90	65.08	65.40	66.10	---
24	65.74	65.50	65.40	65.36	65.32	65.16	65.10	64.90	65.08	65.40	66.10	---
25	65.74	65.48	65.40	65.36	65.30	65.16	65.10	64.90	65.04	65.40	66.00	---
26	65.70	65.48	65.40	65.36	65.30	65.16	65.10	64.86	65.04	65.46	66.00	---
27	65.70	65.48	65.36	65.36	65.30	65.14	65.10	64.86	65.04	65.46	66.00	---
28	65.70	65.48	65.36	65.36	65.30	65.12	65.06	64.86	65.04	65.46	66.00	---
29	65.70	65.48	65.36	65.36	---	65.12	65.06	64.86	65.04	65.46	66.00	---
30	65.70	65.48	65.36	65.36	---	65.20	65.06	64.86	65.04	65.46	65.96	---
31	65.70	---	65.36	65.36	---	65.30	---	64.86	---	65.46	65.96	---
MEAN	65.88	65.55	65.44	65.38	65.35	65.21	65.25	64.95	64.98	65.28	66.07	---
MAX	66.16	65.70	65.50	65.40	65.40	65.30	65.40	65.06	65.08	65.46	66.26	---
MIN	65.70	65.48	65.36	65.36	65.30	65.12	65.06	64.86	64.86	65.04	65.46	---

KISSIMMEE RIVER BASIN

02266900 LAKE PIERCE NEAR WAVERLY, FL

LOCATION.--Lat 27°58'37", long 81°32'33", in NW¹/₄ 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 mi²).

DRAINAGE AREA.--58.9 mi².

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 sea level (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 (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT		
24...	1235	75.87
DEC		
04...	1208	75.65
JAN		
31...	1105	75.50
APR		
05...	1310	75.47
MAY		
31...	1545	74.82
AUG		
03...	1250	76.09
SEP		
25...	1251	77.79

02268400 LAKE WEOHYAKAPKA AT INDIAN LAKE ESTATES, FL

LOCATION.--Lat 27°48'50", long 81°23'16", in NE¹/₄ 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 mi²).

DRAINAGE AREA.--93.5 mi².

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 sea level (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, 62.16 ft, Sept. 25; minimum observed, 59.86 ft, May 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	60.45	---	---	---	---	---	---	---	---
2	61.19	---	---	---	---	---	60.02	---	---	60.56	---	---
3	---	---	---	---	---	---	---	---	---	---	61.10	---
4	---	---	60.58	---	---	---	---	---	60.02	---	---	---
5	---	---	---	---	60.35	60.14	60.38	---	---	---	---	---
6	---	60.81	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	60.08	---	---	---	---
8	---	---	---	60.42	---	---	---	---	---	---	---	---
9	61.11	---	---	---	---	---	60.44	---	---	60.70	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	60.50	---	---	---	---	---	60.22	---	---	---
12	---	---	---	---	60.33	60.20	---	---	---	---	---	---
13	---	60.73	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	59.96	---	---	---	---
15	---	---	---	60.38	---	---	---	---	---	---	---	---
16	61.01	---	---	---	---	---	60.40	---	---	60.86	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	60.47	---	---	---	---	---	60.34	---	---	---
19	---	---	---	---	60.28	60.14	---	---	---	---	---	---
20	---	60.67	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	59.90	---	---	---	---
22	---	---	---	60.40	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	60.36	---	---	61.00	---	---
24	60.88	---	---	---	---	---	---	---	---	---	---	---
25	---	---	60.44	---	---	---	---	---	60.40	---	---	62.16
26	---	---	---	---	60.22	60.08	---	---	---	---	---	---
27	---	60.63	---	---	---	---	---	---	---	---	---	---
28	60.93	---	---	---	---	---	---	59.86	---	---	---	---
29	---	---	---	60.42	---	---	---	---	---	---	---	---
30	60.87	---	---	---	---	---	60.28	---	---	61.08	---	---
31	---	---	---	60.42	---	---	---	59.88	---	---	---	---
MAX	61.19	60.81	60.58	60.45	60.35	60.20	60.44	60.08	60.40	61.08	61.10	62.16
MIN	60.87	60.63	60.44	60.38	60.22	60.08	60.02	59.86	60.02	60.56	61.10	62.16

KISSIMMEE RIVER BASIN

02268600 LAKE ROSALIE NEAR LAKE WALES, FL

LOCATION.--Lat 27°56'23", long 81°25'14", in SE $\frac{1}{4}$ sec.21, T.29 S., R.29 E., Polk County, Hydrologic Unit 03090101, on west side of lake, in boat basin at Monroe Trailer Park, 10.5 mi northeast of town of Lake Wales.

SURFACE AREA.--4,592 acres (7.18 mi²).

DRAINAGE AREA.--133 mi².

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 sea level (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 2000 TO SEPTEMBER 2001
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.93	51.65	51.47	51.36	51.31	51.17	51.21	51.00	---	50.73	50.96	51.38
2	51.94	51.65	51.48	51.34	51.30	51.16	51.20	51.00	---	50.71	50.95	51.39
3	51.95	51.64	51.46	51.32	51.30	51.14	51.18	51.00	---	50.69	51.20	51.37
4	51.96	51.65	51.46	51.30	51.30	51.19	51.18	---	---	50.68	51.18	51.38
5	51.97	51.62	51.45	51.29	51.28	51.16	51.20	---	---	50.66	51.22	51.36
6	51.97	51.63	51.44	51.30	51.28	51.14	51.31	---	---	50.77	51.25	51.35
7	51.97	51.66	51.43	51.32	51.30	51.12	51.33	---	---	50.76	51.32	51.42
8	51.96	51.64	51.42	51.32	51.32	51.10	51.31	---	---	50.74	51.32	51.79
9	51.90	51.65	51.42	51.30	51.32	51.10	51.29	---	---	50.84	51.33	51.89
10	51.86	51.63	51.43	51.30	51.30	51.08	51.28	---	---	50.85	51.34	51.99
11	51.86	51.62	51.44	51.31	51.30	51.08	51.25	---	---	50.85	51.33	52.00
12	51.87	51.59	51.46	51.30	51.30	51.08	---	---	---	50.84	51.32	52.00
13	51.86	51.59	51.49	51.30	51.30	51.06	---	---	---	50.83	51.32	52.51
14	51.83	51.57	51.48	51.31	51.28	51.04	---	---	---	50.83	51.30	52.55
15	51.78	51.56	51.46	51.30	51.28	51.00	---	---	---	50.88	51.29	52.58
16	51.78	51.56	51.47	51.32	51.28	---	---	---	---	50.88	51.28	52.58
17	51.79	51.55	51.46	51.32	51.29	---	---	---	---	50.88	51.28	52.56
18	51.78	51.56	51.46	51.32	51.26	---	---	---	---	50.90	51.26	52.72
19	51.79	51.53	51.45	51.32	51.24	---	---	---	---	50.92	51.26	52.74
20	51.78	51.51	51.43	51.30	51.22	---	---	---	---	50.91	51.25	52.79
21	51.79	51.48	---	51.30	51.22	---	---	---	---	50.90	51.36	52.85
22	51.77	51.47	51.40	51.30	51.21	---	---	---	50.76	50.98	51.49	52.90
23	51.76	51.48	51.44	51.28	51.20	---	51.18	---	50.74	51.00	51.49	52.99
24	51.78	51.50	51.43	51.30	51.22	---	51.14	---	50.73	50.98	51.48	53.14
25	51.76	51.44	---	51.30	51.20	---	51.10	---	50.76	50.98	51.48	53.20
26	51.75	51.48	---	51.30	51.21	---	---	---	50.76	50.96	51.46	53.27
27	51.72	51.50	---	51.30	51.20	---	---	---	50.75	50.96	51.44	---
28	51.70	51.50	---	51.29	51.18	---	---	---	50.74	50.99	51.43	---
29	51.69	51.59	51.37	51.30	---	---	---	---	50.74	50.97	51.42	---
30	51.68	51.48	51.35	51.30	---	---	---	---	50.72	50.97	51.41	---
31	51.66	---	51.36	51.31	---	---	---	50.59	---	50.96	51.39	---
MEAN	51.83	51.57	51.44	51.31	51.26	51.11	51.23	50.90	50.74	50.86	51.32	52.26
MAX	51.97	51.66	51.49	51.36	51.32	51.19	51.33	51.00	50.76	51.00	51.49	53.27
MIN	51.66	51.44	51.35	51.28	51.18	51.00	51.10	50.59	50.72	50.66	50.95	51.35

KISSIMMEE RIVER BASIN

02268800 LAKE MARIAN NEAR KENANSVILLE, FL

LOCATION.--Lat 27°52'22", long 81°03'08", in NE¹/₄ 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 mi²).

DRAINAGE AREA.--49.6 mi².

PERIOD OF RECORD.--February 1958 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is at sea level (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, 60.14 ft, Sept. 28; minimum observed, 55.86 ft, May 18,25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	57.00	---	---	---	---	---	56.01	---	---	---
2	---	---	---	---	56.64	56.38	---	---	---	---	---	---
3	---	57.28	---	---	---	---	56.37	---	---	55.99	57.16	---
4	---	---	---	---	---	---	---	56.06	---	---	---	---
5	---	---	---	56.70	---	---	---	---	---	---	---	58.50
6	57.76	---	---	---	---	---	56.34	---	---	56.08	---	---
7	---	---	---	---	---	56.39	---	---	---	---	---	58.46
8	---	---	56.90	---	---	---	---	55.98	56.08	---	---	---
9	---	---	---	---	56.58	56.26	---	---	---	---	---	---
10	---	57.28	---	---	---	---	---	---	---	---	58.02	---
11	---	---	---	---	---	---	---	56.00	---	---	---	---
12	---	---	---	56.71	---	---	---	---	---	---	---	---
13	57.74	---	---	---	---	---	56.30	---	---	56.40	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	57.15	56.90	---	---	---	---	---	56.00	---	---	59.62
16	---	---	---	---	56.56	56.20	---	---	---	---	---	---
17	---	57.16	---	---	---	---	---	---	---	---	58.18	---
18	---	---	---	---	---	---	---	55.86	---	---	---	---
19	---	---	---	56.64	---	---	---	---	56.00	---	---	---
20	57.74	---	---	---	---	---	56.00	---	---	56.66	---	---
21	---	---	---	---	---	---	---	---	---	---	---	59.90
22	---	---	56.88	---	---	---	---	---	56.18	---	---	---
23	---	---	---	---	---	56.14	56.03	---	---	---	---	---
24	---	57.16	---	---	56.46	---	---	---	---	---	58.44	---
25	---	---	---	---	---	---	---	55.86	---	---	---	---
26	---	---	---	56.64	---	---	---	---	---	---	---	---
27	---	---	---	---	56.45	---	56.00	---	---	56.86	---	---
28	---	---	---	---	---	---	---	---	---	---	---	60.14
29	---	---	56.88	---	---	---	---	---	56.06	---	---	---
30	---	---	---	---	---	56.30	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	58.38	---
MAX	57.76	57.28	57.00	56.71	56.64	56.39	56.37	56.06	56.18	56.86	58.44	60.14
MIN	57.74	57.15	56.88	56.64	56.45	56.14	56.00	55.86	56.00	55.99	57.16	58.46

KISSIMMEE RIVER BASIN

02269600 LAKE ARBUCKLE NEAR AVON PARK, FL

LOCATION.--Lat 27°39'55", long 81°22'38", in SW $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--170 mi².

PERIOD OF RECORD.--December 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is at sea level. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.91	52.44	52.16	52.06	51.97	51.78	52.08	51.68	51.64	52.12	53.70	53.84
2	52.88	52.42	52.16	52.06	51.98	51.76	52.02	51.67	51.65	52.12	53.75	53.81
3	52.89	52.42	52.18	52.05	51.98	51.74	51.99	51.70	51.66	52.19	53.87	53.78
4	52.92	52.40	52.17	52.06	51.97	51.75	52.01	51.75	51.65	52.42	53.98	53.74
5	52.92	52.39	52.14	52.03	51.96	51.86	52.01	51.74	51.63	52.52	54.14	53.74
6	52.91	52.37	52.12	52.02	51.93	51.84	52.02	51.72	51.64	52.55	54.25	53.76
7	52.90	52.35	52.11	52.01	51.93	51.77	52.01	51.70	51.68	52.58	54.31	53.84
8	52.89	52.33	52.10	52.01	51.91	51.72	52.01	51.68	51.80	52.58	54.33	53.93
9	52.89	52.33	52.10	52.09	51.91	51.70	52.00	51.65	51.88	52.61	54.33	54.12
10	52.81	52.34	52.09	52.02	51.91	51.70	51.99	51.63	51.90	52.69	54.34	54.40
11	52.79	52.33	52.10	52.00	51.91	51.70	51.97	51.62	51.89	52.82	54.49	54.54
12	52.76	52.30	52.14	52.00	51.91	51.66	51.96	51.60	51.88	52.89	54.55	54.62
13	52.75	52.28	52.13	52.01	51.90	51.68	51.97	51.60	51.88	52.98	54.56	54.70
14	52.73	52.28	52.13	52.00	51.89	51.70	51.97	51.58	51.88	53.05	54.55	54.98
15	52.71	52.29	52.12	51.99	51.89	51.67	51.96	51.56	51.87	53.12	54.53	55.36
16	52.69	52.25	52.11	51.99	51.88	51.68	51.95	51.56	51.88	53.15	54.49	55.49
17	52.67	52.25	52.15	51.99	51.89	51.69	51.94	51.55	51.89	53.21	54.46	55.55
18	52.66	52.26	52.13	51.98	51.88	51.70	51.90	51.52	51.97	53.33	54.42	55.57
19	52.64	52.24	52.13	51.96	51.83	51.66	51.83	51.50	52.01	53.50	54.38	55.57
20	52.63	52.27	52.12	52.04	51.82	51.69	51.80	51.49	52.02	53.56	54.34	55.56
21	52.62	52.26	52.08	52.02	51.82	51.69	51.79	51.45	52.03	53.60	54.30	55.53
22	52.61	52.20	52.08	52.03	51.82	51.68	51.77	51.46	52.05	53.65	54.26	55.55
23	52.60	52.19	52.08	52.05	51.82	51.64	51.76	51.60	52.07	53.68	54.22	55.70
24	52.58	52.15	52.10	51.99	51.78	51.63	51.76	51.61	52.08	53.75	54.19	55.80
25	52.55	52.16	52.08	52.01	51.78	51.63	51.76	51.58	52.08	53.78	54.15	55.88
26	52.54	52.19	52.05	51.98	51.80	51.62	51.78	51.58	52.08	53.79	54.11	55.91
27	52.52	52.21	52.03	51.97	51.79	51.62	51.72	51.54	52.09	53.81	54.05	55.95
28	52.49	52.19	52.07	51.96	51.80	51.57	51.69	51.55	52.11	53.80	54.01	55.99
29	52.48	52.18	52.12	51.94	---	51.60	51.67	51.57	52.11	53.79	53.97	56.04
30	52.48	52.18	52.13	51.95	---	51.95	51.67	51.58	52.13	53.76	53.92	56.06
31	52.46	---	52.09	51.96	---	52.04	---	51.58	---	53.74	53.88	---
MEAN	52.71	52.28	52.11	52.01	51.88	51.71	51.89	51.60	51.90	53.13	54.22	54.98
MAX	52.92	52.44	52.18	52.09	51.98	52.04	52.08	51.75	52.13	53.81	54.56	56.06
MIN	52.46	52.15	52.03	51.94	51.78	51.57	51.67	51.45	51.63	52.12	53.70	53.74
CAL YR 2000	MEAN 52.52	MAX 53.93	MIN 51.35									
WTR YR 2001	MEAN 52.54	MAX 56.06	MIN 51.45									

02271700 LAKE ISTOKPOGA NEAR DE SOTO CITY, FL

LOCATION.--Lat 27°26'27", long 81°15'42", in NE¹/₄ 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 mi²).

DRAINAGE AREA.--607 mi².

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 sea level (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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.16	38.10	37.82	37.60	37.50	36.50	36.42	---	---	36.31	38.31	38.46
2	38.15	38.10	37.83	37.55	37.46	36.49	36.37	---	---	36.28	38.29	38.45
3	38.21	38.09	37.75	37.55	37.36	36.55	36.47	---	---	36.26	38.32	38.46
4	38.38	38.09	37.66	37.55	37.43	36.58	36.44	---	---	36.34	38.26	38.44
5	38.35	38.10	37.70	37.61	37.43	36.43	36.35	---	36.09	36.41	38.34	38.44
6	38.36	38.11	37.74	37.61	37.46	36.33	36.38	---	36.04	36.43	38.37	38.53
7	38.36	38.11	37.71	37.60	37.40	36.30	36.40	---	36.03	36.44	38.42	38.71
8	38.31	38.11	37.75	37.67	37.30	36.33	36.41	---	36.03	36.49	38.45	38.96
9	38.04	38.10	37.75	37.50	37.29	36.41	36.43	---	36.03	36.56	38.41	39.17
10	38.21	38.09	37.76	37.45	37.24	36.35	36.41	---	36.01	36.63	38.35	39.22
11	38.22	38.00	37.79	37.57	37.18	36.34	36.40	---	36.04	36.71	38.31	39.14
12	38.21	37.99	37.79	37.60	37.14	36.41	36.41	---	36.05	36.77	38.34	39.10
13	38.24	38.02	37.80	37.51	37.09	36.57	36.37	---	36.02	36.85	38.37	39.07
14	38.24	38.05	37.78	37.55	37.07	36.32	36.31	---	35.98	36.83	38.40	39.55
15	38.24	37.93	37.76	37.56	37.03	36.45	36.32	---	35.96	36.75	38.41	39.36
16	38.26	37.96	37.81	37.56	37.03	36.44	36.27	---	36.01	36.93	38.42	39.38
17	38.27	38.00	37.77	37.57	36.96	36.30	36.24	---	36.00	37.15	38.43	39.43
18	38.26	37.91	37.69	37.59	36.71	36.24	36.21	---	35.95	37.25	38.44	39.45
19	38.26	38.01	37.70	37.65	36.76	36.26	---	---	35.88	37.32	38.45	39.47
20	38.24	37.83	37.62	37.56	36.80	36.41	---	---	35.97	37.40	38.50	39.39
21	38.21	37.78	37.63	37.45	36.76	36.33	---	---	36.08	37.58	38.55	39.31
22	38.16	37.81	37.61	37.45	36.73	36.24	---	---	36.10	37.78	38.57	39.18
23	38.12	37.83	37.55	37.46	36.65	36.24	---	---	36.12	37.98	38.55	39.07
24	38.10	37.88	37.49	37.53	36.67	36.24	---	---	36.12	37.93	38.53	39.00
25	38.13	37.90	37.44	37.48	36.67	36.26	---	---	36.13	38.00	38.50	39.05
26	38.14	37.88	37.56	37.49	36.62	36.23	---	---	36.14	38.08	38.44	39.10
27	38.15	37.85	37.64	37.51	36.56	36.22	---	---	36.17	38.16	38.41	39.18
28	38.16	37.85	37.72	37.52	36.57	36.22	---	---	36.25	38.22	38.42	39.17
29	38.17	37.82	37.63	37.55	---	36.29	---	---	36.28	38.29	38.42	39.09
30	38.14	37.80	37.57	37.57	---	36.46	---	---	36.31	38.35	38.43	39.04
31	38.11	---	37.56	37.54	---	36.53	---	---	---	38.34	38.47	---
MEAN	38.21	37.97	37.69	37.55	37.03	36.36	36.37	---	36.07	37.19	38.42	39.05
MAX	38.38	38.11	37.83	37.67	37.50	36.58	36.47	---	36.31	38.35	38.57	39.55
MIN	38.04	37.78	37.44	37.45	36.56	36.22	36.21	---	35.88	36.26	38.26	38.44
CAL YR 2000	MEAN 38.27	MAX 39.45	MIN 37.43									
WTR YR 2001	MEAN 37.51	MAX 39.55	MIN 35.88									

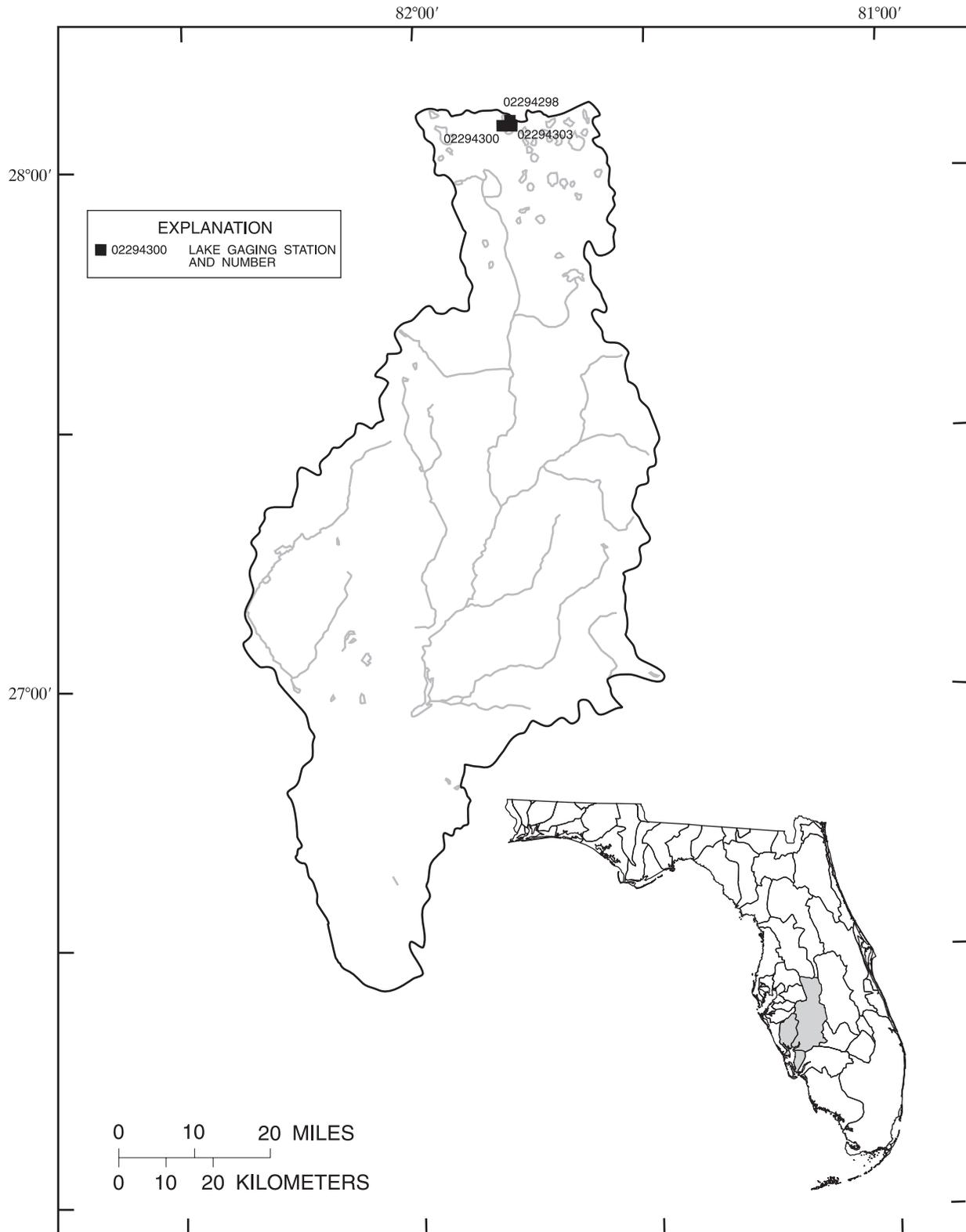


Figure 13.--Location of lake gaging stations in the Peace and Myakka River basins, Charlotte Harbor and coastal area.

02294298 LAKE ARIETTA NEAR AUBURNDALE, FL

LOCATION.--Lat 28°05'43", long 81°47'43", in NE¼ 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 mi²).

DRAINAGE AREA.--3.70 mi².

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 sea level; gage readings have been reduced to elevations above sea level. 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, 139.42 ft, Oct. 3; minimum observed, 137.56 ft, June 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	138.96	---	---	---	---	---	---	---	---	138.18	---
2	---	---	---	---	---	---	138.36	---	---	137.78	---	---
3	139.42	---	---	---	---	---	---	---	---	---	138.26	---
4	---	---	---	---	138.32	---	---	137.82	137.58	---	---	138.46
5	---	---	---	---	---	---	---	---	---	---	138.44	---
6	---	138.90	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	138.58	---	---	---	---	---	---	137.82	---	---
9	---	---	---	---	---	---	138.30	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	138.76
11	---	---	---	---	138.26	---	---	137.70	---	---	---	---
12	---	---	138.62	---	---	138.10	---	---	137.56	---	---	---
13	139.20	138.80	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	137.70	---	---	---	---
15	---	---	---	138.38	---	---	---	---	---	---	---	---
16	---	---	138.64	---	---	---	---	---	---	138.06	---	---
17	---	---	---	---	---	---	---	---	---	---	---	139.28
18	---	---	---	---	---	138.10	---	---	---	---	---	---
19	---	138.74	---	---	---	138.12	138.08	---	137.68	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	138.38	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	138.14	---	---
24	139.02	---	---	---	---	---	---	137.64	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	138.48	---	138.16	---	137.98	---	---	---	---	---
27	---	138.70	---	---	---	---	---	---	---	---	---	139.28
28	---	---	---	---	138.20	---	---	137.60	137.70	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	138.98	---	---	---	---	138.32	---	---	---	---	---	139.22
31	---	---	138.44	138.30	---	---	---	---	---	138.14	138.46	---
MAX	139.42	138.96	138.64	138.38	138.32	138.32	138.36	137.82	137.70	138.14	138.46	139.28
MIN	138.98	138.70	138.44	138.30	138.16	138.10	137.98	137.60	137.56	137.78	138.18	138.46

LOCATION.--Lat 28°05'18", long 81°48'54", in SE¹/₄ 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 mi²).

DRAINAGE AREA.--4.33 mi².

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 sea level; gage readings have been reduced to elevations above sea level. 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, 136.86 ft, Sept. 27; minimum observed, 134.66 ft, June 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	135.94	---	---	---	---	---	---	---	134.90	135.40	---
2	---	---	---	---	---	---	---	135.00	---	---	---	---
3	136.28	---	---	135.52	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	135.44	---	134.69	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	135.87	135.66	---	---	---	---	---	134.66	---	---	135.88
7	---	---	---	---	135.40	135.26	---	---	---	---	---	---
8	---	135.86	---	---	---	---	---	---	---	---	135.94	---
9	---	---	---	---	---	---	135.40	135.00	---	---	---	---
10	---	---	---	135.56	---	---	---	---	---	---	---	---
11	136.14	---	---	---	---	---	135.38	---	---	135.02	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	135.70	---	---	---	---	---	134.68	---	---	136.30
14	---	---	---	---	135.36	135.20	---	---	---	---	---	---
15	---	135.80	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	134.84	---	---	136.02	---
17	---	---	---	135.44	---	---	135.28	---	---	---	---	---
18	136.08	---	---	---	---	---	---	---	---	135.30	---	---
19	---	---	---	---	---	---	---	---	---	---	---	136.76
20	---	---	135.64	---	---	---	---	---	134.78	---	---	---
21	---	---	---	---	135.28	135.14	---	---	---	---	---	---
22	---	135.70	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	134.80	---	---	136.00	---
24	---	---	---	135.42	---	---	---	---	---	---	---	---
25	136.00	---	---	---	---	---	135.12	---	---	---	---	---
26	---	---	135.58	---	135.24	---	---	---	---	135.34	---	---
27	---	---	135.56	---	---	---	---	---	134.82	---	---	136.86
28	---	---	---	---	135.24	135.08	---	---	---	---	---	---
29	---	135.76	---	---	---	---	---	---	---	---	135.96	---
30	---	---	---	---	---	---	---	134.70	---	---	---	---
31	---	---	---	135.40	---	---	---	---	---	---	---	---
MAX	136.28	135.94	135.70	135.56	135.40	135.26	135.44	135.00	134.82	135.34	136.02	136.86
MIN	136.00	135.70	135.56	135.40	135.24	135.08	135.12	134.70	134.66	134.90	135.40	135.88

02294303 ARIANA LAKE AT AUBURNDALE, FL

LOCATION.--Lat 28°05'16", long 81°47'41", in SE¹/₄ 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 mi²).

DRAINAGE AREA.--7.86 mi².

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 sea level (levels by Southwest Florida Water Management District); gage readings have been reduced to elevations above sea level. 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, 133.58 ft, Sept. 27; minimum observed, 131.94 ft, May 30, June 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	132.51	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	132.00	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	133.45	---	---	---	---	---	132.30	---	---	---	---
7	---	---	---	---	---	132.70	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	132.92	---	---	132.78	---	---	---	132.90	133.02
10	133.22	---	---	---	132.62	---	---	---	---	132.58	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	132.72	---	131.94	---	---	---
13	---	---	---	---	---	132.74	---	---	---	---	---	---
14	---	---	---	---	---	---	---	132.14	---	---	---	---
15	---	133.24	132.94	---	---	---	---	---	---	---	---	133.35
16	---	---	---	---	---	---	---	---	---	---	132.84	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	132.82	132.60	---	132.44	---	---	---	---	---
21	---	---	---	---	---	---	---	132.00	132.20	132.62	---	---
22	---	---	---	---	---	132.78	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	133.42
24	---	---	---	---	---	---	---	---	---	---	132.80	---
25	133.24	---	---	---	---	---	---	---	---	---	---	---
26	---	---	133.01	---	132.68	---	---	---	---	---	---	---
27	---	133.26	132.96	---	---	---	---	---	---	132.50	---	133.58
28	---	---	---	132.80	---	---	132.39	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	132.84	---	131.94	132.20	---	---	133.55
31	---	---	---	---	---	---	---	---	---	---	132.70	---
MAX	133.24	133.45	133.01	132.92	132.68	132.84	132.78	132.30	132.20	132.62	132.90	133.58
MIN	133.22	133.24	132.94	132.80	132.60	132.70	132.39	131.94	131.94	132.50	132.51	133.02

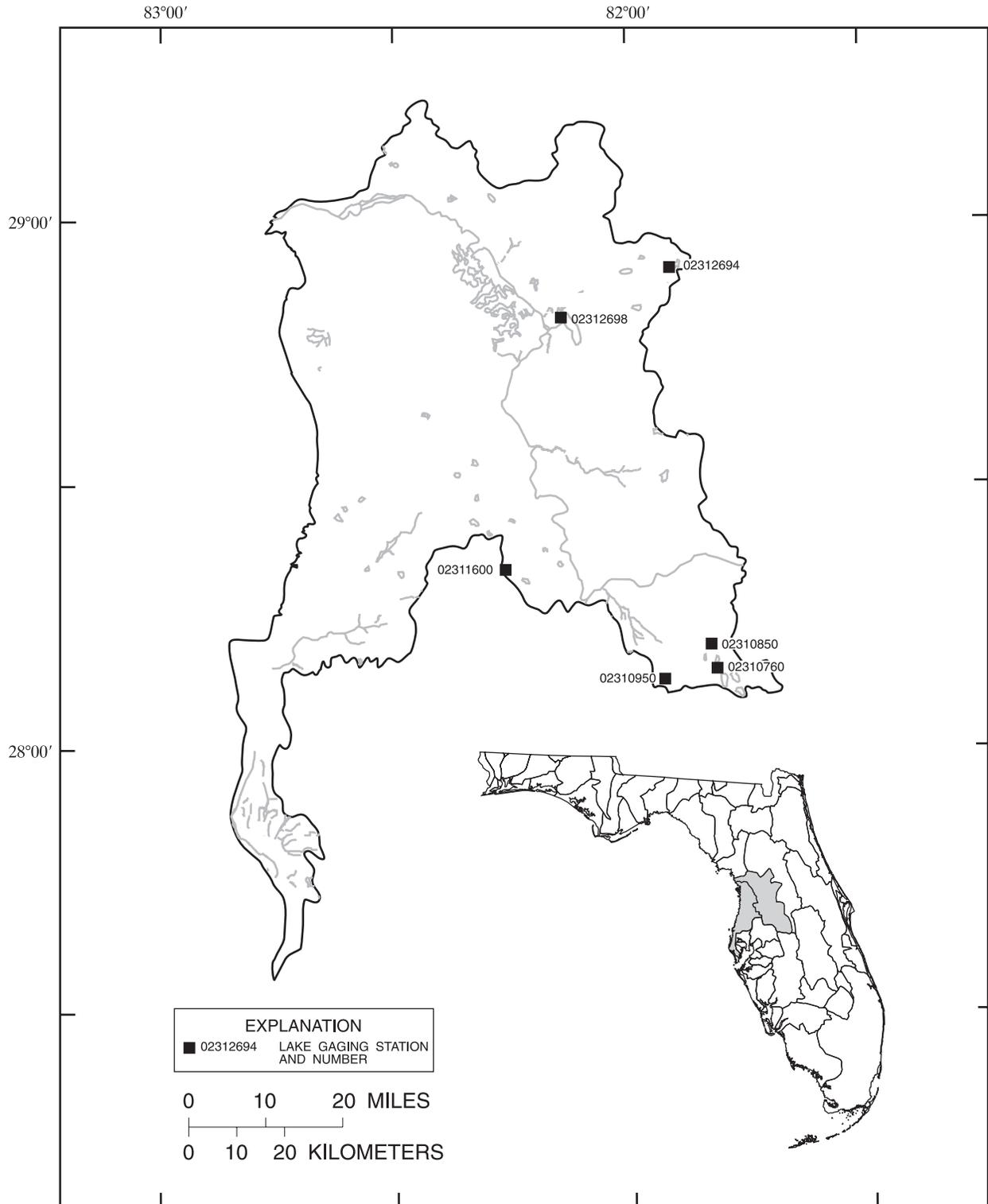


Figure 14.--Location of lake gaging stations in the Withlacoochee River basin and coastal areas.

WITHLACOCHEE RIVER BASIN

02310760 LAKE JULIANA NEAR POLK CITY, FL

LOCATION.--Lat 28°07'51", long 81°47'45", in SE¹/₄ 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 mi²).

DRAINAGE AREA.--5.4 mi², 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 sea level; gage readings have been reduced to elevations above sea level. 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, 129.86 ft, Oct. 1; minimum observed, 127.86 ft, June 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129.86	---	---	---	---	---	---	---	---	---	128.52	128.68
2	---	---	---	---	---	---	---	---	127.93	---	---	---
3	---	---	129.16	---	128.76	---	---	---	---	---	---	---
4	---	129.28	---	---	---	128.72	---	---	127.94	---	128.71	---
5	---	---	---	---	---	---	---	128.26	---	---	---	---
6	---	129.35	---	128.93	---	---	---	---	---	---	---	---
7	129.79	---	---	---	---	---	---	---	---	128.13	---	---
8	---	---	---	---	---	---	128.75	---	---	---	---	128.82
9	---	---	---	---	---	---	128.72	---	127.96	---	---	---
10	---	---	129.10	---	128.76	128.57	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	128.86	---
12	---	129.27	---	---	---	---	---	128.09	---	---	---	---
13	---	---	---	128.89	---	---	---	---	---	---	---	---
14	129.63	---	---	---	---	---	---	---	---	128.20	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	129.17	---	---	---	128.63	---	127.86	128.28	---	129.38
17	---	---	---	---	128.66	128.56	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	128.88	---
19	---	129.21	---	---	---	---	---	128.06	---	---	---	---
20	---	---	---	128.90	---	---	---	---	---	---	---	129.43
21	---	---	---	---	---	---	---	---	---	---	---	---
22	129.54	---	---	---	---	---	---	---	---	---	---	---
23	---	---	129.03	---	---	---	---	---	127.92	---	---	---
24	---	129.11	---	---	128.64	128.52	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	128.78	---
26	---	---	129.00	---	128.63	---	---	127.99	---	---	---	---
27	---	---	---	128.81	---	---	---	---	---	---	---	129.46
28	---	---	---	---	---	---	128.36	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	128.46	---	129.46
30	129.43	---	---	---	---	---	---	---	127.98	---	---	---
31	---	---	128.99	---	---	128.76	---	---	---	---	---	---
MAX	129.86	129.35	129.17	128.93	128.76	128.76	128.75	128.26	127.98	128.46	128.88	129.46
MIN	129.43	129.11	128.99	128.81	128.63	128.52	128.36	127.99	127.86	128.13	128.52	128.68

WITHLACOCHEE RIVER BASIN

O2310850 LAKE HELENE NEAR POLK CITY, FL

LOCATION.--Lat 28°10'25", long 81°48'21", in SW $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--0.42 mi².

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 sea level; gage readings have been reduced to elevations above sea level. 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, 138.21 ft, June 30, 2001.

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, 141.15 ft, Oct. 2; minimum observed, 138.21 ft, June 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	140.57	---	---	---	---	---	---	---	---	138.45	---
2	141.15	---	---	---	---	---	139.40	---	---	---	---	---
3	---	---	---	---	---	---	---	---	138.47	138.25	---	---
4	141.12	140.53	---	139.87	---	---	---	---	138.51	---	138.68	---
5	---	---	140.18	---	---	---	139.36	---	---	138.26	---	138.54
6	141.10	140.50	---	139.84	139.55	---	---	---	138.46	---	138.74	---
7	---	---	140.14	---	---	139.20	---	138.80	---	138.27	---	138.61
8	---	140.46	---	139.81	---	---	---	---	---	---	138.76	---
9	---	---	---	---	139.52	139.15	139.34	---	138.42	138.27	---	138.81
10	---	140.43	---	139.85	---	---	139.32	---	---	---	---	---
11	---	---	140.11	---	139.49	139.12	---	---	138.37	138.26	---	---
12	---	---	---	139.82	---	---	139.28	138.71	---	---	---	---
13	---	140.39	---	---	---	139.10	---	---	138.32	138.27	138.75	138.82
14	---	---	---	---	---	---	139.25	138.68	---	---	---	---
15	---	140.37	---	139.80	139.45	139.06	---	---	---	---	138.77	---
16	140.84	---	---	---	---	---	139.20	138.64	138.29	138.37	---	---
17	---	140.34	140.12	139.78	139.42	139.02	---	---	---	---	138.75	139.44
18	140.81	---	---	---	---	---	---	138.58	138.22	138.36	---	---
19	---	---	---	---	139.35	---	---	---	---	---	---	139.47
20	---	---	---	---	---	139.12	---	138.54	138.27	138.34	138.73	---
21	140.78	140.27	---	139.74	---	---	---	---	---	---	---	---
22	---	---	---	---	139.33	139.08	---	138.56	138.24	---	138.75	---
23	140.75	140.22	---	139.70	---	---	139.02	---	---	138.36	---	---
24	---	---	---	---	---	---	---	---	---	---	---	139.52
25	---	---	---	---	139.28	---	---	138.54	138.27	138.33	---	---
26	140.68	140.22	139.94	139.65	139.28	---	---	---	---	---	---	139.54
27	---	140.29	---	---	139.26	---	---	138.50	---	---	138.66	139.58
28	140.65	---	---	---	---	---	---	---	138.23	---	---	139.54
29	---	---	---	139.62	---	138.95	---	---	---	138.63	---	---
30	140.62	---	---	---	---	---	---	138.46	138.21	138.37	---	---
31	---	---	---	139.60	---	139.32	---	---	---	---	---	---
MAX	141.15	140.57	140.18	139.87	139.55	139.32	139.40	138.80	138.51	138.37	138.77	139.58
MIN	140.62	140.22	139.94	139.60	139.26	138.95	139.02	138.46	138.21	138.25	138.45	138.54

WITHLACOCHEE RIVER BASIN

02310950 LAKE DEESON NEAR LAKELAND, FL

LOCATION.--Lat 28°06'37", long 81°55'51", in NW¹/₄ 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 mi²).

DRAINAGE AREA.--0.96 mi².

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 sea level; gage readings have been reduced to elevations above sea level. 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 daily, 117.60 ft, July 7, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 120.57 ft, Oct. 9; minimum observed, 117.60 ft, July 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	118.08	---
2	---	---	---	---	---	---	---	---	---	---	---	118.52
3	---	---	---	---	---	---	---	---	---	117.68	---	---
4	---	---	---	---	---	---	---	118.42	117.72	---	---	---
5	---	---	---	---	119.06	118.69	118.88	---	---	---	---	---
6	---	120.34	---	---	---	---	---	---	---	---	---	---
7	120.57	---	119.73	119.38	---	---	---	---	---	117.60	118.44	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	118.85	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	119.35
11	---	---	---	---	---	118.59	118.82	118.25	117.64	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	118.94	---	---	---	---	---	118.54	---
14	120.41	119.73	---	119.34	---	---	---	---	---	117.84	---	119.80
15	---	---	119.58	---	---	---	---	---	---	---	---	120.00
16	---	119.96	---	---	---	---	---	118.14	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	119.92	---	---	---	---	118.62	---	---	---	---	---
19	---	---	---	---	---	118.52	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	117.64	---	118.62	---
21	---	---	---	119.26	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	117.94	---	117.89	---	---
23	---	---	---	---	---	---	---	---	---	---	---	120.32
24	---	119.82	---	---	---	---	---	---	---	117.97	---	---
25	---	---	---	---	---	---	---	---	---	---	118.60	---
26	---	---	119.48	---	118.74	---	118.54	---	---	---	---	---
27	---	---	---	119.16	---	---	---	---	---	---	118.58	120.54
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	118.08	---	---
30	---	119.82	---	---	---	---	---	117.72	117.72	---	---	---
31	---	---	119.46	---	---	118.92	---	---	---	---	---	---
MAX	120.57	120.34	119.73	119.38	119.06	118.92	118.88	118.42	117.72	118.08	118.62	120.54
MIN	120.41	119.73	119.46	119.16	118.74	118.52	118.54	117.72	117.64	117.60	118.08	118.52

WITHLACOCHEE RIVER BASIN

02311600 CLEAR LAKE AT SAN ANTONIO, FL

LOCATION.--Lat 28°20'20", long 82°16'02", in SW $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--0.92 mi².

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 sea level (Florida Department of Transportation bench mark); gage readings have been reduced to elevations above sea level. 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, 128.92 ft, Oct. 10, 1998; minimum observed, 122.16 ft, May 7, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 125.00 ft, Oct. 7; minimum observed, 122.60 ft, June 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	123.20
2	---	---	124.28	---	---	---	---	---	122.78	---	---	---
3	---	---	---	---	124.00	123.78	---	---	---	---	---	---
4	---	124.58	---	---	---	---	---	---	---	---	123.38	---
5	---	---	---	---	---	---	---	123.03	122.72	---	---	---
6	---	---	---	123.88	---	---	---	---	---	---	---	---
7	125.00	---	---	---	---	---	---	---	---	122.78	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	124.51	124.20	---	---	---	---	---	122.80	---	---	123.32
10	---	---	---	---	123.90	123.76	123.75	---	---	---	---	---
11	---	124.48	---	---	---	---	---	---	---	---	123.36	---
12	---	---	---	---	---	---	---	123.30	---	---	---	---
13	---	---	---	123.84	---	---	---	---	---	---	---	---
14	124.26	---	---	---	---	---	---	---	---	122.88	---	---
15	---	---	---	---	---	---	---	---	---	---	---	124.00
16	---	---	124.12	---	---	---	---	---	122.60	---	---	---
17	---	---	---	---	123.84	123.66	---	---	---	---	---	---
18	---	124.36	---	---	---	---	---	---	---	---	123.34	---
19	---	---	---	---	---	---	---	122.85	---	---	---	---
20	---	---	---	123.80	---	---	---	---	---	---	---	123.95
21	124.82	---	---	---	---	---	---	---	---	123.06	---	---
22	---	---	---	---	---	---	---	122.85	---	---	---	123.98
23	---	---	124.00	---	---	---	---	---	122.70	---	---	---
24	---	---	---	---	123.80	123.64	---	---	---	---	---	---
25	---	124.30	---	---	---	---	---	---	---	---	123.22	---
26	---	---	---	---	---	---	---	122.80	---	---	---	---
27	---	---	124.02	123.76	123.78	---	---	---	---	---	---	---
28	124.62	---	---	---	---	---	---	---	---	123.10	---	123.94
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	123.90	---	---	---	---	---	122.82	---	---	---
31	---	---	---	---	---	123.72	---	---	---	123.06	---	---
MAX	125.00	124.58	124.28	123.88	124.00	123.78	123.75	123.30	122.82	123.10	123.38	124.00
MIN	124.26	124.30	123.90	123.76	123.78	123.64	123.75	122.80	122.60	122.78	123.22	123.20

WITHLACOCHEE RIVER BASIN

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02312694 LADY LAKE NEAR LADY LAKE, FL

LOCATION.--Lat 28°54'50", long 81°53'43", in NE $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--4.67 mi².

PERIOD OF RECORD.--February 1970 to September 1973 (weekly); October 1973 to current year (fragmentary).

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

GAGE.--Nonrecording gage. Datum of gage is at sea level.

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, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET) (72020)
OCT		
20...	1258	61.22
DEC		
28...	1357	61.04
FEB		
15...	1200	59.96
APR		
18...	0955	61.30
SEP		
20...	1418	61.44

WITHLACOCHEE RIVER BASIN

02312698 LAKE PANASOFFKEE NEAR LAKE PANASOFFKEE, FL

LOCATION.--Lat 28°49'01", long 82°08'40", in SE $\frac{1}{4}$ 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 mi²).

DRAINAGE AREA.--420 mi², 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 sea level (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 daily elevation, 36.93 ft, May 31, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.63	37.32	37.18	37.11	37.13	37.08	37.63	37.29	37.01	37.19	37.67	---
2	37.63	37.31	37.17	37.11	37.13	37.03	37.66	37.28	37.04	37.17	37.67	---
3	37.64	37.30	37.16	37.10	37.13	36.99	37.66	37.26	37.00	37.15	37.71	---
4	37.61	37.30	37.16	37.08	37.12	37.08	37.63	37.27	37.00	37.11	37.77	---
5	37.61	37.28	37.15	37.09	37.12	37.06	37.64	37.24	37.04	37.12	37.82	37.74
6	37.60	37.29	37.14	37.09	37.12	37.01	37.63	37.24	37.03	37.16	37.86	37.76
7	37.59	37.27	37.13	37.09	37.12	36.99	37.61	37.21	37.05	37.15	37.87	37.82
8	37.57	37.27	37.12	37.11	37.13	37.01	37.58	37.21	37.03	37.13	37.86	37.86
9	37.50	37.26	37.12	37.08	37.12	37.02	37.57	37.18	37.00	37.12	37.87	37.89
10	37.51	37.23	37.13	37.10	37.10	37.03	37.56	37.18	36.96	37.12	37.88	37.89
11	37.50	37.22	37.14	37.10	37.10	37.04	37.57	37.18	37.03	37.14	37.87	37.91
12	37.49	37.22	37.17	37.08	37.09	37.05	37.54	37.15	37.15	37.14	37.85	37.95
13	37.48	37.22	37.16	37.09	37.08	37.09	37.52	37.13	37.12	37.20	37.84	37.96
14	37.47	37.21	37.15	37.09	37.07	37.09	37.50	37.14	37.12	37.25	37.83	38.03
15	37.46	37.19	37.15	37.09	37.07	37.07	37.49	37.20	37.12	37.26	37.82	38.39
16	37.45	37.19	37.15	37.09	37.06	37.08	37.46	37.18	37.09	37.24	37.81	38.57
17	37.45	37.19	37.13	37.09	37.04	37.07	37.41	37.16	37.07	37.29	37.82	38.61
18	37.44	37.19	37.13	37.09	37.04	37.09	37.41	37.15	37.09	37.38	37.80	38.63
19	37.44	37.19	37.13	37.10	37.04	37.22	37.43	37.13	37.14	37.36	---	38.65
20	37.43	37.17	37.11	37.03	37.03	37.36	37.42	37.12	37.13	37.36	---	38.65
21	37.43	37.15	37.13	37.05	37.02	37.34	37.41	37.11	37.11	37.42	---	38.65
22	37.41	37.16	37.12	37.04	37.01	37.35	37.39	37.09	37.13	37.50	37.74	38.67
23	37.40	37.17	37.11	37.05	37.02	37.37	37.37	37.06	37.15	37.64	37.62	38.71
24	37.38	37.19	37.10	37.10	37.03	37.37	37.33	37.06	37.16	37.61	37.60	38.73
25	37.37	37.19	37.10	37.07	37.01	37.36	37.34	37.05	37.16	37.59	37.66	38.76
26	37.37	37.19	37.11	37.07	37.00	37.34	37.36	37.02	37.16	37.59	37.67	38.80
27	37.35	37.19	37.10	37.09	37.02	37.34	37.35	36.96	37.17	37.61	---	38.85
28	37.35	37.18	37.12	37.08	37.03	37.34	37.34	37.00	37.20	37.65	---	38.90
29	37.35	37.19	37.12	37.06	---	37.41	37.34	37.02	37.18	37.66	37.62	38.97
30	37.34	37.19	37.10	37.06	---	37.58	37.31	36.97	37.20	37.65	37.63	39.06
31	37.33	---	37.10	37.11	---	37.65	---	36.93	---	37.65	37.63	---
MEAN	37.47	37.22	37.13	37.08	37.07	37.19	37.48	37.13	37.09	37.34	37.76	38.40
MAX	37.64	37.32	37.18	37.11	37.13	37.65	37.66	37.29	37.20	37.66	37.88	39.06
MIN	37.33	37.15	37.10	37.03	37.00	36.99	37.31	36.93	36.96	37.11	37.60	37.74

CAL YR 2000 MEAN 37.63 MAX 38.25 MIN 37.08
WTR YR 2001 MEAN 37.35 MAX 39.06 MIN 36.93

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