

R
(200)
Ga3
Florida
1987
v. 1A



Water Resources Data Florida Water Year 1987

Volume 1A. Northeast Florida Surface Water



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-87-1A
Prepared in cooperation with the State of Florida
and with other agencies

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

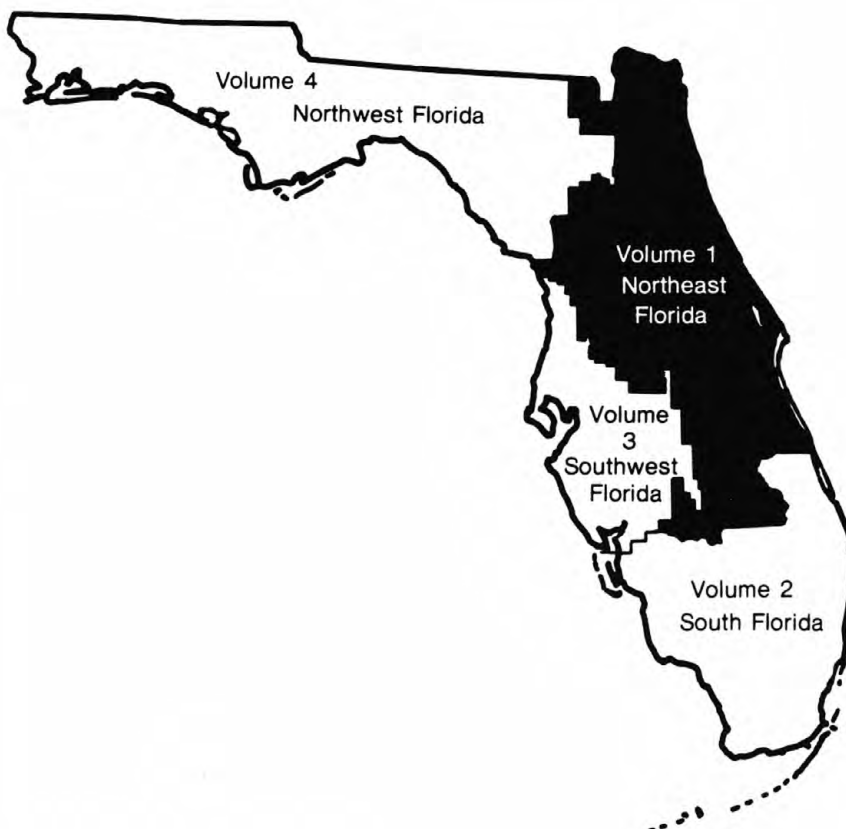
The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons



Water Resources Data Florida Water Year 1987

Volume 1A: Northeast Florida Surface Water



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-87-1A
Prepared in cooperation with the State of Florida
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

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

For additional information write to
Subdistrict Chief, Water Resources Division
U.S. Geological Survey
224 West Center Street, Suite 1006
Altamonte Springs, Florida 32714

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

PREFACE

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

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

ACKNOWLEDGMENT

The water-resources data for northeast Florida were processed and prepared for publication under the supervision of Larry D. Fayard, Chief, Hydrologic Surveillance and Data Analysis Section.

Orlando Subdistrict Office

C.J. Cash	E.J. Duffy	D.E. Laughlin	M.J. Orr
R.A. Craig	H.G. George	A.P. Nazarian	E.P. Simonds
L.L. Braley	W.R. Hopkins	S.A. Nordman	T.L. Turner
D.B. Dale	R.E. Jones	J.L. Oberg	

Jacksonville Field Headquarters

M.S. Bass	R.A. Broxton	S.M. Dickerson	M.A. Reddy
P.L. Bradt	J.E. Coffin	M.A. Holmes	M.J. Savarino

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

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-89/211	2.	3. Recipient's Accession No.
4. Title and Subtitle Water Resources Data - Florida, Water Year 1987 Volume 1A: Northeast Florida - Surface Water			5. Report Date NOVEMBER 1988
7. Author(s)			6.
9. Performing Organization Name and Address U.S. Geological Survey Water Resources Division 224 West Center Street, Suite 1006 Altamonte Springs, FL 32714			8. Performing Organization Rept. No. USGS-WDR-FL-87-1A
12. Sponsoring Organization Name and Address U.S. Geological Survey Water Resources Division 227 North Bronough Street, Suite 3015 Tallahassee, FL 32301			10. Project/Task/Work Unit No.
			11. Contract(C) or Grant(G) No. (C) (G)
			13. Type of Report & Period Covered Annual - Oct. 1, 1986 to Sept. 30, 1987
15. Supplementary Notes Prepared in cooperation with the State of Florida and other agencies.			14.
16. Abstract (Limit: 200 words) Water resources data for the 1987 water year in Florida consist of continuous or daily discharge for 320 streams, periodic discharge for 38 streams, miscellaneous discharge for 29 streams, continuous or daily stage for 94 streams, periodic stage for 48 streams, peak discharge for 76 streams, and peak stage for 69 streams; continuous or daily elevations for 80 lakes, periodic elevations for 74 lakes; continuous ground-water levels for 477 wells, periodic ground-water levels for 562 wells, and miscellaneous water-level measurements for 2,886 wells; quality-of-water data for 223 surface-water sites and 900 wells. The data for northeast Florida include continuous or daily discharge for 125 streams, periodic discharge for 15 streams, miscellaneous discharge for 14 streams, continuous or daily stage for 45 streams, periodic stage for 27 streams, peak discharge for 26 streams, and peak stage for 27 streams; continuous or daily elevations for 39 lakes, periodic elevations for 53 lakes; continuous ground-water levels for 81 wells, periodic ground-water levels for 150 wells, and miscellaneous water-level measurements for 969 wells; quality-of-water data for 59 surface-water sites and 105 wells. These data represent the National Water Data System records collected by the U.S. Geological Survey and cooperating local, state and federal agencies in Florida.			
17. Document Analysis a. Descriptors *Florida, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Elevations, Water wells. b. Identifiers/Open-Ended Terms c. COSATI Field/Group			
18. Availability Statement: No restrictions on distribution. This report may be purchased from: National Technical Information Center, Springfield, VA 22161		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 428
		20. Security Class (This Page) UNCLASSIFIED	22. Price

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

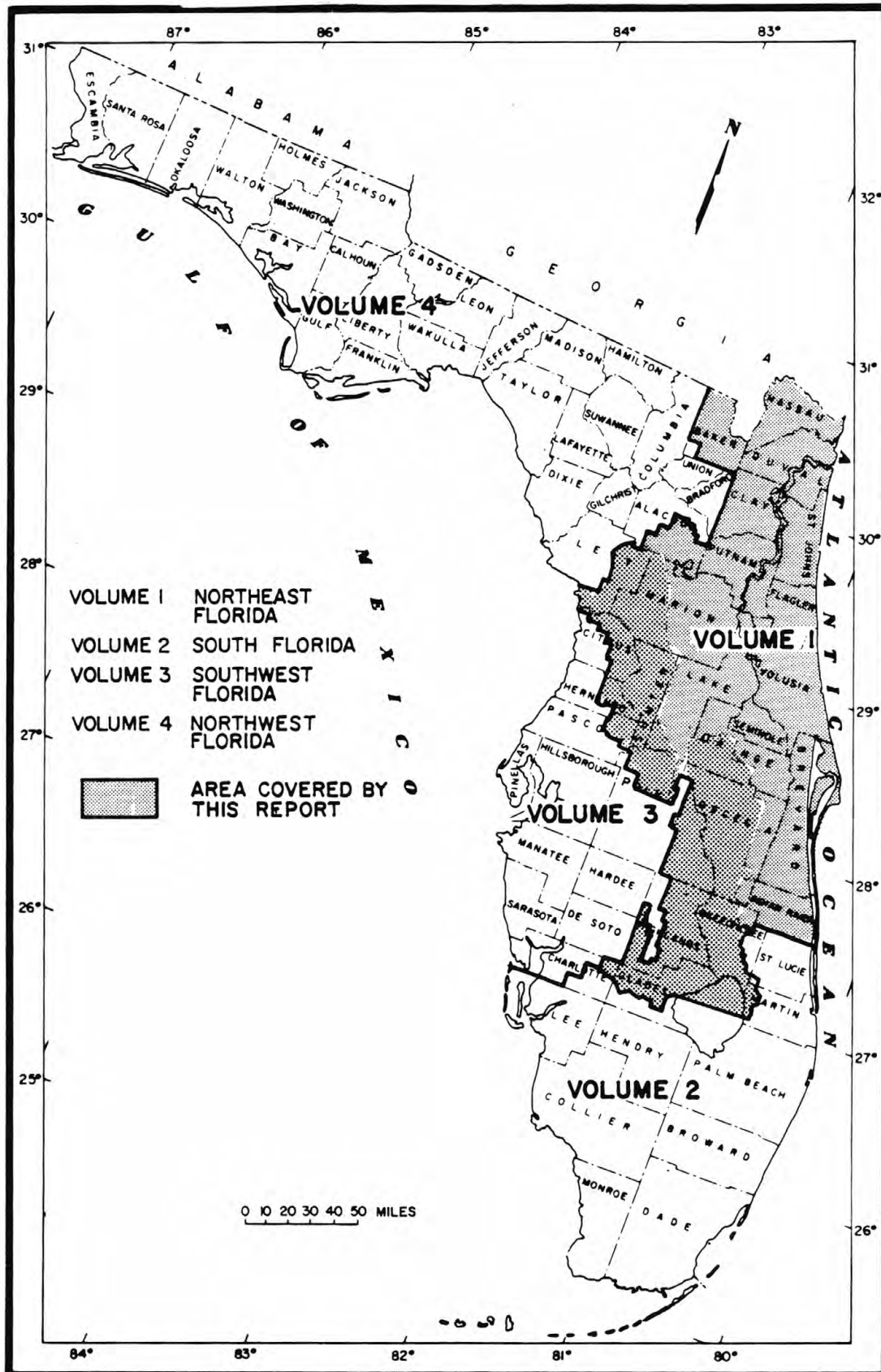


Figure 1.--Geographic area covered by this report.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

CONTENTS

	Page
Preface.....	iii
List of surface-water stations, in downstream order, for which records are published.....	ix
Introduction.....	1
Cooperation.....	1
Summary of hydrologic conditions.....	2
Special networks and programs.....	8
Explanation of the records.....	9
Station identification numbers.....	9
Downstream order system.....	9
Latitude-longitude system.....	9
Records of stage and water discharge.....	10
Data collection and computation.....	10
Data presentation.....	10
Identifying estimated daily discharge.....	12
Accuracy of the records.....	12
Other records available.....	12
Records of surface-water quality.....	12
Classification of records.....	12
Arrangement of records.....	12
Onsite measurements and sample collection.....	13
Water temperature.....	13
Sediment.....	13
Laboratory measurements.....	13
Data presentation.....	13
Remark codes.....	14
Records of ground-water levels.....	14
Data collection and computation.....	14
Data presentation.....	12
Records of ground-water quality.....	12
Data collection and computation.....	12
Data presentation.....	12
Access to WATSTORE data.....	16
Definition of terms.....	17
Publications on techniques of water-resources investigations.....	22
Selected references.....	24
Stage, discharge, and water quality of streams.....	25
Miscellaneous water-quality stations.....	302
Discharge at partial-record stations and miscellaneous sites.....	307
Crest-stage partial-record stations.....	307
Low-flow partial-record stations.....	308
Miscellaneous sites.....	309
Annual maximum flood profile data.....	311
Elevation and water quality of lakes.....	313
Index to	
Introductory text.....	413
Surface-water sites.....	415

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

ILLUSTRATIONS

	Page
Figure 1. Geographic area covered by this report.....	v
2-11. Water-year and long-term hydrographs for station:	
2. 02231000 St. Marys River near Macclenny, FL.....	3
3. 02232400 St. Johns River near Cocoa, FL.....	3
4. 02236000 St. Johns River near De Land, FL.....	4
5. 02240000 Oklawaha River near Conner, FL.....	4
6. 02256500 Fisheating Creek at Palmdale, FL.....	5
7. 02266300 Reedy Creek near Vineland, FL.....	5
8. 02268903 Kissimmee River at S-65 near Lake Wales, FL.....	6
9. 02312000 Withlacoochee River at Trilby, FL.....	6
10. 02312200 Little Withlacoochee River at Rerdell, FL.....	7
11. 02313000 Withlacoochee River near Holder, FL.....	7
12. NASQAN stations in the State of Florida.....	8
13. System for numbering miscellaneous sites (latitude and longitude).....	9
14-29. Location of stream gaging stations in the:	
14. St. Marys River basin and the coastal area between the St. Marys and St. Johns Rivers.....	26
15. St. Johns River basin above the Oklawaha River.....	49
16. Oklawaha River basin.....	83
17. Lower Oklawaha River basin.....	132
18. St. Johns River basin below the Oklawaha River basin.....	135
19. Coastal area between the St. Johns and St. Lucie Rivers.....	156
20. 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....	175
21. Manatee, Little Manatee, Alafia, and Hillsborough River basins, and Tampa Bay and coastal areas.....	229
22. Withlacoochee River basin and coastal areas.....	232
23. Lower Withlacoochee River basin.....	295
24. St. Johns River basin above the Oklawaha River.....	314
25. Oklawaha River basin.....	327
26. St. Johns River basin below the Oklawaha River.....	356
27. 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....	368
28. Peace and Myakka River basins, Charlotte Harbor and coastal area.....	388
29. Withlacoochee River basin and coastal areas.....	394

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

The following list shows the surface water sites where streamflow, stage, lake elevation, or daily water quality data are collected. See the index for a listing for surface water sites where samples are collected for chemical analyses.

	Page
03070204 ST. MARYS RIVER BASIN	
North Prong St. Marys River at Moniac, GA.....	27
Middle Prong St. Marys River at Taylor.....	28
St. Marys River near Macclenny.....	29
St. Marys River near Gross.....	31
03070205 COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS	
Nassau River:	
Mills Creek:	
Alligator Creek at Callahan.....	36
Mills Creek near Italia.....	34
Thomas Creek near Crawford.....	38
Nassau River near Tisonia.....	39
Intracoastal Waterway:	
Intracoastal Waterway near Cedar Point.....	43
03080101 ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER	
St. Johns Headwaters:	
Fort Drum Creek at Sunshine State Parkway near Fort Drum.....	50
St. Johns Headwaters near Vero Beach.....	51
St. Johns River:	
Bull Creek:	
Cow Log Branch at Yeehaw Junction.....	52
Crabgrass Creek near Holopaw.....	52
Jane Green Creek near Deer Park.....	53
St. Johns River near Melbourne.....	54
Lake Washington near Eau Gallie.....	315
Wolf Creek near Deer Park.....	56
Lake Poinsett near Cocoa.....	316
St. Johns River near Cocoa.....	57
St. Johns River near Christmas.....	58
Econlockhatchee River at Magnolia Ranch near Bithlo.....	60
Econlockhatchee River Tributary near Bithlo.....	61
Little Econlockhatchee River near Union Park.....	62
Econlockhatchee River near Chuluota.....	63
St. Johns River above Lake Harney, near Geneva.....	64
Deep Creek near Osteen.....	66
Deep Creek diversion canal:	
Lake Winnemissett near De Land.....	317
Deep Creek diversion canal near Osteen.....	67
Lake Charm at Oviedo.....	318
Lake Jessup:	
Howell Creek near Slavia.....	68
Soldier Creek near Longwood.....	69
Gee Creek near Longwood.....	70
Lake Jessup near Sanford.....	319
Lake Monroe near Sanford.....	320
Wekiva River:	
Lake Wekiva near Maitland.....	321
Little Wekiva River near Altamonte Springs.....	71
Wekiva River near Sanford.....	72
Tracy Canal near Paisley.....	73
Black Water Creek:	
Lake Dorr near Altoona.....	322
Black Water Creek near Cassia.....	74
Blue Springs near Orange City.....	75
St. Johns River near De Land.....	76
Lake Dexter (continuation of St. Johns River):	
Lake Woodruff (head of Tick Island Creek):	
Spring Garden Lake (head of Spring Garden Creek):	
Mount Plymouth Lake at Mount Plymouth.....	323
Lake Odom near De Leon Springs.....	324
Deep Creek near Barberville.....	82
Lake Kerr near Eureka.....	325
Lake George near Salt Springs.....	326
03080102 OKLAWAHA RIVER BASIN	
Lake Lowery (head of Oklawaha River) near Haines City.....	328
Green Swamp Run near Eva.....	84
Big Creek near Clermont.....	85
Little Creek near Clermont.....	89
Lake Louisa:	
Lake Nellie near Clermont.....	329
Lake Louisa (continuation of Big Creek) near Clermont.....	330
Lake Minnehaha at Clermont.....	331
Lake Apshawa near Minneola.....	332
Cherry Lake near Groveland.....	333
Palatlakaha River at Cherry Lake Outlet, near Groveland.....	90
Palatlakaha River below spillway at Cherry Lake Outlet, near Groveland.....	91
Palatlakaha River near Mascotte.....	92
Palatlakaha River below spillway, near Mascotte.....	93

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

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

	Page
<u>03080102 OKLAWAHA RIVER BASIN--Continued</u>	
Palatlakaha River at Structure M-6 near Mascotte.....	94
Palatlakaha River below Structure M-6 near Mascotte.....	95
Palatlakaha River at Structure M-5 near Okahumpka.....	96
Palatlakaha River below Structure M-5 near Okahumpka.....	97
Palatlakaha River at Structure M-4 near Okahumpka.....	98
Palatlakaha River below Structure M-4 near Okahumpka.....	99
Palatlakaha River at Structure M-1, near Okahumpka.....	100
Little Lake Harris (part of Lake Harris):	
Church Lake near Groveland.....	334
Lake Harris at Leesburg.....	335
Lake Eustis:	
Lake Apopka:	
Johns Lake at Oakland.....	336
Lake Apopka at Winter Garden.....	337
Apopka-Beauclair Canal:	
Lake Francis near Plymouth.....	338
Apopka-Beauclair Canal near Astatula.....	102
Apopka-Beauclair Canal below dam, near Astatula.....	106
Lake Dora:	
West Crooked Lake near Eustis.....	339
Lake Dora at Mount Dora.....	340
Dora Canal at Tavares.....	107
Lake Umatilla at Umatilla.....	341
Lake Eustis at Eustis.....	342
Silver Lake near Leesburg.....	343
Haines Creek (continuation of Palatlakaha River) at Lisbon.....	108
Haines Creek below Burrell Dam at Lisbon.....	110
Lake Griffin:	
Holly Lake near Umatilla.....	344
Lake Yale at Grand Island.....	345
Lake Griffin at Leesburg.....	346
Oklawaha River above Moss Bluff Dam, at Moss Bluff.....	111
Oklawaha River at Moss Bluff.....	112
Lake Weir at Oklawaha.....	347
Lake Weir Outlet:	
Smith Lake near Candler.....	348
Bowers Lake near Oklawaha.....	349
Silver Springs (head of Silver River) near Ocala.....	114
Oklawaha River near Conner.....	116
Lake Bryant near Silver Springs.....	350
Oklawaha River at Eureka.....	122
Newnans Lake (head of Prairie Creek) near Gainesville.....	351
Prairie Creek near Gainesville.....	123
Camps Canal (connection of Prairie Creek to River Styx):	
Paynes Prairie:	
Hogtown Creek near Arredondo.....	125
Haile Sink near Arredondo.....	126
Lake Kanapaha at Arredondo.....	352
Camps Canal near Rochelle.....	127
Orange Lake:	
Lochloosa Lake at Lochloosa.....	353
Orange Lake at Orange Lake.....	354
Orange Creek at Orange Springs.....	131
Orange Lake Outlet near Citra.....	129
Lochloosa Slough near Lochloosa.....	130
Lake Ocklawaha near Orange Springs.....	355
Oklawaha River at Rodman Dam, near Orange Springs.....	133
<u>03080103 ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER</u>	
St. Johns River below Oklawaha River:	
Cross-Florida Barge Canal at Buckman Lock near Palatka.....	136
Crescent Lake (head of Dunns Creek):	
Haw Creek:	
Middle Haw Creek near Korona.....	137
Little Haw Creek:	
Lake Winona near De Land.....	357
Little Haw Creek near Seville.....	138
Dunns Creek near Satsuma.....	139
Rice Creek near Springside.....	140
Sand Hill Lake near Keystone Heights.....	358
Magnolia Lake near Keystone Heights.....	359
Brooklyn Lake at Keystone Heights.....	360
Lake Geneva at Keystone Heights.....	361
Etonia Creek:	
Lake Johnson:	
Pebble Lake near Keystone Heights.....	362
Lake Johnson (little lake) near Keystone Heights.....	363
Lake Johnson (big lake) near Keystone Heights.....	364
Lake Grandin near Interlachen.....	365
Georges Lake near Florahome.....	366
Etonia Creek at Bardin.....	142
Simms Creek near Bardin.....	143

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

	Page
<u>03080103 ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER--Continued</u>	
St. Johns River below Oklawaha River--Continued	
Deep Creek near Hastings	144
South Fork Black Creek (head of Black Creek) near Penney Farms	145
Kingsley Lake (head of North Fork Black Creek) at Camp Blanding	146
North Fork Black Creek near Middleburg	147
Black Creek:	
Black Creek near Doctors Inlet	148
Julington Creek:	
Big Davis Creek at Bayard	150
Ortega River at Jacksonville	151
St. Johns River at Jacksonville	152
Pablo Creek (merges with Intracoastal Waterway) at Jacksonville	154
Cedar Swamp Creek at Jacksonville	155
<u>03080201 COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET</u>	
Diego Plains Swamp Drain at Mickler Landing	157
Moultrie Creek at State Highway 207 near St. Augustine	158
Tiger Bay Canal near Daytona Beach	159
Tomoka River near Holly Hill	160
Spruce Creek near Samsula	161
<u>03080202 COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET</u>	
Turkey Creek at Palm Bay	166
<u>03080203 COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER</u>	
Indian River at Wabasso	168
North Canal near Vero Beach	170
Main Canal at Vero Beach	171
South Canal near Vero Beach	174
<u>03090103 FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST</u>	
Fisheating Creek at Palmdale	176
Harney Pond Canal at S-71, near Lakeport	181
Indian Prairie Canal at S-72, near Okeechobee	183
<u>03090101 KISSIMMEE RIVER BASIN</u>	
Kissimmee River headwaters:	
Alligator Lake near Ashton	369
Lake Mary Jane near Narcoossee	370
East Lake Tohopekaliga:	
Lake Conway at Pine Castle	371
Boggy Creek near Taft	185
Lake Tohopekaliga:	
Shingle Creek:	
Lake Bryan near Vineland	372
Shingle Creek at Airport, near Kissimmee	186
Bonnet Creek Headwaters:	
Bay Lake near Vineland	373
South Lake near Vineland	374
Bonnet Creek:	
Lake Butler at Windermere	375
Cypress Creek at Vineland	187
Black Lake Outlet at S-101A at Buena Vista	190
Bonnet Creek near Vineland	191
Shingle Creek at Campbell	194
Lake Tohopekaliga at Kissimmee	376
Cypress Lake:	
Reedy Creek:	
Whittenhorse Creek near Vineland	195
Trout Lake near Clermont	377
Lateral 405 below S-405 near Vineland	198
Reedy Creek near Vineland	200
Davenport Creek near Loughman	206
Reedy Creek near Loughman	209
Reedy Creek at State Highway 531 near Poinsianna	212
Cypress Lake near St. Cloud	378
Lake Hatchineha:	
Lake Marion near Haines City	379
Lake Pierce near Waverly	380
Catfish Creek near Lake Wales	213
Lake Kissimmee:	
Lake Weohyakapka at Indian Lake Estates	381
Lake Rosalie at Lake Wales	382
Lake Marian near Kenansville	383
Lake Kissimmee near Lake Wales	384
Kissimmee River at S-65 near Lake Wales	214
Kissimmee River below S-65, near Lake Wales	215
Lake Arbuckle near Avon Park	385
Arbuckle Creek (continuation of Livingston Creek) near De Soto City	216
Lake Istokpoga near De Soto City	386
Kissimmee River at S-65E, near Okeechobee	217
Kissimmee River below S-65E, near Okeechobee	221
Canal 41A at S-68 at Lake Istokpoga near Lake Placid	222
Canal 41A at S-84 near Okeechobee	223
<u>03090102 TAYLOR CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTH</u>	
Taylor Creek near Basinger	225
Taylor Creek above S-1, near Okeechobee	227
Williamson Ditch at S-7, near Okeechobee	228
<u>03090201 LAKE OKEECHOBEE</u>	
Lake Okeechobee	387

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

	Page
03100101 PEACE RIVER BASIN	
Peace Creek Drainage Canal (head of Peace River):	
Lake Fannie:	
Lake Alfred at Lake Alfred.....	389
Peace River:	
Saddle Creek:	
Lake Gibson near Lakeland.....	390
Lake Hancock:	
Lake Arietta near Auburndale.....	391
Lake Whistler near Auburndale.....	392
Lake Ariana at Auburndale.....	393
03100205 HILLSBOROUGH RIVER BASIN	
Hillsborough River:	
Fox Branch near Socrum.....	230
03100207 COASTAL AREA FROM TAMPA BAY TO WITHLACOCHEE RIVER	
Crews Lake (head of Pithlachascotee River):	
Neff Lake Sink near Brooksville.....	395
Neff Lake near Brooksville.....	396
03100208 WITHLACOCHEE RIVER BASIN	
Withlacoochee River:	
Lake Juliana near Polk City.....	397
Withlacoochee River near Eva.....	233
Pony Creek:	
Lake Helene near Polk City.....	398
Withlacoochee River near Cumpresso.....	237
Lake Deeson near Lakeland.....	399
Withlacoochee-Hillsborough overflow near Richland.....	239
Withlacoochee River near Dade City.....	241
Clear Lake at San Antonio.....	400
Dade City Canal near Dade City.....	246
Withlacoochee River at Trilby.....	247
Little Withlacoochee River:	
Bayroot Slough:	
Bayroot Slough Headwaters near Bay Lake.....	250
Little Withlacoochee River near Tarrytown.....	251
Big Gant Canal at Structure S-11, near Webster.....	253
Big Gant Canal at Structure WC-2, at Rerdell.....	254
Big Gant Canal below Structure WC-2, at Rerdell.....	255
Little Withlacoochee River at Rerdell.....	256
Withlacoochee River at Croom.....	259
Withlacoochee River near Floral City.....	263
Jumper Creek Canal near Sumterville.....	267
Jumper Creek Canal near Bushnell.....	268
Jumper Creek Canal near Wahoo.....	270
Withlacoochee River:	
Outlet River:	
Lake Panasoffkee:	
Shady Brook near Sumterville.....	271
Lake Catherine at Groveland.....	401
Shady Brook:	
Little Jones Creek:	
Lake Deaton near Wildwood.....	402
Chitty Chatty Creek near Wildwood.....	273
Lake Okahumpka near Wildwood.....	403
Lady Lake near Lady Lake.....	404
Lake Miona near Oxford.....	405
Lake Panasoffkee near Lake Panasoffkee.....	406
Outlet River at Panachoochee Retreats.....	274
Withlacoochee River above Wysong Dam, at Carlson.....	276
Withlacoochee River at Wysong Dam, at Carlson.....	277
The Canal (Orange State Canal):	
Leslie-Heifner Canal near Floral City.....	280
The Canal (Orange State Canal) near Floral City.....	281
Little Lake at Floral City.....	407
Tsala Apopka Lake at Floral City.....	408
Tsala Apopka Lake at Inverness.....	409
Tsala Apopka Lake at Hernando.....	410
Tsala Apopka outfall canal at S-353, near Hernando.....	282
Tsala Apopka outfall canal below S-353, near Hernando.....	284
Withlacoochee River near Holder.....	285
Rainbow Springs near Dunnellon.....	291
Withlacoochee River at Dunnellon.....	293
Lake Rousseau near Dunnellon.....	411
Withlacoochee River at Inglis Dam, near Dunnellon.....	296
Withlacoochee River below Inglis Dam, near Dunnellon.....	297
Cross-Florida Barge Canal at Inglis Lock, near Inglis.....	298
Withlacoochee River Bypass Channel, near Inglis.....	299
Withlacoochee River at Crackertown.....	300
Miscellaneous water-quality stations.....	302
Discharge at partial-record stations and miscellaneous sites.....	307
Crest-stage partial-record stations.....	307
Low-flow partial-record stations.....	308
Miscellaneous sites.....	309
Annual maximum flood-profile data.....	311

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State, County, and other Federal agencies, obtains a large amount of data pertaining to the water resources of Florida each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State.

The data for northeast Florida include continuous or daily discharge for 125 streams, periodic discharge for 15 streams, miscellaneous discharge for 14 streams, continuous or daily stage for 45 streams, periodic stage for 27 streams, peak discharge for 26 streams, and peak stage for 27 streams; continuous or daily elevations for 39 lakes, periodic elevations for 53 lakes; continuous ground-water levels for 81 wells, periodic ground-water levels for 150 wells, and miscellaneous water-level measurements for 969 wells; quality-of-water data for 59 surface-water sites and 105 wells.

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

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

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report FL-87-1A." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on the back of the title page or by telephone (407) 648-6191.

COOPERATION

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

Florida Department of Environmental Regulation	County of St. Johns
Florida Department of Transportation	County of Lake
Florida Department of Natural Resources	County of Polk
St. Johns River Water Management District	County of Volusia
South Florida Water Management District	City of Cocoa
Southwest Florida Water Management District	City of Jacksonville
	Reedy Creek Improvement District

Assistance with funds or services was given by the U.S. Army Corps of Engineers, Jacksonville District, in collecting records at hydrologic stations throughout the Subdistrict.

Organizations that provided data are acknowledged in station descriptions.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

SUMMARY OF HYDROLOGIC CONDITIONS

Rainfall was unusually heavy during a storm in late March. Monthly totals ranged from 3 inches above normal at Vero Beach, to 4 inches above normal in the lower Kissimmee basin, 8 inches above normal in Orlando and Clermont, 10 inches above normal at Crescent City, and 12 inches above normal near Dade City. Record or near record runoff was recorded at some gaging stations and flows reached the 5 to 10 year recurrence interval range in parts of the Upper Kissimmee and Withlacoochee River basins (Bridges, 1982). The following table is a summary of peak discharges that occurred during the storm at several sites.

Station number	Station name	Peak (ft ³ /s)	Date	Previous maximum (ft ³ /s)	Date
02238000	Haines Creek at Lisbon	1,490	Mar. 30	1,350	Jan. 14,15, 1970
02264495	Shingle Creek at Campbell	2,070	Apr. 1	1,510	Oct. 5, 1969
02266200	Whittenhorse Creek near Vineland	62	Apr. 1,2	52	July 27, 1984
02266500	Reedy Creek near Loughman	779	Apr. 2,3	790	Sept. 24, 1969
02310947	Withlacoochee River near Cumpressco	2,260	Apr. 1	1,840	Sept. 30, Oct. 1, 1979
02312000	Withlacoochee River at Trilby	3,290	Apr. 6,7	8,840	June 21, 1934
02312635	Jumper Creek Canal near Sumterville	145	Apr. 2	89	Apr. 24, 1983
02312690	Chitty Chatty Creek near Wildwood	220	Mar. 31	180	Sept. 27, 1979
02312700	Outlet River at Panacoochee Retreats	658	Apr. 18,19	784	Oct. 6, 1982
02313000	Withlacoochee River near Holder	3,100	Apr. 21,22,23	8,860	Apr. 5, 1960

The March rains only prevented heavier deficits in central and northeast Florida. Most areas in this report area received below normal rainfall for the year. Exceptions were the very upper St. Johns River basin which received 3 to 4 inches above normal rainfall and the Withlacoochee River basin where rainfall was 1 to 3 inches above normal.

Streamflow reflected the rainfall patterns as shown in figures 2-11 which are hydrographs for one gaging station in the St. Marys River basin, three stations in the St. Johns River basin, three in the Kissimmee River basin and three in the Withlacoochee River basin. The upper hydrograph is the daily mean discharge for the water year and the lower is the annual mean discharge for the period of record.

Streamflow at St. Marys River near Macclenny (base period 1927-86, fig. 2) was below average during the months of October, November, May through July, and September.

In the St. Johns River basin, including the Oklawaha River, streamflow was below average at St. Johns River near Cocoa (base period 1954-86, fig. 3) during the months of October through December, March, and June through September. The St. Johns River near De Land (base period 1934-86, fig. 4) and the Oklawaha River near Conner (base period 1931-46, 1978-86, fig. 5) were below average from October through February and June through September.

The Fisheating Creek and Kissimmee River basins had below average runoff at Fisheating Creek at Palmdale (base period 1932-86, fig. 6) October through December, February, March, and May through September; Reedy Creek near Vineland (base period 1967-86, fig. 7) October, December through February, June through September; and Kissimmee River, at S-65, near Lake Wales (base period 1970-86, fig. 8) October through December, and May through September.

In the Withlacoochee River basin flows were below average at Withlacoochee River at Trilby (base period 1931-86, fig. 9) and Little Withlacoochee River at Rerdell (base period 1959-86, fig. 10) for the months of October through March, June through September; and Withlacoochee River near Holder (base period 1932-86, fig. 11) October through March, July through September.

All other months had above average flow at each of the above stations.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

SUMMARY OF HYDROLOGIC CONDITIONS--Continued

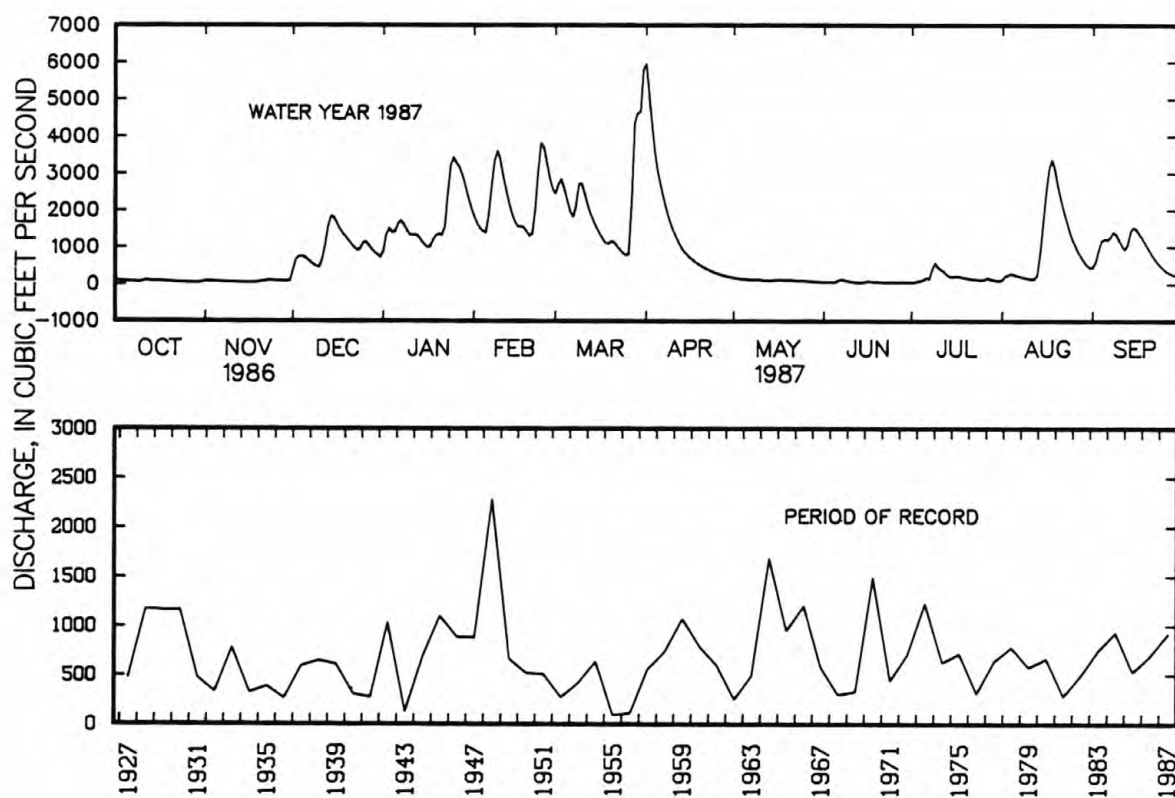


Figure 2.--Water year and long-term hydrographs for station 02231000
St. Marys River near Macclenny, FL.

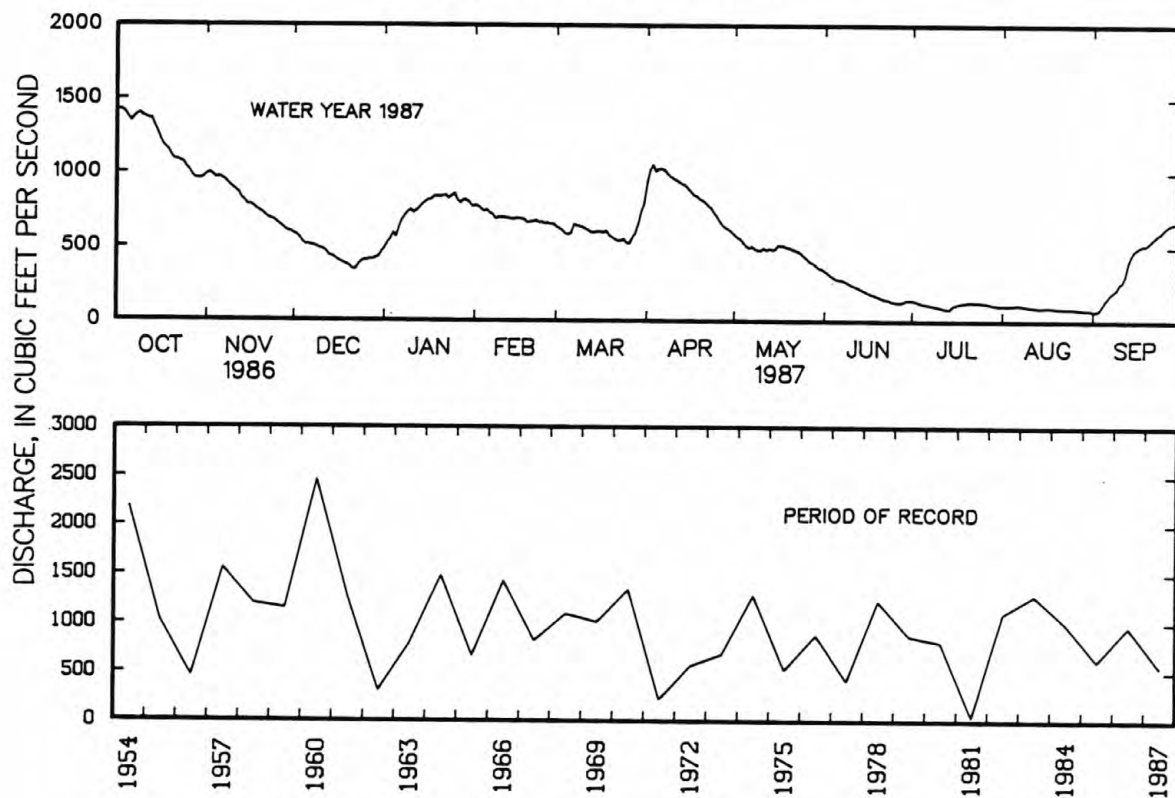


Figure 3.--Water-year and long-term hydrographs for station 02232400
St. Johns River near Cocoa, FL.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

SUMMARY OF HYDROLOGIC CONDITIONS--Continued

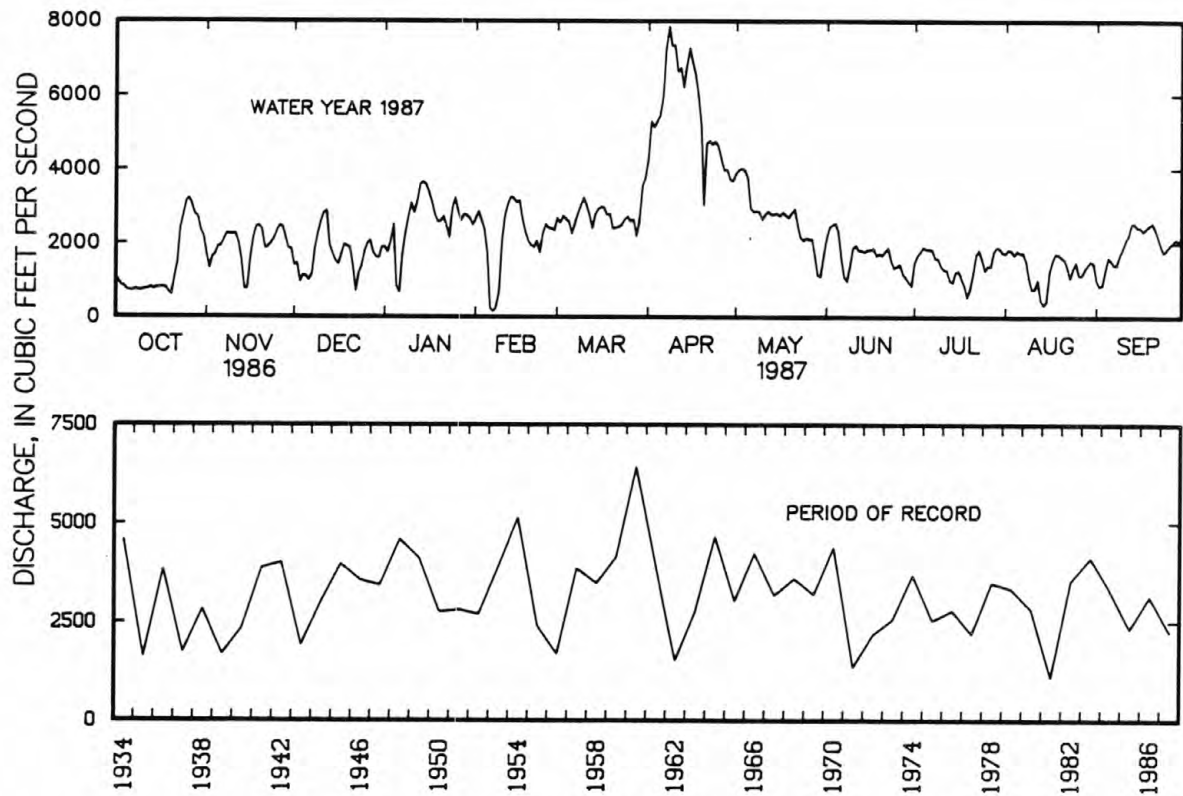


Figure 4.--Water-year and long-term hydrographs for station 02236000
St. Johns River near De Land, FL.

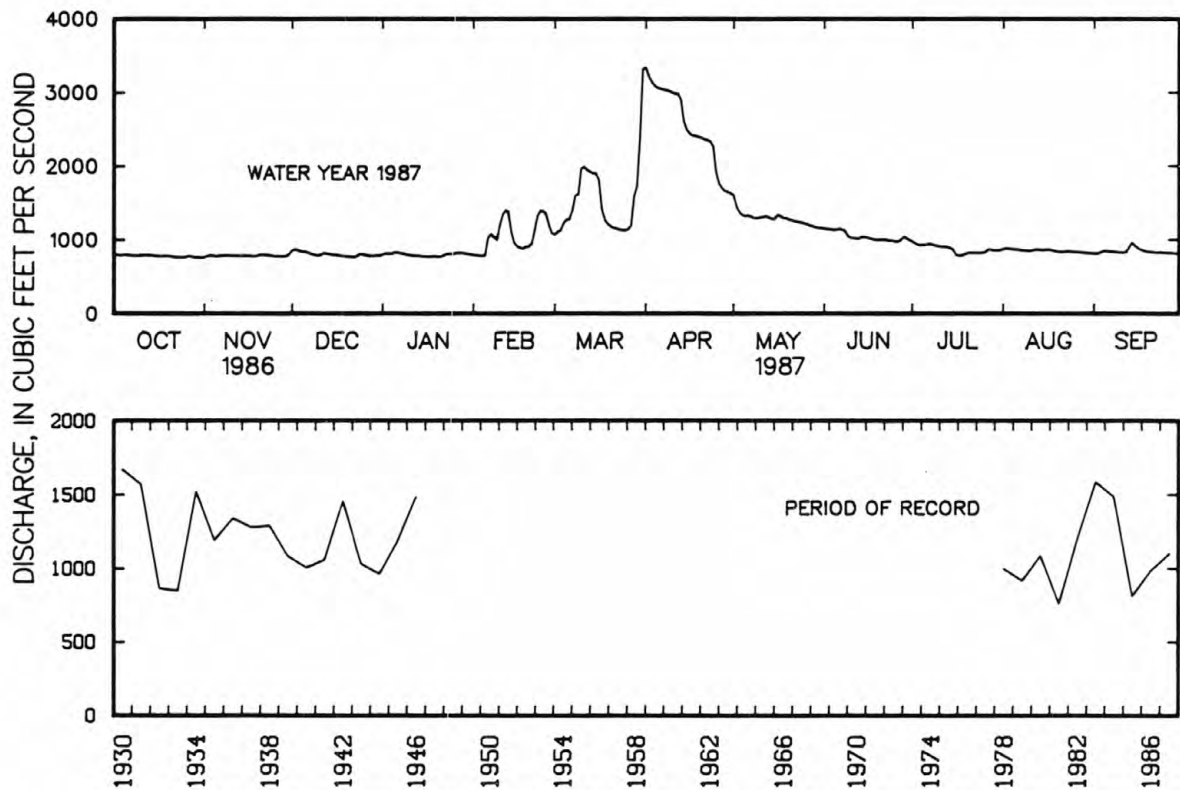


Figure 5.--Water-year and long-term hydrographs for station 02240000
Oklawaha River near Conner, FL.

SUMMARY OF HYDROLOGIC CONDITIONS--Continued

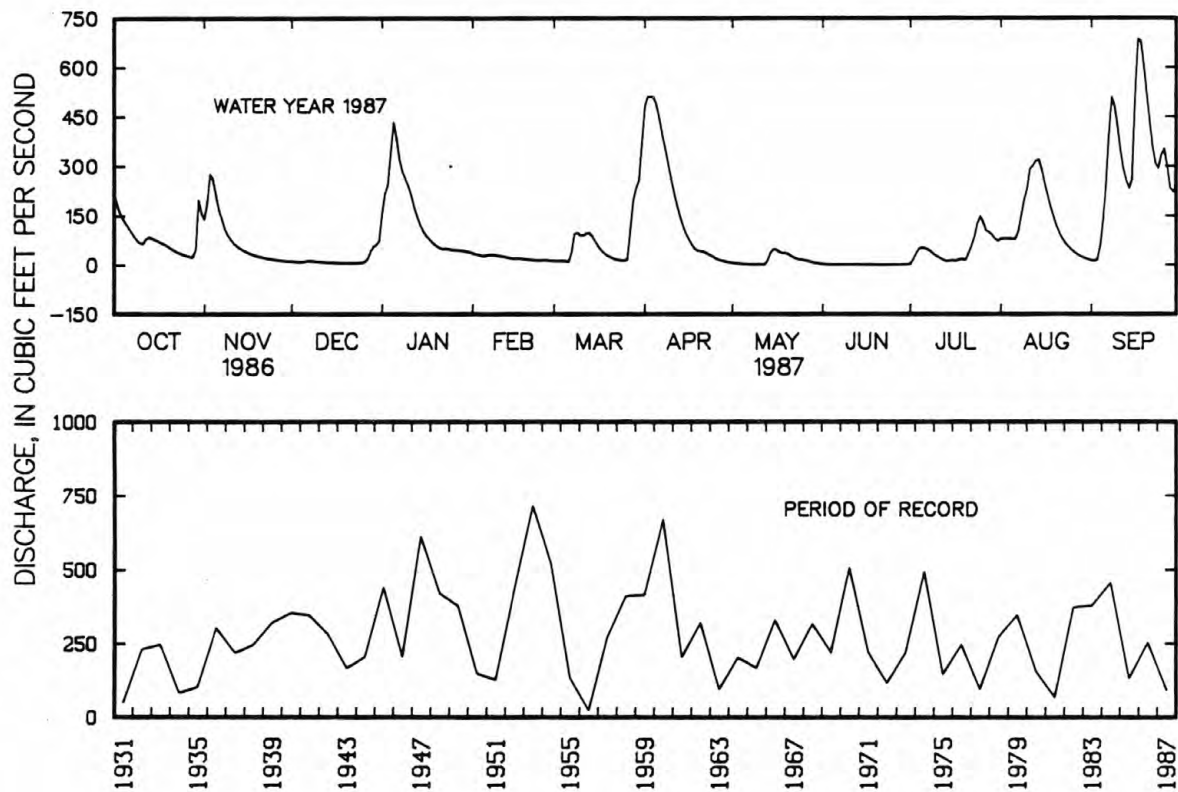


Figure 6.--Water-year and long-term hydrographs for station 02256500
Fisheating Creek at Palmdale, FL.

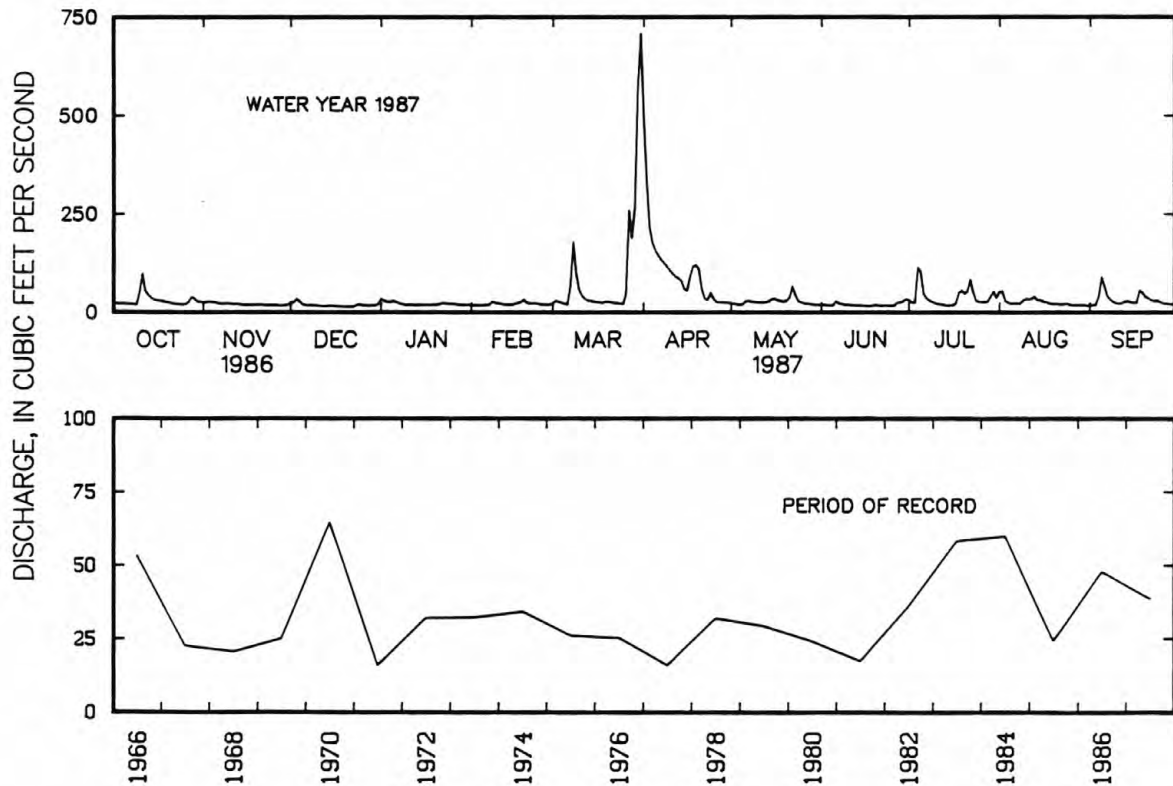


Figure 7.--Water-year and long-term hydrographs for station 02266300
Reedy Creek near Vineland, FL.

SUMMARY OF HYDROLOGIC CONDITIONS--Continued

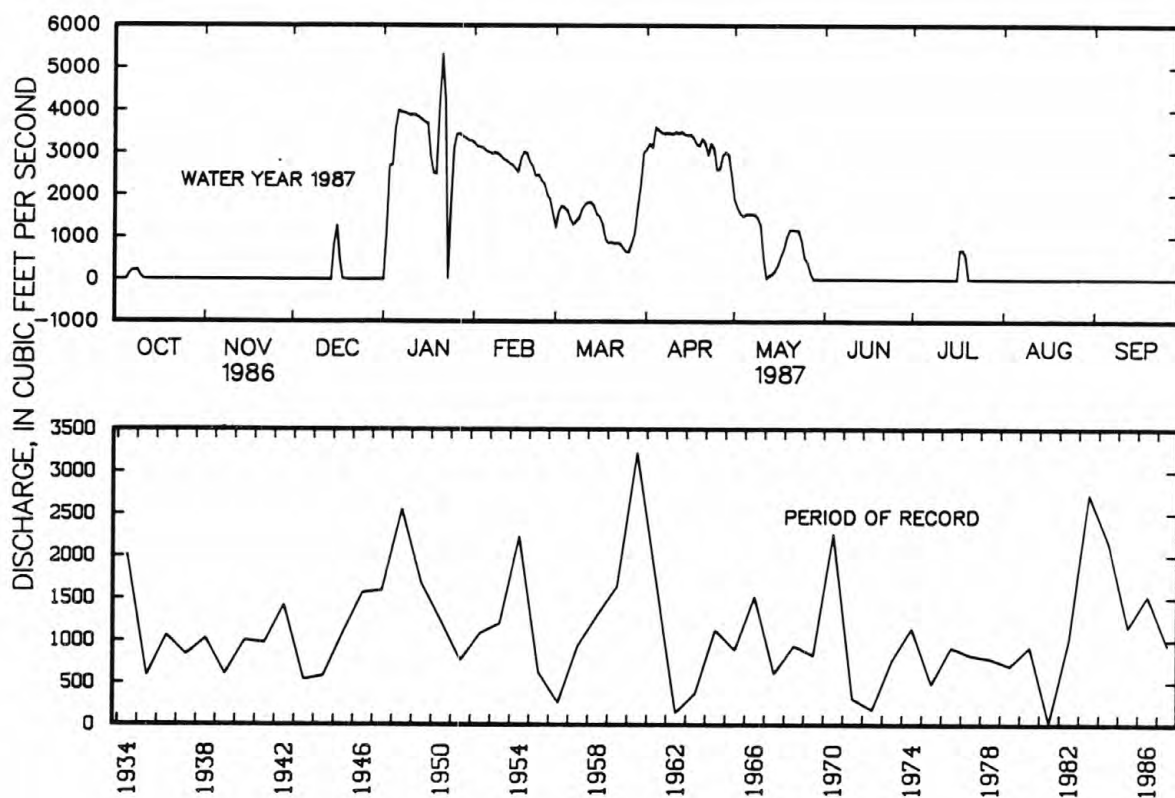


Figure 8.--Water-year and long-term hydrographs for station 02268903
Kissimmee River at S-65 near Lake Wales, FL.

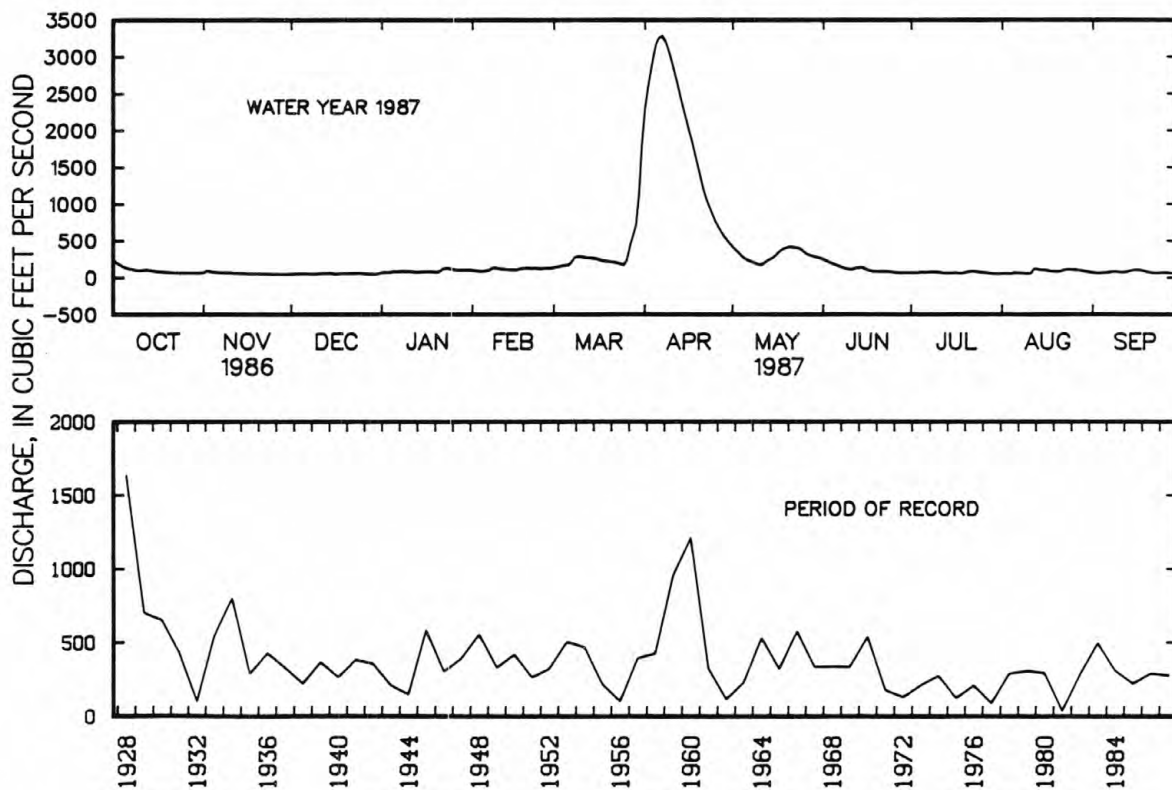


Figure 9.--Water-year and long-term hydrographs for station 02312000
Withlacoochee River at Trilby, FL.

SUMMARY OF HYDROLOGIC CONDITIONS--Continued

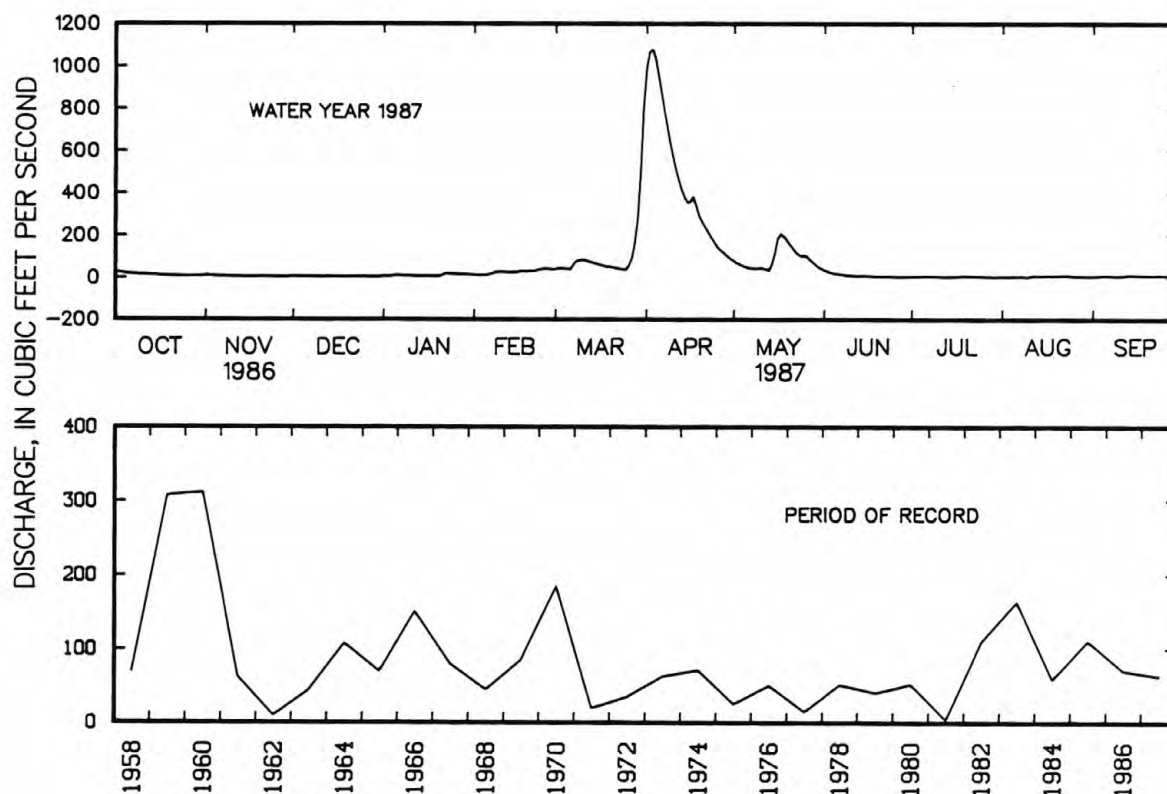


Figure 10.--Water-year and long-term hydrographs for station 02312200
Little Withlacoochee River near at Rerdell, FL.

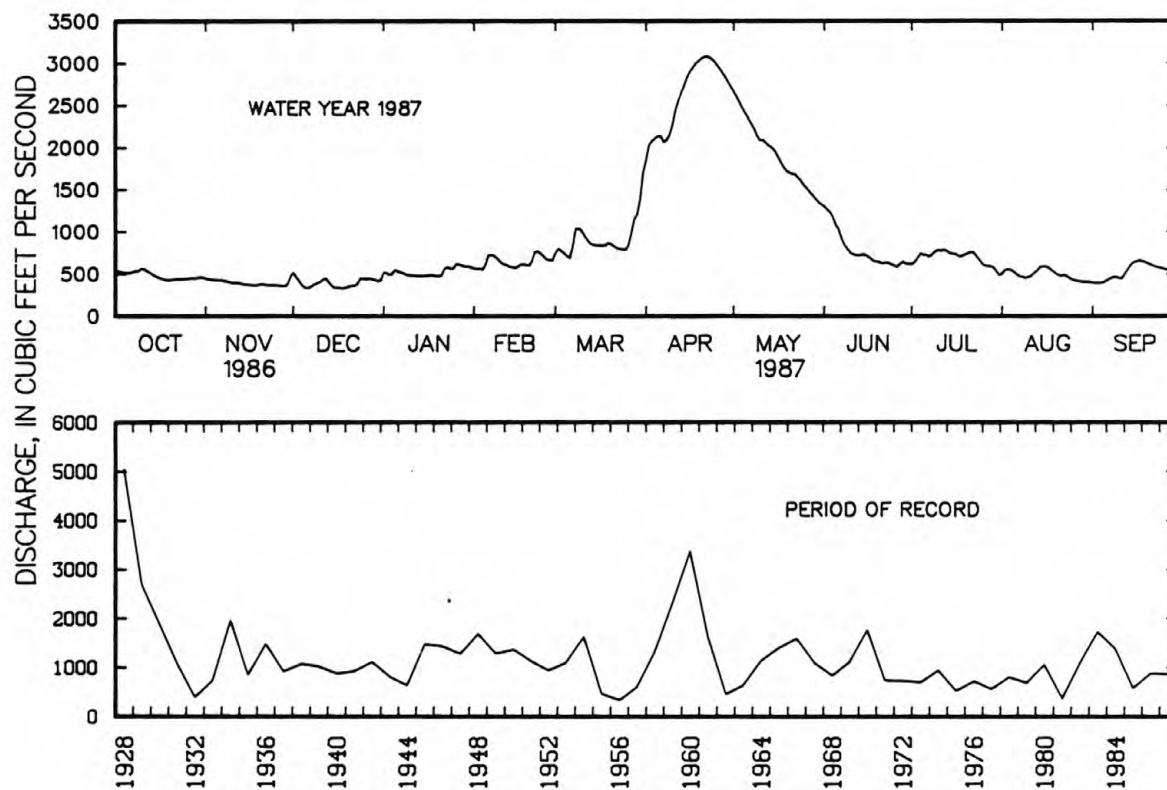


Figure 11.--Water-year and long-term hydrographs for station 02313000
Withlacoochee River near Holder, FL.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council.

The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research. The NASQAN stations in Florida are shown in figure 12.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.



Figure 12.--NASQAN stations in the State of Florida.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1987 water year that began October 1, 1986, and ended September 30, 1987. 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 and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)

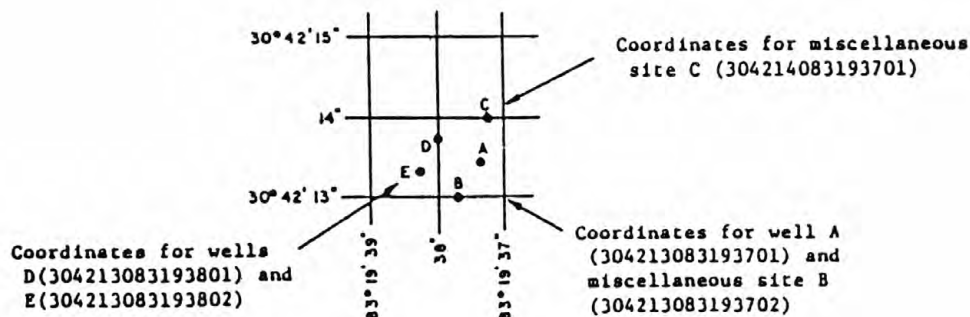


Figure 13.--System for numbering wells and miscellaneous sites.
(latitude and longitude)

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake elevation, similarly, are those for which stage may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a stage-recording device or daily or weekly observations, but need not be. Because daily mean discharges and lake elevations commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

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

Data Collection and Computation

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

Records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

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

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

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

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

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

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location, period of record, average discharge, historical extremes, record accuracy, and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

LOCATION.--Information on locations is obtained from the most accurate base maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given.

DRAINAGE AREA.--Drainage areas are delineated and measured using the most accurate topographic maps available, and are updated as necessary.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

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

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

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development. The median of yearly mean discharges also is given under this heading for stations having 10 or more water years of record, if the median differs from the average given by more than 10 percent.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

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

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

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

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 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 Orlando Subdistrict Office of the Florida District. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the offices whose addresses are given on the back of the title page of this report.

Records of Surface-Water Quality

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

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where water-quality data are collected systematically over a period of years, usually less frequently than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

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

Arrangement of Records

Water-quality records collected at a surface-water daily record station or a periodic observation station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the quality of the water in its natural state. To assure this, certain measurements, such as water temperature, pH, alkalinity, specific conductance, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the natural water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey office.

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

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

For stations equipped with water-quality monitors, the records consist of daily mean values for each constituent measured and are based upon unit values (hourly or 15-minute recordings). These unit values may be obtained from the Orlando Subdistrict Office, 224 West Center Street, Suite 1006, Altamonte Springs, FL 32714.

Water Temperature

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

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

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

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

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

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

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

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

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

INSTRUMENTATION.--Information on instrumentation is given only if a recording or sampling device, which may be time- or event-activated, is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

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

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

Remark Codes

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

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

Records of Ground-Water Levels

Ground-water level data from a statewide network of observation wells are published herein. The records include data from wells equipped with water-level recorders and data from wells where water levels are measured periodically.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table.

Water-level records are obtained from direct measurements with a steel tape, pressure gage, manometer, or from the graph or punched tape of a water-level recorder. The measurements in this report are given in feet above National Geodetic Vertical Datum of 1929 or in some tables as feet below land-surface datum. Land-surface datum is a datum plane that is approximately at land surface at each well. The elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on hourly, daily, weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of record, with reference to National Geodetic Vertical Datum of 1929, and the dates of their occurrence.

A table of water levels follows the station description for each well. For wells equipped with recorders, only abbreviated tables are published; generally, daily maximums are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality in the report area. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published immediately following the ground-water-level records of each county. Data for quality of ground water are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. The Remark Codes listed for surface-water-quality records are also applicable to ground-water-quality records.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

ACCESS TO WATSTORE DATA

The National Water Data Storage and Retrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, VA 22092

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Bottom material: See Bed material.

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

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

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

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

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

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (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.

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

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

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

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

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

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

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

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

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

Picocurie (PC, pCi) is one millionth of the amount of radioactivity represented by a micro-curie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegrations per minute.

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

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

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

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

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

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

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

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

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

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

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

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

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

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

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

Solute is any substance that is dissolved in water.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

- 1-D1. WATER TEMPERATURE-INFLUENTIAL FACTORS, FIELD MEASUREMENT, AND DATA PRESENTATION, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. GUIDELINES FOR COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FOR SELECTED UNSTABLE CONSTITUENTS, W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. APPLICATION OF SURFACE GEOPHYSICS TO GROUND-WATER INVESTIGATIONS, by A.A.R. Zohdy, G.P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-E1. APPLICATION OF BOREHOLE GEOPHYSICS TO WATER-RESOURCES INVESTIGATIONS, by W.S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. GENERAL FIELD AND OFFICE PROCEDURES FOR INDIRECT DISCHARGE MEASUREMENTS, by M.A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. MEASUREMENT OF PEAK DISCHARGE BY THE SLOPE-AREA METHOD, by Tate Dalrymple and M.A. Benson, USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. MEASUREMENT OF PEAK DISCHARGE AT CULVERTS BY INDIRECT METHODS, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. MEASUREMENT OF PEAK DISCHARGE AT WIDTH CONTRACTIONS BY INDIRECT METHODS, by H.F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. MEASUREMENT OF PEAK DISCHARGE AT DAMS BY INDIRECT METHODS, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. GENERAL PROCEDURE FOR GAGING STREAMS, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. STAGE MEASUREMENTS AT GAGING STATIONS, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. DISCHARGE MEASUREMENTS AT GAGING STATIONS, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. MEASUREMENT OF TIME OF TRAVEL AND DISPERSION IN STREAMS BY DYE TRACING, by E.F. Hubbard, F.A. Kilpatrick, L.A. Martens, and J.F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A10. DISCHARGE RATINGS AT GAGING STATIONS, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. MEASUREMENT OF DISCHARGE BY MOVING-BOAT METHOD, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A13. COMPUTATION OF CONTINUOUS RECORDS OF STREAMFLOW, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. USE OF FLUMES IN MEASURING DISCHARGE, by F.A. Kilpatrick and V.R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. COMPUTATION OF WATER-SURFACE PROFILES IN OPEN CHANNELS, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-B1. AQUIFER-TEST DESIGN, OBSERVATION, AND DATA ANALYSIS, by R.W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. INTRODUCTION TO GROUND-WATER HYDRAULICS, A PROGRAMED TEXT FOR SELF-INSTRUCTION, by G.D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. TIP CURVES FOR SELECTED PROBLEMS OF FLOW TO WELLS IN CONFINED AQUIFERS, by J.E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-C1. FLUVIAL SEDIMENT CONCEPTS, by H.P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. FIELD METHODS FOR MEASUREMENT OF FLUVIAL SEDIMENT, by H.P. Guy and V.W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. COMPUTATION OF FLUVIAL-SEDIMENT DISCHARGE, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 4-A1. SOME STATISTICAL TOOLS IN HYDROLOGY, by H.C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. FREQUENCY CURVES, by H.C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. LOW-FLOW INVESTIGATIONS, by H.C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. STORAGE ANALYSES FOR WATER SUPPLY, by H.C. Riggs and C.H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. REGIONAL ANALYSES OF STREAMFLOW CHARACTERISTICS, by H.C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. COMPUTATION OF RATE AND VOLUME OF STREAM DEPLETION BY WELLS, by C.T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. METHODS FOR DETERMINATION OF INORGANIC SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by M.W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. DETERMINATION OF MINOR ELEMENTS IN WATER BY EMISSION SPECTROSCOPY, by P.R. Barnett and E.C. Mallor, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. METHODS FOR ANALYSIS OF ORGANIC SUBSTANCES IN WATER, by D.F. Goerlitz and Eugene Brown: USGS--TWRI 5, Chapter A3. 1972. 40 pages.
- 5-A4. METHODS FOR COLLECTION AND ANALYSIS OF AQUATIC BIOLOGICAL AND MICROBIOLOGICAL SAMPLES, edited by P.E. Greeson, T.A. Ehlike, G.A. Irwin, B.W. Lium, and K.V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. METHODS FOR DETERMINATION OF RADIOACTIVE SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. QUALITY ASSURANCE PRACTICES FOR THE CHEMICAL AND BIOLOGICAL ANALYSES OF WATER AND FLUVIAL SEDIMENTS, by L.C. Friedman and D.E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. LABORATORY THEORY AND METHODS FOR SEDIMENT ANALYSIS, by H.P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. FINITE DIFFERENCES MODEL FOR AQUIFER SIMULATION IN TWO DIMENSIONS WITH RESULTS OF NUMERICAL EXPERIMENTS, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. COMPUTER MODEL OF TWO-DIMENSIONAL SOLUTE TRANSPORT AND DISPERSION IN GROUND WATER, by L.F. Konikow and J.D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. A MODEL FOR SIMULATION OF FLOW IN SINGULAR AND INTERCONNECTED CHANNELS, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. METHODS OF MEASURING WATER LEVELS IN DEEP WELLS, by M.S. Garber and F.C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. INSTALLATION AND SERVICE MANUAL FOR U.S. GEOLOGICAL SURVEY MANOMETERS, by J.D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. CALIBRATION AND MAINTENANCE OF VERTICAL-AXIS TYPE CURRENT METERS, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

SELECTED REFERENCES

- American Public Health Association, and others 1965, Standard methods for the examination of water and wastewater, 12th edition: American Public Health Association, New York, 769 p.
- Bridges, W.C., 1982, Technique for estimating magnitude and frequency of floods on natural-flow streams in Florida: U.S. Geological Survey Open File Report 82-4012, 45 p.
- California State Water Quality Control Board, 1963, Water quality criteria; Pub. 3-A, 226 p.
- Conover, C.S., and Leach, S.D., 1975, River basin and hydrologic unit map of Florida: Florida Bureau of Geology Map Series 72.
- Ellis, M.M., Westfall, B.A., and Ellis, M.D., 1946, Determination of water quality, U.S. Fish and Wildlife Reserve Report 9, 122 p.
- Florida Department of Environmental Regulation, 1983, Water quality standards: Chapter 17-3 in Florida Administrative Code.
- 1984, Public drinking water systems: Chapter 17-22 in Florida Administrative Code.
- Hem, J.D., 1970, Study and interpretations of the chemical characteristics of natural water: U.S. Geological Survey Water-Supply Paper 1473, second edition, 363 p.
- Kirkor, Teodor, 1951, Protecting public waters from pollution in the USSR: Sewage Works Journal, v. 23, p. 938.
- Langbein, W.B., and Iseri, K.T., 1960, General introduction and hydrologic definitions: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.
- Maier, F.J., 1950, Fluoridation of public water supplies: Journal of the American Water Works Association, v. 42, pt. 1, p. 1120-1132.
- Maxcy, K.F., 1950, Report on the relation of nitrite concentrations in well waters to the occurrence of methemoglobinemia: National Research Council, Sanitary Engineering and Environment Bulletin, Appendix D, 271 p.
- Paynter, O.E., 1960, The chronic toxicity of dodecylbenzene sodium sulfonate: U.S. Public Health Conference on Physiological Aspects of Water Quality Proc., Washington, D.C., Sept. 8-9, 1960, 175-179 p.
- Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Publishing Corporation, New York, 7th ed., 285 p.
- Swenson, H.A., and Baldwin, H.L., 1965, A primer on water quality: Washington, U.S. Government Printing Office, 27 p.
- U.S. Environmental Protection Agency, 1975, National interim primary drinking water regulations: Federal Register, v. 40, no. 51, March 14, p. 11990-11998.
- 1976 (1977), Quality criteria for water: U.S. Government Printing Office, 256 p.
- 1977, National secondary drinking water regulations: Federal Register, v. 42, no. 62, March 31, 1977, p. 17143-17146.
- U.S. Public Health Service, 1962, Drinking water standards: U.S. Department of Health, Education, and Welfare, Public Health Service: Pub. no. 956.
- Wayman, C.H., Robertson, J.B., and Page, H.G., 1962, Foaming characteristics of synthetic detergent solutions: U.S. Geological Survey Professional Paper 450D, art. 178, D198 p.

STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

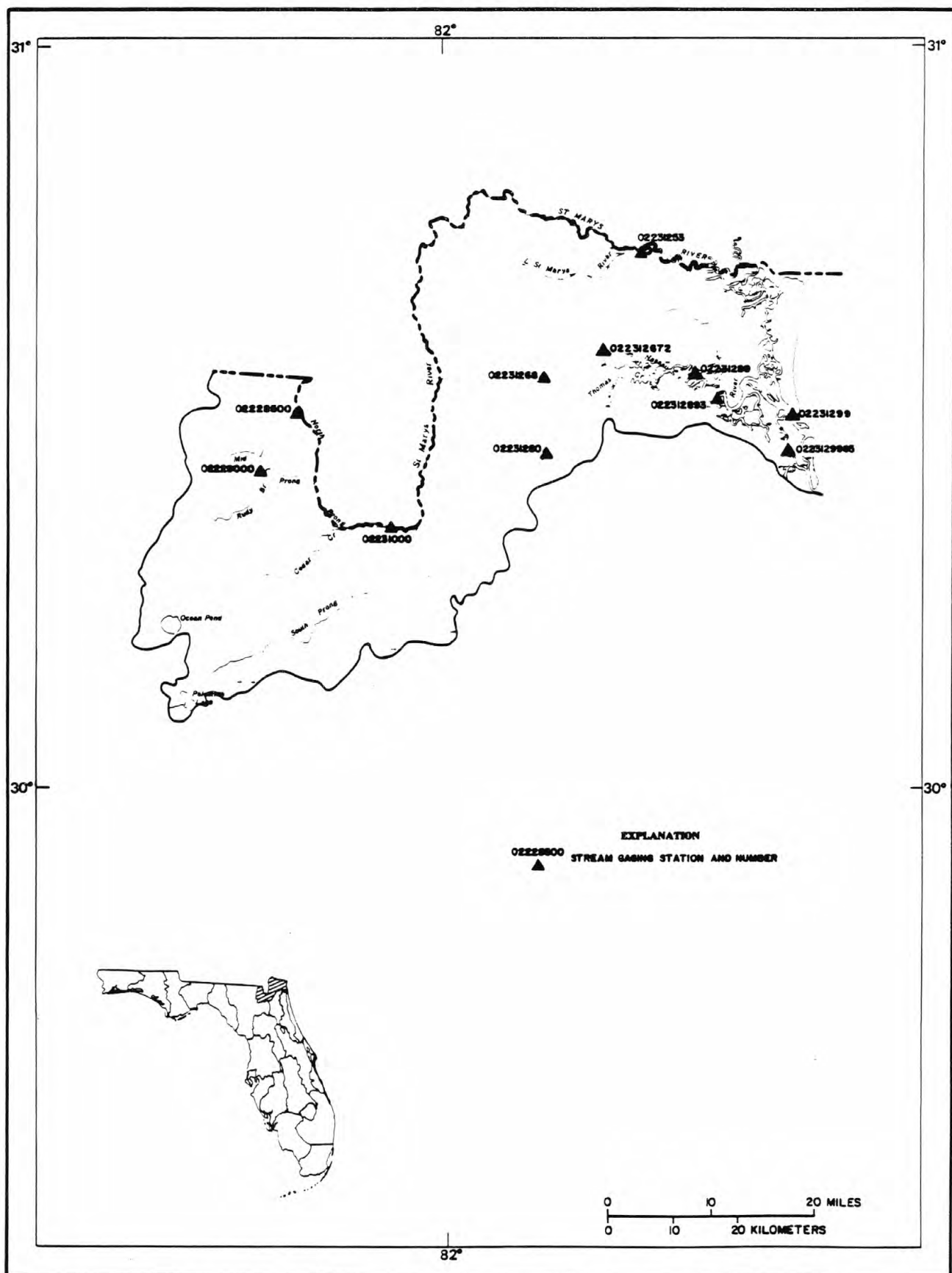


Figure 14.--Location of stream gaging stations in the St. Marys River basin and the coastal area between the St. Marys and St. Johns Rivers.

ALTAMAHA-ST. MARYS RIVER

ST. MARYS RIVER BASIN

02228500 NORTH PRONG ST. MARYS RIVER AT MONIAC, GA

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

DRAINAGE AREA.--160 mi², approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

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

REVISED RECORDS.--WSP 1234; Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 89.40 ft above National Geodetic Vertical Datum of 1929. January 1921 to June 1934, nonrecording gage at site 800 ft downstream at datum 3.22 ft higher.

REMARKS.--Estimated daily discharges: Mar. 10 to Apr. 13. Records good.

AVERAGE DISCHARGE.--42 years (water years 1922-23, 1928-29, 1933, 1951-87), 160 ft³/s, 13.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft³/s, Apr. 5, 1973, gage height, 22.98 ft; no flow for many days in some years; minimum gage height, 3.62 ft, June 26, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 1,180 ft³/s, Jan. 23, gage height, 12.64 ft, but may have been higher during period of no gage-height record Mar. 10 to Apr. 13; minimum, 0.75 ft³/s, June 30, gage height, 4.44 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	20	399	406	466	545	980	37	3.4	33	56	26
2	26	19	508	533	426	638	800	34	2.9	44	67	24
3	23	18	511	469	442	563	660	31	2.3	49	84	42
4	20	17	496	430	435	501	600	28	2.6	54	67	99
5	18	16	457	594	445	455	540	26	9.5	51	47	105
6	16	15	412	691	795	416	480	23	8.9	43	35	126
7	14	15	367	620	982	398	420	22	6.4	40	29	232
8	13	14	325	557	1050	558	380	21	4.6	144	23	269
9	13	13	286	510	982	612	350	20	3.4	186	19	213
10	14	13	276	476	866	562	317	18	2.4	120	16	157
11	14	12	424	501	748	510	278	17	1.7	85	13	125
12	13	12	654	479	647	450	242	18	1.2	63	15	115
13	12	12	809	429	568	410	217	18	1.1	63	34	192
14	13	12	739	391	505	380	192	19	1.6	73	198	215
15	17	11	656	360	454	366	171	20	5.2	73	773	175
16	15	11	600	351	436	350	155	20	5.5	62	705	137
17	14	11	558	409	459	340	140	19	5.2	49	614	128
18	12	15	508	459	425	335	128	17	4.4	39	523	127
19	12	27	460	467	391	350	117	15	3.8	33	410	100
20	11	27	415	453	361	400	107	14	3.1	29	351	81
21	9.9	38	375	417	393	420	98	13	2.9	25	328	67
22	9.4	39	336	732	505	415	90	12	2.2	21	239	55
23	8.9	38	306	1150	672	380	81	11	1.7	18	153	47
24	8.6	36	400	996	657	340	74	12	2.8	15	106	41
25	8.3	35	452	889	599	300	66	9.8	2.6	13	78	36
26	8.4	34	408	898	564	390	59	8.1	1.9	11	60	32
27	9.0	33	365	826	529	560	53	6.9	1.8	8.5	48	30
28	9.0	34	334	714	496	750	49	6.0	1.5	6.8	39	27
29	9.0	41	306	628	---	860	44	5.5	1.1	5.5	34	24
30	18	97	276	562	---	990	40	4.7	.80	6.5	30	22
31	21	---	252	514	---	1020	---	4.0	---	28	28	---
TOTAL	438.5	735	13670	17911	16298	15564	7928	530.0	98.50	1491.3	5222	3069
MEAN	14.1	24.5	441	578	582	502	264	17.1	3.28	48.1	168	102
MAX	29	97	809	1150	1050	1020	980	37	9.5	186	773	269
MIN	8.3	11	252	351	361	300	40	4.0	.80	5.5	13	22
CFSM	.09	.15	2.76	3.61	3.64	3.14	1.65	.11	.0	.30	1.05	.64
IN.	.10	.17	3.18	4.16	3.79	3.62	1.84	.12	.0	.35	1.21	.71

CAL YR 1986 TOTAL 81747.31 MEAN 224 MAX 2270 MIN 2.9 CFSM 1.40 IN. 19.0
WTR YR 1987 TOTAL 82955.03 MEAN 227 MAX 1150 MIN .80 CFSM 1.42 IN. 19.3

ALTAMAHA-ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02229000 MIDDLE PRONG ST. MARYS RIVER AT TAYLOR, FL

LOCATION.--Lat 30°26'10", long 82°17'15", in SW¼ sec.2, T.1 S., R.20 E., Baker County, Hydrologic Unit 03070204, near center of span on upstream side of bridge on State Highway 125, 0.5 mi southeast of Taylor, 0.9 mi upstream from Little River, and 7.4 mi upstream from mouth.

DRAINAGE AREA.--125 mi², approximately.

PERIOD OF RECORD.--September 1955 to September 1967, April 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 89.51 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to April 1976 at same site at datum 0.11 ft lower.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--23 years (water years 1956-67, 1977-87), 115 ft³/s, 12.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,920 ft³/s, Sept. 12, 1964, gage height, 14.49 ft, present datum; minimum, 0.03 ft³/s, June 6, 1985, gage height, 0.89 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 23	0300	822	9.88	Mar. 8	1900	573	8.93
Feb. 7	2000	762	9.67	Mar. 31	1000	848	9.97
Feb. 23	1300	802	9.81	Aug. 15	1900	*985	*10.33

Minimum discharge, 0.77 ft³/s, Oct. 26,28,29, gage height, 1.19 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	6.8	4.4	36	207	456	570	771	20	1.5	1.7	21	140	
2	6.6	4.4	40	234	411	633	715	17	1.5	1.9	30	154	
3	6.4	4.0	42	206	381	577	686	15	1.4	4.0	41	289	
4	6.0	3.6	38	196	345	506	687	12	1.9	4.1	36	213	
5	5.4	3.2	34	273	346	444	659	10	2.2	3.8	36	202	
6	4.8	2.8	31	313	578	394	608	9.0	2.8	3.9	41	235	
7	4.1	2.4	30	280	732	371	545	7.8	2.0	3.0	42	316	
8	3.9	2.1	29	248	729	521	472	6.8	1.7	10	39	241	
9	4.4	1.9	29	224	641	521	414	5.9	1.5	11	36	204	
10	3.4	1.6	56	211	554	446	359	5.1	1.3	8.8	32	187	
11	3.1	1.5	148	216	483	393	304	4.4	1.2	5.7	33	173	
12	2.9	1.3	282	209	441	348	258	3.9	1.1	4.3	58	179	
13	2.4	1.2	407	193	411	311	218	3.6	1.1	3.0	262	244	
14	2.5	1.1	386	180	382	280	187	3.3	1.6	2.9	585	252	
15	3.1	1.0	325	170	348	251	163	4.7	1.8	11	877	217	
16	2.6	.92	289	172	340	225	142	3.8	2.0	23	959	186	
17	2.1	.89	294	211	363	204	125	3.5	1.7	30	930	174	
18	1.9	2.4	317	246	335	191	112	3.2	1.5	35	891	154	
19	1.6	3.2	337	254	297	220	101	2.9	1.4	38	881	141	
20	1.4	2.9	347	245	264	210	91	2.5	1.4	37	861	127	
21	1.2	4.0	337	226	279	186	82	2.5	1.6	36	831	113	
22	1.1	3.6	310	504	367	165	73	3.1	1.8	35	763	102	
23	.93	3.3	288	783	719	147	65	3.0	5.2	33	670	94	
24	.88	2.9	323	692	714	131	57	2.6	7.4	29	557	86	
25	.83	2.6	324	645	647	121	50	2.3	4.1	25	509	79	
26	.82	2.4	281	676	591	155	43	2.1	4.0	23	392	71	
27	.88	2.2	238	660	547	388	38	1.9	4.8	24	300	65	
28	.81	2.2	205	630	518	598	33	1.8	3.9	22	233	60	
29	1.3	3.6	181	603	---	627	28	1.7	2.6	18	185	54	
30	3.4	16	161	566	---	710	24	1.7	1.9	14	152	50	
31	3.9	---	146	515	---	836	---	1.6	---	14	168	---	
TOTAL	91.45	89.61	6291	10988	13219	11680	8110	168.7	69.9	515.1	11451	4802	
MEAN	2.95	2.99	203	354	472	377	270	5.44	2.33	16.6	369	160	
MAX	6.8	16	407	783	732	836	771	20	7.4	38	959	316	
MIN	.81	.89	29	170	264	121	24	1.6	1.1	1.7	21	50	
CFSM	.02	.02	1.62	2.84	3.78	3.01	2.16	.04	.02	.13	2.96	1.28	
IN.	.03	.03	1.87	3.27	3.93	3.48	2.41	.05	.02	.15	3.41	1.43	
CAL YR	1986	TOTAL	44817.25	MEAN	123	MAX	1400	MIN	.59	CFSM	.98	IN.	13.34
WTR YR	1987	TOTAL	67475.76	MEAN	185	MAX	959	MIN	.81	CFSM	1.48	IN.	20.08

ALTAMAHA-ST. MARYS RIVERS

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--61 years, 678 ft³/s, 13.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,100 ft³/s, Sept. 25, 1947; maximum gage height, 23.25 ft, Sept. 13, 1964, from floodmark; minimum discharge observed, 12 ft³/s, May 22, 1932; minimum gage height observed, 0.04 ft, June 4, 5, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 25	0600	3,450	13.15	Mar. 9	1900	2,840	12.40
Feb. 9	0800	3,650	13.36	Mar. 31	2400	*6,250	*15.51
Feb. 24	1400	3,890	13.60	Aug. 18	0800	3,420	13.12

Minimum discharge, 36 ft³/s, Oct. 28, 29, gage height, 1.23 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	80	384	893	1840	2430	5960	168	53	45	117	451
2	96	78	666	1340	1650	2710	5120	154	50	55	217	610
3	87	72	751	1510	1510	2840	4280	143	48	82	248	925
4	80	68	760	1400	1430	2570	3570	133	47	98	289	1170
5	73	64	719	1410	1390	2260	3040	124	58	120	258	1220
6	67	61	651	1630	1870	1970	2660	116	99	175	231	1200
7	62	57	582	1720	2680	1800	2320	110	130	145	211	1260
8	58	54	521	1610	3350	2100	1990	113	103	401	190	1400
9	55	51	470	1460	3620	2730	1720	111	74	569	171	1350
10	60	48	450	1340	3380	2730	1490	104	58	447	154	1190
11	98	46	676	1320	2950	2440	1310	97	51	393	136	1020
12	105	43	1070	1340	2560	2130	1140	93	46	339	146	913
13	86	42	1570	1280	2210	1890	993	91	42	251	250	1100
14	76	40	1850	1170	1910	1700	873	92	44	204	854	1450
15	79	39	1810	1060	1690	1520	784	106	61	204	1670	1550
16	80	39	1640	991	1550	1370	711	112	73	210	2500	1470
17	77	39	1480	1020	1560	1240	642	116	66	214	3150	1340
18	70	42	1370	1200	1530	1110	580	107	62	190	3380	1220
19	61	51	1270	1330	1420	1080	526	106	58	170	3080	1080
20	55	71	1170	1360	1300	1150	479	107	52	156	2640	938
21	51	82	1070	1330	1370	1130	435	99	46	142	2270	812
22	48	91	986	1560	1990	1020	394	90	44	133	1970	696
23	45	104	910	2460	3070	921	356	86	47	126	1700	587
24	42	97	952	3240	3830	834	321	85	49	116	1420	495
25	40	89	1120	3430	3700	765	290	83	51	107	1200	419
26	38	84	1150	3280	3290	813	262	78	50	126	1020	353
27	37	79	1050	3160	2880	2270	239	71	52	175	846	302
28	37	75	935	2950	2560	4350	217	65	52	133	717	262
29	38	76	849	2650	---	4630	200	62	49	110	604	227
30	46	101	780	2350	---	4660	183	58	44	92	507	202
31	59	---	722	2060	---	5820	---	56	---	82	437	---
TOTAL	2011	1963	30384	54854	64090	66983	43085	3136	1759	5810	32583	27212
MEAN	64.9	65.4	980	1769	2289	2161	1436	101	58.6	187	1051	907
MAX	105	104	1850	3430	3830	5820	5960	168	130	569	3380	1550
MIN	37	39	384	893	1300	765	183	56	42	45	117	202
CFSM	.09	.09	1.40	2.53	3.27	3.09	2.05	.14	.08	.27	1.50	1.30
IN.	.11	.10	1.61	2.92	3.41	3.56	2.29	.17	.09	.31	1.73	1.45

CAL YR 1986 TOTAL 245215 MEAN 672 MAX 5690 MIN 33 CFSM .96 IN. 13.0
WTR YR 1987 TOTAL 333870 MEAN 915 MAX 5960 MIN 37 CFSM 1.31 IN. 17.7

ALTAMAHA-ST. MARYS RIVERS

ST. MARYS RIVER BASIN

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

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.01	1.77	4.11	6.78	10.44	11.70	15.31	2.68	1.46	1.35	2.18	4.52
2	1.92	1.75	5.65	8.82	9.88	12.19	14.70	2.56	1.42	1.49	3.09	5.37
3	1.83	1.69	6.08	9.45	9.46	12.40	13.98	2.45	1.39	1.83	3.31	6.97
4	1.75	1.64	6.12	9.06	9.17	11.96	13.27	2.35	1.37	2.01	3.59	8.15
5	1.68	1.59	5.91	9.10	9.03	11.39	12.67	2.27	1.53	2.23	3.39	8.36
6	1.61	1.55	5.57	9.83	10.49	10.81	12.11	2.20	2.02	2.75	3.20	8.27
7	1.55	1.50	5.22	10.11	12.14	10.34	11.51	2.14	2.33	2.47	3.06	8.54
8	1.50	1.46	4.91	9.78	13.03	11.07	10.84	2.18	2.07	4.19	2.88	9.15
9	1.46	1.42	4.63	9.27	13.33	12.23	10.10	2.15	1.74	5.16	2.71	8.94
10	1.53	1.39	4.52	8.82	13.07	12.23	9.39	2.08	1.53	4.51	2.56	8.26
11	1.94	1.36	5.70	8.73	12.55	11.73	8.69	2.01	1.43	4.21	2.38	7.44
12	2.02	1.33	7.60	8.82	11.93	11.16	7.96	1.95	1.36	3.89	2.48	6.93
13	1.83	1.31	9.64	8.55	11.30	10.59	7.27	1.93	1.31	3.33	3.28	7.81
14	1.72	1.28	10.47	8.06	10.65	10.04	6.69	1.94	1.34	3.00	6.56	9.32
15	1.75	1.26	10.36	7.58	10.01	9.50	6.24	2.10	1.57	3.00	9.91	9.68
16	1.76	1.26	9.86	7.26	9.58	8.95	5.87	2.16	1.72	3.05	11.82	9.42
17	1.73	1.27	9.36	7.41	9.62	8.38	5.53	2.20	1.63	3.08	12.82	8.94
18	1.64	1.32	8.94	8.21	9.52	7.82	5.22	2.12	1.58	2.88	13.08	8.37
19	1.55	1.43	8.51	8.79	9.14	7.66	4.94	2.11	1.53	2.70	12.74	7.73
20	1.48	1.68	8.07	8.90	8.66	8.00	4.68	2.12	1.45	2.58	12.09	7.07
21	1.42	1.81	7.65	8.77	8.91	7.89	4.44	2.02	1.37	2.44	11.45	6.43
22	1.37	1.92	7.23	9.57	10.78	7.40	4.21	1.93	1.33	2.35	10.84	5.83
23	1.34	2.05	6.87	11.75	12.67	6.92	3.99	1.87	1.39	2.29	10.09	5.27
24	1.30	1.99	7.07	12.90	13.54	6.49	3.79	1.87	1.40	2.20	9.16	4.78
25	1.28	1.90	7.86	13.12	13.41	6.15	3.60	1.84	1.44	2.11	8.24	4.35
26	1.25	1.84	7.98	12.96	12.97	6.37	3.42	1.78	1.42	2.28	7.43	3.96
27	1.24	1.78	7.52	12.82	12.46	11.05	3.25	1.70	1.44	2.74	6.57	3.65
28	1.24	1.74	6.99	12.55	11.95	14.05	3.10	1.63	1.44	2.35	5.91	3.38
29	1.25	1.74	6.57	12.08	---	14.30	2.96	1.58	1.40	2.14	5.34	3.13
30	1.35	2.03	6.23	11.56	---	14.33	2.82	1.54	1.33	1.94	4.84	2.93
31	1.52	---	5.93	11.02	---	15.21	---	1.50	---	1.83	4.45	---
MEAN	1.57	1.60	7.07	9.76	11.1	10.3	7.42	2.03	1.52	2.72	6.50	6.76
MAX	2.02	2.05	10.47	13.12	13.54	15.21	15.31	2.68	2.33	5.16	13.08	9.68
MIN	1.24	1.26	4.11	6.78	8.66	6.15	2.82	1.50	1.31	1.35	2.18	2.93
CAL YR 1986	MEAN 4.48											
WTR YR 1987	MEAN 5.67											
			MAX 15.08	MIN 1.18								
			MAX 15.31	MIN 1.24								

ALTAMAHA ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, FL

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

DRAINAGE AREA.--1,360 mi², approximately.

PERIOD OF RECORD.--April 1966 to September 1972, October 1972 to September 1973 (gage heights only), October 1973 to August 1975, October 1980 to September 1983, October 1984 to current year (incomplete).

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

REMARKS.--Estimated daily discharge Dec. 3 to Jan. 27. Records poor. Discharge computed from continuous electromagnetic current meter record and represents net of much larger upstream and downstream discharges. The stage record published is the maximum and minimum tide event for each calendar day.

AVERAGE DISCHARGE.--9 years (1967-72, 1981-82, 1987), 1,484 ft³/s, 1,075,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,300 ft³/s, Nov. 2, 1969; maximum gage height, 14.60 ft, Nov. 1, 1969; maximum daily reverse flow, 5,780 ft³/s, Aug. 28, 1982; minimum gage height, 5.63 ft Feb. 13, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 12,000 ft³/s, Apr. 3; maximum gage height, 14.13 ft, Jan. 5; maximum daily reverse flow, 974 ft³/s, Oct. 11; minimum gage height, 7.14 ft, Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	2030	2290	2400	5950	8860	7750	1960	2070	1950	1930	3070
2	1210	1830	1590	2700	7370	8410	9670	1420	2130	2220	1440	2860
3	1360	1000	1600	3000	6670	8460	12000	2360	1610	2030	1280	2940
4	1480	1360	1800	3400	6120	8840	11500	1950	1440	1470	1210	2150
5	1510	2220	2000	3800	5900	7990	10200	1120	1010	1170	713	1400
6	1200	2120	2090	4000	7610	8080	9980	2580	348	890	289	1600
7	1390	1340	2100	4200	7550	7090	10100	1610	1390	-320	616	1800
8	1800	973	2000	4400	9820	9060	8960	1260	1060	1510	1600	2000
9	1930	1140	1600	4600	8410	7800	7260	10	1100	2720	2360	2200
10	897	380	1400	4300	6470	4980	5650	1750	1320	2780	2720	2000
11	-974	117	1800	4100	7000	5950	5570	1120	1100	2690	1860	1800
12	1290	1580	2000	3800	6180	6560	5140	1430	2110	2650	1850	1600
13	1210	267	2500	3500	5480	5780	1900	2680	2710	2220	2800	1800
14	1780	864	3000	3000	6890	6070	4490	2500	2320	2600	3250	2000
15	1230	2200	3500	2800	6550	6720	3750	2400	1730	2370	3900	2300
16	1450	2020	3800	2700	6100	6810	2920	2300	1790	1330	3990	2500
17	1730	1750	4000	2600	7900	5500	2900	2200	1410	1090	3770	2600
18	1500	2040	3600	2700	7690	4840	2160	2100	822	1240	3850	2450
19	1930	2010	3200	3200	6590	5780	2310	1670	490	2080	3680	2200
20	2210	2070	2800	3800	6230	5260	1290	769	1260	1600	3520	2000
21	2130	2560	2600	4500	5930	5790	1180	-540	1370	1250	4310	1800
22	1900	2070	2700	5000	6230	4140	1070	336	985	1000	6840	1600
23	1810	1850	2900	5900	9120	3610	270	1040	1620	917	7010	1400
24	1560	1990	3200	6600	6420	2910	1870	1220	1930	2110	4600	1300
25	1340	1020	3400	7500	4340	2560	1590	1320	1530	2310	5490	1200
26	1060	624	3200	6400	4480	3310	2040	1700	2150	2500	6230	1050
27	959	1030	3000	5200	6560	4120	1720	1460	2240	2340	5930	940
28	1070	-697	2800	4960	6990	5790	2440	2130	1560	1900	5610	830
29	393	575	2600	5470	---	5430	2110	2440	2200	1850	4490	720
30	105	1820	2400	7430	---	7420	2690	2190	2210	1870	3930	650
31	908	---	2300	5990	---	9790	---	2300	---	2460	2880	---
TOTAL	40398	42153	79770	133950	188550	193710	142480	50785	47015	56797	103948	54760
MEAN	1303	1405	2573	4321	6734	6249	4749	1638	1567	1832	3353	1825
MAX	2210	2560	4000	7500	9820	9790	12000	2680	2710	2780	7010	3070
MIN	-974	-697	1400	2400	4340	2560	270	-540	348	-320	289	650
AC-FT	80130	83610	158200	265700	374000	384200	282600	100700	93250	112700	206200	108600

CAL YR 1986 TOTAL 165392 MEAN 453 MAX 4000 MIN -974 AC-FT 328100
WTR YR 1987 TOTAL 1134320 MEAN 3108 MAX 12000 MIN -974 AC-FT 2250000

NOTE.--Negative figures indicate reverse flow.

ALTAMAHA ST. MARYS RIVERS

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.04	13.55	14.09	14.06	13.43	13.89	13.09	12.88	13.01	12.52	12.54	13.00
2	12.99	13.50	13.96	13.58	13.37	13.49	13.39	12.86	12.86	12.43	12.61	12.98
3	12.99	13.67	13.55	13.49	13.02	13.46	13.26	12.84	12.68	12.21	12.62	13.16
4	13.00	13.86	13.42	13.77	13.08	13.45	12.61	12.69	12.66	12.25	12.60	13.46
5	13.07	13.73	13.56	14.13	13.42	13.36	12.35	12.89	12.87	12.60	12.71	13.58
6	13.21	13.38	13.60	14.08	13.77	13.36	12.46	13.18	13.26	12.60	12.85	13.55
7	13.50	13.26	13.31	13.58	13.60	13.45	12.52	12.89	13.19	12.92	13.06	13.50
8	13.44	13.20	12.97	12.98	13.59	13.25	12.62	12.70	13.18	13.14	13.29	13.54
9	13.19	12.96	12.85	13.25	12.33	13.67	12.50	13.21	13.16	13.18	13.27	13.29
10	13.15	12.99	12.81	13.19	13.03	12.87	12.81	13.10	13.18	13.25	13.35	13.11
11	13.50	13.14	12.99	12.36	12.96	13.40	12.89	13.23	13.56	13.26	13.15	13.09
12	13.45	13.08	12.99	12.40	12.81	13.42	12.77	13.41	13.61	13.36	13.29	13.04
13	13.39	13.15	13.18	12.80	13.06	13.39	12.90	13.39	13.50	13.41	13.43	12.74
14	13.17	13.70	13.71	13.16	13.28	13.56	13.11	13.20	13.27	13.35	13.45	12.69
15	13.23	13.45	13.61	13.04	13.31	13.54	13.22	13.10	13.17	13.05	13.13	12.77
16	13.31	13.23	13.50	13.10	13.78	13.43	13.18	13.00	13.09	12.96	12.86	12.74
17	13.42	13.08	13.39	13.37	13.71	13.61	13.31	12.90	12.97	13.15	12.73	12.60
18	13.43	13.32	13.42	13.57	13.47	13.83	13.21	12.72	12.92	13.22	12.68	12.52
19	13.56	13.21	13.31	13.20	13.29	13.73	13.30	13.00	13.08	13.05	12.76	12.63
20	13.42	13.41	13.41	12.69	13.31	13.65	13.25	12.80	13.00	12.91	12.90	12.89
21	13.26	13.17	13.55	12.92	13.46	13.63	13.07	13.14	12.88	12.82	13.14	13.07
22	13.18	13.10	13.67	13.37	13.68	13.32	13.07	13.27	12.96	12.85	13.10	13.05
23	12.98	13.11	13.63	12.63	13.10	13.59	13.16	13.20	13.03	13.14	12.88	13.04
24	12.78	12.82	13.36	12.82	13.36	13.62	13.12	13.28	12.90	13.13	13.06	13.20
25	12.73	12.73	12.86	13.16	13.62	13.59	13.30	13.27	13.08	13.11	13.12	13.10
26	12.77	12.76	12.90	13.04	13.89	13.53	13.43	13.32	13.08	13.08	13.11	13.04
27	12.85	12.75	13.25	13.36	13.99	13.65	13.58	13.48	12.97	12.88	12.93	13.06
28	12.79	13.14	13.71	13.41	13.99	13.58	13.62	13.55	12.92	12.61	12.71	13.11
29	12.98	13.62	13.81	13.69	---	13.67	13.55	13.54	13.09	12.47	12.49	12.96
30	13.27	13.82	13.69	13.45	---	13.64	13.46	13.39	12.98	12.63	12.76	12.78
31	13.57	---	13.85	13.17	---	13.53	---	13.23	---	12.58	12.76	---
MEAN	13.18	13.26	13.42	13.25	13.38	13.52	13.07	13.12	13.07	12.91	12.95	13.04
MAX	13.57	13.86	14.09	14.13	13.99	13.89	13.62	13.55	13.61	13.41	13.45	13.58
MIN	12.73	12.73	12.81	12.36	12.33	12.87	12.35	12.69	12.66	12.21	12.49	12.52
CAL YR 1986	MEAN	13.17	MAX	14.18	MIN	12.17						
WTR YR 1987	MEAN	13.18	MAX	14.13	MIN	12.21						

ST. MARYS RIVER BASIN

02231253 ST. MARYS RIVER NEAR GROSS, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.62	9.84	10.20	10.65	9.05	9.89	8.69	8.17	8.62	8.28	8.20	8.40
2	8.42	9.13	10.09	9.34	8.76	9.46	9.23	8.67	8.44	8.08	7.83	8.24
3	8.49	9.06	9.15	8.84	8.94	9.69	8.67	8.56	8.33	7.71	7.83	8.67
4	8.38	9.95	8.31	9.88	9.48	9.53	7.93	8.45	8.55	7.58	7.20	9.00
5	8.17	9.83	8.72	12.10	10.89	9.84	8.39	9.72	9.09	7.53	7.30	9.52
6	8.04	9.09	10.01	11.04	10.65	10.11	9.18	9.56	9.45	7.58	7.14	9.52
7	9.33	8.69	9.51	9.34	10.80	10.63	8.86	9.31	9.25	7.63	7.25	9.64
8	9.33	8.95	8.77	9.30	9.25	8.95	8.67	8.72	8.57	7.91	7.60	9.28
9	9.01	8.85	8.39	9.30	8.71	8.37	8.50	8.96	7.80	7.86	8.25	8.96
10	8.65	8.63	8.43	9.00	8.73	8.36	8.55	8.82	7.81	7.80	8.16	8.62
11	9.44	9.40	8.37	8.09	8.66	10.22	8.72	8.40	7.90	8.05	8.73	8.75
12	10.09	9.19	8.40	7.89	8.30	9.96	7.93	8.51	8.18	8.21	9.16	8.66
13	9.61	8.74	8.06	7.89	8.12	9.72	7.76	8.63	7.80	8.73	9.95	8.25
14	9.01	10.13	10.20	8.61	9.14	9.93	8.09	8.52	7.80	8.50	10.35	8.33
15	9.18	9.93	9.99	8.37	9.09	10.15	8.29	8.40	7.80	8.50	9.46	8.56
16	9.33	9.29	9.73	8.62	10.33	9.39	8.35	9.35	7.98	8.39	8.62	8.87
17	9.69	8.57	9.48	9.07	10.19	9.90	8.31	8.30	7.93	8.86	8.26	8.62
18	9.50	8.57	9.56	10.29	9.63	10.36	8.80	8.27	7.98	9.60	8.42	8.26
19	10.26	8.94	9.17	8.37	9.51	9.79	8.96	8.03	8.25	9.02	8.46	8.06
20	9.86	10.17	9.73	8.43	9.81	10.09	8.94	7.95	8.14	8.56	8.54	8.50
21	9.49	9.17	10.02	9.07	10.25	9.09	8.85	8.38	7.81	8.32	9.00	9.21
22	9.54	9.49	11.04	8.52	10.10	9.79	8.83	9.33	7.80	8.25	9.01	9.27
23	9.34	9.72	11.03	7.88	8.81	9.93	8.94	8.98	8.03	8.58	8.44	9.19
24	9.06	9.17	9.30	8.25	8.58	10.26	8.75	8.43	7.72	8.94	8.46	9.37
25	9.14	8.96	8.67	8.38	9.16	9.93	8.88	8.23	8.35	8.91	9.31	9.23
26	9.21	8.96	8.82	8.16	10.04	9.81	9.16	8.39	8.42	8.52	9.05	8.98
27	9.35	8.56	8.69	8.31	10.57	10.00	9.48	9.17	7.87	7.94	8.76	8.85
28	8.91	8.28	9.63	8.70	10.84	9.91	8.75	9.44	8.66	7.74	8.30	9.02
29	8.91	9.59	9.57	8.77	---	9.81	9.35	9.27	8.78	7.88	7.84	8.74
30	9.21	9.77	9.45	9.10	---	9.81	8.17	9.09	8.32	8.59	7.83	8.22
31	9.85	---	8.52	7.89	---	7.90	---	8.77	---	8.38	8.36	---
MEAN	9.17	9.22	9.32	8.95	9.51	9.70	8.67	8.73	8.25	8.27	8.42	8.83
MAX	10.26	10.17	11.04	12.10	10.89	10.63	9.48	9.72	9.45	9.60	10.35	9.64
MIN	8.04	8.28	8.06	7.88	8.12	7.90	7.76	7.95	7.72	7.53	7.14	8.06
CAL YR 1986	MEAN 8.89	MAX 11.04	MIN 7.83									
WTR YR 1987	MEAN 8.92	MAX 12.10	MIN 7.14									

ALTAMAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312672 MILLS CREEK NEAR ITALIA, FL

LOCATION.--Lat 30°36'31", long 81°44'32", in NW¼ sec.7, T.2 N., R.26 E., Nassau County, Hydrologic Unit 03070205, on downstream side of bridge on U.S. Highway A1A, 1.5 mi west of Italia, and 5.5 mi east of Callahan.

DRAINAGE AREA.--56.6 mi².

PERIOD OF RECORD.--August 1982 to September 1986, (gage heights only). October 1986 to September 1987.

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is 5.00 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge 542 ft³/s, Feb. 8; maximum gage height, 10.39 ft, Jan. 6; maximum daily reverse flow, 42 ft³/s, Oct. 19; minimum gage height, 5.68 ft, July 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-4.1	-19	-1.7	284	58	189	317	3.6	9.6	12	11	-25
2	-6.0	4.0	13	266	58	162	281	-.99	1.6	13	4.6	-34
3	-4.1	-2.2	76	300	50	132	345	1.9	-.36	7.4	19	-14
4	-.65	-38	82	377	27	125	314	-2.5	-.10	4.4	20	-10
5	3.2	-27	56	442	27	126	175	-20	-6.9	3.4	8.7	22
6	-.98	18	50	531	186	91	91	-21	-6.1	1.6	2.0	108
7	-20	33	45	519	439	75	67	-2.1	-1.1	6.2	-.02	131
8	-2.2	14	50	363	542	174	19	-5.6	4.7	6.2	-3.7	139
9	23	11	56	282	441	250	9.0	-17	8.3	4.4	-4.1	141
10	19	4.0	67	239	343	256	-.44	-.94	6.9	1.4	-11	114
11	8.8	.35	118	129	225	177	-1.7	.53	4.4	1.5	-21	69
12	-12	13	155	115	242	160	.98	-.05	-3.3	-2.3	-38	64
13	14	3.9	201	100	112	113	-2.9	5.3	9.0	-10	-39	62
14	35	-40	292	95	35	66	-15	7.1	11	-3.2	-30	45
15	31	-39	250	92	38	46	-6.7	3.2	8.0	8.9	25	27
16	16	18	220	90	26	52	-6.1	3.7	4.2	3.5	46	26
17	2.8	24	200	88	30	27	.64	-3.8	11	-8.7	48	9.8
18	-2.9	18	185	85	82	13	-.73	-4.4	-.31	-13	24	8.3
19	-42	21	170	82	74	27	-7.0	-3.2	1.7	-.77	18	4.3
20	-13	-3.5	155	80	45	7.2	-13	-12	7.9	5.9	-4.0	-6.7
21	26	36	150	74	58	38	-12	-16	10	.72	-8.3	-17
22	27	21	145	117	144	20	-15	-7.5	18	1.7	-39	-10
23	19	16	136	216	287	-5.8	-14	-.30	15	-3.5	-23	-17
24	9.7	28	130	127	304	7.4	-3.0	3.3	9.6	-7.9	-23	-17
25	1.1	21	120	139	259	13	-3.5	2.8	13	-6.0	-29	-7.3
26	-6.0	19	113	131	246	44	-6.6	3.2	14	2.4	-21	-6.7
27	-6.6	23	105	89	192	146	-9.7	-.98	14	6.4	-29	-11
28	7.4	16	100	80	196	319	-.03	-6.3	11	-1.8	-25	-14
29	5.0	4.4	104	58	---	330	-3.9	4.2	11	.95	-17	-5.6
30	.41	4.1	82	61	---	382	9.9	11	17	-6.2	-20	.43
31	-36	---	92	56	---	512	---	14	---	-3.7	-35	---
TOTAL	91.88	202.05	3716.3	5707	4766	4073.8	1508.22	-60.83	202.73	24.90	-193.82	775.53
MEAN	2.96	6.73	120	184	170	131	50.3	-1.96	6.76	.80	-6.25	25.9
MAX	35	36	292	531	542	512	345	14	18	13	48	141
MIN	-42	-40	-1.7	56	26	-5.8	-15	-21	-6.9	-13	-39	-34

WTR YR 1987 TOTAL 20813.76 MEAN 57.0 MAX 542 MIN -42

NOTE.--Negative figures indicate reverse flow.

ALTAMAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312672 MILLS CREEK NEAR ITALIA, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.35	9.17	9.37	9.65	8.64	9.67	9.88	7.88	8.03	7.81	8.11	8.21
2	8.30	9.10	9.49	9.72	8.66	9.42	9.83	7.91	7.81	7.73	7.81	8.35
3	8.29	9.05	9.37	9.75	8.33	9.27	9.64	7.88	7.62	7.48	7.73	8.58
4	8.29	9.21	8.97	9.83	8.44	9.21	8.87	7.78	7.68	7.39	7.68	8.92
5	8.26	9.28	8.81	10.12	8.96	9.13	7.89	8.08	7.95	7.32	7.53	9.32
6	8.28	9.17	9.11	10.34	9.63	9.10	7.92	8.78	8.35	7.41	7.55	9.66
7	8.69	8.81	9.16	10.21	10.06	9.22	7.86	8.51	8.65	7.61	7.74	9.75
8	8.84	8.63	8.87	9.83	10.28	9.44	7.71	8.18	8.37	7.99	8.08	9.79
9	8.75	8.54	8.47	9.51	10.08	9.02	7.49	8.49	8.03	8.09	8.54	9.67
10	8.40	8.31	8.20	9.24	9.76	8.80	7.60	8.68	7.74	8.21	8.65	9.43
11	8.67	8.65	8.39	8.38	9.47	9.35	7.88	8.43	7.90	8.38	8.61	9.21
12	9.09	8.74	8.60	7.77	8.92	9.44	7.66	8.49	8.45	8.50	8.76	9.18
13	9.07	8.58	8.88	7.85	8.52	9.33	7.39	8.61	8.24	8.68	9.05	8.97
14	8.98	9.02	9.56	8.42	8.69	9.27	7.76	8.57	8.12	8.74	9.23	8.64
15	8.80	9.24	9.74	8.37	8.65	9.24	8.20	8.58	7.98	8.59	9.20	8.44
16	8.83	9.05	9.65	8.39	9.02	9.07	8.21	8.57	7.89	8.43	8.97	8.42
17	8.95	8.65	9.46	8.65	9.33	8.99	8.33	8.49	7.88	8.53	8.59	8.32
18	8.99	8.47	9.26	9.09	9.23	9.24	8.34	8.44	7.86	8.80	8.30	7.99
19	9.17	8.58	9.02	8.95	9.00	9.26	8.50	8.12	7.97	8.81	8.21	7.73
20	9.22	8.89	8.96	7.72	8.93	9.20	8.49	7.86	8.00	8.53	8.26	7.96
21	9.07	8.80	9.02	8.37	9.15	9.15	8.38	8.02	7.75	8.20	8.40	8.42
22	8.86	8.55	9.28	9.01	9.48	8.87	8.36	8.62	7.70	8.03	8.54	8.64
23	8.64	8.57	9.50	8.86	9.62	8.97	8.48	8.73	7.67	8.18	8.33	8.67
24	8.26	8.46	9.49	9.01	9.60	9.10	8.53	8.46	7.65	8.53	8.00	8.77
25	8.12	8.10	9.06	9.33	9.68	9.19	8.50	8.28	7.82	8.62	8.46	8.77
26	8.09	8.11	8.66	9.33	9.73	9.34	8.71	8.24	8.10	8.50	8.49	8.64
27	8.27	8.08	8.76	9.20	9.74	9.58	8.83	8.46	7.76	8.12	8.28	8.54
28	8.27	8.23	9.16	9.16	9.71	9.80	8.85	8.77	7.91	7.64	7.99	8.55
29	8.27	8.90	9.30	9.11	---	9.95	8.84	8.78	8.23	7.67	7.68	8.54
30	8.67	9.20	9.29	9.05	---	10.08	8.60	8.64	8.08	8.03	7.82	8.22
31	9.01	---	9.17	8.43	---	10.09	---	8.37	---	8.17	8.21	---
MEAN	8.64	8.74	9.10	9.05	9.26	9.32	8.38	8.38	7.97	8.15	8.28	8.74
MAX	9.22	9.28	9.74	10.34	10.28	10.09	9.88	8.78	8.65	8.81	9.23	9.79
MIN	8.09	8.08	8.20	7.72	8.33	8.80	7.39	7.78	7.62	7.32	7.53	7.73

WTR YR 1987 MEAN 8.67 MAX 10.34 MIN 7.32

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231268 ALLIGATOR CREEK AT CALLAHAN, FL

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

DRAINAGE AREA.--14.0 mi².

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--6 years, 12.7 ft³/s, 12.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 495 ft³/s, Sept. 2, 1985, gage height, 13.85 ft; no flow for many days in some years; minimum gage height, 6.24 ft, June 5,6,7, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 2	0200	*195	10.41	Feb. 7	0215	191	10.35
Jan. 23	0915	161	9.74	Sept. 7	2130	189	*11.00

Minimum discharge, 0.20 ft³/s, June 11,12, gage height, 6.34 ft.

EXTREMES FOR WATER YEARS 1982-1986.--Peak discharges greater than base discharge of 150 ft³/s and maximums(*):

Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
1982	Apr. 12	0415	*114	*9.88	1985	Sept. 2	0145	*495	*13.85
1983	Jan. 21	1400	152	10.62	1986	Dec. 14	1730	185	10.47
	Mar. 18	0400	228	12.17		Jan. 6	0130	162	10.12
	Apr. 10	0900	*238	*12.35		Jan. 11	1845	231	11.06
						Feb. 6	2300	251	11.30
1984	Mar. 28	1230	*438	*13.41		Feb. 9	2300	211	10.81
						Mar. 15	1015	*299	*11.81

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231268 ALLIGATOR CREEK AT CALLAHAN, FL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	.39	3.2	31	114	13	29	106	.75	.42	1.2	26	2.6	
2	.39	2.8	28	163	13	55	53	.67	.38	1.7	19	4.2	
3	.39	2.3	16	74	17	37	34	.61	.35	4.4	17	15	
4	.38	1.9	15	44	21	25	27	.56	.35	18	11	48	
5	.35	1.6	11	78	35	19	22	.55	.43	14	5.0	58	
6	.35	1.4	7.7	89	145	15	17	.59	.55	15	2.8	32	
7	.32	1.3	6.0	49	171	19	13	.65	.52	14	1.7	99	
8	.35	1.2	5.0	32	118	62	10	.71	.42	31	1.2	122	
9	.41	1.2	4.5	24	64	73	8.3	.95	.38	44	.94	47	
10	.99	1.0	7.8	23	38	39	6.8	.89	.31	30	1.1	23	
11	1.6	.98	52	26	27	26	5.6	.74	.26	23	.90	16	
12	1.6	.98	75	25	21	20	4.6	1.0	.40	11	.97	18	
13	2.1	.98	108	19	17	17	3.9	1.4	.77	6.3	4.2	31	
14	2.2	.98	65	15	15	15	4.4	2.3	2.0	3.6	47	31	
15	2.6	1.0	32	13	12	12	8.5	9.5	3.1	3.2	87	20	
16	4.7	1.1	23	12	21	9.9	8.8	17	3.4	3.7	86	13	
17	3.6	1.2	19	16	34	8.5	6.0	5.7	2.3	3.9	51	8.6	
18	2.0	3.5	16	24	24	7.9	4.5	2.9	2.5	2.6	28	6.0	
19	1.3	6.2	13	26	20	11	3.8	1.9	2.6	1.8	15	4.3	
20	1.0	12	12	24	15	14	3.2	1.5	1.9	1.7	9.2	3.1	
21	.80	8.6	10	26	30	11	2.6	1.2	1.5	1.7	6.2	2.3	
22	.72	7.2	8.8	73	96	8.7	2.2	.89	2.5	1.5	4.1	1.6	
23	.65	5.9	12	148	120	7.0	1.8	.92	7.1	1.1	2.8	1.2	
24	.64	3.7	28	80	89	6.0	1.6	.81	11	.86	1.9	1.0	
25	.70	2.8	35	46	45	6.5	1.3	.59	5.3	.78	1.4	.79	
26	.78	2.5	22	49	31	25	1.2	.50	3.7	1.7	1.1	.64	
27	.89	2.3	17	42	25	78	1.2	.46	3.3	2.1	.96	.54	
28	.83	2.3	14	29	21	82	1.1	.50	3.0	1.1	.86	.45	
29	1.0	3.5	11	22	---	71	.99	.58	2.2	1.0	.81	.45	
30	1.8	12	9.8	18	---	69	.93	.50	1.5	2.1	1.1	.52	
31	2.6	---	11	16	---	134	---	.45	---	15	1.5	---	
TOTAL	38.43	97.62	725.6	1439	1298	1012.5	365.32	58.27	64.44	263.04	437.74	611.59	
MEAN	1.24	3.25	23.4	46.4	46.4	32.7	12.2	1.88	2.15	8.49	14.1	20.4	
MAX	4.7	12	108	163	171	134	106	17	11	44	87	122	
MIN	.32	.98	4.5	12	12	6.0	.93	.45	.26	.78	.81	.45	
CFSM	.09	.23	1.67	3.32	3.31	2.33	.87	.13	.15	.61	1.01	1.46	
IN.	.10	.26	1.93	3.82	3.45	2.69	.97	.15	.17	.70	1.16	1.63	
CAL YR	1986	TOTAL	5631.61	MEAN	15.4	MAX	271	MIN	.22	CFSM	1.10	IN.	14.96
WTR YR	1987	TOTAL	6411.55	MEAN	17.6	MAX	171	MIN	.26	CFSM	1.25	IN.	17.04

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

02231280 THOMAS CREEK NEAR CRAWFORD, FL

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

DRAINAGE AREA.--29.9 mi².

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

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--22 years, 35.4 ft³/s, 16.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,020 ft³/s, Apr. 4, 1973, gage height, 21.04 ft, from rating curve extended above 1,600 ft³/s; minimum, 0.41 ft³/s, July 16, 1981, gage height, 14.50 ft.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 2	0800	343	17.56	Mar. 31	0300	479	17.78
Feb. 7	2400	486	17.79	Aug. 15	2200	315	17.48
Feb. 23	1600	*499	*17.81	Sept. 13	1000	315	17.48
Mar. 8	2200	333	17.52				

Minimum discharge, 0.77 ft³/s, June 11, 12, gage height, 14.57 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	6.9	36	136	32	127	319	4.4	1.9	2.3	35	5.0
2	3.4	6.3	33	303	27	220	192	4.2	1.9	2.2	24	16
3	3.2	5.8	24	193	36	155	126	4.0	1.8	2.3	15	35
4	3.1	5.4	19	123	37	105	93	3.9	1.7	2.4	11	131
5	2.9	4.8	15	124	64	74	71	3.7	1.7	2.8	11	192
6	2.8	4.5	12	135	259	53	53	4.1	1.1	3.8	7.3	124
7	2.8	4.3	10	106	442	58	37	3.9	.93	3.6	5.1	90
8	3.8	4.1	9.8	76	437	214	28	4.3	.80	2.8	3.9	116
9	5.1	3.9	9.4	56	279	287	21	4.5	.80	2.4	3.2	88
10	4.8	3.7	11	49	165	190	18	4.0	.80	2.7	2.7	49
11	9.3	3.7	54	67	107	126	16	3.8	.77	10	3.0	27
12	8.7	3.7	93	68	76	89	14	3.7	.86	6.2	3.9	93
13	6.5	3.7	99	51	57	68	12	4.0	1.1	3.4	13	296
14	6.2	3.8	76	38	43	57	11	4.6	1.4	2.6	89	201
15	11	3.9	48	31	34	41	14	8.7	1.6	2.8	273	122
16	9.1	3.9	34	30	39	33	12	6.2	1.9	3.2	254	74
17	6.8	3.9	27	42	67	26	10	4.7	2.2	2.6	175	42
18	5.3	5.2	21	57	67	23	9.7	3.8	2.5	2.3	137	24
19	4.5	11	18	57	52	33	9.0	3.3	2.9	2.2	77	17
20	4.1	8.5	16	53	40	39	8.1	3.1	3.1	3.6	39	14
21	3.7	10	15	53	103	30	7.6	2.9	2.9	11	20	11
22	3.5	9.8	13	121	241	23	7.0	2.7	2.9	6.4	14	8.9
23	3.4	7.2	15	275	433	19	6.4	2.7	3.0	3.6	10	7.7
24	3.3	6.1	52	204	335	17	6.0	2.8	3.5	2.8	7.7	7.0
25	3.2	5.6	58	140	209	16	5.6	2.6	3.4	2.4	6.1	6.1
26	3.4	5.2	36	131	143	32	5.5	2.4	5.7	2.5	4.9	5.4
27	3.7	5.0	24	123	104	188	5.7	2.2	4.2	2.4	4.3	4.9
28	3.6	4.8	20	91	80	250	5.3	2.2	3.2	2.2	3.7	4.5
29	3.6	6.1	17	67	---	220	4.9	2.3	2.6	2.1	3.4	4.5
30	7.1	15	16	52	---	279	4.6	2.1	2.4	8.1	3.8	4.4
31	8.3	---	16	41	---	456	---	2.0	---	21	4.5	---
TOTAL	153.7	175.8	947.2	3093	4008	3548	1132.4	113.8	65.56	130.7	1264.5	1820.4
MEAN	4.96	5.86	30.6	99.8	143	114	37.7	3.67	2.19	4.22	40.8	60.7
MAX	11	15	99	303	442	456	319	8.7	5.7	21	273	296
MIN	2.8	3.7	9.4	30	27	16	4.6	2.0	.77	2.1	2.7	4.4
CFSM	.17	.20	1.02	3.34	4.79	3.83	1.26	.12	.07	.14	1.36	2.03
IN.	.19	.22	1.18	3.85	4.99	4.41	1.41	.14	.08	.16	1.57	2.26

CAL YR 1986	TOTAL	11153.4	MEAN	30.6	MAX	507	MIN	1.8	CFSM	1.02	IN.	13.88
WTR YR 1987	TOTAL	16453.06	MEAN	45.1	MAX	456	MIN	.77	CFSM	1.51	IN.	20.47

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312893 NASSAU RIVER NEAR TISONIA, FL

WATER-QUALITY RECORDS

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

DRAINAGE AREA.--285 mi², approximately.

PERIOD OF RECORD.--October 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1985 to September 1986.

WATER TEMPERATURE: February 1986 to September 1986.

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

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 57,300 microsiemens, Aug. 13, 1987; minimum, less than 100 microsiemens, Feb. 2-14, 1986.

WATER TEMPERATURE: Maximum, 30.5°C, Aug. 9, 1987; minimum 10.0°C, Feb. 1, 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 57,300 microsiemens, Aug. 13; minimum, 400 microsiemens, Mar. 10.

WATER TEMPERATURE: Maximum, 30.5°C, Aug. 8,9,11; minimum, 10.5°C, Feb. 23.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50000	52500	51600	43400	24900	18300	---	---	46900	48700	49100	52900
2	50400	53000	50400	32100	24200	7600	---	---	45600	49800	49100	---
3	50300	52800	48600	34500	19400	8300	---	---	45400	48800	50200	---
4	50600	53200	48100	37000	22100	10000	---	---	44900	47900	50300	---
5	51300	53200	48900	41500	28800	11500	---	---	44100	48800	51500	---
6	52200	52700	49200	39600	30900	13100	---	41600	45100	49700	52100	---
7	53200	52200	48200	25200	22300	16300	---	40500	46600	51100	54700	---
8	52600	52200	46400	13600	17000	8900	---	39500	44700	51500	55900	---
9	50700	51600	45800	18400	2200	2000	---	43200	44900	51800	56000	---
10	51800	51800	45800	18500	5500	4500	---	42900	43200	52200	56200	---
11	53500	52300	45800	9200	3900	12400	---	43900	42900	52800	55900	---
12	52500	51800	44100	12200	3200	12700	---	45100	42100	53300	56800	---
13	52300	52200	43600	17100	7200	11500	---	45300	40500	53600	57300	---
14	48900	53500	46600	22300	11700	15100	---	45400	38600	52700	56800	---
15	51100	53000	45500	21700	13400	16000	---	46300	39100	52600	54300	---
16	51600	52300	43900	23300	20600	14800	---	46600	34700	52300	51600	---
17	51700	51600	42700	27200	22400	21000	---	45700	34300	52800	50800	---
18	52900	51000	42600	30300	17200	25300	---	46800	33400	52400	50700	---
19	53400	49700	41000	23500	15600	24400	---	45100	35500	51200	51500	---
20	53100	51200	42700	18600	16600	24500	---	45100	35800	50200	52200	---
21	51300	50200	43500	21800	20100	25500	---	46700	36700	51100	51900	---
22	51200	49700	45200	26700	21700	21900	---	47500	37200	52900	51500	---
23	50200	49600	44100	12100	7600	26300	---	46900	36200	54100	51000	---
24	49500	48000	39600	14200	8200	27700	---	47300	37300	54500	51600	---
25	49300	47900	32900	17200	12900	27900	---	47800	35800	54600	52000	43100
26	49700	48200	34200	13800	18900	26800	---	48300	37800	54400	52700	43600
27	50300	48400	38400	18700	21000	24600	---	49100	37100	53800	52200	44200
28	50500	50200	43000	19600	20600	20900	---	49400	34700	53100	51200	45500
29	51400	51400	44000	25800	---	20200	---	49400	34900	52000	50700	44800
30	52000	51500	43500	21500	---	---	---	49100	35300	52400	52700	42900
31	52800	---	44400	19700	---	---	---	48500	---	49100	52700	---
MAX	53500	53500	51600	43400	30900	---	---	---	46900	54600	57300	---

ALTAMAHA-ST. MARYS RIVERS
COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS
022312893 NASSAU RIVER NEAR TISONIA, FL

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35900	41600	36900	23400	1700	700	---	---	33500	28100	40100	35400
2	35800	43200	37200	11500	1600	600	---	---	33500	40800	37900	---
3	33800	38200	33600	6200	1700	600	---	---	33300	38600	38100	---
4	35800	41900	27700	6600	2400	700	---	---	28700	37300	36800	---
5	36500	41100	33400	22900	8200	700	---	---	34300	37400	36200	---
6	32100	41800	36200	10400	4400	900	---	24100	34900	37800	37200	---
7	40700	39100	37700	2200	1600	1000	---	27600	38300	38900	39500	---
8	41100	39300	31900	1600	800	500	---	25300	35900	39600	41700	---
9	39600	36300	32700	1500	500	500	---	25700	32900	39600	45000	---
10	37600	38500	31600	1400	600	400	---	24400	20800	39300	44000	---
11	37500	43300	29400	1200	500	600	---	25300	31800	40400	45300	---
12	44000	39200	28000	1200	500	700	---	28500	34000	41000	46100	---
13	42500	37300	23100	1200	500	700	---	24000	30700	42800	48900	---
14	33000	39100	29600	1700	600	800	---	28600	28400	42200	47400	---
15	34700	47000	26900	1900	800	1000	---	24900	23400	42200	42700	---
16	40000	40200	24300	2500	1100	900	---	30000	26800	41500	38400	---
17	41200	38500	21400	3500	2100	1100	---	25800	24100	42300	34600	---
18	40400	40300	19100	9700	1300	3500	---	26100	26100	44700	33800	---
19	44300	38600	16900	3200	1200	2400	---	27000	26400	43700	33600	---
20	44600	37100	18100	2500	1600	4000	---	22600	29600	41500	34200	---
21	43100	34000	18400	3200	1800	1900	---	29300	29100	40800	35200	---
22	38900	37800	28900	2100	1300	3200	---	33600	29200	41400	35500	---
23	40200	39800	29300	1500	800	5400	---	31100	26800	43800	34000	---
24	38000	34200	17500	1400	700	6700	---	32500	27400	45500	33100	---
25	38000	37800	11600	1400	700	7700	---	27900	27700	46000	37200	21600
26	38000	35500	12100	1200	800	6400	---	33100	28800	45100	37000	20400
27	39800	36500	12100	1100	1000	4400	---	37400	27100	43300	36300	20000
28	39900	33400	17400	1200	1300	1900	---	37100	26900	42500	35000	22000
29	37800	36000	20200	1200	---	1200	---	38600	27000	42000	33500	22200
30	38300	40700	20600	1400	---	---	---	37600	26000	42200	33700	19600
31	43600	---	15700	1000	---	---	---	34800	---	41300	35800	---
MIN	32100	33400	11600	1000	500	---	---	---	20800	28100	33100	---

ALTAMAHA-ST. MARYS RIVERS

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312893 NASSAU RIVER NEAR TISONIA, FL

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.9	21.9	---	---	---	14.0	---	---	25.6	28.6	28.4	29.5
2	30.0	21.8	---	---	---	14.0	---	---	26.1	28.8	28.6	---
3	30.0	22.0	---	---	---	13.9	---	---	26.6	28.7	28.9	---
4	30.0	22.3	---	---	---	14.0	---	---	26.7	28.8	29.3	---
5	30.0	22.7	---	---	---	13.9	---	---	26.3	28.9	29.5	---
6	30.0	23.1	---	---	---	13.5	---	21.0	26.1	29.4	29.8	---
7	29.8	23.8	---	---	---	12.9	---	21.5	25.7	29.8	30.1	---
8	29.1	24.3	---	---	---	13.6	---	21.5	25.6	29.9	30.3	---
9	29.1	24.5	---	---	---	13.8	---	21.8	25.6	29.9	30.5	---
10	28.8	24.5	---	---	---	14.2	---	21.6	26.0	29.6	30.2	---
11	28.2	24.8	---	---	---	13.6	---	21.5	25.9	29.8	30.3	---
12	27.3	---	---	---	---	12.5	---	22.0	26.0	29.8	30.0	---
13	27.0	---	---	---	---	12.3	---	22.1	26.2	30.0	29.5	---
14	27.1	---	---	---	---	12.5	---	22.5	25.8	30.0	28.7	---
15	26.8	---	---	---	---	12.9	---	22.9	25.8	29.1	28.3	---
16	25.5	---	---	---	---	13.6	---	23.4	26.1	28.9	28.0	---
17	24.7	---	---	---	---	13.6	---	23.8	26.2	28.7	28.4	---
18	23.5	---	---	---	---	13.8	---	24.1	26.6	28.3	29.1	---
19	22.6	---	---	---	---	14.6	---	23.8	26.9	27.5	29.5	---
20	21.0	---	---	---	12.1	14.8	---	24.3	27.2	27.1	29.6	---
21	20.5	---	---	---	11.5	14.9	---	24.7	27.4	27.8	29.4	---
22	20.5	---	---	---	10.9	15.3	---	24.6	27.5	28.2	29.3	---
23	20.9	---	---	---	11.6	15.7	---	24.7	27.2	28.7	29.2	---
24	21.2	---	---	---	11.1	15.5	---	25.0	27.4	28.9	29.2	---
25	21.5	---	---	---	11.6	16.4	---	25.1	27.6	28.6	29.5	27.5
26	22.0	---	---	---	11.5	16.5	---	25.1	27.2	28.7	29.6	27.3
27	22.3	---	---	---	12.0	17.2	---	24.9	27.0	28.9	29.8	27.3
28	22.0	---	---	---	12.8	17.7	---	24.5	26.9	29.0	29.8	27.6
29	21.7	---	---	---	---	17.7	---	24.4	27.0	29.0	30.0	27.8
30	21.4	---	---	---	---	---	---	24.5	26.7	28.6	30.1	27.5
31	21.7	---	---	---	---	---	---	25.0	---	28.5	29.8	---
MAX	30.0	---	---	---	---	---	---	---	27.6	30.0	30.5	---

ALTAMAHA-ST. MARYS RIVERS
COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

022312893 NASSAU RIVER NEAR TISONIA, FL

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.3	21.2	---	---	---	12.6	---	---	24.3	26.3	27.7	28.9
2	29.1	21.2	---	---	---	13.3	---	---	24.9	27.9	27.9	---
3	29.2	21.1	---	---	---	13.1	---	---	25.4	28.1	28.0	---
4	29.0	21.0	---	---	---	13.2	---	---	25.8	27.9	28.4	---
5	28.9	21.3	---	---	---	13.0	---	---	25.9	27.8	28.6	---
6	28.9	21.5	---	---	---	12.7	---	20.4	25.6	28.2	28.9	---
7	28.8	22.0	---	---	---	12.6	---	20.2	25.0	28.6	29.0	---
8	28.2	22.7	---	---	---	12.8	---	20.7	24.6	28.6	29.3	---
9	28.1	23.1	---	---	---	13.4	---	20.8	24.5	28.9	29.4	---
10	27.9	23.4	---	---	---	13.4	---	20.9	24.8	28.9	29.2	---
11	27.5	23.6	---	---	---	12.4	---	21.0	25.1	28.5	29.2	---
12	26.6	24.3	---	---	---	11.8	---	21.1	25.0	28.9	29.1	---
13	26.3	---	---	---	---	11.3	---	21.5	25.3	28.8	28.5	---
14	26.5	---	---	---	---	11.4	---	21.5	25.2	29.2	27.9	---
15	25.8	---	---	---	---	11.8	---	21.7	24.9	28.6	27.7	---
16	24.5	---	---	---	---	12.2	---	22.1	25.3	28.2	27.4	---
17	23.2	---	---	---	---	13.1	---	22.6	25.6	28.2	27.4	---
18	22.3	---	---	---	---	12.9	---	23.0	25.7	27.6	28.1	---
19	21.0	---	---	---	---	13.6	---	23.3	26.1	27.1	28.7	---
20	19.8	---	---	---	11.2	14.2	---	23.3	26.3	26.6	29.0	---
21	19.5	---	---	---	10.8	14.0	---	23.8	26.5	26.5	28.6	---
22	19.4	---	---	---	10.8	14.4	---	24.1	26.6	27.0	28.4	---
23	19.7	---	---	---	10.7	14.9	---	24.0	26.6	27.4	28.3	---
24	20.2	---	---	---	10.9	15.3	---	24.1	26.5	27.8	28.3	---
25	20.7	---	---	---	10.9	15.3	---	24.3	26.8	28.0	28.5	26.4
26	21.2	---	---	---	11.3	16.1	---	24.2	26.7	27.8	28.7	26.1
27	21.5	---	---	---	11.1	16.2	---	24.3	26.4	27.8	28.8	26.0
28	21.5	---	---	---	11.4	16.8	---	23.9	26.2	28.2	28.9	26.1
29	21.3	---	---	---	---	17.3	---	23.6	26.1	28.2	29.0	26.4
30	21.1	---	---	---	---	---	---	23.6	26.4	28.0	29.1	26.6
31	20.9	---	---	---	---	---	---	23.8	---	27.8	29.1	---
MIN	19.4	---	---	---	---	---	---	---	24.3	26.3	27.4	---

ALTAMAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

0223129985 INTRACOASTAL WATERWAY NEAR CEDAR POINT, FL

LOCATION.--Lat 30°27'42", long 81°26'59", in NW¼ sec. , T.1 N., R.28 E., Duval County, Hydrologic Unit 03070205, at channel marker 67 in Gunnison Cut, 0.9 mi north of the confluence of Sisters Creek and Fort George River, 1.5 mi northeast of Cedar Point, and 15.6 mi south of Fernandina Beach.

DRAINAGE AREA.--Indeterminate.

GAGE-HEIGHT RECORDS

PERIOD OF RECORD.--February to September 1987.

GAGE.--Incremental shaft encoder and GOES data collection platform. Datum of gage is 10 ft below National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 17.10 ft, Feb. 27; minimum, 9.72 ft, Mar. 31, June 10, Aug. 8.

GAGE HEIGHT, IN FEET ABOVE DATUM, PERIOD FEBRUARY 1986 TO SEPTEMBER 1987
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	16.28	16.01	15.72	15.57	14.72	15.26	15.87
2	---	---	---	---	---	16.02	15.68	15.60	15.43	15.12	15.32	15.85
3	---	---	---	---	---	15.82	15.64	15.56	15.15	14.80	15.44	16.16
4	---	---	---	---	---	15.87	14.80	15.36	15.10	14.90	15.50	16.68
5	---	---	---	---	---	15.93	14.31	15.54	15.37	15.08	15.71	16.92
6	---	---	---	---	16.50	15.87	14.40	16.01	15.92	15.34	15.92	16.89
7	---	---	---	---	16.16	16.05	14.60	15.56	15.88	15.92	16.28	16.90
8	---	---	---	---	16.20	15.68	14.68	15.30	15.92	16.17	16.72	16.40
9	---	---	---	---	15.94	14.92	14.71	16.08	16.00	16.40	16.71	16.22
10	---	---	---	---	15.68	15.18	15.16	15.93	16.10	16.62	16.36	16.16
11	---	---	---	---	15.42	16.04	15.43	16.22	16.88	16.82	16.40	16.06
12	---	---	---	---	15.16	16.12	15.29	16.64	16.65	16.89	16.54	15.90
13	---	---	---	---	15.54	16.08	15.59	16.66	16.00	16.64	16.68	15.51
14	---	---	---	---	15.82	16.31	16.10	16.70	15.99	16.76	16.48	15.43
15	---	---	---	---	15.85	16.28	16.17	16.73	16.08	16.09	16.04	15.45
16	---	---	---	---	16.54	16.14	16.39	16.45	15.91	15.95	15.62	15.39
17	---	---	---	---	16.15	16.88	16.19	16.31	15.44	16.14	15.49	15.28
18	---	---	---	---	15.92	16.76	16.09	16.36	15.48	16.30	15.34	15.18
19	---	---	---	---	15.90	16.67	16.27	15.92	---	16.03	15.49	15.35
20	---	---	---	---	15.92	16.72	16.21	15.60	---	15.83	15.66	15.79
21	---	---	---	---	16.12	16.65	15.90	15.94	---	15.68	15.93	15.98
22	---	---	---	---	16.40	16.21	15.88	16.22	---	15.78	15.95	15.97
23	---	---	---	---	15.60	16.61	16.04	16.14	---	16.20	15.62	16.01
24	---	---	---	---	15.92	16.64	16.06	16.12	---	16.21	15.96	16.25
25	---	---	---	---	16.40	16.72	16.30	16.16	---	16.14	15.91	16.12
26	---	---	---	---	16.92	16.63	16.59	16.20	15.69	15.83	15.68	16.07
27	---	---	---	---	17.10	16.61	16.91	16.56	15.56	15.53	15.46	16.06
28	---	---	---	---	17.05	16.41	16.84	16.56	15.75	15.30	15.32	16.08
29	---	---	---	---	---	16.69	16.60	16.25	15.67	15.35	15.25	15.90
30	---	---	---	---	---	16.32	15.75	16.00	15.60	15.39	15.40	15.70
31	---	---	---	---	---	15.56	---	15.66	---	15.35	15.56	---
MAX	---	---	---	---	---	16.88	16.91	16.73	---	16.89	16.72	16.92

ALTAMAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

0223129985 INTRACOASTAL WATERWAY NEAR CEDAR POINT, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, PERIOD FEBRUARY 1986 TO SEPTEMBER 1987
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	10.18	10.18	10.56	11.11	11.14	10.69	11.00
2	---	---	---	---	---	10.19	10.73	11.04	11.00	10.64	10.56	10.69
3	---	---	---	---	---	10.56	10.46	11.20	10.67	10.36	10.48	10.85
4	---	---	---	---	---	10.54	9.96	11.16	10.88	10.30	10.18	10.91
5	---	---	---	---	---	11.52	10.36	11.95	11.24	10.18	9.81	10.90
6	---	---	---	---	12.26	11.84	11.24	12.08	11.53	10.08	9.78	10.52
7	---	---	---	---	12.58	12.61	11.00	11.69	11.29	10.15	9.78	10.60
8	---	---	---	---	10.66	11.29	11.07	11.20	10.74	10.02	9.72	10.34
9	---	---	---	---	10.66	10.84	10.57	11.56	10.04	9.82	9.92	10.02
10	---	---	---	---	11.06	11.18	10.55	10.94	9.72	9.76	9.73	9.96
11	---	---	---	---	10.75	12.04	10.42	10.58	9.90	9.83	9.95	10.37
12	---	---	---	---	10.36	11.89	9.77	10.49	9.97	9.90	10.41	10.68
13	---	---	---	---	9.98	11.52	9.76	10.38	9.74	10.28	11.11	10.56
14	---	---	---	---	10.49	11.28	9.80	10.22	9.76	10.17	11.56	10.85
15	---	---	---	---	10.36	11.12	10.10	10.32	9.83	10.08	11.30	11.11
16	---	---	---	---	11.39	10.69	10.18	10.34	9.85	10.36	10.84	11.43
17	---	---	---	---	11.14	10.96	10.32	10.54	9.85	10.79	10.76	11.27
18	---	---	---	---	11.06	11.42	10.74	10.56	10.00	11.48	10.91	10.88
19	---	---	---	---	11.12	11.22	11.04	10.37	---	11.29	10.96	10.60
20	---	---	---	---	11.61	11.61	11.14	10.17	---	11.07	10.92	10.92
21	---	---	---	---	11.80	11.22	10.94	10.60	---	10.96	11.05	11.20
22	---	---	---	---	11.36	11.56	10.98	11.13	---	10.85	11.04	11.17
23	---	---	---	---	10.35	11.84	10.94	10.93	---	11.12	10.60	11.03
24	---	---	---	---	10.57	11.73	10.60	10.52	---	11.33	10.59	11.19
25	---	---	---	---	10.68	11.16	10.64	10.43	---	11.31	10.96	11.04
26	---	---	---	---	10.84	11.20	10.92	10.57	10.75	10.97	10.88	10.99
27	---	---	---	---	11.00	10.85	10.95	11.02	10.38	10.58	10.67	11.00
28	---	---	---	---	10.88	10.60	10.83	11.44	10.67	10.39	10.49	11.25
29	---	---	---	---	---	10.50	11.22	11.43	10.98	10.28	10.21	11.16
30	---	---	---	---	---	10.81	10.66	11.33	10.93	10.87	10.29	10.87
31	---	---	---	---	---	9.72	---	11.21	---	10.75	10.74	---
MIN	---	---	---	---	---	9.72	9.76	10.17	---	9.76	9.72	9.96

ALTAMAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

0223129985 INTRACOASTAL WATERWAY NEAR CEDAR POINT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February to September 1987.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February to September 1987.

WATER TEMPERATURE: February to September 1987.

INSTRUMENTATION.--Water-quality monitor since February 1987. Specific conductance recorded at 15-minute intervals, water temperature recorded at 60-minute intervals.

EXTREMES FOR CURRENT PERIOD.--

SPECIFIC CONDUCTANCE: Maximum, 59,200 microsiemens, May 31; minimum, 7,010 microsiemens, Apr. 5.

WATER TEMPERATURE: Maximum, 34.0 °C, July 10, Aug. 10; minimum, 11.5 °C, Feb. 10, 11.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD FEBRUARY TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	35800	37500	35500	58300	51100	50500	50900
2	---	---	---	---	---	35200	37800	35000	55300	50600	50400	47900
3	---	---	---	---	---	35700	34100	36700	41100	48700	51700	47600
4	---	---	---	---	---	35700	15600	35600	37300	47900	51800	48200
5	---	---	---	---	---	36900	10200	39100	52100	47900	52800	48900
6	---	---	---	---	44300	38100	29900	42200	50600	49000	53300	48900
7	---	---	---	---	43100	38500	29800	42500	49600	50700	53200	48400
8	---	---	---	---	42200	38500	27500	40800	50700	51800	52100	48100
9	---	---	---	---	39100	27600	29900	42600	50300	52600	53200	48100
10	---	---	---	---	38500	28800	35400	43400	45400	52600	52900	48100
11	---	---	---	---	37100	40100	38100	42800	42800	52600	52700	48600
12	---	---	---	---	33600	39000	37600	41300	42600	52000	52100	47600
13	---	---	---	---	34800	39900	42100	40500	42100	52600	52900	47900
14	---	---	---	---	36600	38500	45900	42700	39200	52500	53200	47400
15	---	---	---	---	37600	38000	46300	41900	39500	50700	52600	47300
16	---	---	---	---	41300	37800	46400	41100	38400	50900	52500	46900
17	---	---	---	---	39200	39900	44400	40700	39100	51300	51200	45800
18	---	---	---	---	39000	39100	45500	40900	51900	51200	50000	44800
19	---	---	---	---	39800	38500	46400	39300	50400	51600	49700	45000
20	---	---	---	---	38500	39700	45900	37800	47700	51700	49200	47400
21	---	---	---	---	39300	38900	44800	39800	44400	51900	50300	47900
22	---	---	---	---	37500	38000	44400	41100	41400	51800	50500	47900
23	---	---	---	---	36000	38900	21500	41100	40000	51400	49900	48200
24	---	---	---	---	33100	39200	21700	39100	39200	51600	51200	52700
25	---	---	---	---	36000	38800	21000	38700	38200	51900	50800	51800
26	---	---	---	---	38700	39100	18100	36700	49700	51900	51700	52700
27	---	---	---	---	37000	38300	46300	41100	48100	54100	51800	53200
28	---	---	---	---	36500	38000	41000	37800	46600	52700	51300	52900
29	---	---	---	---	---	39800	38200	53600	44100	53600	50700	52800
30	---	---	---	---	---	37100	37100	54300	43300	53300	51300	52400
31	---	---	---	---	---	30200	---	59200	---	53300	51000	---
MAX	---	---	---	---	---	40100	46400	59200	58300	54100	53300	53200

ALTAMAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

0223129985 INTRACOASTAL WATERWAY NEAR CEDAR POINT, FL--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), PERIOD FEBRUARY TO SEPTEMBER 1987
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	30200	11000	22200	44400	40900	44900	45800
2	---	---	---	---	---	23500	15200	23000	37600	45800	43900	39200
3	---	---	---	---	---	23100	12100	24000	28100	41900	43800	39800
4	---	---	---	---	---	23100	8160	22500	22500	40000	43000	40800
5	---	---	---	---	---	32300	7010	24500	23600	40200	42200	42800
6	---	---	---	---	41800	34700	7450	35700	40100	39500	42600	45000
7	---	---	---	---	40300	36400	13000	33100	40500	39800	42900	46100
8	---	---	---	---	38700	24500	14700	32500	37600	44800	42800	46200
9	---	---	---	---	37900	11200	16700	33000	36700	45700	45700	46500
10	---	---	---	---	34700	10200	18600	32500	37600	47800	47700	46400
11	---	---	---	---	29600	26400	19300	33000	32900	48300	48700	45400
12	---	---	---	---	24400	35300	25600	33800	33500	49400	49600	44400
13	---	---	---	---	21300	37200	24900	30000	31300	49900	51300	42700
14	---	---	---	---	24400	34700	25200	32900	31700	48600	51900	42000
15	---	---	---	---	27300	34200	29100	31200	33500	47700	51200	41400
16	---	---	---	---	30400	32100	29600	33200	29100	48600	50200	42300
17	---	---	---	---	36400	32400	32100	33400	29300	48900	48700	41900
18	---	---	---	---	36600	37200	33900	31500	34500	48900	45800	40600
19	---	---	---	---	37000	35000	34300	31600	46200	47600	44000	38400
20	---	---	---	---	36900	36300	37300	28600	44300	48300	43600	39300
21	---	---	---	---	35500	33500	36500	29100	41500	48600	41800	41800
22	---	---	---	---	34700	32400	17300	32800	39400	49400	45100	44100
23	---	---	---	---	26500	35900	17400	27300	38000	48900	46000	45400
24	---	---	---	---	26800	35600	17400	29200	37200	49300	45100	47300
25	---	---	---	---	25800	35500	17500	27900	36600	45400	46300	50700
26	---	---	---	---	33200	33400	17300	31600	36400	45200	47600	50900
27	---	---	---	---	34400	31400	17300	28400	41600	42700	48000	51500
28	---	---	---	---	33900	30300	32400	29700	41300	40400	47200	51800
29	---	---	---	---	---	27800	30300	32000	40900	45800	45000	51500
30	---	---	---	---	---	24600	30300	48400	40800	45900	44600	49700
31	---	---	---	---	---	14800	---	48700	---	45900	45100	---
MIN	---	---	---	---	---	10200	7010	22200	22500	39500	41800	38400

ALTAMAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

0223129985 INTRACOASTAL WATERWAY NEAR CEDAR POINT, FL

TEMPERATURE, WATER (DEG. C), PERIOD FEBRUARY TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	19.0	18.5	25.5	31.0	32.0	32.0	32.5
2	---	---	---	---	---	17.0	19.0	26.0	31.5	32.0	32.0	31.5
3	---	---	---	---	---	16.0	18.5	26.0	31.5	31.0	32.0	30.0
4	---	---	---	---	---	15.5	17.5	27.0	30.5	30.0	32.0	29.5
5	---	---	---	---	---	17.5	17.5	26.0	30.0	31.0	32.0	30.0
6	---	---	---	---	14.5	15.5	18.5	22.5	29.5	31.5	32.5	30.5
7	---	---	---	---	14.5	15.0	18.5	24.0	28.5	31.5	33.5	31.0
8	---	---	---	---	14.5	17.0	19.0	24.0	28.5	32.0	33.0	32.5
9	---	---	---	---	14.5	17.0	19.5	24.5	30.0	33.5	33.5	32.5
10	---	---	---	---	13.0	19.0	20.0	25.0	31.0	34.0	34.0	32.5
11	---	---	---	---	13.5	15.5	20.5	25.0	31.0	33.0	33.5	31.5
12	---	---	---	---	15.0	13.5	21.5	27.0	31.0	32.5	33.0	31.0
13	---	---	---	---	16.0	14.0	23.0	26.5	30.5	32.5	31.5	31.0
14	---	---	---	---	15.5	15.5	22.5	26.5	29.0	31.5	31.5	31.5
15	---	---	---	---	16.5	17.0	23.0	27.5	31.0	30.5	31.5	31.5
16	---	---	---	---	18.0	18.0	21.0	28.0	31.0	31.0	31.0	31.5
17	---	---	---	---	16.0	17.5	20.5	28.5	30.9	32.0	32.0	31.5
18	---	---	---	---	15.0	17.5	20.5	28.5	32.5	31.0	32.5	31.5
19	---	---	---	---	15.5	18.5	21.5	27.5	31.5	30.0	32.5	32.0
20	---	---	---	---	14.5	17.5	23.0	28.0	30.0	29.5	32.5	31.5
21	---	---	---	---	14.0	18.5	23.5	28.5	31.0	30.0	32.0	31.5
22	---	---	---	---	13.5	19.0	24.0	28.0	31.0	31.5	32.0	30.0
23	---	---	---	---	14.5	19.0	24.0	28.5	32.0	32.5	33.0	29.0
24	---	---	---	---	14.5	19.0	24.5	29.0	32.0	32.5	33.0	28.5
25	---	---	---	---	15.0	19.5	24.0	29.0	32.0	32.5	33.0	29.0
26	---	---	---	---	14.5	19.5	22.5	29.0	30.5	33.0	33.5	28.0
27	---	---	---	---	14.5	20.0	22.5	28.0	30.5	33.0	33.5	28.0
28	---	---	---	---	16.0	20.5	24.0	28.0	30.5	33.0	33.5	28.5
29	---	---	---	---	---	20.0	24.0	28.5	31.0	32.0	33.5	29.0
30	---	---	---	---	---	19.5	25.0	29.0	31.0	31.5	33.0	29.5
31	---	---	---	---	---	19.0	---	30.0	---	31.5	33.0	---
MAX	---	---	---	---	---	20.5	25.0	30.0	32.5	34.0	34.0	32.5

ALTAMAHA-ST. MARYS RIVER

COASTAL AREA BETWEEN ST. MARYS AND ST. JOHNS RIVERS

0223129985 INTRACOASTAL WATERWAY NEAR CEDAR POINT, FL--Continued

TEMPERATURE, WATER (DEG. C), PERIOD FEBRUARY TO SEPTEMBER 1987
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	15.5	15.5	22.5	28.0	26.0	29.5	31.0
2	---	---	---	---	---	15.5	15.5	23.0	28.5	30.0	30.0	29.0
3	---	---	---	---	---	14.5	17.0	23.5	29.0	29.5	30.5	28.5
4	---	---	---	---	---	15.5	15.0	24.5	29.0	30.0	30.5	28.5
5	---	---	---	---	---	15.0	14.5	22.0	29.0	29.0	31.0	28.5
6	---	---	---	---	14.0	14.5	15.5	21.0	28.0	29.5	31.0	29.0
7	---	---	---	---	14.0	14.5	16.0	22.0	27.5	30.0	31.0	29.5
8	---	---	---	---	13.5	15.0	17.0	23.0	27.0	30.0	31.0	30.0
9	---	---	---	---	13.5	16.5	17.5	23.0	27.5	30.0	31.0	30.0
10	---	---	---	---	11.5	15.0	18.0	23.5	28.0	30.0	31.0	30.0
11	---	---	---	---	11.5	13.0	18.0	24.0	28.0	30.0	31.0	30.5
12	---	---	---	---	12.5	12.5	19.0	24.0	28.0	29.5	31.0	30.0
13	---	---	---	---	13.5	12.5	19.5	24.5	28.1	30.0	31.0	29.0
14	---	---	---	---	14.0	13.0	19.5	24.5	27.5	30.5	30.0	29.5
15	---	---	---	---	14.0	14.0	19.5	24.5	27.5	29.5	30.5	30.5
16	---	---	---	---	15.0	15.5	18.5	25.0	28.5	29.0	30.0	30.5
17	---	---	---	---	15.0	15.5	18.5	25.5	29.5	30.0	30.0	30.5
18	---	---	---	---	14.0	16.0	18.0	26.0	29.5	29.5	31.0	30.5
19	---	---	---	---	13.5	16.5	18.5	26.0	30.5	29.0	31.5	30.5
20	---	---	---	---	14.0	16.5	19.5	26.0	30.0	28.5	30.5	30.5
21	---	---	---	---	12.5	16.0	21.0	26.5	30.0	28.0	30.0	30.0
22	---	---	---	---	13.0	17.0	22.0	26.5	29.5	30.0	30.5	29.0
23	---	---	---	---	13.0	17.0	22.5	27.0	29.5	30.5	30.5	28.0
24	---	---	---	---	13.5	17.5	23.0	27.5	29.5	31.0	30.5	27.0
25	---	---	---	---	13.5	17.5	22.5	27.5	29.5	31.0	31.0	27.0
26	---	---	---	---	13.5	18.5	21.0	27.0	28.0	30.5	29.0	26.0
27	---	---	---	---	13.5	18.0	21.0	27.0	28.5	28.5	31.0	26.5
28	---	---	---	---	13.5	18.5	21.5	26.5	28.5	29.5	31.0	27.0
29	---	---	---	---	---	18.5	22.0	26.5	28.5	30.5	31.0	27.5
30	---	---	---	---	---	18.0	22.0	27.0	29.0	30.0	31.0	28.0
31	---	---	---	---	---	17.0	---	27.5	---	30.0	31.5	---
MIN	---	---	---	---	---	12.5	14.5	21.0	27.0	26.0	29.0	26.0

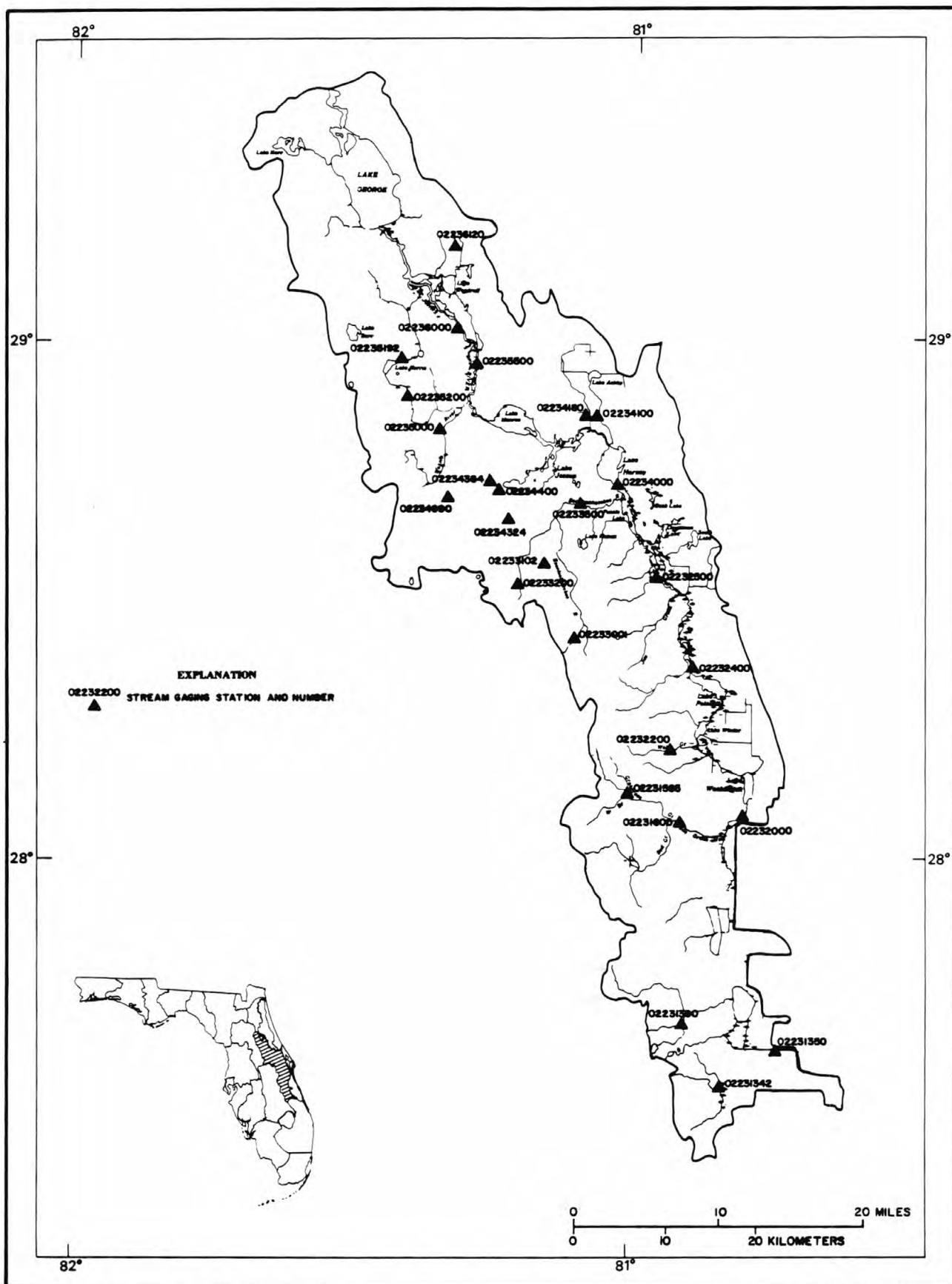


Figure 15.--Location of stream gaging stations in the St. Johns River basin above the Oklawaha River.

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02231342 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 right bank on downstream side of northbound 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. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Brevard Engineering Co.).

REMARKS.--Estimated daily discharges: Aug. 7-24. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years, 41.9 ft³/s, 10.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s, Sept. 4, 1979; maximum gage height, 38.35 ft, Sept. 4,5, 1979; no flow for several days each year; creek dry at gage for many days in 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 176 ft³/s, Jan. 6, gage height, 36.05 ft; no flow May 6, June 23-25; minimum gage height, 34.29 ft, June 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	131	8.3	76	18	7.6	77	.31	2.2	43	30	.17
2	25	135	7.9	124	16	8.1	73	.20	1.8	41	33	.55
3	28	136	7.2	106	15	8.0	55	.14	1.5	36	29	.27
4	26	102	6.5	102	14	7.5	43	.08	1.3	31	24	.74
5	21	70	6.4	142	14	7.2	35	.03	1.0	35	17	3.8
6	17	46	6.5	171	14	8.1	29	.00	.60	46	12	5.9
7	17	36	6.1	161	15	36	23	.03	.40	38	9.3	7.5
8	31	30	5.8	135	16	129	21	.06	.22	30	5.0	4.8
9	32	27	5.6	105	14	132	20	.07	.11	24	2.2	3.2
10	31	24	5.3	80	13	89	19	.19	.65	19	1.6	2.1
11	29	22	4.8	58	12	56	17	.60	3.7	15	1.1	2.1
12	25	23	4.5	46	12	40	14	.91	6.4	12	.90	2.9
13	21	22	4.3	39	11	30	11	1.7	4.2	13	.60	4.2
14	17	22	4.1	35	11	25	11	3.4	2.1	12	.50	7.4
15	15	19	4.1	31	12	21	11	7.6	1.0	15	.35	5.8
16	14	18	4.0	28	13	19	10	12	.98	34	.25	3.9
17	13	16	4.0	27	11	17	8.5	12	1.4	54	.20	3.4
18	11	15	3.9	26	11	15	7.0	10	.77	57	.20	2.8
19	10	14	3.8	24	11	14	5.6	9.2	.39	56	.22	2.0
20	9.5	13	3.8	23	11	13	5.2	8.4	.17	50	.25	1.5
21	8.7	12	3.6	21	11	12	5.0	8.5	.07	35	.25	2.0
22	7.7	11	3.4	23	10	11	4.0	7.1	.01	31	.25	3.8
23	6.9	9.8	4.7	26	9.4	11	3.0	5.7	.00	30	.20	27
24	6.4	9.2	11	25	8.6	11	2.4	4.5	.00	27	.16	34
25	5.8	8.7	12	26	8.8	9.9	1.9	3.7	.00	22	.08	26
26	5.4	8.3	12	28	8.6	12	1.6	2.8	.18	19	.05	18
27	5.1	7.9	17	27	8.3	27	1.3	2.0	17	15	.16	15
28	6.1	7.5	23	25	7.9	33	1.1	2.5	29	13	.20	13
29	11	7.2	22	22	---	36	.77	2.8	38	14	.15	11
30	45	7.5	19	21	---	49	.52	2.9	46	16	.12	11
31	113	---	21	19	---	65	---	2.9	---	19	.10	---
TOTAL	629.6	1010.1	255.6	1802	336.6	959.4	516.89	112.32	161.15	902	169.39	225.83
MEAN	20.3	33.7	8.25	58.1	12.0	30.9	17.2	3.62	5.37	29.1	5.46	7.53
MAX	113	136	23	171	18	132	77	12	46	57	33	34
MIN	5.1	7.2	3.4	19	7.9	7.2	.52	.00	.00	12	.05	.17
CFSM	.39	.64	.16	1.11	.23	.59	.33	.07	.10	.55	.10	.14
IN.	.45	.71	.18	1.27	.24	.68	.37	.08	.11	.64	.12	.16

CAL YR 1986 TOTAL 12072.83 MEAN 33.1 MAX 346 MIN .00 CFSM .63 IN. 8.54
WTR YR 1987 TOTAL 7080.88 MEAN 19.4 MAX 171 MIN .00 CFSM .37 IN. 5.01

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02231350 ST. JOHNS HEADWATERS NEAR VERO BEACH, FL

LOCATION.--Lat 27°38'26", long 80°40'43", in NW¼ sec.6, T.33 S., R.37 E., Indian River County, Hydrologic Unit 03080101, on upstream side of bridge on State Highway 60, 17.1 mi west of courthouse in Vero Beach, and 297 mi upstream from mouth.

DRAINAGE AREA.--297 mi².

PERIOD OF RECORD.--February 1942 to current year (gage heights only). Records of gage heights prior to October 1962 and revised records of gage heights for water years 1962-86 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is 18.56 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to May 21, 1974, at site 0.3 mi east at same datum.

REMARKS.--Stage affected by development of system of dikes and controls; not equivalent to earlier record of headwaters marsh.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 9.24 ft, revised, Sept. 5, 1979, estimated; minimum, -0.30 ft, revised, May 23, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum daily gage height, 7.30 ft, Oct. 30; minimum daily 4.11 ft, June 25, 26.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.13	7.22	6.01	---	6.09	5.81	6.28	5.68	5.29	4.99	5.97	5.42
2	6.11	7.10	5.98	---	6.09	5.80	6.30	5.65	5.28	5.01	5.92	5.43
3	6.08	6.84	5.96	---	6.07	5.80	6.31	5.63	5.26	5.04	5.88	5.42
4	6.05	6.64	5.94	---	6.05	5.80	6.28	5.60	5.24	5.04	5.85	5.44
5	6.02	6.58	5.92	---	6.03	5.78	6.25	5.58	5.21	5.03	5.83	5.51
6	6.00	6.53	5.91	---	6.03	5.76	6.24	5.56	5.18	5.03	5.80	5.57
7	5.97	6.51	5.89	---	6.03	5.84	6.23	5.55	5.16	5.04	5.79	---
8	5.95	6.47	5.87	6.46	6.04	5.86	6.21	5.53	5.14	5.05	5.77	---
9	5.93	6.44	5.86	6.45	6.03	5.91	6.16	5.51	5.11	5.02	5.74	---
10	5.91	6.41	5.84	6.44	6.02	5.96	6.13	5.50	5.13	4.99	5.72	---
11	5.90	6.39	5.82	6.43	5.99	5.97	6.11	5.50	5.14	4.97	5.72	---
12	5.87	6.39	5.81	6.41	5.98	5.96	6.08	5.49	4.90	4.95	5.80	---
13	5.85	6.36	5.80	6.39	5.96	5.96	6.06	5.50	4.54	4.99	5.79	---
14	5.83	6.36	5.78	6.38	5.94	5.95	6.05	5.51	4.45	5.06	5.83	---
15	5.83	6.33	5.77	6.36	5.93	5.93	6.05	5.52	4.39	5.25	5.88	---
16	5.83	6.30	5.76	6.34	5.93	5.93	6.03	5.52	4.37	6.29	5.86	---
17	5.82	6.27	5.75	6.32	5.93	5.92	6.02	5.50	4.37	6.65	5.83	---
18	5.82	6.25	5.73	6.29	5.92	5.90	5.99	5.49	4.39	6.52	5.82	---
19	5.83	6.22	5.72	6.28	5.93	5.92	5.97	5.50	4.34	6.44	5.78	---
20	5.82	6.20	5.71	6.26	5.93	5.91	5.95	5.48	4.28	6.36	5.72	---
21	5.84	6.18	5.69	6.24	5.92	5.90	5.93	5.47	4.24	6.25	5.68	---
22	5.88	6.15	5.68	6.23	5.90	5.88	5.90	5.46	4.21	6.20	5.64	---
23	5.88	6.13	5.69	6.22	5.89	5.87	5.88	5.44	4.18	6.12	5.61	---
24	5.86	6.11	5.75	6.20	5.88	5.86	5.85	5.41	4.15	5.98	5.58	---
25	5.84	6.09	5.74	6.19	5.87	5.84	5.83	5.39	4.11	5.87	5.55	---
26	5.81	6.07	5.73	6.19	5.85	5.85	5.80	5.37	4.11	5.82	5.54	---
27	5.80	6.05	5.77	6.16	5.84	5.91	5.78	5.34	4.43	5.79	5.53	---
28	5.88	6.03	5.78	6.14	5.82	5.95	5.76	5.34	4.68	5.78	5.50	---
29	6.82	6.01	---	6.12	---	6.02	5.73	5.34	4.83	5.74	5.49	---
30	7.30	6.01	---	6.12	---	6.11	5.70	5.33	4.93	5.78	5.46	---
31	7.28	---	---	6.11	---	6.20	---	5.31	---	5.98	5.44	---
MEAN	6.02	6.35	---	---	5.96	5.91	6.03	5.48	4.70	5.58	5.72	---
MAX	7.30	7.22	---	---	6.09	6.20	6.31	5.68	5.29	6.65	5.97	---
MIN	5.80	6.01	---	---	5.82	5.76	5.70	5.31	4.11	4.95	5.44	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02231390 COW LOG BRANCH NEAR YEEHAW JUNCTION, FL

LOCATION.--Lat 27°41'19", long 80°52'52", in SW¼ sec.13, T.32 S., R.34 E., Osceola County, Hydrologic Unit 03080101, on upstream side of bridge on State Highway 60, 1.6 mi southwest of Yeehaw Junction.

DRAINAGE AREA.--20.5 mi².

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 74 ft³/s, July 24, 1984; no flow observed in 1956, 1967.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
NOV 12...	1445	24	MAY 05...	1205	0.77
JAN 09...	1418	31	JUN 25...	1720	0.08
MAR 11...	1213	20	AUG 24...	1620	0.68

02231565 CRABGRASS CREEK NEAR HOLOPAW, FL

LOCATION.--Lat 28°07'48, long 81°00'07", in SE¼ sec.15, T.27 S., R.33 E., Osceola County, Hydrologic Unit 03080101, on downstream side of bridge on U.S. Highway 192, 4.6 mi east of Holopaw.

DRAINAGE AREA.--30.2 mi².

PERIOD OF RECORD.--1965, 1967, 1969-70 (one to three discharge measurements each year), October 1970 to September 1983 (discharge measurements only), October 1983 to current year (annual peak discharge and periodic discharge measurements).

REVISED RECORDS.--WDR FL-72-3: Drainage area.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 34.93 ft above National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 891 ft³/s, July 25, 1984, gage height 7.81 ft; maximum discharge measured, 484 ft³/s, Aug. 22, 1974; no flow observed at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 401 ft³/s, Mar. 30, gage height, 7.02 ft.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT 01...	1045	1.4	MAY 11...	1008	1.6
NOV 19...	0945	0.84	JUL 09...	0940	21
JAN 20...	0945	2.6	AUG 25...	1105	0.07
MAR 23...	0955	1.8			
	30...	1340			
		261			

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAHAHA RIVER

02231600 JANE GREEN CREEK NEAR DEER PARK, FL

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

DRAINAGE AREA.--248 mi²

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

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

REMARKS.--Records fair.

AVERAGE DISCHARGE.--34 years, 231 ft³/s, 12.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s, Oct. 17, 1956, gage height, 10.95 ft, from rating curve extended above 11,000 ft³/s; no flow for many days in some years; creek dry at gage at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,860 ft³/s, Sept. 14,15, gage height, 6.72 ft; no flow June 6 to July 4; minimum gage height, 1.38 ft, June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	25	7.8	48	23	17	942	2.8	.67	.00	66	1.2
2	82	39	7.4	55	22	17	1170	2.1	.45	.00	54	2.0
3	67	54	6.7	62	21	16	1100	1.5	.27	.00	45	11
4	58	62	6.1	81	20	15	928	1.2	.13	.00	40	70
5	52	74	5.8	103	18	14	755	.92	.05	.32	35	279
6	45	84	5.6	115	17	14	610	.81	.00	1.1	31	560
7	41	89	5.2	123	16	24	497	.86	.00	1.4	29	804
8	36	86	4.9	128	17	35	405	.70	.00	1.8	26	1010
9	32	80	4.7	130	16	41	332	.54	.00	9.6	23	1000
10	33	73	4.5	127	15	46	272	.98	.00	21	21	932
11	34	67	4.3	121	15	52	222	1.3	.00	32	18	1120
12	34	61	4.1	109	15	57	183	1.2	.00	34	15	1620
13	33	54	3.9	100	15	56	149	1.0	.00	29	13	1700
14	32	47	3.6	89	14	53	121	.91	.00	24	11	1810
15	32	41	3.4	80	14	48	100	.86	.00	19	9.6	1760
16	33	37	3.3	72	14	44	83	.88	.00	16	8.2	1460
17	29	32	3.2	65	14	39	66	1.9	.00	16	7.8	1130
18	28	29	3.1	59	14	33	53	4.0	.00	14	9.0	861
19	28	25	3.0	53	15	32	43	5.5	.00	21	11	665
20	26	22	2.8	47	15	29	35	6.3	.00	108	12	524
21	24	20	2.7	42	15	25	28	6.1	.00	180	12	414
22	22	18	2.7	40	17	22	22	5.7	.00	216	12	333
23	19	16	3.8	37	18	20	18	5.1	.00	215	11	286
24	17	15	9.1	33	19	18	15	4.3	.00	209	8.5	262
25	15	13	12	31	19	17	12	3.4	.00	195	6.5	285
26	13	12	14	30	19	17	10	2.7	.00	178	4.9	294
27	11	11	18	28	19	26	8.0	2.3	.00	156	3.9	278
28	9.9	10	22	27	18	37	6.2	1.8	.00	130	3.1	259
29	11	9.1	25	26	---	95	4.8	1.4	.00	104	2.4	241
30	18	8.3	27	25	---	241	3.7	1.1	.00	89	1.9	221
31	22	---	31	24	---	544	---	.88	---	82	1.5	---
TOTAL	1039.9	1213.4	260.7	2110	474	1744	8193.7	71.04	1.57	2102.22	552.3	20192.2
MEAN	33.5	40.4	8.41	68.1	16.9	56.3	273	2.29	.052	67.8	17.8	673
MAX	103	89	31	130	23	544	1170	6.3	.67	216	66	1810
MIN	9.9	8.3	2.7	24	14	14	3.7	.54	.00	.00	1.5	1.2
CFSM	.14	.16	.03	.27	.07	.23	1.10	.01	.00	.27	.07	2.71
IN.	.16	.18	.04	.32	.07	.26	1.23	.01	.00	.32	.08	3.03
CAL YR 1986	TOTAL 36516.67	MEAN 100	MAX 940	MIN .00	CFSM .40	IN. 5.48						
WTR YR 1987	TOTAL 37955.03	MEAN 104	MAX 1810	MIN .00	CFSM .42	IN. 5.69						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232000 ST. JOHNS RIVER NEAR MELBOURNE, FL

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

DRAINAGE AREA.--968 mi².

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

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

REMARKS.--Estimated daily discharges: May 23, July 17 to Aug. 10, Sept. 7-17. Records poor.

AVERAGE DISCHARGE.--48 years, 669 ft³/s, 484,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,000 ft³/s, Oct. 18, 1956; maximum gage height, 9.66 ft, Sept. 30, 1960; minimum daily discharge, -118 ft³/s, May 23, 1984, affected by wind; minimum gage height, -1.28 ft, May 27, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,420 ft³/s, Sept. 15, 1986; maximum gage height, 4.46 ft, Oct. 1, occurred on recession following peak of Sept. 27, 1986; minimum daily discharge, -2.1 ft³/s, May 28, affected by wind; minimum gage height, 1.94 ft, June 27, affected by wind.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	571	435	388	552	159	652	358	39	62	106	6.0
2	1050	588	400	558	454	385	791	353	151	62	100	22
3	1070	655	165	598	478	403	977	318	138	55	110	22
4	930	647	154	598	498	445	1100	268	114	50	102	112
5	899	653	171	714	472	484	1180	270	105	50	92	184
6	854	650	137	705	494	462	1240	260	135	42	100	295
7	833	640	214	742	469	406	1290	221	210	90	108	330
8	808	643	161	765	519	235	1260	195	176	76	120	414
9	852	640	174	765	536	262	1230	201	137	54	132	625
10	860	626	242	796	511	417	1190	294	137	27	144	798
11	836	656	224	788	482	548	1110	158	137	19	137	1090
12	820	671	232	827	433	568	1060	142	137	26	143	1270
13	794	621	233	833	430	612	1050	116	136	41	144	1320
14	733	617	210	872	427	545	1040	115	129	34	207	1400
15	643	613	231	742	424	463	1010	106	129	20	139	1420
16	538	661	214	582	294	416	958	135	121	28	140	1420
17	533	662	208	476	402	415	947	141	99	22	124	1400
18	460	606	207	490	423	366	853	184	92	35	123	1320
19	459	514	213	475	493	312	803	199	84	60	73	1270
20	576	582	212	494	467	437	779	161	70	130	64	1210
21	583	463	192	493	490	391	750	134	49	118	64	1160
22	592	466	163	536	372	363	713	105	42	108	96	1110
23	503	450	186	510	444	453	653	97	41	98	72	1060
24	483	449	203	468	463	320	581	85	41	94	64	979
25	429	587	301	507	439	354	547	66	19	91	80	924
26	386	527	310	488	366	355	471	59	26	88	57	841
27	335	457	303	464	339	414	456	49	40	86	14	786
28	221	415	367	454	259	402	460	-2.1	40	84	14	753
29	255	342	381	470	---	435	401	23	82	86	22	694
30	328	327	394	476	---	490	384	31	70	95	14	614
31	448	---	393	522	---	583	---	23	---	112	6.0	---
TOTAL	20201	16999	7630	18596	12430	12900	25936	4864.9	2926	2043	2911.0	24849.0
MEAN	652	567	246	600	444	416	865	157	97.5	65.9	93.9	828
MAX	1090	671	435	872	552	612	1290	358	210	130	207	1420
MIN	221	327	137	388	259	159	384	-2.1	19	19	6.0	6.0
AC-FT	40070	33720	15130	36890	24650	25590	51440	9650	5800	4050	5770	49290

CAL YR 1986 TOTAL 149607.0 MEAN 410 MAX 1090 MIN 6.0 AC-FT 296700
WTR YR 1987 TOTAL 152285.9 MEAN 417 MAX 1420 MIN -2.1 AC-FT 302100

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

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

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.46	3.73	3.17	3.14	3.34	2.87	3.39	3.08	2.56	2.19	---	2.46
2	4.42	3.75	3.14	3.35	3.31	2.90	3.45	3.03	2.53	2.16	---	2.45
3	4.37	3.75	3.13	3.41	3.30	2.88	3.56	2.94	2.51	2.17	---	2.47
4	4.34	3.73	3.11	3.44	3.28	2.87	3.73	2.91	2.48	2.19	---	2.64
5	4.30	3.70	3.11	3.46	3.25	2.86	3.84	2.87	2.45	2.21	---	2.79
6	4.25	3.68	3.10	3.53	3.25	2.83	3.95	2.81	2.45	2.20	2.55	2.99
7	4.22	3.65	3.07	3.57	3.23	2.90	4.00	2.81	2.43	2.18	---	3.07
8	4.22	3.63	3.05	3.58	3.25	2.93	4.04	2.75	2.32	2.15	---	---
9	4.17	3.61	3.04	3.59	3.23	2.95	4.05	2.73	2.36	2.13	---	---
10	4.13	3.59	3.02	3.57	3.19	3.00	4.03	2.81	2.36	2.10	2.51	3.46
11	4.09	3.58	3.01	3.60	3.16	3.03	4.00	2.98	2.36	2.07	2.49	---
12	4.05	3.57	2.99	3.59	3.13	3.04	3.96	3.06	2.35	2.07	2.48	---
13	4.01	3.56	3.00	3.58	3.11	3.06	3.93	3.07	2.33	2.14	2.51	---
14	3.96	3.57	3.01	3.57	3.08	3.04	3.91	3.03	2.30	2.14	2.73	---
15	3.94	3.54	2.97	3.57	3.06	3.01	3.89	3.04	2.30	2.20	2.76	---
16	3.97	3.51	2.96	3.57	3.03	2.99	3.87	3.06	2.28	2.28	2.77	---
17	3.93	3.48	2.97	3.57	3.05	2.98	3.85	3.03	2.26	2.42	2.76	4.37
18	3.88	3.46	2.95	3.57	3.05	2.95	3.79	3.04	2.25	---	2.74	4.39
19	3.87	3.44	2.94	3.56	3.06	2.94	3.74	3.05	2.23	---	2.72	4.40
20	3.83	3.42	2.93	3.56	3.04	2.97	3.70	3.06	2.20	---	2.71	4.39
21	3.78	3.41	2.93	3.55	3.04	2.95	3.66	3.03	2.17	---	2.70	4.36
22	3.74	3.37	2.94	3.53	3.01	2.93	3.61	2.99	2.15	---	2.69	4.33
23	3.68	3.34	2.95	3.54	3.03	2.93	3.56	---	2.11	2.48	2.68	4.29
24	3.63	3.33	3.00	3.50	3.01	2.87	3.51	2.85	2.09	---	2.67	4.24
25	3.58	3.30	3.15	3.47	2.99	2.85	3.45	2.82	2.08	---	2.65	4.19
26	3.53	3.27	3.17	3.47	2.96	2.87	3.41	2.76	2.05	---	2.63	4.13
27	3.47	3.25	3.17	3.46	2.94	2.93	3.35	2.72	2.03	---	2.59	4.08
28	3.45	3.23	3.17	3.42	2.91	2.93	3.28	2.67	2.04	---	2.57	4.03
29	3.49	3.20	3.17	3.40	---	3.07	3.22	2.64	2.19	---	2.54	3.98
30	3.68	3.19	3.15	3.37	---	3.19	3.15	2.62	2.20	2.37	2.52	3.94
31	3.71	---	3.14	3.37	---	3.31	---	2.58	---	---	2.48	---
MEAN	3.94	3.49	3.05	3.50	3.12	2.96	3.70	---	2.28	---	---	---
MAX	4.46	3.75	3.17	3.60	3.34	3.31	4.05	---	2.56	---	---	---
MIN	3.45	3.19	2.93	3.14	2.91	2.83	3.15	---	2.03	---	---	---

CAL YR 1986 MEAN 2.95 MAX 4.57 MIN 1.05

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232200 WOLF CREEK NEAR DEER PARK, FL

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

DRAINAGE AREA.--25.7 mi³.

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

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

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

AVERAGE DISCHARGE.--31 years, 31.8 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,700 ft³/s Oct. 16, 1956, from rating curve extended above 1,400 ft³/s; maximum gage height, 10.2 ft, estimated, Aug. 28, 1964, present site; no flow for many days in some years; minimum gage height, 1.01 ft, Aug. 14, 1972, caused by temporary earthen dam upstream and pumpage from gage pool; prior to Aug 14, 1972, minimum gage height observed, 2.23 ft, May 9, 1967, present site.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 755 ft³/s, Mar. 30, gage height, 7.77 ft; no flow June 13-16, Aug. 29,31; minimum gage height, 2.89 ft, June 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	8.8	2.4	64	5.7	5.8	358	1.4	.29	5.8	12	.01
2	4.3	8.4	3.7	56	5.4	7.9	185	1.3	.21	3.5	12	.13
3	5.2	8.4	3.3	40	5.2	8.5	123	1.1	.14	2.1	9.7	3.3
4	4.3	7.3	2.8	35	5.0	7.7	88	.92	.10	7.9	8.6	47
5	3.6	5.9	2.5	46	4.9	6.5	62	.78	.07	9.1	17	186
6	3.1	4.9	2.4	43	4.9	5.7	44	.66	.08	35	12	207
7	134	4.2	2.2	36	5.2	27	34	.60	.11	35	7.6	244
8	208	3.7	2.1	30	7.4	75	27	.51	.08	16	4.8	116
9	103	3.3	2.1	24	8.5	54	22	.53	.05	7.6	3.2	91
10	60	3.1	2.0	20	7.7	35	18	3.6	.04	4.4	2.3	305
11	39	2.8	1.9	17	6.8	25	15	13	.02	2.8	1.9	282
12	27	2.9	2.0	15	6.1	19	12	9.5	.01	2.0	1.6	253
13	20	2.8	1.8	13	5.6	15	10	15	.00	1.6	1.3	297
14	15	2.5	1.7	12	5.1	12	9.5	9.4	.00	2.3	1.3	264
15	12	2.3	1.6	10	4.7	9.8	10	5.7	.00	3.0	1.4	167
16	13	2.3	1.6	9.5	5.2	8.3	11	9.0	.00	3.0	1.3	109
17	16	2.3	1.6	8.9	8.2	7.3	11	14	.04	6.9	.98	76
18	12	2.2	1.6	8.5	10	6.5	9.4	10	.08	13	.64	54
19	9.5	2.1	1.6	8.2	12	7.2	7.6	7.3	.06	32	.40	39
20	7.8	2.0	1.6	8.1	13	8.4	6.2	5.9	.03	83	.23	27
21	6.6	2.0	1.6	7.8	12	7.7	5.2	4.2	.01	99	.12	19
22	5.5	1.9	1.7	8.0	11	6.5	4.5	2.9	.19	68	.08	15
23	4.7	1.8	7.1	9.6	11	5.5	3.8	2.2	1.5	44	.09	18
24	4.1	1.7	41	10	9.0	4.8	3.4	1.7	.79	28	.06	23
25	3.7	1.7	44	9.3	7.9	4.4	2.9	1.3	.44	17	.04	16
26	3.3	1.6	23	8.9	7.2	9.5	2.5	1.0	.45	12	.03	11
27	3.0	2.4	17	8.4	6.6	89	2.3	.81	1.9	44	.01	7.6
28	3.0	2.6	15	8.0	5.9	89	2.1	.66	3.1	55	.01	6.0
29	3.8	2.2	14	7.4	---	292	1.9	.57	5.9	38	.00	5.0
30	8.9	2.1	12	6.8	---	592	1.7	.45	3.8	25	.01	4.7
31	10	---	14	6.3	---	599	---	.38	---	17	.00	---
TOTAL	757.8	102.2	232.9	594.7	207.2	2051.0	1093.0	126.37	19.49	723.0	100.70	2892.74
MEAN	24.4	3.41	7.51	19.2	7.40	66.2	36.4	4.08	.65	23.3	3.25	96.4
MAX	208	8.8	44	64	13	599	358	15	5.9	99	17	305
MIN	3.0	1.6	1.6	6.3	4.7	4.4	1.7	.38	.00	1.6	.00	.01

CAL YR 1986 TOTAL 10753.42 MEAN 29.5 MAX 490 MIN .00
WTR YR 1987 TOTAL 8901.10 MEAN 24.4 MAX 599 MIN .00

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232400 ST. JOHNS RIVER NEAR COCOA, FL

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

DRAINAGE AREA.--1,331 mi².

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

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1959, nonrecording gage at site 3.7 mi east on north shore of Lake Poinsett at datum 5.06 ft higher.

REMARKS.--Records fair. Records include inflow from Taylor Creek. Gage heights are published as elevations for Lake Poinsett (station 02232300) in the section of this report entitled LAKE ELEVATIONS.

AVERAGE DISCHARGE.--34 years, 978 ft³/s, 9.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 10,700 ft³/s, Oct. 11, 1953; maximum gage height observed, 16.96 ft, present site and datum, Oct. 11, 1953; minimum daily discharge, 5.6 ft³/s, July 17, 1961; minimum gage height, 7.77 ft, Mar. 6, 1962, affected by wind.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,450 ft³/s, Oct. 1, gage height, 14.03 ft, occurred on recession following peak of Sept. 25, 1986; maximum independent peak discharge, 1,120 ft³/s, Apr. 3, gage height, 13.51 ft; minimum daily discharge, 71 ft³/s, Sept. 2; minimum gage height, 11.03 ft, Sept. 1,2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	988	586	491	778	636	932	583	339	142	107	72
2	1420	996	574	526	774	624	1020	566	325	138	107	71
3	1420	981	555	553	756	613	1060	555	307	130	106	81
4	1400	959	526	593	739	590	1010	532	295	122	110	111
5	1370	967	510	567	751	585	1030	507	283	117	110	142
6	1340	960	513	634	726	595	1030	494	280	114	114	169
7	1370	947	507	682	718	653	1020	504	278	110	111	193
8	1390	930	503	712	688	647	992	488	267	106	107	207
9	1400	908	492	736	700	639	975	479	259	101	103	224
10	1380	891	483	749	698	634	962	479	246	97	100	260
11	1370	876	478	729	700	621	951	495	237	93	96	274
12	1360	858	465	744	694	611	939	482	229	86	96	314
13	1360	821	436	765	690	599	925	491	219	84	92	400
14	1310	805	433	788	686	601	918	484	210	87	93	451
15	1270	779	421	804	693	608	895	489	201	110	94	482
16	1220	781	405	819	692	605	875	517	190	115	95	499
17	1180	768	395	820	688	598	851	513	182	122	95	512
18	1160	752	387	842	684	612	844	509	175	126	93	521
19	1140	738	378	843	661	580	824	497	169	127	91	521
20	1100	728	367	839	672	564	814	495	160	132	87	536
21	1080	708	346	844	670	554	801	485	153	133	88	556
22	1080	692	344	848	681	541	777	476	147	131	86	574
23	1070	684	380	824	662	544	763	471	142	130	87	593
24	1060	676	401	847	668	555	729	454	133	130	86	604
25	1030	662	411	861	658	526	705	436	129	127	85	625
26	1010	646	411	813	662	524	670	419	128	124	83	644
27	974	630	419	793	654	568	645	400	130	120	81	659
28	955	613	414	817	655	597	631	392	133	115	80	665
29	957	602	425	815	---	658	619	375	144	112	77	671
30	953	598	434	801	---	743	604	357	143	108	78	679
31	969	---	464	770	---	795	---	353	---	108	76	---
TOTAL	37528	23944	13863	23269	19498	18820	25811	14777	6233	3597	2914	12310
MEAN	1211	798	447	751	696	607	860	477	208	116	94.0	410
MAX	1430	996	586	861	778	795	1060	583	339	142	114	679
MIN	953	598	344	491	654	524	604	353	128	84	76	71
CFSM	.91	.60	.34	.56	.52	.46	.65	.36	.16	.09	.07	.31
IN.	1.05	.67	.39	.65	.54	.53	.72	.41	.17	.10	.08	.34

CAL YR 1986 TOTAL 196009 MEAN 537 MAX 1490 MIN 19 CFSM .40 IN. 5.48
WTR YR 1987 TOTAL 202564 MEAN 555 MAX 1430 MIN 71 CFSM .42 IN. 5.66

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232500 ST. JOHNS RIVER NEAR CHRISTMAS, FL

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

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

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

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is 1.62 ft above National Geodetic Vertical Datum of 1929. Prior to July 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--54 years, 1,289 ft³/s, 11.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s, Oct. 12, 1953; maximum gage height, 10.81 ft, Sept. 28, 1960; no flow Mar. 22-27, Apr. 19, June 12,13, 1939; minimum gage height, 0.48 ft, June 19, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,130 ft³/s, Apr. 4, gage height, 7.42 ft; minimum, 154 ft³/s, Aug. 31, Sept. 1; minimum gage height, 2.99 ft, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1640	1140	739	694	804	779	3070	891	400	272	202	158
2	1610	1130	721	714	795	795	3030	855	390	259	245	164
3	1600	1120	696	728	782	794	2810	823	380	249	262	181
4	1580	1100	675	756	775	778	2520	792	370	242	277	211
5	1560	1090	651	783	771	758	2400	759	361	234	281	274
6	1540	1080	640	826	769	739	2260	732	353	230	275	342
7	1560	1070	621	841	766	781	2120	711	344	223	264	426
8	1580	1060	602	847	791	834	1990	684	334	214	253	500
9	1560	1050	587	854	785	854	1900	671	325	204	241	586
10	1560	1040	567	866	771	898	1810	678	317	194	230	770
11	1570	1030	559	860	751	941	1730	708	311	185	222	851
12	1590	1020	548	870	731	944	1660	697	312	180	217	972
13	1610	995	534	873	718	922	1600	687	306	182	209	1170
14	1600	983	524	871	708	895	1540	678	297	177	202	1280
15	1590	962	509	865	704	863	1500	673	289	178	197	1340
16	1560	945	494	859	706	826	1490	667	280	177	192	1380
17	1530	920	477	858	729	798	1450	663	271	179	184	1390
18	1500	899	465	878	737	776	1420	652	263	179	176	1370
19	1460	884	450	874	749	762	1400	641	255	183	176	1360
20	1420	886	438	875	752	748	1360	637	246	187	195	1360
21	1380	866	422	874	785	732	1310	622	237	187	195	1330
22	1340	848	415	870	841	711	1260	606	231	187	190	1300
23	1320	827	432	870	840	694	1220	593	228	186	191	1260
24	1280	806	563	874	837	676	1180	579	220	185	187	1230
25	1260	786	610	866	828	651	1130	562	215	183	181	1220
26	1230	767	604	849	823	676	1090	548	216	183	174	1210
27	1210	753	603	839	807	860	1050	533	223	187	168	1200
28	1190	741	595	839	792	1030	1010	522	235	187	166	1200
29	1190	743	583	834	---	1360	968	508	275	185	165	1200
30	1190	757	568	822	---	1980	929	428	279	182	165	1220
31	1170	---	578	805	---	2670	---	411	---	186	161	---
TOTAL	44980	28298	17470	25934	21647	28525	50207	20211	8763	6166	6443	28455
MEAN	1451	943	564	837	773	920	1674	652	292	199	208	948
MAX	1640	1140	739	878	841	2670	3070	891	400	272	281	1390
MIN	1170	741	415	694	704	651	929	411	215	177	161	158
CFSM	.94	.61	.37	.54	.50	.60	1.09	.42	.19	.13	.14	.62
IN.	1.09	.68	.42	.63	.52	.69	1.21	.49	.21	.15	.16	.69

CAL YR 1986 TOTAL 263992 MEAN 723 MAX 3020 MIN 24 CFSM .47 IN. 6.38
WTR YR 1987 TOTAL 287099 MEAN 787 MAX 3070 MIN 158 CFSM .51 IN. 6.94

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233001 ECONLOCKHATCHEE RIVER AT MAGNOLIA RANCH NEAR BITHLO, FL

LOCATION.--Lat 28°25'27", long 81°07'10", in SE¼ sec.4, T.24 S., R.32 E., Orange County, Hydrologic Unit 03080101, near center of span on downstream side of bridge on Wewahootee Road, 250 ft downstream from Disston Canal, and 7 mi south of Bithlo.

DRAINAGE AREA.--32.9 mi².

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

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

REMARKS.--Estimated daily discharges: Oct. 1-6, Nov. 27 to Jan. 23. Records fair.

AVERAGE DISCHARGE.--15 years, 24.1 ft³/s, 9.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 474 ft³/s June 21,22, 1982, gage height, 62.58 ft; maximum gage height 63.42 ft, Mar. 31, 1987; no flow for many days in most years; river dry at gage for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 370 ft³/s, Mar. 31, gage height, 63.42 ft; no flow many days, river dry at gage many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	20	5.6	129	17	14	325	6.5	.09	.00	1.2	.00
2	26	20	10	108	16	15	279	5.1	.03	.00	1.6	.01
3	24	20	9.0	92	15	15	244	4.0	.00	.00	.97	.14
4	22	18	8.0	78	14	14	214	3.1	.00	.00	.61	3.7
5	20	17	7.1	101	13	13	188	2.6	.00	.00	.79	14
6	17	16	6.6	88	13	12	167	3.0	.00	.16	.60	25
7	80	15	6.2	78	12	19	151	2.9	.00	.36	.38	24
8	151	14	6.0	70	14	36	136	2.6	.00	.25	.23	22
9	176	13	5.7	64	13	36	121	2.0	.00	.18	.15	16
10	162	12	5.6	60	12	30	108	4.7	.00	.13	.09	12
11	146	11	6.5	56	11	26	96	10	.00	.08	.05	10
12	129	11	6.1	53	10	23	85	11	.00	.04	.01	19
13	116	10	5.7	50	9.6	22	75	8.7	.00	.03	.00	50
14	103	9.4	5.3	46	8.8	20	66	7.1	.00	.01	.00	58
15	91	8.9	5.1	43	8.2	19	60	5.6	.00	.00	.00	47
16	80	8.6	4.9	40	9.0	18	57	4.5	.00	.02	.00	41
17	69	8.2	4.7	38	14	17	53	3.7	.00	.30	.00	38
18	59	7.8	4.6	37	16	16	47	3.0	.00	14	.00	38
19	51	7.7	4.5	35	17	16	42	2.5	.00	25	.00	38
20	44	8.2	4.4	32	17	16	37	2.2	.00	18	.00	41
21	38	7.5	4.3	30	18	15	33	1.8	.00	16	.00	39
22	33	6.8	7.2	30	22	13	29	1.4	.00	17	.00	36
23	30	6.3	20	31	22	12	26	1.2	.00	15	.00	34
24	26	5.9	65	29	20	11	22	1.0	.00	12	.00	33
25	23	5.6	61	27	19	11	19	.91	.00	9.8	.00	31
26	21	5.3	55	26	18	20	16	.68	.00	7.7	.00	28
27	21	4.7	47	25	16	54	14	.51	.00	6.0	.00	25
28	21	5.0	36	22	15	73	12	.42	.00	4.2	.00	23
29	20	5.2	33	21	---	142	10	.30	.00	3.0	.00	21
30	21	4.6	29	19	---	256	8.1	.20	.00	2.0	.00	19
31	21	---	45	18	---	358	---	.14	---	1.4	.00	---
TOTAL	1870	312.7	524.1	1576	409.6	1362	2740.1	103.36	0.12	152.66	6.68	785.85
MEAN	60.3	10.4	16.9	50.8	14.6	43.9	91.3	3.33	.004	4.92	.22	26.2
MAX	176	20	65	129	22	358	325	11	.09	25	1.6	58
MIN	17	4.6	4.3	18	8.2	11	8.1	.14	.00	.00	.00	.00
CFSM	1.83	.32	.51	1.55	.44	1.34	2.78	.10	.00	.15	.01	.80
IN.	2.11	.35	.59	1.78	.46	1.54	3.10	.12	.00	.17	.01	.89

CAL YR 1986 TOTAL 9938.67 MEAN 27.2 MAX 225 MIN .00 CFSM .83 IN. 11.24
WTR YR 1987 TOTAL 9843.17 MEAN 27.0 MAX 358 MIN .00 CFSM .82 IN. 11.13

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233102 ECONLOCKHATCHEE RIVER TRIBUTARY NEAR BITHLO, FL

LOCATION.--Lat 28°33'55", long 81°11'19", in NW¼ sec.23, T.22 S., R.31 E., Orange County, Hydrologic Unit 03080101, on right bank 15 ft upstream from culvert on State Highway 50, 3.5 mi east of Union Park, 5.1 mi west of Bithlo, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--1.83 mi².

PERIOD OF RECORD.--Annual maximum, water years 1969-82. January 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 51.35 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft³/s, Sept. 22, 1969, gage height, 4.83 ft, from rating curve extended above 120 ft³/s; minimum daily discharge, 0.01 ft³/s, May 18,19, 1985, minimum gage height, 2.11 ft, part or all of each day May 30 to June 7, June 9, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 171 ft³/s, Mar. 31, gage height, 4.15 ft; minimum daily discharge, 0.06 ft³/s, Aug. 24,25; minimum gage height, 2.13 ft, part or all of each day June 21-23, 25-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	1.2	.42	2.1	.44	.89	19	.86	.58	1.1	.57	.15
2	.66	1.9	.49	1.1	.44	.93	6.2	.85	.52	1.1	.42	.13
3	.58	1.2	.44	.90	.44	.75	4.5	.87	.44	1.6	.64	.61
4	.58	.97	.37	1.2	.44	.67	3.5	1.0	.37	2.8	1.6	.75
5	.57	.87	.36	1.3	.44	.57	2.6	.84	.38	4.3	1.4	.80
6	1.0	.77	.31	1.0	.44	.51	2.2	1.6	.31	2.1	.75	.69
7	17	.77	.31	1.0	1.4	4.6	2.0	2.4	.38	1.5	.59	.56
8	14	.77	.31	.83	3.2	3.9	1.8	1.4	.46	2.1	.44	.98
9	7.7	.66	.28	.77	1.2	2.3	1.5	1.0	.33	1.2	.31	4.3
10	8.6	.58	.25	.77	.94	1.6	1.3	1.9	.33	.83	.37	9.0
11	6.4	.58	.25	.77	.83	1.3	1.3	2.3	.25	.68	.27	13
12	4.7	.58	.31	.71	.75	.98	1.3	2.1	.23	.65	.14	26
13	3.7	.58	.31	.67	.67	.80	1.2	1.4	.20	1.4	.10	46
14	3.1	.55	.25	.58	.58	.70	1.2	1.2	.20	2.1	.10	25
15	2.5	.51	.25	.58	.58	.65	1.6	1.1	.33	1.6	.10	13
16	2.0	.51	.25	.58	.67	.56	1.4	.87	.47	.95	.10	10
17	1.7	.51	.25	.58	.65	.37	1.3	.92	.48	1.6	.10	9.2
18	1.4	.51	.25	.58	.67	.60	1.2	.80	.59	2.4	.10	9.3
19	1.1	.53	.25	.51	.66	.55	1.2	.62	.52	1.6	.42	9.0
20	1.0	.58	.25	.51	.58	.52	1.2	.79	.20	1.4	.17	10
21	1.0	.55	.25	.51	.63	.45	1.1	.81	.13	2.5	.10	9.7
22	.96	.51	.25	.77	.67	.43	1.0	.82	.10	2.4	.10	7.6
23	.88	.51	.42	.68	.66	.37	.88	.62	.30	1.1	.10	5.4
24	.88	.42	3.4	.58	.58	.37	.88	.51	.25	.74	.06	4.6
25	.88	.37	.82	.54	.58	.37	.88	.57	.15	.56	.06	1.6
26	.88	.37	.66	.54	.58	2.7	.88	.77	.10	.63	.09	1.3
27	1.1	.37	.58	.51	.55	5.3	.88	.54	.12	.88	.10	1.2
28	.98	.37	.58	.44	.51	7.1	.98	.63	.40	.48	.10	1.0
29	.88	.37	.52	.44	---	53	.91	.51	1.1	.87	.10	.98
30	.88	.37	.51	.44	---	58	.88	.42	1.4	.72	.10	2.0
31	.78	---	1.3	.44	---	94	---	.37	---	.80	.24	---
TOTAL	89.13	19.34	15.45	22.93	20.78	245.84	66.77	31.39	11.62	44.69	9.84	223.85
MEAN	2.88	.64	.50	.74	.74	7.93	2.23	1.01	.39	1.44	.32	7.46
MAX	17	1.9	3.4	2.1	3.2	94	19	2.4	1.4	4.3	1.6	46
MIN	.57	.37	.25	.44	.44	.37	.88	.37	.10	.48	.06	.13

CAL YR 1986 TOTAL 765.90 MEAN 2.10 MAX 69 MIN .03
WTR YR 1987 TOTAL 801.63 MEAN 2.20 MAX 94 MIN .06

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233200 LITTLE ECONLOCKHATCHEE RIVER NEAR UNION PARK, FL

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

DRAINAGE AREA.--27.1 mi².

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

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

REMARKS.--Estimated daily discharges: May 26 to July 6, Aug. 14-28. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--28 years, 25.1 ft³/s, 12.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft³/s, Mar. 17, 1960, gage height, 11.64 ft; minimum discharge, 0.10 ft³/s, June 6, 1961; minimum gage height, 4.83 ft, May 14, 1967, May 6, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0200	132	7.86	Aug. 12	0600	227	8.29
Mar. 31	0900	*825	*10.00	Sept. 5	0300	163	8.02
Aug. 5	0500	287	8.49	Sept. 13	1300	165	8.03

Minimum daily discharge, 4.7 ft³/s, June 21; minimum gage height observed, 5.55 ft, June 16, but may have been lower during period of no gage height record May 26 to July 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	27	13	40	11	15	480	13	7.8	42	16	21
2	19	93	13	29	11	22	306	13	7.5	35	16	17
3	16	46	13	23	11	17	221	12	7.1	28	57	46
4	14	35	12	24	10	15	175	12	6.9	24	86	121
5	13	31	11	35	10	13	140	11	6.4	36	210	138
6	13	27	10	29	10	13	119	11	8.0	40	93	103
7	16	24	10	25	12	24	101	14	7.1	93	60	71
8	15	20	9.7	23	37	41	89	12	6.7	74	45	53
9	14	17	9.5	22	25	27	75	11	6.3	43	35	42
10	85	15	9.3	21	22	21	66	17	6.0	31	30	57
11	59	14	9.3	20	26	18	53	17	5.8	25	33	47
12	40	14	11	18	18	17	46	16	5.7	21	184	103
13	33	13	10	17	15	16	39	17	5.6	19	108	148
14	29	13	9.3	16	13	15	36	13	5.5	48	70	140
15	25	12	8.9	15	13	14	36	12	5.5	42	50	108
16	21	12	9.0	15	14	13	40	12	5.4	47	31	83
17	18	12	9.3	14	16	12	31	16	5.2	34	29	65
18	15	14	9.5	14	14	12	28	14	5.1	75	27	58
19	14	25	9.3	14	15	14	25	30	5.0	50	25	54
20	14	20	8.8	14	14	14	23	20	4.8	47	61	62
21	13	15	8.6	13	17	12	21	16	4.7	44	47	71
22	12	13	8.2	16	17	11	20	13	6.3	46	35	56
23	12	12	10	18	16	11	19	14	9.6	38	31	52
24	12	12	35	15	15	11	18	12	11	31	27	45
25	11	11	29	14	14	11	17	11	10	27	26	38
26	12	11	19	15	14	50	16	11	9.6	23	24	34
27	15	11	16	14	13	202	15	10	19	21	23	29
28	15	11	15	13	12	148	15	10	36	20	23	26
29	13	11	14	12	---	336	14	9.5	54	23	19	25
30	13	11	13	12	---	580	14	8.9	50	20	16	24
31	12	---	16	11	---	744	---	8.3	---	17	17	---
TOTAL	634	602	388.7	581	435	2469	2298	416.7	333.6	1164	1554	1937
MEAN	20.5	20.1	12.5	18.7	15.5	79.6	76.6	13.4	11.1	37.5	50.1	64.6
MAX	85	93	35	40	37	744	480	30	54	93	210	148
MIN	11	11	8.2	11	10	11	14	8.3	4.7	17	16	17
CFSM	.75	.74	.46	.69	.57	2.94	2.83	.50	.41	1.39	1.85	2.38
IN.	.87	.83	.53	.80	.60	3.39	3.15	.57	.46	1.60	2.13	2.66
CAL YR 1986	TOTAL 10016.2	MEAN 27.4	MAX 517	MIN 4.1	CFSM 1.01	IN. 13.7						
WTR YR 1987	TOTAL 12813.0	MEAN 35.1	MAX 744	MIN 4.7	CFSM 1.30	IN. 17.6						

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02233500 ECONLOCKHATCHEE RIVER NEAR CHULUOTA, FL

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

DRAINAGE AREA.--241 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 National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Nov. 6, 1935, to May 17, 1939, and June 17, 1969, to July 21, 1971, nonrecording gage at same site and datum. 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.--Estimated daily discharges: July 2 to Aug. 21. Records fair. Records include some flow diverted from Lake Mary Jane in the Kissimmee River Basin through Disston Canal.

AVERAGE DISCHARGE.--52 years, 264 ft³/s, 14.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s, Mar. 18, 1960, gage height, 18.69 ft; minimum daily, 6.7 ft³/s, June 11-13, 1945; minimum gage height, 0.08 ft, May 10, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,090 ft³/s, Apr. 1, gage height, 14.70 ft; minimum discharge, 50 ft³/s, June 17, 18, gage height, 0.93 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	111	83	209	114	141	4970	129	75	380	155	107
2	236	156	98	279	109	158	4450	122	73	440	150	116
3	198	211	113	307	120	184	3290	116	73	350	150	136
4	175	227	110	323	117	175	2410	109	67	270	190	243
5	151	189	97	331	102	157	1820	109	66	240	230	572
6	136	160	86	367	97	138	1460	112	72	400	285	919
7	134	138	80	428	102	151	1260	151	70	600	260	898
8	193	130	75	437	134	284	1090	228	66	860	240	807
9	275	118	73	389	223	385	936	195	64	744	210	707
10	285	109	71	339	235	442	791	152	61	520	200	701
11	372	106	73	302	197	435	684	177	57	400	180	662
12	474	99	71	267	169	373	591	206	55	300	250	711
13	488	100	72	239	155	305	517	223	56	230	296	961
14	440	93	70	217	141	250	455	229	55	180	430	1140
15	385	91	67	199	126	206	407	218	54	400	250	1180
16	336	84	66	184	115	177	386	200	52	255	210	1120
17	292	82	61	173	121	161	379	185	50	230	190	969
18	258	83	63	163	124	147	363	194	54	220	180	762
19	228	85	65	156	125	135	336	198	59	600	165	589
20	196	86	65	156	134	138	305	200	64	520	154	477
21	175	94	62	159	138	140	284	190	65	450	230	434
22	162	89	60	160	146	132	259	165	67	430	206	413
23	144	82	63	167	161	125	236	142	73	328	219	398
24	135	79	86	168	167	117	213	130	68	270	213	379
25	126	78	157	162	167	114	193	119	66	240	176	341
26	118	77	209	160	164	112	174	106	76	220	151	302
27	115	76	234	159	157	183	161	101	74	205	134	259
28	118	73	225	149	149	432	155	95	88	190	121	226
29	123	73	199	139	---	828	147	88	124	170	118	203
30	118	73	180	135	---	1560	138	83	186	182	114	187
31	111	---	169	125	---	3720	---	78	---	165	110	---
TOTAL	6982	3252	3203	7148	4009	12005	28860	4750	2130	10989	6167	16919
MEAN	225	108	103	231	143	387	962	153	71.0	354	199	564
MAX	488	227	234	437	235	3720	4970	229	186	860	430	1180
MIN	111	73	60	125	97	112	138	78	50	165	110	107
CFSM	.93	.45	.43	.96	.59	1.61	3.99	.64	.29	1.47	.83	2.34
IN.	1.08	.50	.49	1.10	.62	1.85	4.45	.73	.33	1.70	.95	2.61

CAL YR 1986 TOTAL 90586 MEAN 248 MAX 4230 MIN 47 CFSM 1.03 IN. 13.98
WTR YR 1987 TOTAL 106414 MEAN 292 MAX 4970 MIN 50 CFSM 1.21 IN. 16.43

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

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

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

DRAINAGE AREA.--2,043 mi².

PERIOD OF RECORD.--July 1941 to September 1981 (gage heights and miscellaneous discharge measurements only). October 1981 to current year. Records of gage heights prior to October 1962 are unpublished and available in files of the Orlando Subdistrict Office.

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

GAGE.--Water-stage recorder and electromagnetic current meter recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Sept. 3, 1943, nonrecording gage, and Sept. 3, 1943, to Oct. 8, 1959, water-stage recorder at site 50 ft downstream at same datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--6 years, 1,737 ft³/s, 11.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 13,800 ft³/s, Oct. 7, 1953, gage height, 10.05 ft; maximum gage height, 10.62 ft, Oct. 13, 1953; minimum discharge measured, 70 ft³/s, Nov. 6, 1980, gage height, 0.88 ft; minimum gage height, -0.42 ft, June 18, 1945.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,630 ft³/s, Apr. 4, gage height, 6.27 ft; minimum, 263 ft³/s, Sept. 1, gage height, 0.57 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	1520	1100	1270	1020	1220	3940	1660	865	715	482	278
2	1920	1510	1120	1300	989	1250	4850	1580	854	761	447	343
3	1890	1520	1130	1310	971	1250	5370	1520	842	752	420	456
4	1860	1530	1140	1330	951	1250	5500	1450	822	723	406	551
5	1830	1520	1150	1380	926	1240	5580	1390	797	714	395	682
6	1800	1500	1160	1410	939	1220	5520	1340	791	758	387	787
7	1790	1480	1160	1440	974	1250	5390	1300	771	793	385	850
8	1800	1450	1160	1460	1080	1320	5180	1270	749	783	377	875
9	1810	1420	1150	1470	1160	1370	5000	1240	743	786	342	902
10	1810	1400	1140	1460	1200	1420	4790	1200	741	780	320	994
11	1820	1370	1130	1460	1220	1430	4580	1190	731	746	339	1030
12	1850	1350	1120	1440	1220	1420	4360	1190	715	691	336	1100
13	1860	1330	1110	1410	1220	1390	4140	1180	698	638	347	1200
14	1860	1300	1070	1370	1210	1380	3930	1180	692	601	411	1270
15	1850	1280	1050	1330	1180	1350	3720	1160	675	602	457	1330
16	1830	1270	1040	1290	1170	1320	3520	1140	659	625	477	1370
17	1810	1260	1030	1260	1160	1290	3350	1120	650	628	460	1390
18	1790	1250	1020	1220	1150	1260	3200	1090	625	606	427	1390
19	1770	1250	1010	1190	1140	1230	3070	1080	612	606	389	1380
20	1760	1240	997	1170	1140	1210	2930	1070	600	621	352	1390
21	1760	1220	992	1140	1140	1190	2800	1050	589	645	325	1420
22	1750	1200	980	1160	1160	1170	2660	1020	582	651	324	1430
23	1740	1170	983	1170	1200	1140	2530	996	581	645	326	1450
24	1720	1150	1110	1160	1210	1100	2400	969	578	628	326	1450
25	1690	1130	1150	1140	1220	1070	2270	944	586	603	315	1450
26	1660	1110	1170	1140	1230	1070	2150	921	613	591	304	1440
27	1650	1090	1190	1130	1220	1120	2040	904	613	577	303	1420
28	1620	1080	1200	1110	1220	1250	1930	888	629	569	302	1400
29	1590	1060	1190	1080	---	1510	1840	875	639	546	295	1380
30	1570	1080	1190	1060	---	2050	1750	867	666	530	286	1370
31	1540	---	1200	1040	---	2960	---	871	---	515	274	---
TOTAL	54950	39040	34342	39300	31620	41700	110290	35655	20708	20429	11336	33778
MEAN	1773	1301	1108	1268	1129	1345	3676	1150	690	659	366	1126
MAX	1950	1530	1200	1470	1230	2960	5580	1660	865	793	482	1450
MIN	1540	1060	980	1040	926	1070	1750	867	578	515	274	278
CFSM	.87	.64	.54	.62	.55	.66	1.80	.56	.34	.32	.18	.55
IN.	1.00	.71	.63	.72	.58	.76	2.01	.65	.38	.37	.21	.62

CAL YR 1986 TOTAL 406032 MEAN 1112 MAX 4220 MIN 55 CFSM .54 IN. 7.39
WTR YR 1987 TOTAL 473148 MEAN 1296 MAX 5580 MIN 274 CFSM .63 IN. 8.62

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.75	2.50	2.08	2.42	1.97	2.46	5.30	2.90	1.39	.97	.97	.61
2	2.72	2.51	2.11	2.49	1.92	2.52	5.89	2.79	1.37	1.07	.91	.76
3	2.68	2.54	2.15	2.50	1.88	2.53	6.18	2.68	1.33	1.07	.86	1.01
4	2.63	2.57	2.17	2.54	1.84	2.54	6.21	2.57	1.29	1.02	.85	1.20
5	2.59	2.57	2.19	2.62	1.80	2.52	6.24	2.47	1.23	1.02	.84	1.47
6	2.55	2.55	2.20	2.67	1.83	2.48	6.20	2.38	1.21	1.13	.84	1.68
7	2.53	2.52	2.20	2.71	1.90	2.53	6.12	2.30	1.16	1.23	.85	1.81
8	2.55	2.50	2.21	2.75	2.11	2.68	5.99	2.24	1.11	1.22	.85	1.84
9	2.58	2.46	2.19	2.76	2.27	2.77	5.87	2.19	1.10	1.25	.79	1.87
10	2.59	2.43	2.17	2.75	2.36	2.85	5.74	2.12	1.09	1.25	.72	2.04
11	2.63	2.40	2.15	2.75	2.40	2.86	5.60	2.09	1.06	1.19	.75	2.08
12	2.67	2.39	2.12	2.72	2.41	2.85	5.45	2.08	1.03	1.09	.83	2.21
13	2.70	2.37	2.10	2.67	2.41	2.82	5.30	2.08	.99	.99	.87	2.39
14	2.71	2.32	2.03	2.61	2.39	2.79	5.14	2.06	.97	.92	1.03	2.51
15	2.71	2.30	1.98	2.54	2.34	2.75	4.98	2.02	.93	.94	1.15	2.60
16	2.70	2.29	1.96	2.47	2.32	2.70	4.82	1.99	.89	1.01	1.21	2.65
17	2.69	2.28	1.93	2.40	2.31	2.64	4.67	1.94	.86	1.03	1.19	2.67
18	2.68	2.28	1.91	2.33	2.29	2.58	4.54	1.89	.81	1.00	1.14	2.65
19	2.67	2.29	1.90	2.28	2.28	2.54	4.41	1.86	.78	1.02	1.07	2.63
20	2.67	2.28	1.87	2.23	2.27	2.50	4.28	1.84	.75	1.07	1.00	2.62
21	2.68	2.26	1.86	2.19	2.28	2.45	4.15	1.79	.72	1.14	.96	2.64
22	2.69	2.23	1.84	2.21	2.32	2.41	4.01	1.74	.70	1.17	.94	2.65
23	2.69	2.20	1.84	2.24	2.40	2.36	3.89	1.68	.70	1.17	.93	2.65
24	2.68	2.16	2.09	2.22	2.42	2.30	3.74	1.62	.68	1.15	.91	2.65
25	2.66	2.13	2.17	2.19	2.44	2.23	3.61	1.57	.70	1.11	.86	2.63
26	2.64	2.10	2.22	2.20	2.46	2.23	3.47	1.52	.76	1.11	.81	2.59
27	2.63	2.06	2.25	2.18	2.46	2.34	3.34	1.48	.75	1.09	.78	2.54
28	2.61	2.03	2.27	2.13	2.45	2.56	3.23	1.45	.79	1.09	.76	2.48
29	2.58	2.00	2.26	2.09	---	2.96	3.12	1.42	.81	1.06	.72	2.43
30	2.55	2.03	2.25	2.04	---	3.61	3.01	1.40	.87	1.04	.68	2.39
31	2.53	---	2.27	2.02	---	4.51	---	1.40	---	1.02	.62	---
MEAN	2.64	2.32	2.09	2.42	2.23	2.67	4.82	1.99	.96	1.09	.89	2.16
MAX	2.75	2.57	2.27	2.76	2.46	4.51	6.24	2.90	1.39	1.25	1.21	2.67
MIN	2.53	2.00	1.84	2.02	1.80	2.23	3.01	1.40	.68	.92	.62	.61
CAL YR 1986	MEAN 2.09		MAX 6.47		MIN .50							

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234100 DEEP CREEK NEAR OSTEEN, FL

LOCATION.--Lat 28°50'45", long 81°04'46", in NW¼ sec.13, T.19 S., R.32 E., Volusia County, Hydrologic Unit 03080101, on right bank 50 ft downstream from bridge on Osteen-Maytown Road, 3.2 mi upstream from Cow Creek, 5.0 mi upstream from mouth, and 4.5 mi east of Osteen.

DRAINAGE AREA.--About 140 mi², includes the total area drained by Deep Creek and Deep Creek diversion canal.

PERIOD OF RECORD.--October 1964 to September 1966, January 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. October 1964 to September 1966 at site 50 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 27 to Nov. 5, Jan. 15 to Feb. 12. Records fair except for estimated daily discharges which are poor. Flow affected at times by backwater from St. Johns River. Some flow above station is diverted through Deep Creek diversion canal near Osteen (station 02234180) at high water and by interconnection of drainage canals. Discharge for water years 1965-66 and 1982-86 is a summation of flow of Deep Creek and Deep Creek diversion canal.

AVERAGE DISCHARGE.--Combined flow, 8 years (water years 1965-66, 1982-87, 123 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Combined flow, maximum daily discharge, 1,930 ft³/s, Sept. 21, 1985; maximum gage height, 9.99 ft, Sept. 21, 1985; no flow for many days in 1981 and 1985; creek dry at gage for many days in 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 14, 1964, reached a stage of 11.98 ft, from floodmarks, discharge, 2,630 ft³/s.

EXTREMES FOR CURRENT YEAR.--Combined flow, maximum daily discharge, 1,120 ft³/s, Mar. 31; maximum gage height, 9.38 ft, Mar. 31; minimum daily discharge, 0.35 ft³/s, Aug. 26; minimum gage height, 1.43 ft, Aug. 26.

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF DEEP CREEK AND DEEP CREEK DIVERSION CANAL
WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	23	97	70	71	211	960	49	3.9	2.1	2.3	1.2
2	44	27	103	81	65	243	818	44	3.4	2.0	1.9	8.3
3	39	24	93	72	59	235	721	38	3.3	2.1	1.0	19
4	36	23	80	70	55	221	657	34	3.0	2.1	1.0	45
5	31	23	70	77	53	200	607	29	2.9	2.9	1.0	52
6	31	21	68	73	139	181	563	24	2.9	3.0	.70	73
7	42	19	68	69	207	257	524	21	2.6	2.5	.74	89
8	47	19	66	66	239	342	486	17	2.3	2.3	.75	57
9	55	17	63	62	254	311	444	17	2.0	3.0	.70	35
10	64	16	59	58	254	289	403	18	2.1	3.1	.63	21
11	65	16	57	54	244	258	366	24	2.1	2.5	3.6	16
12	63	16	54	50	225	226	333	27	2.2	2.1	2.2	53
13	62	14	50	47	203	199	304	27	2.5	2.0	2.6	81
14	60	13	48	44	182	179	277	24	3.0	2.0	5.2	174
15	57	12	46	41	167	164	254	23	2.4	2.1	2.4	197
16	54	11	46	38	176	152	227	21	2.4	3.2	2.2	179
17	49	11	43	35	195	139	204	20	2.3	2.7	1.2	124
18	46	11	41	33	201	130	187	20	2.3	5.1	.90	83
19	41	16	38	30	197	125	173	19	2.2	7.2	.76	64
20	37	22	37	32	184	117	158	18	2.2	6.8	.75	55
21	35	20	35	42	186	108	145	16	2.2	5.3	.74	50
22	34	18	33	79	214	100	133	13	2.3	3.8	.73	45
23	32	15	34	118	241	93	122	12	2.3	2.8	.63	41
24	30	15	49	108	247	87	111	10	1.9	2.1	.48	37
25	29	14	47	98	249	83	99	9.0	1.9	1.8	.41	31
26	27	13	46	106	239	82	86	7.7	2.2	1.6	.35	28
27	26	13	45	107	220	106	77	6.5	2.1	1.1	.38	24
28	24	14	42	99	198	270	68	5.7	1.9	1.1	.44	20
29	22	27	40	92	---	814	62	5.0	2.0	.93	.49	18
30	22	82	38	85	---	966	56	4.4	2.0	1.4	.55	17
31	21	---	43	78	---	1120	---	4.4	---	1.5	.50	---
TOTAL	1274	585	1679	2114	5164	8008	9625	607.7	72.8	84.23	38.23	1737.5
MEAN	41.1	19.5	54.2	68.2	184	258	321	19.6	2.43	2.72	1.23	57.9
MAX	65	82	103	118	254	1120	960	49	3.9	7.2	5.2	197
MIN	21	11	33	30	53	82	56	4.4	1.9	.93	.35	1.2

CAL YR 1986 TOTAL 18400.94 MEAN 50.4 MAX 454 MIN .50
WTR YR 1987 TOTAL 30989.46 MEAN 84.9 MAX 1120 MIN .35

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234180 DEEP CREEK DIVERSION CANAL NEAR OSTEEN, FL

LOCATION.--Lat 28°50'44", long 81°06'06", in NW¼ sec.14, T.19 S., R.32 E., Volusia County, Hydrologic Unit 03080101, on left bank, 90 ft downstream from bridge on Osteen-Maytown Road, 1.6 mi upstream from mouth, and 3.7 mi east of Osteen.

DRAINAGE AREA.--70 mi², approximately.

PERIOD OF RECORD.--1935, 1956 (one discharge measurement each year); September 1964 to September 1966 (discharge measurements and gage heights); March to September 1981 (discharge measurements only); October 1981 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. September 1964 to September 1966, nonrecording gage, near present site at same datum.

REMARKS.--Canal diverts flow from Deep Creek to St. Johns River. Flow affected at times by backwater from St. Johns River.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 11.41 ft Apr. 9, 1982, estimated; minimum gage height, 3.53 ft, June 5-11, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 12, 1964, reached a stage of 13.17 ft, from floodmarks, discharge, 878 ft³/s; no flow observed June 24, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.92 ft, Mar. 30,31; minimum, 3.60 ft, all or part of each day Aug. 24 to Sept. 1.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.23	---	5.45	4.79	4.63	6.16	10.41	4.34	3.91	3.72	3.68	3.64
2	4.17	---	5.46	5.02	4.59	6.42	10.09	4.29	3.88	3.69	3.70	3.75
3	4.13	---	5.30	4.89	4.55	6.45	9.49	4.25	3.82	3.66	3.67	3.83
4	4.09	---	5.07	4.81	4.51	6.36	8.95	4.22	3.77	3.69	3.64	4.06
5	4.06	---	4.90	4.88	4.50	6.18	8.49	4.18	3.75	3.81	3.63	4.45
6	4.20	4.19	4.82	4.83	5.76	5.99	8.09	4.15	3.76	3.88	3.62	5.00
7	4.30	4.17	4.79	4.76	6.51	6.41	7.74	4.11	3.74	3.79	3.61	5.13
8	4.45	4.15	4.77	4.70	6.78	7.07	7.43	4.09	3.69	3.78	3.60	4.76
9	4.64	4.12	4.70	4.64	6.92	7.08	7.11	4.06	3.67	3.87	3.60	4.49
10	4.72	4.10	4.64	4.59	7.01	7.02	6.77	4.06	3.66	3.91	3.60	4.32
11	4.74	4.09	4.58	4.55	6.90	6.75	6.48	4.12	3.65	3.86	3.62	4.21
12	4.73	4.08	4.53	4.48	6.69	6.42	6.23	4.26	3.64	3.82	3.64	4.62
13	4.70	4.07	4.48	4.44	6.41	6.14	6.03	4.24	3.70	3.81	3.63	4.98
14	4.67	4.05	4.43	4.41	6.14	5.92	5.83	4.19	3.84	3.80	3.66	6.17
15	4.62	4.04	4.39	4.38	5.93	5.74	5.66	4.17	3.73	3.79	3.64	6.59
16	4.58	4.04	4.37	4.36	5.96	5.60	5.49	4.15	3.70	3.88	3.65	6.45
17	4.51	4.03	4.34	4.34	6.20	5.45	5.33	4.21	3.73	3.87	3.64	5.75
18	4.45	4.03	4.31	4.32	6.27	5.33	5.22	4.26	3.71	4.06	3.62	5.15
19	4.39	4.07	4.28	4.30	6.21	5.28	5.14	4.27	3.69	4.18	3.61	4.86
20	4.33	4.17	4.26	4.29	6.07	5.20	5.06	4.25	3.68	4.17	3.61	4.73
21	4.30	4.16	4.24	4.36	6.02	5.11	4.99	4.21	3.66	4.11	3.61	4.65
22	4.28	4.12	4.21	4.72	6.31	5.04	4.92	4.17	3.65	4.02	3.61	4.60
23	4.25	4.08	4.22	5.04	6.60	4.96	4.85	4.13	3.64	3.95	3.61	4.54
24	4.21	4.07	4.40	4.96	6.71	4.90	4.79	4.10	3.65	3.88	3.60	4.50
25	4.18	4.07	4.49	4.85	6.76	4.85	4.70	4.07	3.65	3.84	3.60	4.42
26	4.16	4.06	4.49	4.94	6.65	4.84	4.63	4.04	3.72	3.81	3.60	4.36
27	---	4.04	4.45	4.93	6.43	5.09	4.55	4.01	3.72	3.77	3.60	4.29
28	---	4.04	4.41	4.86	6.17	6.25	4.49	3.97	3.68	3.77	3.60	4.23
29	---	4.06	4.38	4.80	---	9.06	4.43	3.95	3.67	3.72	3.60	4.19
30	---	5.23	4.35	4.75	---	9.71	4.38	3.92	3.68	3.68	3.60	4.16
31	---	---	4.35	4.70	---	10.69	---	3.91	---	3.67	3.60	---
MEAN	---	---	4.58	4.67	6.08	6.24	6.26	4.14	3.71	3.85	3.62	4.70
MAX	---	---	5.46	5.04	7.01	10.69	10.41	4.34	3.91	4.18	3.70	6.59
MIN	---	---	4.21	4.29	4.50	4.84	4.38	3.91	3.64	3.66	3.60	3.64

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234324 HOWELL CREEK NEAR SLAVIA, FL

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

DRAINAGE AREA.--29.2 mi².

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

GAGE.--Water-stage recorder and culvert control. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Oct. 1, 1980, at site 15 ft downstream at same datum.

REMARKS.--Records fair. Some regulation by retention ponds in urban areas upstream from station.

AVERAGE DISCHARGE.--13 years (water years 1973-79, 1982-87), 32.0 ft³/s, 14.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 412 ft³/s, June 28, 1974, gage height, 36.71 ft; minimum, 0.91 ft³/s, May 18, 19, 1985; gage height, 32.24 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 167 ft³/s, Mar. 30, gage height, 34.60 ft; minimum, 2.6 ft³/s, June 18, gage height, 32.30 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	16	14	15	12	24	149	25	11	37	44	15
2	18	15	16	14	12	27	142	23	9.8	44	43	15
3	16	15	16	13	12	27	135	21	8.7	51	41	18
4	15	15	16	13	12	26	128	20	7.7	60	39	39
5	14	14	15	16	12	25	121	19	6.9	54	35	47
6	15	14	15	16	13	23	114	17	8.0	54	33	54
7	15	14	14	16	14	30	109	13	7.5	53	31	58
8	13	13	14	15	30	34	103	13	6.7	52	29	60
9	14	13	13	14	42	33	96	13	6.2	50	27	61
10	52	12	13	13	37	31	91	14	5.6	49	25	61
11	48	12	13	14	33	29	85	16	5.1	47	39	60
12	47	11	13	14	30	27	80	16	4.8	46	59	68
13	45	11	12	14	27	23	75	17	4.8	43	60	77
14	43	11	11	14	25	21	70	20	4.8	42	60	74
15	41	10	11	14	23	21	68	24	4.0	41	60	70
16	38	9.7	10	14	24	19	66	23	3.7	41	52	66
17	34	9.6	10	14	24	18	63	23	3.3	40	46	63
18	31	9.5	9.7	14	23	17	59	22	5.2	39	43	61
19	27	9.5	9.1	14	23	18	55	23	5.3	42	40	57
20	24	9.3	8.9	13	22	17	53	27	4.8	45	39	54
21	22	8.8	8.5	14	22	17	49	27	5.0	51	37	51
22	20	8.2	8.2	15	23	16	46	25	5.4	55	33	48
23	18	7.9	8.8	14	23	15	44	24	5.7	52	31	48
24	17	7.8	12	14	22	14	42	22	6.2	50	30	46
25	16	7.7	12	14	23	14	40	21	7.1	52	27	42
26	15	7.4	12	15	22	17	37	19	8.2	60	25	38
27	15	7.1	11	14	22	28	35	18	8.0	55	23	34
28	15	7.1	11	14	21	42	33	16	8.6	56	21	31
29	15	7.8	11	14	---	82	30	15	14	54	20	28
30	15	11	11	13	---	117	28	13	31	51	18	27
31	15	---	12	13	---	152	---	12	---	47	18	---
TOTAL	752	324.4	371.2	438	628	1004	2246	601	223.1	1513	1128	1471
MEAN	24.3	10.8	12.0	14.1	22.4	32.4	74.9	19.4	7.44	48.8	36.4	49.0
MAX	52	16	16	16	42	152	149	27	31	60	60	77
MIN	13	7.1	8.2	13	12	14	28	12	3.3	37	18	15
CFSM	.83	.37	.41	.48	.77	1.11	2.56	.66	.25	1.67	1.25	1.68
IN.	.96	.41	.47	.56	.80	1.28	2.86	.77	.28	1.93	1.44	1.87

CAL YR 1986 TOTAL 9101.6 MEAN 24.9 MAX 123 MIN 1.6 CFSM .85 IN. 11.60
WTR YR 1987 TOTAL 10699.7 MEAN 29.3 MAX 152 MIN 3.3 CFSM 1.00 IN. 13.63

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234384 SOLDIER CREEK NEAR LONGWOOD, FL

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

DRAINAGE AREA.--21.2 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 National Geodetic Vertical Datum of 1929 (levels by Seminole County Engineer). Nov. 5, 1975 to July 26, 1977 and Oct. 1, 1980 to Sept. 30, 1986, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: May 26 to June 12. Records good except for estimated daily discharges, which are fair. Since about 1980, some regulation by retention ponds in headwaters.

AVERAGE DISCHARGE.--6 years (water years 1973-75, 1978-79, 1987), 11.0 ft³/s, 7.11 in/yr, 7,970 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 429 ft³/s, July 19, 1978; maximum gage height, 14.41 ft, Sept. 13, 1973; minimum discharge observed, 0.15 ft³/s, June 25, 1981, discharge measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 30	2100	*282	*11.84	No other peak greater than base discharge.			
Minimum discharge, 0.47 ft ³ /s, June 16,17,18,20; gage height, 6.82 ft.							

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 to SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	4.0	13	13	6.5	19	47	2.4	1.2	7.2	5.4	.57
2	6.7	3.7	11	7.6	6.2	17	37	2.1	1.1	6.9	4.7	1.1
3	6.3	3.6	8.3	6.2	6.1	13	33	1.9	1.1	11	4.1	2.1
4	5.9	3.5	6.8	12	5.7	10	31	1.8	1.1	18	3.4	15
5	5.5	4.1	6.1	12	5.8	9.2	28	1.8	1.0	11	2.7	20
6	5.9	5.3	5.6	9.6	9.2	8.3	25	2.4	1.4	9.1	2.0	15
7	7.1	4.3	5.2	8.4	14	34	24	2.0	1.3	8.2	1.5	8.2
8	6.4	2.7	5.0	6.2	26	23	22	1.8	1.2	7.2	1.2	6.3
9	7.8	2.6	4.5	6.1	15	16	20	1.7	1.0	6.2	.95	6.3
10	28	2.5	4.1	5.8	12	13	19	3.2	.90	5.4	1.8	5.3
11	19	2.7	3.9	5.9	11	11	17	3.2	.80	4.4	9.6	4.6
12	16	2.5	3.8	5.1	10	10	16	3.5	.76	3.6	11	6.2
13	14	2.2	3.4	4.6	9.6	9.0	14	3.1	.73	16	7.7	8.2
14	12	2.0	3.1	4.4	8.0	8.0	13	3.0	.70	16	6.5	6.9
15	12	2.0	3.0	4.1	7.5	7.0	13	5.4	.65	12	5.5	6.0
16	11	1.9	2.9	4.8	20	6.4	12	3.3	.59	12	4.4	5.2
17	9.0	1.8	2.8	3.9	18	5.9	11	2.3	.57	12	3.1	5.1
18	8.8	1.7	2.7	4.5	16	5.4	9.9	1.9	.68	10	2.2	12
19	6.6	3.5	2.5	4.4	13	6.4	9.4	2.2	.62	8.4	1.6	7.7
20	5.6	3.4	2.5	4.1	11	5.2	8.1	2.7	2.0	17	2.8	7.3
21	4.8	2.7	2.4	13	15	4.6	7.6	2.2	1.4	21	5.9	6.8
22	4.9	2.2	2.2	19	17	4.0	6.7	2.0	3.3	14	3.4	6.0
23	4.8	2.0	3.7	13	19	3.8	6.1	1.9	7.4	11	2.3	5.5
24	4.2	2.0	5.8	9.8	13	3.4	5.7	1.9	3.2	9.3	1.5	4.9
25	3.9	1.9	4.0	11	12	3.2	4.9	1.7	2.3	7.9	1.2	4.2
26	3.4	1.8	3.5	12	11	13	4.3	1.7	2.0	7.1	.95	3.7
27	4.3	1.7	3.3	9.6	10	34	3.9	1.5	1.7	12	.86	3.3
28	3.7	1.8	3.0	8.4	9.1	33	3.6	1.4	3.2	15	.85	2.9
29	3.8	5.3	3.0	7.6	---	80	3.2	1.3	5.1	9.5	.82	2.3
30	4.4	13	3.5	7.1	---	140	2.7	1.3	8.1	7.3	.65	3.2
31	4.1	---	9.0	7.1	---	100	---	1.2	---	6.0	.61	---
TOTAL	247.1	94.4	143.6	250.3	336.7	655.8	458.1	69.8	57.10	321.7	101.19	191.87
MEAN	7.97	3.15	4.63	8.07	12.0	21.2	15.3	2.25	1.90	10.4	3.26	6.40
MAX	28	13	13	19	26	140	47	5.4	8.1	21	11	20
MIN	3.4	1.7	2.2	3.9	5.7	3.2	2.7	1.2	.57	3.6	.61	.57
CFSM	.38	.15	.22	.38	.57	1.00	.72	.11	.09	.49	.15	.30
IN.	.43	.17	.25	.44	.59	1.15	.80	.12	.10	.56	.18	.34

WTR YR 1987 TOTAL 2927.66 MEAN 8.02 MAX 140 MIN .57 CFSM .38 IN. 5.14

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234400 GEE CREEK NEAR LONGWOOD, FL

LOCATION.--Lat 28°42'14", Long 81°17'27", in SE¼ sec.38, T.20 S., R.30 E., Seminole County, Hydrologic Unit 03080101, on left bank at downstream side of box culvert on State Highway 419, 700 ft upstream from Seaboard Coast Line Railroad bridge, 1.0 mi upstream from mouth, and 3.5 mi east of Longwood.

DRAINAGE AREA.--12.8 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 National Geodetic Vertical Datum of 1929 (levels by Seminole County Engineer). Apr. 11, 1978 to Sept. 30, 1979 at site 400 ft upstream at same datum, Oct. 1, 1980 to Aug. 11, 1985, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 7 to June 11. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--9 years (water years 1973-79, 1987), 16.0 ft³/s, 16.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 310 ft³/s, July 19, 1978; maximum gage height, 14.69 ft, June 30, 1974; minimum discharge, 1.0 ft³/s, June 8,9, 1986; minimum gage height, 5.56 ft, Dec. 5, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 27	2000	82	10.94	Aug. 11	1800	92	11.18
Mar. 30	2000	*193	*13.13				

Minimum discharge, 0.81 ft³/s, June 15,16,17,18, gage height 7.23 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.0	22	16	6.6	16	104	4.1	2.1	4.6	6.1	3.3
2	5.8	4.9	19	13	6.8	15	72	3.7	2.0	5.1	6.3	3.2
3	5.5	4.9	15	10	8.3	13	54	3.4	1.9	9.3	7.2	6.4
4	5.3	4.8	13	13	6.8	12	44	3.2	1.8	21	7.2	16
5	5.0	4.8	12	12	6.7	10	35	3.0	1.7	20	6.2	24
6	7.8	4.8	10	11	7.8	10	30	3.0	1.7	18	5.6	28
7	8.0	4.7	9.2	10	14	31	26	4.1	2.3	15	5.1	21
8	7.6	4.6	8.3	9.0	28	29	23	3.4	2.1	12	4.5	15
9	9.4	4.6	7.6	8.2	21	23	20	3.1	1.8	10	4.1	14
10	45	4.6	7.2	7.8	17	18	18	2.9	1.5	8.9	3.8	10
11	35	4.5	8.1	7.8	14	14	16	5.3	1.3	7.8	25	9.2
12	26	4.5	7.4	6.7	12	12	15	5.4	1.1	7.0	22	12
13	20	4.5	6.4	6.1	11	11	14	5.8	1.1	16	17	15
14	20	4.4	5.6	6.2	11	10	13	5.1	1.1	12	14	13
15	15	4.4	5.3	7.4	10	10	13	4.9	1.0	19	14	11
16	12	4.4	5.1	6.8	19	10	12	8.8	.99	15	11	9.3
17	10	4.4	4.9	6.6	16	9.8	11	5.8	.94	12	8.7	9.2
18	8.4	4.3	4.7	6.4	16	9.8	9.7	3.8	1.4	12	7.3	18
19	7.4	4.6	4.6	6.2	15	9.6	9.3	3.2	1.6	13	6.5	13
20	6.7	4.3	4.4	6.3	12	9.0	9.0	3.8	4.1	13	7.2	13
21	6.1	4.3	4.2	9.6	14	8.6	8.5	4.4	3.5	16	7.4	11
22	5.6	4.2	4.1	15	16	8.0	8.0	3.7	3.2	14	5.9	9.5
23	5.2	4.2	7.1	14	14	7.6	7.6	3.4	3.3	11	5.6	8.6
24	5.0	4.2	9.0	12	12	7.5	7.0	3.2	2.7	9.4	5.1	8.0
25	4.9	4.2	6.8	11	11	7.4	6.4	3.1	2.8	8.0	4.7	7.2
26	4.9	4.1	6.1	11	10	17	6.1	3.1	2.3	7.3	4.5	6.5
27	5.8	4.1	5.4	9.5	10	36	5.6	2.8	2.2	8.8	4.3	5.9
28	5.3	4.0	5.2	9.0	9.5	52	5.2	2.6	3.0	8.6	4.2	5.6
29	5.0	19	5.1	8.4	---	93	4.8	2.4	3.8	7.2	4.0	5.3
30	5.1	26	5.2	7.8	---	131	4.4	2.3	4.9	6.8	3.8	7.0
31	5.1	---	11	7.3	---	144	---	2.2	---	6.3	3.6	---
TOTAL	324.1	170.3	249.0	291.1	355.5	794.3	611.6	119.0	65.23	354.1	241.9	338.2
MEAN	10.5	5.68	8.03	9.39	12.7	25.6	20.4	3.84	2.17	11.4	7.80	11.3
MAX	45	26	22	16	28	144	104	8.8	4.9	21	25	28
MIN	4.9	4.0	4.1	6.1	6.6	7.4	4.4	2.2	.94	4.6	3.6	3.2
AC-FT	643	338	494	577	705	1580	1210	236	129	702	480	671
IN.	.94	.49	.72	.85	1.03	2.31	1.78	.35	.19	1.03	.70	.98

CAL YR 1986 TOTAL 4841.0 MEAN 13.3 MAX 131 MIN 1.2 AC-FT 9600 IN. 14.07
WTR YR 1987 TOTAL 3914.33 MEAN 10.7 MAX 144 MIN .94 AC-FT 7760 IN. 11.38

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234990 LITTLE WEKIVA RIVER NEAR ALTAMONTE SPRINGS, FL

LOCATION.--Lat 28°41'13", long 81°23'50", in SE¼ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, on left bank 50 ft downstream from bridge on State Highway 434, 200 ft upstream from Sanlando Springs outlet, 2.9 mi northwest of Post Office in Altamonte Springs, and 5.5 mi upstream from mouth.

DRAINAGE AREA.--90.7 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 National Geodetic Vertical Datum of 1929 (levels by Seminole County Engineer). Feb. 11, 1981 to Nov. 28, 1985, at site 75 ft downstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--12 years (water years 1973-79, 1983-87), 35.1 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 592 ft³/s, July 22, 1984, gage height, 27.34 ft; maximum gage height 28.15 ft, Mar. 31, Apr. 1, 1987; minimum discharge, 1.9 ft³/s, May 7, 1973; minimum gage height, 23.14 ft, Jan. 1, 1985, site then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 406 ft³/s, Mar. 31, Apr. 1, gage height, 28.15 ft; minimum, 3.8 ft³/s, June 21, gage height 23.88 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	30	25	21	36	398	17	13	21	52	23
2	21	20	26	23	21	35	353	16	13	20	45	22
3	20	20	23	21	20	36	295	15	13	19	40	36
4	19	20	22	26	20	30	239	15	12	21	35	104
5	18	20	21	29	20	31	188	15	12	23	31	92
6	20	19	20	34	23	30	143	15	17	25	31	92
7	22	19	19	31	34	51	110	15	13	27	27	79
8	22	18	19	28	49	58	91	14	13	27	25	66
9	31	17	18	26	43	66	80	16	12	25	24	57
10	62	17	18	24	40	65	70	21	12	22	27	51
11	65	17	18	23	37	59	63	23	12	40	37	48
12	68	17	18	22	35	53	58	27	12	33	31	52
13	61	16	17	21	31	46	50	25	13	53	29	51
14	53	16	16	20	28	40	50	26	12	38	28	48
15	48	16	16	20	27	36	47	32	11	34	27	50
16	40	16	17	19	44	33	50	26	11	35	24	43
17	33	16	16	18	33	31	51	25	11	35	22	41
18	29	16	17	17	32	29	47	33	11	33	21	55
19	26	17	16	18	32	29	42	30	11	33	19	43
20	24	16	15	18	29	28	37	30	10	55	24	41
21	22	16	15	30	33	27	33	28	15	60	22	37
22	21	16	14	35	32	26	29	25	15	64	25	33
23	20	15	17	28	31	25	27	23	15	60	26	31
24	19	15	20	27	29	25	25	21	19	50	29	30
25	18	15	16	28	30	25	23	19	21	43	29	28
26	18	16	16	28	28	41	21	18	24	56	27	26
27	22	16	16	26	26	60	21	17	20	74	25	25
28	21	15	16	27	25	96	19	17	21	78	22	24
29	21	27	16	27	---	202	18	15	22	71	20	23
30	21	24	16	25	---	304	17	15	27	65	18	26
31	23	---	25	23	---	391	---	13	---	59	20	---
TOTAL	930	529	569	767	853	2044	2695	647	443	1299	862	1377
MEAN	30.0	17.6	18.4	24.7	30.5	65.9	89.8	20.9	14.8	41.9	27.8	45.9
MAX	68	27	30	35	49	391	398	33	27	78	52	104
MIN	18	15	14	17	20	25	17	13	10	19	18	22

CAL YR 1986 TOTAL 14924 MEAN 40.9 MAX 269 MIN 14
WTR YR 1987 TOTAL 13015 MEAN 35.7 MAX 398 MIN 10

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235000 WEKIVA RIVER NEAR SANFORD, FL

LOCATION.--Lat 28°48'54", long 81°25'10", in SE¼ sec.21, T.19 S., R.29 E., Seminole County, Hydrologic Unit 03080101, near right bank at downstream side of bridge on State Highway 46, 4.5 mi downstream from Little Wekiva River, 6.7 mi upstream from mouth, and 8.9 mi west of Sanford.

DRAINAGE AREA.--189 mi².

PERIOD OF RECORD.--October 1931 to September 1935 (discharge measurements only), October 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4.96 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 19, 1960, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 25 to Feb. 20. Records fair except for estimated daily discharges, which are poor. Flow includes large ground-water inflow.

AVERAGE DISCHARGE.--52 years, 287 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,060 ft³/s, Sept. 17, 1945; maximum gage height, 6.09 ft, Sept. 12, 1960; minimum discharge observed, 105 ft³/s, June 5-13, 1939; minimum gage height, 1.75 ft, Mar. 13-16, 18, 19, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft³/s, Mar. 31, Apr. 1, gage height, 4.02 ft; minimum daily discharge, 217 ft³/s, June 8, 9; minimum gage height recorded, 1.88 ft, Dec. 20-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	248	267	300	430	332	1220	229	222	251	286	256
2	243	247	271	320	420	378	1160	227	221	248	282	257
3	241	243	259	330	410	369	1070	225	220	247	276	260
4	241	241	247	320	400	353	956	223	218	255	271	301
5	241	240	242	320	385	336	838	222	218	251	266	355
6	239	240	241	310	405	325	719	227	221	246	264	353
7	241	240	239	310	440	360	612	227	224	249	267	341
8	245	238	237	300	465	442	522	222	217	251	266	329
9	246	237	235	300	460	453	446	222	217	252	265	317
10	259	237	234	300	445	435	391	225	218	252	263	304
11	271	238	233	290	425	408	351	235	218	252	268	298
12	273	238	231	290	408	380	325	233	224	265	277	308
13	274	237	229	280	400	359	304	236	225	272	272	332
14	272	234	229	280	390	340	291	254	224	281	269	324
15	265	233	230	280	380	322	292	245	221	287	271	324
16	260	235	230	280	380	310	287	240	221	282	270	315
17	254	234	229	280	370	303	280	234	221	279	268	302
18	250	232	227	280	360	297	274	234	226	275	265	303
19	247	238	230	280	360	301	271	243	237	270	264	308
20	245	244	229	290	350	300	265	246	229	273	270	304
21	244	238	230	340	340	293	259	240	229	290	288	297
22	242	233	230	420	349	290	255	235	235	294	279	288
23	241	233	235	450	357	288	249	231	244	290	274	278
24	240	232	246	470	350	284	247	229	240	285	275	275
25	240	232	240	470	341	281	243	229	240	279	273	272
26	236	232	240	480	336	298	238	228	239	278	269	269
27	239	231	230	480	328	377	236	227	237	281	266	270
28	240	231	230	470	322	481	236	226	236	292	265	268
29	238	238	240	470	---	702	233	226	241	294	265	266
30	238	261	250	460	---	948	231	223	239	292	262	264
31	239	---	280	450	---	1220	---	225	---	288	260	---
TOTAL	7689	7135	7420	10900	10806	12565	13301	7168	6822	8401	8376	8938
MEAN	248	238	239	352	386	405	443	231	227	271	270	298
MAX	274	261	280	480	465	1220	1220	254	244	294	288	355
MIN	236	231	227	280	322	281	231	222	217	246	260	256

CAL YR 1986 TOTAL 101975 MEAN 279 MAX 942 MIN 201
WTR YR 1987 TOTAL 109521 MEAN 300 MAX 1220 MIN 217

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235192 TRACY CANAL NEAR PAISLEY, FL

LOCATION.--Lat 28°56'56", long 81°30'42", in SE¼ sec.4, T.18 S., R.28 E., Lake County, Hydrologic Unit 03080101, on left bank at downstream side of culverts on county road, 0.5 mi upstream from Lake Norris, 2.1 mi downstream from Lake Tracy, and 3.1 mi southeast of Paisley.

DRAINAGE AREA.--29.1 mi².

PERIOD OF RECORD.--August 1982 to current year (discharge measurements only).

REMARKS.--Discharge affected by backwater from Lake Norris.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 52 ft³/s, Oct. 1, 1985; no flow observed in some years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT 24...	1310	0.0	JUN 09...	1530	2.5
DEC 18...	1440	0.0	JUL 30...	1535	0.0
FEB 17...	0910	16	SEP 29...	1020	2.4
APR 14...	1250	35			

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235200 BLACK WATER CREEK NEAR CASSIA, FL

LOCATION.--Lat 28°52'28", long 81°29'23", in SW¼ sec.35, T.18 S., R.28 E., Lake County, Hydrologic Unit 03080101, at bridge on State Highway 44, 1.5 mi southwest of Cassia, and 13 mi upstream from mouth.

DRAINAGE AREA.--126 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 18.55 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Sept. 20, 1962 to Aug. 7, 1967, and Oct. 1, 1969 to Mar. 23, 1981, crest-stage gage; Aug. 7, 1967 to Sept. 30, 1969 and Mar. 23, 1981 to June 10, 1983, water-stage recorder and June 10, 1983 to June 10, 1985, nonrecording gage at site 1,000 ft upstream at same datum.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 749 ft³/s, Sept. 1, 1968, gage height, 9.93 ft; minimum recorded, 3.2 ft³/s, June 11, 12, 1985, gage height, 4.53 ft, but may have been less during period of no gage-height record Apr. 10 to June 9, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 460 ft³/s, Apr. 1, 2, gage height, 8.82 ft; minimum, 8.1 ft³/s, Aug. 31, Sept. 1, gage height, 4.76 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	25	25	31	42	114	451	58	33	23	13	8.5
2	40	23	27	29	42	128	459	55	32	22	13	9.9
3	38	22	24	28	42	129	443	52	31	21	12	11
4	36	20	22	28	42	126	417	49	30	22	12	18
5	35	19	19	29	44	121	386	47	32	21	12	20
6	34	19	17	29	70	118	354	47	42	25	11	20
7	37	18	16	28	78	133	327	45	37	23	11	20
8	37	18	16	28	100	164	302	43	32	21	12	18
9	36	17	16	28	108	171	280	41	30	19	11	16
10	36	17	15	28	112	173	261	41	29	18	9.9	15
11	35	16	15	28	115	180	243	40	28	17	9.9	15
12	33	16	16	28	118	183	228	40	27	16	12	16
13	31	16	16	27	122	182	211	43	26	16	13	22
14	30	16	16	27	122	175	197	47	25	16	13	22
15	29	15	16	27	120	167	188	60	24	16	13	20
16	28	14	16	27	130	159	183	58	23	16	14	18
17	27	14	16	27	138	150	167	59	22	16	13	17
18	26	14	16	27	133	141	152	58	21	16	12	19
19	24	14	15	27	127	137	139	57	24	16	12	20
20	23	15	16	27	120	130	129	56	27	15	11	20
21	22	15	16	32	122	123	119	54	24	15	12	23
22	20	15	16	40	125	116	110	53	21	14	12	22
23	19	15	16	42	126	110	103	51	20	14	13	21
24	19	15	20	41	121	105	96	50	19	14	12	21
25	18	14	21	42	118	99	90	47	18	13	10	21
26	18	14	21	45	116	100	84	45	18	13	9.4	20
27	18	13	20	44	113	116	79	42	19	13	8.9	20
28	18	13	19	43	109	159	74	40	19	12	8.8	19
29	18	14	18	43	---	215	69	38	19	12	9.2	19
30	20	21	18	42	---	311	63	36	20	12	9.2	21
31	21	---	21	42	---	418	---	35	---	12	8.6	---
TOTAL	868	497	561	1014	2875	4853	6404	1487	772	519	352.9	552.4
MEAN	28.0	16.6	18.1	32.7	103	157	213	48.0	25.7	16.7	11.4	18.4
MAX	42	25	27	45	138	418	459	60	42	25	14	23
MIN	18	13	15	27	42	99	63	35	18	12	8.6	8.5
CFSM	.22	.13	.14	.26	.81	1.24	1.69	.38	.20	.13	.09	.15
IN.	.26	.15	.17	.30	.85	1.43	1.89	.44	.23	.15	.10	.16

CAL YR 1986 TOTAL 17066 MEAN 46.8 MAX 288 MIN 11 CFSM .37 IN. 5.04
WTR YR 1987 TOTAL 20755.3 MEAN 56.9 MAX 459 MIN 8.5 CFSM .45 IN. 6.13

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02235500 BLUE SPRINGS NEAR ORANGE CITY, FL

LOCATION.--Lat 28°56'38", long 81°20'24", in NE¼ sec.8, T.18 S., R.30 E., Volusia County, Hydrologic Unit 03080101, on left bank of Blue Springs Run, 800 ft upstream from St. Johns River, 0.2 mi downstream from head of springs, and 2.5 mi west of Orange City.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1932 to current year (discharge measurements only).

REMARKS.--Discharge affected by backwater from St. Johns River.

AVERAGE DISCHARGE.--439 measurements, 160 ft³/s, 103 mgd.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 214 ft³/s, Nov. 1, 1960; minimum measured, 63 ft³/s, Nov. 6, 1935, but may be in error due to abnormal amount of backwater from St. Johns River causing adverse measuring conditions.

WATER-QUALITY RECORDS

PERIOD OF RECORD:--Water years 1960, 1964 to current year.

DISCHARGE MEASUREMENTS AND WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT					JUN				
29...	1510	166	1530	370	10...	1630	153	1390	340
DEC					AUG				
22...	1140	152	1650	410	11...	1215	136	1500	300
FEB					SEP				
18...	1140	146	1910	490	29...	1620	152	1600	420
APR									
15...	1525	125	1960	500					

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DE LAND, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°00'29", long 81°22'58", in land grant 38, T.17 S., R.29 E., Lake County, Hydrologic Unit 03080101, near left bank on downstream side of Francis P. Whitehair Bridge on State Highway 44, 5 mi west of De Land, and 142 mi upstream from mouth.

DRAINAGE AREA.--3,066 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only prior to February 1934, published in WSP 1304.

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

GAGE.--Water-stage recorder and electromagnetic current meter recorder. Datum of gage is 0.09 ft below National Geodetic Vertical Datum of 1929 (corrected). Prior to May 28, 1936, nonrecording gage at site of former Crows Bluff Bridge about 1,000 ft downstream and May 28, 1936 to July 21, 1970, water-stage recorder at site 0.4 mi downstream at datum 1.11 ft lower. Oct. 1, 1959 to Sept. 30, 1975, and Oct. 1, 1984 to Mar. 21, 1986, water-stage recorder for Lake Monroe near Sanford (station 02234499) used as auxiliary gage for this station.

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

AVERAGE DISCHARGE.--54 years, 3,095 ft³/s, 13.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,100 ft³/s, Oct. 15, 1953; maximum gage height, 6.06 ft, present datum, Oct. 11, 1953; maximum daily reverse flow, 3,030 ft³/s, Aug. 23, 1957; minimum gage height since at least May 28, 1936, -0.59 ft, present datum, Apr. 2, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,870 ft³/s, Apr. 8; maximum gage height, 2.59 ft, Apr. 3, 4; minimum daily discharge, 135 ft³/s, Feb. 7; minimum gage height, 0.08 ft, Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	1710	1390	1910	2660	2690	4260	3900	2140	1480	1730	994
2	978	1310	1460	1740	2860	2530	5310	3990	2440	1680	1830	823
3	847	1640	936	2050	2610	2730	5130	4030	2500	1780	1800	882
4	823	1700	1140	2510	2360	2650	5300	3970	2540	1900	1680	1280
5	724	1920	1110	828	1690	2570	5460	3750	2300	1840	1790	1610
6	723	1930	995	652	231	2260	5990	2940	1630	1840	1740	1530
7	712	2110	1170	1690	135	2520	7260	2850	1090	1820	1740	1410
8	765	2270	1850	2290	262	2800	7870	2870	978	1600	1510	1420
9	710	2240	2280	2710	687	3020	7330	2840	1390	1580	1060	1700
10	729	2240	2590	3090	2080	3230	7340	2640	1880	1380	738	1860
11	758	2250	2830	2810	2760	3020	6620	2780	1950	1290	775	2080
12	763	1990	2880	3110	3070	2740	6730	2870	1800	1270	1020	2220
13	814	1530	1950	3590	3270	2400	6200	2780	1800	991	456	2530
14	748	738	1710	3660	3210	2780	6780	2780	1760	949	328	2540
15	806	769	1520	3580	3110	2930	7290	2810	1830	1230	441	2410
16	806	1620	1420	3370	3140	2980	6900	2730	1830	1270	1220	2420
17	814	2160	1690	3090	2650	2950	6550	2840	1870	1060	1530	2310
18	795	2450	1970	2770	2320	2740	5980	2760	1670	862	1720	2410
19	684	2480	1920	2570	2060	2780	5180	2680	1720	549	1700	2480
20	596	2350	1880	2590	1930	2380	3020	2830	1680	773	1630	2550
21	1060	1840	1370	2710	1890	2420	4700	2930	1790	1180	1560	2390
22	1470	1900	696	2430	2060	2440	4780	2500	1890	1700	1350	2160
23	2410	2000	1190	2150	1730	2490	4660	2160	1530	1820	1050	1920
24	2760	2120	1390	2970	2250	2640	4760	2070	1330	1580	1320	1730
25	3130	2320	1770	3220	2500	2710	4590	2150	1380	1270	1480	1840
26	3230	2490	1990	2860	2410	2590	4230	2110	1440	1390	1130	1950
27	3030	2440	2090	2590	2390	2630	3960	2110	1170	1380	1120	2020
28	2770	2150	1750	2790	2340	2200	3990	1650	1080	1770	1300	2130
29	2700	1860	1610	2740	---	2550	3710	1120	947	1900	1420	2040
30	2340	1830	1590	2660	---	3530	3680	1110	856	1870	1520	2150
31	2170	---	1900	2460	---	3760	---	1680	---	1750	1460	---
TOTAL	42755	58357	52037	80190	60665	84660	165560	83230	50211	44754	41148	57789
MEAN	1379	1945	1679	2587	2167	2731	5519	2685	1674	1444	1327	1926
MAX	3230	2490	2880	3660	3270	3760	7870	4030	2540	1900	1830	2550
MIN	596	738	696	652	135	2200	3020	1110	856	549	328	823
CFSM	.45	.63	.55	.84	.71	.89	1.80	.88	.55	.47	.43	.63
IN.	.52	.71	.63	.97	.74	1.03	2.01	1.01	.61	.54	.50	.70

CAL YR 1986 TOTAL 764470 MEAN 2094 MAX 7070 MIN -466 CFSM .68 IN. 9.28
WTR YR 1987 TOTAL 821356 MEAN 2250 MAX 7870 MIN 135 CFSM .73 IN. 9.97

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DE LAND, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-49, 1954, 1962, 1966 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1985 to current year.

WATER TEMPERATURE: November 1985 to current year.

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

REMARKS.--Interruption of data due to recorder and sensor malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 1,270 microsiemens, July 19, 1986; minimum daily mean, 407 microsiemens, June 7, 1986.

WATER TEMPERATURE: Maximum daily mean, 31.5°C, July 17, 1986; minimum daily mean 11.5°C, Jan. 29, 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 1,170 microsiemens, June 9; minimum daily mean, 801 microsiemens, Apr. 7.

WATER TEMPERATURE: Minimum daily mean, 14.5°C, Jan. 28,29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	1000	997	1120	1060	---	885	1140	---	---	---
2	---	---	997	996	1130	1040	---	858	1040	---	---	---
3	---	---	998	1010	1130	1060	---	850	1100	---	---	---
4	---	---	1000	984	1140	1090	---	858	1140	---	---	---
5	---	---	1030	983	1140	1090	---	854	1130	---	---	---
6	---	---	1060	985	1130	1050	850	850	1130	---	---	---
7	---	---	1040	985	1100	1050	801	921	1130	---	---	---
8	---	---	1040	1010	1060	1050	802	928	1140	---	---	---
9	---	990	989	995	1040	1050	817	924	1170	---	---	---
10	---	989	994	1010	1050	1040	826	939	---	---	---	---
11	---	990	1000	1010	1140	1050	841	950	---	---	---	---
12	---	989	999	1020	1070	1030	856	951	---	---	---	---
13	---	996	986	1010	1060	1020	849	952	---	---	---	---
14	---	992	1000	1010	1080	1000	871	942	---	---	---	---
15	---	991	1010	1030	1110	985	871	940	---	---	---	---
16	---	999	1020	1050	1120	989	833	909	---	---	---	---
17	---	985	1020	1070	1100	995	816	930	---	---	---	---
18	---	974	1020	1060	1110	1010	828	945	---	---	---	---
19	---	979	970	1060	1110	1010	864	1010	---	---	---	---
20	---	970	999	1050	1100	1020	864	1020	---	---	---	---
21	---	970	1000	1050	1090	1030	861	1030	---	---	---	---
22	---	965	1010	1060	---	1040	804	1050	---	---	---	---
23	987	951	1020	1070	---	1040	820	1040	---	---	---	---
24	---	985	1050	1070	---	1050	805	1050	---	---	---	---
25	---	1010	1060	1050	---	1060	805	1050	---	---	---	---
26	---	1010	1000	1070	---	1060	805	1060	---	---	---	---
27	---	997	982	1110	---	1050	810	1040	---	---	---	---
28	---	1010	992	1110	---	1050	815	1030	---	---	---	---
29	---	991	1000	1110	---	---	837	1040	---	---	---	---
30	---	1010	1010	1130	---	---	865	1070	---	---	---	---
31	---	---	1020	1130	---	---	---	1120	---	---	---	---
MEAN	---	---	1010	1040	---	---	---	968	---	---	---	---
MAX	---	---	1060	1130	---	---	---	1120	---	---	---	---
MIN	---	---	970	983	---	---	---	850	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DE LAND, FL--Continued
(National stream-quality accounting network station)

TEMPERATURE, (DEG C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.0	24.3	24.1	17.5	16.0	18.4	---	23.8	26.2	---	---	---
2	30.0	24.5	24.0	16.8	16.4	18.6	---	23.7	26.5	---	---	---
3	30.1	24.5	23.6	16.3	16.9	19.1	---	24.4	27.7	---	---	---
4	30.2	24.6	22.6	15.9	17.4	19.8	---	25.0	29.7	---	---	---
5	30.1	24.6	21.2	15.4	17.5	20.6	---	25.8	30.2	---	---	---
6	30.1	24.9	20.6	15.3	17.7	20.4	---	26.0	30.0	---	---	---
7	29.9	25.1	20.4	15.4	17.9	20.1	16.7	26.0	29.6	---	---	---
8	29.3	25.4	20.3	16.1	17.5	19.9	16.4	26.3	29.5	---	---	---
9	29.3	25.7	20.5	16.3	17.2	19.5	15.4	25.8	28.1	---	---	---
10	28.9	26.1	21.0	16.6	16.5	17.1	15.9	25.8	---	---	---	---
11	28.7	26.0	21.6	16.9	16.8	19.1	17.5	25.5	---	---	---	---
12	28.8	25.9	22.0	16.3	16.3	19.1	19.5	25.6	---	---	---	---
13	29.1	26.0	21.6	15.4	16.6	19.5	20.4	25.7	---	---	---	---
14	28.9	25.4	20.9	14.8	16.5	19.6	20.8	25.9	---	---	---	---
15	28.7	24.8	21.0	15.2	16.6	19.5	20.5	26.0	---	---	---	---
16	28.0	24.0	21.0	16.2	17.4	14.9	20.5	26.5	---	---	---	---
17	26.9	24.1	20.9	17.5	18.0	18.6	21.3	26.4	---	---	---	---
18	25.9	24.2	21.0	18.4	18.5	18.2	21.4	25.9	---	---	---	---
19	25.2	24.3	20.9	19.2	18.4	17.9	21.4	26.4	---	---	---	---
20	24.9	24.6	21.0	19.3	18.0	18.1	21.0	26.2	---	---	---	---
21	24.2	24.6	20.8	19.1	17.6	18.7	20.8	25.7	---	---	---	---
22	23.4	23.9	20.5	18.5	---	19.4	21.1	25.6	---	---	---	---
23	23.2	23.6	20.4	17.4	---	20.1	22.5	26.1	---	---	---	---
24	23.1	23.5	20.7	16.4	---	20.9	24.3	26.3	---	---	---	---
25	23.4	23.6	20.7	15.7	---	21.1	24.9	26.2	---	---	---	---
26	23.8	23.8	20.1	15.6	---	21.2	24.4	26.8	---	---	---	---
27	23.9	24.2	19.5	15.4	---	21.1	22.5	26.4	---	---	---	---
28	23.5	24.3	18.9	14.7	---	21.1	21.5	26.1	---	---	---	---
29	23.2	24.1	18.3	14.6	---	---	22.8	25.9	---	---	---	---
30	23.3	24.0	17.9	14.9	---	---	23.4	25.9	---	---	---	---
31	23.7	---	17.6	15.6	---	---	---	25.8	---	---	---	---
MEAN	26.8	24.6	20.8	16.4	---	---	---	25.8	---	---	---	---
MAX	30.2	26.1	24.1	19.3	---	---	---	26.8	---	---	---	---
MIN	23.1	23.5	17.6	14.6	---	---	---	23.7	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DE LAND, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 24...	1100	1.34	2120	1130	7.3	23.0	1.4	4.7	--	--
JAN 06...	1011	1.94	652	972	--	15.0	1.7	8.6	--	--
FEB 09...	1130	1.79	687	1020	7.8	17.0	2.5	7.8	--	--
MAY 04...	1220	1.24	4710	880	7.8	24.5	4.0	5.6	95	230
JUN 30...	1442	0.38	856	1060	7.9	29.0	4.6	9.7	620	E2
SEP 01...	1225	0.34	832	1230	8.6	30.5	5.6	8.1	E45	E38

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 24...	49	18	120	5.7	--	63	230	0.20	9.7	556
JAN 06...	47	18	110	5.0	--	68	220	0.20	7.5	559
FEB 09...	46	19	130	4.8	55	76	250	0.10	3.7	582
MAY 04...	36	15	110	4.5	55	67	200	0.10	2.5	499
JUN 30...	49	19	130	5.0	91	73	250	0.10	4.9	597
SEP 01...	53	20	150	5.8	73	82	320	0.20	9.9	700

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 24...	0.010	0.420	0.090	0.130	1.3	0.200	0.110	0.070	9	70
JAN 06...	<0.010	0.160	0.020	0.040	1.7	0.130	0.020	0.040	7	83
FEB 09...	<0.010	<0.100	0.070	0.070	1.9	0.080	0.040	0.030	57	86
MAY 04...	0.010	0.110	0.090	0.060	1.6	0.100	0.100	0.020	14	86
JUN 30...	<0.010	0.100	0.070	0.060	1.5	0.120	0.060	0.020	56	96
SEP 01...	<0.010	<0.100	0.020	0.020	1.6	0.130	0.030	0.010	59	97

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236000 ST. JOHNS RIVER NEAR DE LAND, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 24...	1100	<10	<1	24	2	2	<1	<3	4	80	<5
MAY 04...	1220	60	<1	30	<0.5	<1	<1	<3	3	170	<5
JUN 30...	1442	20	<1	20	<0.5	<1	4	<3	2	14	<5
SEP 01...	1225	10	<1	20	<0.5	<1	<1	<3	1	8	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 24...	9	7	--	<10	<1	<1	<1.0	1100	<6	32
MAY 04...	5	4	<0.1	<10	<1	<1	<1.0	760	<6	14
JUN 30...	8	1	0.1	<10	1	<1	<1.0	970	<6	<3
SEP 01...	5	1	0.1	<10	<1	<1	<1.0	1100	<6	3

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236120 DEEP CREEK NEAR BARBERVILLE, FL

LOCATION.--Lat 29°09'47", long 81°23'27", in SW¼ sec.27, T.15 S., R.29 E., Volusia County, Hydrologic Unit 03080101, on downstream side of bridge on U.S. Highway 17, 2.1 mi upstream from mouth, and 2.5 mi southeast of Barberville.

DRAINAGE AREA.--23 mi², approximately.

PERIOD OF RECORD.--October 1964 to September 1971 (annual peak discharge and periodic discharge measurements only), October 1971 to September 1982 (annual peak discharge only), October 1982 to current year (annual peak discharge and periodic discharge measurements only).

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 2.49 ft below National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s Aug. 29, 1968, gage height 11.23 ft; maximum discharge measured, 837 ft³/s Oct. 19, 1968; no flow observed in 1967, 1968, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 286 ft³/s, Mar. 31, gage height 9.36 ft.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT			JUN		
23...	1550	0.08	08...	1420	e0.10
DEC			JUL		
19...	1220	e0.15	31...	1000	0.82
FEB			SEP		
13...	1440	47	25...	1550	10
APR					
15...	1010	39			

e Estimated

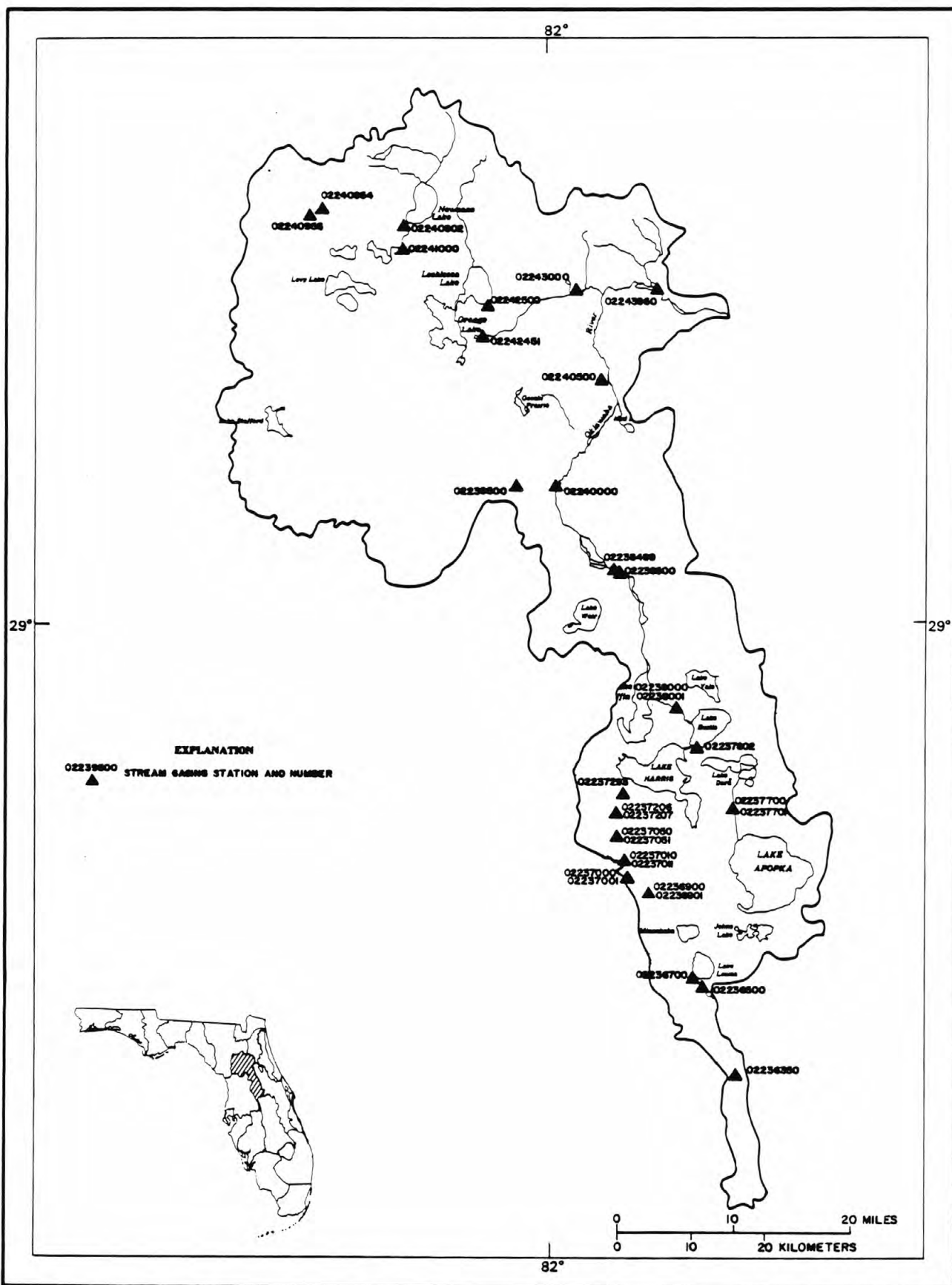


Figure 16.--Location of stream gaging stations in the Oklawaha River basin.

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02236350 GREEN SWAMP RUN NEAR EVA, FL

LOCATION.--Lat 28°18'39", long 81°41'08", in NW¼ sec.14, T.25 S., R.26 E., Polk County, Hydrologic Unit 03080102, on left bank, 20 ft downstream from culverts on Sand Mine Road, 1.1 mi west of U.S. Highway 27, 9.1 mi east of Eva, and 12.8 mi upstream from mouth.

DRAINAGE AREA.--43 mi², approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 116.16 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 12.2 ft³/s, 3.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 109 ft³/s, Mar. 31, Apr. 1, 1987; maximum gage height, 578 ft, Apr. 9, 1984; no flow for many days most years; creek dry at gage for many days during 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 109 ft³/s, Mar. 31, Apr. 1, gage height, 5.41 ft; no flow Oct. 1 to Mar. 28, Aug. 21, Aug. 24 to Sept. 3, Sept. 10, Sept. 21-30; minimum gage height, 2.43 ft, Sept. 29,30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	109	3.9	7.2	.06	.03	.00
2	.00	.00	.00	.00	.00	.00	107	3.1	5.8	.06	.05	.00
3	.00	.00	.00	.00	.00	.00	101	2.5	4.6	.16	.03	.00
4	.00	.00	.00	.00	.00	.00	96	1.9	3.6	.53	.01	.01
5	.00	.00	.00	.00	.00	.00	91	1.8	2.9	.44	.01	.01
6	.00	.00	.00	.00	.00	.00	85	3.7	2.7	.35	.01	.01
7	.00	.00	.00	.00	.00	.00	79	3.1	2.1	.27	.01	.01
8	.00	.00	.00	.00	.00	.00	73	2.3	1.6	.18	.01	.01
9	.00	.00	.00	.00	.00	.00	67	4.2	1.2	.11	.01	.01
10	.00	.00	.00	.00	.00	.00	60	11	.91	.05	.01	.00
11	.00	.00	.00	.00	.00	.00	55	13	.62	.03	.02	.01
12	.00	.00	.00	.00	.00	.00	50	14	.41	.02	.08	.01
13	.00	.00	.00	.00	.00	.00	45	13	.28	.01	.08	.01
14	.00	.00	.00	.00	.00	.00	41	15	.18	.01	.07	.01
15	.00	.00	.00	.00	.00	.00	40	27	.11	.01	.08	.01
16	.00	.00	.00	.00	.00	.00	38	33	.05	.01	.04	.01
17	.00	.00	.00	.00	.00	.00	34	35	.02	.01	.02	.01
18	.00	.00	.00	.00	.00	.00	31	34	.02	.01	.01	.01
19	.00	.00	.00	.00	.00	.00	28	33	.02	.01	.01	.01
20	.00	.00	.00	.00	.00	.00	25	31	.02	.01	.01	.01
21	.00	.00	.00	.00	.00	.00	23	29	.07	.01	.00	.00
22	.00	.00	.00	.00	.00	.00	20	27	.05	.01	.01	.00
23	.00	.00	.00	.00	.00	.00	18	25	.02	.01	.01	.00
24	.00	.00	.00	.00	.00	.00	16	22	.01	.01	.00	.00
25	.00	.00	.00	.00	.00	.00	13	20	.01	.01	.00	.00
26	.00	.00	.00	.00	.00	.00	11	18	.01	.01	.00	.00
27	.00	.00	.00	.00	.00	.00	9.4	16	.01	.01	.00	.00
28	.00	.00	.00	.00	.00	.00	7.7	14	.01	.01	.00	.00
29	.00	.00	.00	.00	---	4.1	6.4	12	.01	.04	.00	.00
30	.00	.00	.00	.00	---	28	5.1	10	.02	.05	.00	.00
31	.00	---	.00	.00	---	79	---	8.9	---	.04	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	111.10	1384.6	487.4	34.56	2.55	0.62	0.16
MEAN	.00	.00	.00	.00	.00	3.58	46.2	15.7	1.15	.082	.020	.005
MAX	.00	.00	.00	.00	.00	79	109	35	7.2	.53	.08	.01
MIN	.00	.00	.00	.00	.00	.00	5.1	1.8	.01	.01	.00	.00
CFSM	.00	.00	.00	.00	.00	.08	1.07	.37	.03	.00	.00	.00
IN.	.00	.00	.00	.00	.00	.10	1.20	.42	.03	.00	.00	.00

CAL YR 1986 TOTAL 765.81 MEAN 2.10 MAX 24 MIN .00 CFSM .05 IN. .66
WTR YR 1987 TOTAL 2020.99 MEAN 5.54 MAX 109 MIN .00 CFSM .13 IN. 1.75

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL

LOCATION.--Lat 28°26'51", long 81°44'25", in NE¼ sec.31, T.23 S., R.26 E., Lake County, Hydrologic Unit 03080102, near left bank 40 ft downstream from log bridge, 1 mi upstream from mouth at Lake Louisa, and 7.5 mi southeast of Clermont.

DRAINAGE AREA.--68 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 98.97 ft above National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--29 years (water years 1959-87), 26.2 ft³/s, 5.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 691 ft³/s, Sept. 13, 1960, gage height, 6.23 ft; no flow for many days in some years; creek dry at gage for many days in 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 189 ft³/s, Apr. 1,2, gage height, 5.29 ft; minimum, 0.09 ft³/s, Oct. 25,26; minimum gage height, 0.98 ft, Aug. 9,10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	.98	1.5	4.1	4.4	6.5	187	15	5.2	17	1.8	.59
2	1.5	3.5	1.5	4.0	4.1	8.5	189	13	4.6	18	1.5	1.1
3	1.2	3.3	1.4	3.7	4.0	8.4	182	12	4.5	20	1.3	3.4
4	.99	3.1	1.3	4.1	3.7	7.9	167	11	3.7	19	1.1	16
5	.79	2.9	1.1	4.9	3.6	7.1	149	10	3.4	18	.97	16
6	.70	2.6	1.1	4.7	3.8	6.4	130	10	3.9	16	.84	14
7	2.7	2.3	.86	4.4	4.0	9.9	113	10	3.5	13	.69	12
8	2.2	2.1	.80	4.1	9.9	14	97	9.2	3.2	11	.56	9.6
9	1.8	1.9	.72	3.8	10	13	85	8.7	3.0	9.0	.45	7.9
10	2.0	1.7	.67	3.7	9.4	12	74	8.9	2.7	7.6	.38	6.7
11	2.1	1.5	.97	3.6	8.6	11	64	10	2.4	8.2	1.1	6.1
12	1.8	1.4	.97	3.4	7.8	9.7	59	12	2.5	6.7	11	5.9
13	1.5	1.4	.89	3.2	7.1	8.7	54	12	8.3	5.5	14	17
14	1.2	1.2	.83	3.2	6.6	7.7	49	14	7.7	4.4	14	18
15	1.1	1.2	.75	3.1	6.0	6.9	46	31	7.4	4.1	14	16
16	.97	1.1	.75	3.0	6.7	6.3	44	33	6.4	5.0	12	15
17	.77	.98	.73	3.0	7.2	5.7	41	34	5.3	6.0	9.8	12
18	.61	.89	.66	2.9	6.9	5.2	39	33	4.4	6.2	7.8	11
19	.47	.96	.60	2.9	6.3	6.1	37	31	3.7	8.3	6.7	9.0
20	.38	1.0	.57	2.8	5.9	5.8	34	29	3.3	9.9	5.1	8.2
21	.27	.82	.50	3.5	6.2	5.4	32	26	3.2	11	4.1	8.0
22	.21	.66	.45	5.2	7.2	5.0	31	23	2.5	9.4	3.5	8.0
23	.17	.62	.58	6.3	7.4	4.6	29	19	2.0	7.8	3.0	14
24	.13	.55	1.5	6.1	6.8	4.2	27	17	1.7	6.3	2.5	12
25	.10	.52	1.5	6.1	6.7	3.9	25	14	1.4	5.0	2.0	10
26	.14	.45	1.4	6.4	6.4	16	23	12	1.2	4.1	1.7	8.4
27	.64	.44	1.3	6.0	5.9	49	21	10	1.4	3.4	1.4	7.2
28	.81	.42	1.3	5.6	5.5	60	19	9.1	2.1	2.8	1.2	6.8
29	.75	.39	1.2	5.4	---	91	18	8.0	12	2.5	.95	5.8
30	.81	.90	1.1	5.1	---	138	16	6.9	13	2.0	.77	5.9
31	.69	---	1.6	4.8	---	178	---	6.0	---	1.8	.55	---
TOTAL	31.30	41.78	31.10	133.1	178.1	721.9	2081	497.8	129.6	269.0	126.76	291.59
MEAN	1.01	1.39	1.00	4.29	6.36	23.3	69.4	16.1	4.32	8.68	4.09	9.72
MAX	2.7	3.5	1.6	6.4	10	178	189	34	13	20	14	18
MIN	.10	.39	.45	2.8	3.6	3.9	16	6.0	1.2	1.8	.38	.59
CFSM	.01	.02	.01	.06	.09	.34	1.02	.24	.06	.13	.06	.14
IN.	.02	.02	.02	.07	.10	.39	1.14	.27	.07	.15	.07	.16

CAL YR 1986 TOTAL 5994.12 MEAN 16.4 MAX 146 MIN .00 CFSM .24 IN. 3.28
WTR YR 1987 TOTAL 4533.03 MEAN 12.4 MAX 189 MIN .10 CFSM .18 IN. 2.48

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1958-61, 1963, 1966-77, 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1982 to current year.

WATER TEMPERATURE: January 1982 to current year.

DISSOLVED OXYGEN: January 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1982. Digital recorder--60-minute interval.

REMARKS.--Interruption of data due to water levels too low to measure. Water quality daily records prior to October 1984 are unpublished and available in files of the Orlando Subdistrict Office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 225 microsiemens, Jan. 6,7, 1982; minimum daily mean, 42 microsiemens, Sept. 26,27, 1984.

WATER TEMPERATURE: Maximum daily mean, 28.5°C, July 10, Aug. 8,9, 1987; minimum daily mean, 5.5°C, Jan. 22, 1985.

DISSOLVED OXYGEN: Maximum daily mean, 8.9 mg/L, Jan. 9, 1985; minimum daily mean, 1.6 mg/L, May 23, 1982, July 12, 1985.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	102	99	---	---	---	---	---	---	102	110	107
2	95	109	104	---	---	---	---	---	---	103	110	108
3	95	104	102	---	---	---	---	---	---	105	110	105
4	94	102	100	---	---	---	---	---	108	105	110	98
5	94	104	99	---	---	---	---	---	108	105	110	103
6	95	104	97	---	---	---	---	---	108	106	111	106
7	105	104	97	---	---	---	---	---	106	107	110	108
8	109	104	96	---	---	---	---	---	107	107	111	109
9	104	104	98	---	---	---	---	---	108	108	110	111
10	104	103	---	---	---	---	---	---	109	108	109	112
11	105	103	---	---	---	---	---	---	109	108	107	113
12	104	102	---	---	---	---	---	---	108	108	100	113
13	103	102	---	---	---	---	---	---	102	109	104	104
14	103	102	---	---	---	---	---	---	101	110	106	105
15	102	101	---	---	---	---	---	---	106	110	105	107
16	103	101	---	---	---	---	---	---	108	109	107	108
17	102	100	---	---	---	---	---	---	108	107	108	109
18	101	99	---	---	---	---	---	---	109	107	109	110
19	100	99	---	---	---	---	---	---	109	106	110	112
20	99	99	---	---	---	---	---	---	109	106	112	112
21	98	99	---	---	---	---	---	---	108	106	113	112
22	98	99	---	---	---	---	---	---	110	107	114	111
23	97	98	---	---	---	---	---	---	110	109	114	105
24	97	97	---	---	---	---	---	---	110	110	114	104
25	97	97	---	---	---	---	---	---	110	110	115	106
26	98	97	---	---	---	---	---	---	109	111	115	108
27	100	99	---	---	---	---	---	---	108	111	114	109
28	104	98	---	---	---	---	---	---	108	111	114	111
29	107	96	---	---	---	---	---	---	95	111	113	112
30	105	95	---	---	---	---	---	---	99	111	112	111
31	104	---	---	---	---	---	---	---	---	110	111	---
MEAN	101	101	---	---	---	---	---	---	---	108	110	108
MAX	109	109	---	---	---	---	---	---	---	111	115	113
MIN	94	95	---	---	---	---	---	---	---	102	100	98

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.5	22.9	22.0	---	---	---	---	---	---	26.3	26.6	27.2
2	25.5	22.4	21.6	---	---	---	---	---	---	27.3	26.8	26.0
3	25.1	21.9	19.5	---	---	---	---	---	---	27.1	26.9	25.0
4	24.8	21.9	16.7	---	---	---	---	---	26.4	27.0	27.2	24.6
5	24.6	22.4	15.8	---	---	---	---	---	26.0	27.4	27.3	25.6
6	24.5	22.6	16.6	---	---	---	---	---	25.5	27.4	27.6	26.0
7	24.6	23.0	17.6	---	---	---	---	---	24.8	27.6	28.0	26.5
8	24.6	22.9	18.5	---	---	---	---	---	24.7	27.6	28.5	26.9
9	24.9	22.9	19.0	---	---	---	---	---	25.2	28.1	28.6	26.9
10	24.3	23.0	---	---	---	---	---	---	25.7	28.3	27.8	26.8
11	23.9	22.9	---	---	---	---	---	---	26.1	28.0	26.7	26.5
12	24.5	22.9	---	---	---	---	---	---	26.4	28.2	25.9	26.3
13	24.8	22.8	---	---	---	---	---	---	26.1	27.9	26.7	25.9
14	25.2	21.6	---	---	---	---	---	---	26.3	27.9	26.0	26.4
15	24.8	20.9	---	---	---	---	---	---	26.4	27.2	25.4	26.8
16	22.8	20.5	---	---	---	---	---	---	27.3	26.3	26.5	26.7
17	21.1	21.1	---	---	---	---	---	---	27.1	26.4	27.4	26.8
18	20.8	22.3	---	---	---	---	---	---	27.0	27.0	27.8	27.0
19	20.9	22.7	---	---	---	---	---	---	26.9	26.5	27.9	26.9
20	20.4	22.8	---	---	---	---	---	---	27.0	25.9	27.9	26.9
21	20.2	21.7	---	---	---	---	---	---	27.0	26.3	27.3	26.8
22	20.1	18.8	---	---	---	---	---	---	27.5	26.8	27.1	26.7
23	20.5	19.5	---	---	---	---	---	---	27.8	26.9	26.6	25.7
24	20.9	20.9	---	---	---	---	---	---	27.7	27.5	26.5	25.2
25	21.6	21.7	---	---	---	---	---	---	27.7	27.5	26.6	25.0
26	22.1	21.8	---	---	---	---	---	---	27.5	27.1	27.0	24.8
27	21.7	21.8	---	---	---	---	---	---	26.4	27.2	26.9	24.8
28	20.9	22.0	---	---	---	---	---	---	26.1	27.3	26.8	25.1
29	21.4	22.3	---	---	---	---	---	---	25.7	27.2	26.8	25.3
30	22.1	22.3	---	---	---	---	---	---	26.0	27.3	27.3	25.1
31	22.7	---	---	---	---	---	---	---	---	26.8	27.3	---
MEAN	23.0	22.0	---	---	---	---	---	---	---	27.2	27.1	26.1
MAX	25.5	23.0	---	---	---	---	---	---	---	28.3	28.6	27.2
MIN	20.1	18.8	---	---	---	---	---	---	---	25.9	25.4	24.6

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02236500 BIG CREEK NEAR CLERMONT, FL--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.0	---	---	---	---	---	---	---	4.3	5.1	4.4
2	4.4	4.1	---	---	---	---	---	---	---	4.2	5.0	4.9
3	4.4	5.0	---	---	---	---	---	---	---	4.1	4.8	5.5
4	4.4	5.1	---	---	---	---	---	---	4.4	4.1	4.7	6.0
5	4.4	4.8	---	---	---	---	---	---	4.5	4.1	4.6	5.7
6	4.4	3.7	---	---	---	---	---	---	4.7	4.2	4.4	5.7
7	4.4	3.5	---	---	---	---	---	---	4.8	4.2	4.2	5.6
8	4.7	3.0	---	---	---	---	---	---	4.9	4.3	4.0	5.6
9	4.8	3.1	---	---	---	---	---	---	4.8	4.4	4.0	5.7
10	4.9	2.8	---	---	---	---	---	---	4.6	4.4	3.6	5.8
11	5.2	2.9	---	---	---	---	---	---	4.5	4.3	4.7	5.8
12	5.1	4.0	---	---	---	---	---	---	4.5	4.3	5.9	5.9
13	4.9	2.5	---	---	---	---	---	---	4.8	4.4	5.5	5.9
14	4.5	2.4	---	---	---	---	---	---	4.7	4.4	5.6	5.6
15	3.3	3.8	---	---	---	---	---	---	4.7	4.4	5.8	5.6
16	4.7	4.4	---	---	---	---	---	---	4.6	4.8	5.7	5.6
17	5.1	3.6	---	---	---	---	---	---	4.6	4.8	5.6	5.7
18	5.2	2.7	---	---	---	---	---	---	4.7	4.8	5.6	5.8
19	4.2	2.7	---	---	---	---	---	---	4.6	4.7	5.6	5.8
20	5.1	---	---	---	---	---	---	---	4.6	4.7	5.7	5.8
21	---	---	---	---	---	---	---	---	4.4	4.7	5.7	5.8
22	---	---	---	---	---	---	---	---	4.2	4.6	5.7	6.0
23	---	---	---	---	---	---	---	---	4.0	4.7	5.8	5.9
24	---	---	---	---	---	---	---	---	3.8	4.9	5.8	6.1
25	---	---	---	---	---	---	---	---	3.7	5.5	5.6	6.2
26	---	---	---	---	---	---	---	---	3.5	5.6	5.4	6.4
27	---	---	---	---	---	---	---	---	3.6	5.5	5.2	6.4
28	---	---	---	---	---	---	---	---	3.9	5.3	5.1	6.3
29	---	---	---	---	---	---	---	---	4.5	5.3	4.8	6.3
30	---	---	---	---	---	---	---	---	4.4	5.2	4.6	6.1
31	2.1	---	---	---	---	---	---	---	---	5.0	4.4	---
MEAN	---	---	---	---	---	---	---	---	---	4.7	5.1	5.8
MAX	---	---	---	---	---	---	---	---	---	5.6	5.9	6.4
MIN	---	---	---	---	---	---	---	---	---	4.1	3.6	4.4

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02236700 LITTLE CREEK NEAR CLERMONT, FL

LOCATION.--Lat 28°27'39", long 81°45'26", in NE¼ sec.25, T.23 S., R.25 E., Lake County, Hydrologic Unit 03080102, at downstream side of culverts on Lake Nellie Road, 0.6 mi upstream from Lake Louisa, 2.3 mi east of State Highway 561, and 6.1 mi south of Clermont.

DRAINAGE AREA.--14.7 mi².

PERIOD OF RECORD.--Occasional discharge measurements, water years 1945-47, 1952-56, 1966, 1967; periodic discharge measurements and gage heights, water years 1958-60. July 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 90.08 ft above National Geodetic Vertical Datum of 1929. July 18, 1958 to July 5, 1960, nonrecording gage at same site at different datum.

REMARKS.--Records poor. Some interconnection at high stages with Big Creek is possible.

AVERAGE DISCHARGE.--8 years, 15.6 ft³/s, 14.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 850 ft³/s, Mar. 18, 1960, gage height, 10.85 ft, from flood mark; no flow for many days in most years; creek dry at gage for many days in 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 178 ft³/s, Apr. 1, gage height, 9.31 ft; no flow Aug. 9, 10, Aug. 26 to Sept. 3; minimum gage height, 6.58 ft, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	1.3	4.5	10	7.8	12	177	18	8.3	.82	.23	.00
2	5.3	1.8	3.9	9.7	7.3	17	170	15	7.8	.86	.19	.00
3	4.5	1.9	3.4	10	6.7	17	163	14	7.1	1.2	.14	.00
4	3.9	3.2	3.0	11	6.2	16	152	12	6.7	1.5	.13	5.3
5	3.4	4.7	2.4	13	5.5	14	147	10	6.2	1.6	.11	4.5
6	3.0	5.3	2.2	13	6.3	13	142	10	5.8	1.6	.10	3.6
7	6.0	5.3	1.9	12	6.5	20	136	10	5.3	2.3	.06	3.4
8	5.1	5.1	1.7	11	12	27	125	9.4	4.4	1.7	.03	3.0
9	4.2	4.7	1.5	10	13	28	117	9.4	3.7	1.1	.00	2.0
10	4.5	4.0	1.4	9.4	13	24	109	11	3.2	.86	.00	1.5
11	5.1	3.6	3.6	8.8	13	22	102	9.7	2.6	.95	.13	1.1
12	4.9	3.2	4.2	8.1	12	21	96	9.7	2.6	1.2	.51	1.0
13	4.7	2.7	4.7	7.6	11	19	90	10	4.4	1.1	.51	1.6
14	4.4	2.3	4.5	6.9	11	16	84	11	3.2	1.6	.78	1.5
15	4.2	2.1	4.2	6.3	9.4	14	83	21	2.4	1.8	1.6	1.1
16	4.0	1.8	3.9	5.6	11	12	80	23	1.7	2.3	1.7	.82
17	3.4	1.6	3.7	5.3	11	11	74	22	1.2	2.6	1.5	.59
18	2.9	1.4	3.4	4.9	11	9.1	70	18	.95	1.8	1.0	.41
19	2.4	1.4	3.2	4.7	9.7	10	66	18	.90	1.6	.68	.27
20	2.1	1.4	2.9	4.7	8.8	9.7	62	18	.78	2.1	.48	.35
21	1.8	1.2	2.6	6.7	8.8	9.1	56	19	.68	2.2	.86	1.3
22	1.5	.95	2.3	12	9.4	8.3	53	20	.59	1.7	.90	1.0
23	1.3	.90	2.4	14	11	7.6	50	20	.53	1.1	.59	.86
24	1.1	.78	4.4	14	10	6.9	45	19	.46	.78	.31	.78
25	.90	.71	4.2	13	11	6.3	40	17	.41	.59	.10	.56
26	.90	.62	3.7	12	10	12	37	16	.37	1.2	.00	.43
27	1.6	.56	3.3	12	9.4	52	33	14	.41	1.1	.00	.33
28	1.6	.51	2.8	11	9.1	70	29	13	.41	.68	.00	.22
29	1.5	.56	2.7	11	---	95	25	11	.65	.51	.00	.16
30	1.6	2.4	2.6	10	---	141	22	10	.68	.35	.00	.16
31	1.5	---	3.3	8.8	---	169	---	9.1	---	.27	.00	---
TOTAL	99.50	67.99	98.5	296.5	270.9	909.0	2635	447.3	84.42	41.07	12.64	37.84
MEAN	3.21	2.27	3.18	9.56	9.67	29.3	87.8	14.4	2.81	1.32	.41	1.26
MAX	6.2	5.3	4.7	14	13	169	177	23	8.3	2.6	1.7	5.3
MIN	.90	.51	1.4	4.7	5.5	6.3	22	9.1	.37	.27	.00	.00
CFSM	.22	.15	.22	.65	.66	1.99	5.98	.98	.19	.09	.03	.09
IN.	.25	.17	.25	.75	.69	2.30	6.67	1.13	.21	.10	.03	.10

CAL YR 1986 TOTAL 4528.19 MEAN 12.4 MAX 82 MIN .00 CFSM .84 IN. 11.46
WTR YR 1987 TOTAL 5000.66 MEAN 13.7 MAX 177 MIN .00 CFSM .93 IN. 12.65

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236900 PALATLAKAHA RIVER AT CHERRY LAKE OUTLET, NEAR GROVELAND, FL

LOCATION.--Lat 28°35'33", Long 81°49'21", in NE¼ sec.8, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, near left bank 21 ft upstream from spillway at outlet of Cherry Lake, and 3 mi northeast of Groveland.

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--September 1956 to February 1957 (gage heights and discharge measurements only), March 1957 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Gee and Jenson, Inc. bench mark). Auxiliary gage at downstream side of spillway structure.

REMARKS.--Estimated daily discharges: Apr. 14-22. Records poor. Since 1956, flow regulated by earthen dam and concrete spillway with radial lift gates at outlet. An undetermined amount of water is diverted at times through a gated culvert in dam for irrigation of citrus groves. Gage heights are published as elevations for Cherry Lake (station 02236880) in the section of this report entitled LAKE ELEVATIONS.

COOPERATION.--Gate-opening record was provided by Oklawaha Basin Recreation and Water Conservation and Control Authority.

AVERAGE DISCHARGE.--30 years (water years 1958-87), 37.9 ft³/s, 3.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 584 ft³/s, Apr. 5, 1960; maximum gage height, 98.15 ft, Apr. 22, 1959; maximum daily reverse flow, 5.1 ft³/s, July 14, 1971; no flow for many days in most years; minimum gage height, 92.58 ft, Jan. 23, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 262 ft³/s, Apr. 16; maximum gage height, 96.71 ft, Mar. 30,31; minimum daily discharge 2.5 ft³/s, Dec. 7-10,19-23,28-30; minimum gage height, 95.64 ft, Dec. 22,23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.0	2.7	2.7	2.7	3.1	98	3.9	3.9	3.6	3.3	2.7
2	3.6	3.0	2.7	2.7	2.7	3.2	118	3.9	3.9	3.6	3.3	2.7
3	3.6	3.0	2.7	2.6	2.7	3.2	134	3.9	3.8	3.6	3.2	2.7
4	3.6	3.0	2.6	2.7	2.7	3.2	136	3.9	3.8	3.6	3.2	2.8
5	3.5	3.0	2.6	2.7	2.7	3.1	133	3.9	3.8	3.6	3.2	2.8
6	3.5	3.0	2.6	2.7	2.7	3.1	160	3.9	3.8	3.6	3.2	2.8
7	3.5	3.0	2.5	2.6	2.8	3.2	172	3.9	3.8	3.6	3.2	2.8
8	3.5	3.0	2.5	2.7	2.9	3.3	143	3.9	3.7	3.7	3.2	2.9
9	3.5	2.9	2.5	2.7	2.9	3.3	138	3.9	3.7	3.6	3.1	2.9
10	3.5	2.9	2.5	2.7	2.9	3.2	182	3.9	3.7	3.6	3.1	2.8
11	3.5	2.9	2.7	2.6	2.9	3.2	216	3.9	3.7	3.6	3.1	2.8
12	3.4	2.9	2.7	2.6	2.8	3.2	219	3.9	3.7	3.6	3.2	2.9
13	3.4	2.9	2.6	2.6	2.8	3.2	225	3.9	3.7	3.5	3.2	3.1
14	3.4	2.8	2.6	2.6	2.8	3.2	239	4.0	3.7	3.5	3.2	3.0
15	3.4	2.7	2.6	2.6	2.8	3.2	254	4.0	3.7	3.5	3.2	3.0
16	3.3	2.7	2.6	2.6	3.0	3.2	262	4.0	3.7	3.5	3.2	3.0
17	3.3	2.7	2.6	2.6	3.0	3.2	254	4.0	3.7	3.5	3.2	2.9
18	3.2	2.7	2.6	2.6	3.0	3.2	244	4.0	3.7	3.4	3.2	2.9
19	3.2	2.8	2.5	2.6	3.0	3.2	227	4.0	3.7	3.4	3.1	2.9
20	3.1	2.8	2.5	2.6	3.0	3.2	189	4.1	3.6	3.4	3.1	2.8
21	3.1	2.7	2.5	2.6	3.0	3.2	135	4.1	3.6	3.4	3.1	2.8
22	3.1	2.7	2.5	2.7	3.0	3.2	65	4.1	3.6	3.4	3.1	2.8
23	3.0	2.7	2.5	2.7	3.0	3.2	3.5	4.1	3.6	3.4	3.0	2.8
24	3.0	2.7	2.6	2.7	3.0	3.2	3.8	4.1	3.5	3.4	3.0	2.7
25	3.0	2.7	2.6	2.7	3.0	3.2	3.9	4.0	3.5	3.4	3.0	2.7
26	3.0	2.7	2.6	2.8	3.0	3.5	3.9	4.0	3.5	3.4	2.9	2.7
27	3.0	2.7	2.6	2.7	3.0	3.6	4.0	4.0	3.5	3.4	2.9	2.7
28	3.0	2.6	2.5	2.7	3.0	3.7	4.0	4.0	3.5	3.4	2.8	2.6
29	3.0	2.6	2.5	2.7	---	3.8	4.0	3.9	3.6	3.4	2.8	2.6
30	3.0	2.6	2.5	2.7	---	4.0	4.0	3.9	3.6	3.4	2.8	2.6
31	3.0	---	2.6	2.7	---	43	---	3.9	---	3.3	2.7	---
TOTAL	101.8	84.4	79.9	82.5	80.8	141.5	3974.1	122.9	110.3	108.3	95.8	84.2
MEAN	3.28	2.81	2.58	2.66	2.89	4.56	132	3.96	3.68	3.49	3.09	2.81
MAX	3.6	3.0	2.7	2.8	3.0	43	262	4.1	3.9	3.7	3.3	3.1
MIN	3.0	2.6	2.5	2.6	2.7	3.1	3.5	3.9	3.5	3.3	2.7	2.6
CFSM	.02	.02	.02	.02	.02	.03	.80	.02	.02	.02	.02	.02
IN.	.02	.02	.02	.02	.02	.03	.90	.03	.02	.02	.02	.02
CAL YR 1986	TOTAL 3939.1	MEAN 10.8	MAX 236	MIN 2.0	CFSM .07	IN. .89						
WTR YR 1987	TOTAL 5066.5	MEAN 13.9	MAX 262	MIN 2.5	CFSM .08	IN. 1.14						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

LOCATION.--Lat 28°35'32", long 81°49'22", in NE¼ sec.8, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, near left bank 20 ft downstream from spillway at outlet of Cherry Lake, and 3 mi northeast of Groveland.

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--September 1956 to July 1957 (fragmentary), August 1957 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and available in files of the Orlando Subdistrict Office. Prior to October 1968, published as 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 National Geodetic Vertical Datum of 1929 (Gee and Jenson, Inc. bench mark). Prior to Aug. 20, 1957, nonrecording gage at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 97.73 ft, Apr. 5, 1960; minimum, 90.65 ft, June 1, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 95.64 ft, Apr. 8; minimum, 93.86 ft, Sept. 2,3.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94.46	94.20	94.08	94.12	94.17	94.56	95.39	94.58	94.55	94.32	94.09	93.87
2	94.45	94.22	94.07	94.11	94.17	94.60	95.33	94.56	94.54	94.31	94.08	93.87
3	94.43	94.22	94.06	94.10	94.17	94.59	95.33	94.55	94.52	94.33	94.06	93.89
4	94.42	94.21	94.05	94.12	94.16	94.58	95.36	94.53	94.50	94.34	94.06	93.99
5	94.41	94.20	94.02	94.16	94.16	94.56	95.35	94.52	94.48	94.31	94.04	94.02
6	94.40	94.19	94.00	94.15	94.22	94.56	95.35	94.52	94.48	94.30	94.02	94.03
7	94.39	94.18	93.99	94.15	94.27	94.64	95.52	94.52	94.46	94.29	94.03	94.02
8	94.38	94.18	93.98	94.15	94.38	94.70	95.63	94.51	94.44	94.29	94.02	94.02
9	94.36	94.17	93.96	94.15	94.37	94.70	95.60	94.50	94.42	94.27	94.00	94.02
10	94.35	94.16	93.97	94.14	94.37	94.69	95.56	94.49	94.41	94.26	93.99	94.00
11	94.35	94.15	94.01	94.14	94.36	94.68	95.54	94.53	94.40	94.24	94.00	93.98
12	94.34	94.15	94.02	94.12	94.36	94.67	95.51	94.60	94.41	94.24	94.06	94.04
13	94.32	94.15	94.02	94.11	94.35	94.66	95.49	94.61	94.43	94.23	94.05	94.16
14	94.32	94.13	94.00	94.10	94.35	94.66	---	94.62	94.41	94.21	94.05	94.15
15	94.32	94.12	94.00	94.09	94.34	94.65	---	94.64	94.40	94.20	94.06	94.15
16	94.30	94.11	93.99	94.09	94.41	94.65	---	94.64	94.38	94.19	94.09	94.13
17	94.27	94.10	93.98	94.09	---	94.64	---	94.62	94.37	94.20	94.08	94.13
18	94.25	94.12	93.98	94.08	94.46	94.63	---	94.61	94.36	94.28	94.07	94.11
19	94.22	94.12	93.97	94.09	94.46	94.65	---	94.64	94.36	94.24	94.06	94.10
20	94.20	94.12	93.98	94.09	94.46	94.65	---	94.72	94.35	94.24	94.05	94.09
21	94.18	94.11	93.98	94.13	94.48	94.65	---	94.71	94.34	94.24	94.05	94.08
22	94.16	94.10	93.96	94.20	94.51	94.64	---	94.70	94.32	94.22	94.04	94.05
23	94.15	94.08	93.99	94.20	94.52	94.62	94.68	94.69	94.31	94.21	94.02	94.05
24	94.14	94.07	94.03	94.19	94.52	94.60	94.67	94.67	94.30	94.19	94.01	94.03
25	94.13	94.07	94.04	94.19	94.52	94.65	94.66	94.66	94.28	94.18	93.99	94.01
26	94.13	94.06	94.03	94.22	94.52	94.97	94.65	94.65	94.26	94.17	93.96	93.99
27	94.13	94.06	94.02	94.20	94.52	95.09	94.64	94.63	94.28	94.15	93.95	93.97
28	94.14	94.05	94.01	94.19	94.52	95.17	94.62	94.61	94.30	94.13	93.94	93.96
29	94.14	94.05	94.00	94.19	---	95.22	94.60	94.59	94.30	94.11	93.92	93.95
30	94.14	94.06	94.00	94.18	---	95.31	94.59	94.58	94.30	94.09	93.91	93.97
31	94.15	---	94.03	94.18	---	95.42	---	94.57	---	94.09	93.90	---
MEAN	94.28	94.13	94.01	94.14	---	94.74	---	94.60	94.39	94.23	94.02	94.03
MAX	94.46	94.22	94.08	94.22	---	95.42	---	94.72	94.55	94.34	94.09	94.16
MIN	94.13	94.05	93.96	94.08	---	94.56	---	94.49	94.26	94.09	93.90	93.87

CAL YR 1986 MEAN 94.32 MAX 95.37 MIN 93.43

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02237000 PALATLAKAHA RIVER NEAR MASCOTTE, FL

LOCATION.--Lat 28°36'56", long 81°51'53", in SW¼ sec.36, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on left bank 260 ft upstream from spillway, 0.4 mi downstream from bridge on State Highway 565, 0.7 mi downstream from Lake Emma, and 3.2 mi northeast of Mascotte.

DRAINAGE AREA.--182 mi².

PERIOD OF RECORD.--May 1945 to March 1956, April 1964 to September 1965, October 1965 to current year (gage heights and discharge measurements only).

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 21, 1946, nonrecording gage and May 21, 1946, to Mar. 20, 1956, water-stage recorder, at site 0.5 mi upstream at datum 89.54 ft higher. Since Apr. 6, 1964, auxiliary water-stage recorder on left bank 260 ft downstream from spillway.

REMARKS.--Since Dec. 4, 1963, flow regulated at station by manipulation of gates in spillway. From March 1956 to December 1963, flow was regulated through two box culverts with radial lift gates.

AVERAGE DISCHARGE.--10 years (water years 1945-55), 104 ft³/s, 7.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 458 ft³/s, Oct. 4,5, 1945; maximum gage height, 96.66 ft, former site, present datum, Oct. 11,12, 1953; gates closed and no flow or leakage only for many days in 1972-83; minimum gage height, 90.60 ft, July 19, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 95.07 ft, Mar. 28; minimum, 92.88 ft, Apr. 13.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
APR 01...	1220	271

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94.36	94.11	93.98	94.01	94.07	94.44	94.19	94.45	94.43	94.22	93.98	93.77
2	94.35	94.11	93.97	94.00	94.07	94.47	94.04	94.43	94.42	94.21	93.97	93.76
3	94.33	94.11	93.95	93.99	94.06	94.47	93.91	94.42	94.40	94.21	93.96	93.77
4	94.31	94.10	93.92	94.03	94.05	94.46	93.80	94.41	94.38	94.21	93.95	93.88
5	94.29	94.11	93.90	94.03	94.06	94.45	93.73	94.40	94.36	94.20	93.93	93.92
6	94.28	94.10	93.88	94.04	94.13	94.44	93.68	94.40	94.36	94.19	93.92	93.92
7	94.28	94.09	93.87	94.05	94.17	94.54	93.27	94.39	94.35	94.18	93.93	93.91
8	94.27	94.09	93.88	94.05	94.27	94.59	92.94	94.39	94.33	94.17	93.91	93.90
9	94.26	94.08	93.88	94.04	94.26	94.58	92.95	94.38	94.31	94.17	93.89	93.91
10	94.25	94.07	93.88	94.04	94.26	94.57	92.95	94.38	94.30	94.15	93.88	93.89
11	94.24	94.06	93.91	94.02	94.26	94.56	92.93	94.42	94.29	94.13	93.88	93.88
12	94.23	94.05	93.92	94.01	94.25	94.55	92.91	94.50	94.28	94.12	93.94	93.92
13	94.22	94.04	93.90	94.00	94.25	94.54	92.95	94.50	94.31	94.11	93.93	94.06
14	94.21	94.02	93.89	94.00	94.24	94.54	93.01	94.52	94.30	94.09	93.93	94.05
15	94.20	94.01	93.89	94.00	94.24	94.54	93.05	94.53	94.28	94.08	93.96	94.04
16	94.18	94.01	93.88	93.99	94.32	94.53	93.06	94.52	94.26	94.08	93.98	94.03
17	94.15	94.00	93.88	93.99	94.34	94.53	93.04	94.51	94.25	94.08	93.97	94.01
18	94.13	94.01	93.88	93.99	94.34	94.53	93.02	94.50	94.25	94.12	93.96	93.99
19	94.10	94.02	93.87	93.99	94.33	94.54	92.99	94.54	94.26	94.13	93.94	93.98
20	94.08	94.02	93.88	93.98	94.33	94.53	93.21	94.61	94.24	94.13	93.94	93.97
21	94.07	94.00	93.87	94.03	94.36	94.52	93.99	94.60	94.23	94.13	93.95	93.96
22	94.06	93.99	93.86	94.09	94.38	94.52	94.27	94.58	94.21	94.12	93.94	93.94
23	94.05	93.98	93.88	94.09	94.38	94.51	94.50	94.57	94.18	94.10	93.92	93.92
24	94.04	93.98	93.94	94.09	94.38	94.51	94.53	94.56	94.17	94.09	93.90	93.91
25	94.04	93.97	93.93	94.10	94.40	94.55	94.53	94.55	94.16	94.07	93.88	93.90
26	94.03	93.97	93.92	94.11	94.40	94.85	94.51	94.53	94.15	94.06	93.87	93.89
27	94.04	93.96	93.91	94.09	94.40	94.99	94.50	94.51	94.16	94.04	93.85	93.87
28	94.03	93.95	93.90	94.09	94.40	94.88	94.49	94.49	94.18	94.02	93.84	93.86
29	94.03	93.95	93.90	94.09	---	94.65	94.47	94.48	94.20	94.00	93.81	93.84
30	94.03	93.96	93.89	94.09	---	94.56	94.46	94.46	94.19	93.99	93.81	93.86
31	94.04	---	93.93	94.07	---	94.43	---	94.45	---	93.98	93.80	---
MEAN	94.17	94.03	93.90	94.04	94.26	94.56	93.66	94.48	94.27	94.12	93.91	93.92
MAX	94.36	94.11	93.98	94.11	94.40	94.99	94.53	94.61	94.43	94.22	93.98	94.06
MIN	94.03	93.95	93.86	93.98	94.05	94.43	92.91	94.38	94.15	93.98	93.80	93.76

WTR YR 1987 MEAN 94.11 MAX 94.99 MIN 92.91

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237010 PALATLAHAHA RIVER AT STRUCTURE M-6, NEAR MASCOTTE, FL

LOCATION.--Lat 28°38'35", long 81°52'21", in SE¼ sec.23, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 50 ft upstream from control structure M-6, 1.5 mi west of State Highway 565, and 4.6 mi north of Mascotte.

DRAINAGE AREA.--186 mi².

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 150 ft downstream from spillway.

REMARKS.--Flow regulated at station by manipulation of gates in spillway.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 92.97 ft, Aug. 11, 1983; minimum unknown, below lowest recordable stage.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 92.52 ft, Mar. 30; minimum, 90.95 ft, Dec. 9, 10.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91.47	91.20	91.02	91.13	91.27	91.70	91.92	91.86	91.44	91.63	91.39	91.13
2	91.46	91.20	91.02	91.12	91.27	91.74	91.82	91.84	91.44	91.62	91.38	91.11
3	91.45	91.19	91.01	91.12	91.26	91.74	91.75	91.83	91.43	91.62	91.36	91.11
4	91.44	91.19	90.99	91.15	91.26	91.73	91.70	91.82	91.42	91.61	91.36	91.18
5	91.42	91.18	90.98	91.18	91.27	91.72	91.66	91.82	91.42	91.61	91.35	91.23
6	91.41	91.17	90.97	91.18	91.34	91.71	91.63	91.84	91.43	91.64	91.34	91.23
7	91.41	91.16	90.96	91.18	91.38	91.79	91.68	91.83	91.43	91.63	91.40	91.21
8	91.40	91.15	90.96	91.18	91.49	91.74	91.85	91.82	91.41	91.66	91.38	91.20
9	91.39	91.14	90.96	91.18	91.49	91.66	91.92	91.81	91.40	91.65	91.35	91.18
10	91.40	91.13	90.96	91.18	91.49	91.66	91.96	91.81	91.39	91.63	91.34	91.16
11	91.40	91.12	91.00	91.17	91.49	91.65	91.98	91.89	91.37	91.61	91.34	91.15
12	91.38	91.10	91.00	91.16	91.49	91.64	91.99	92.04	91.38	91.60	91.35	91.19
13	91.37	91.08	91.00	91.15	91.49	91.63	92.00	92.04	91.45	91.59	91.34	91.26
14	91.36	91.06	91.00	91.15	91.48	91.63	91.99	92.04	91.44	91.58	91.35	91.26
15	91.36	91.05	91.00	91.15	91.48	91.63	92.03	91.86	91.43	91.56	91.39	91.25
16	91.34	91.05	90.99	91.14	91.55	91.62	92.03	91.65	91.42	91.57	91.43	91.24
17	91.32	91.04	90.99	91.14	91.58	91.61	92.03	91.45	91.41	91.56	91.41	91.23
18	91.30	91.04	90.99	91.14	91.59	91.61	92.03	91.28	91.40	91.55	91.40	91.22
19	91.28	91.04	90.98	91.14	91.58	91.63	92.03	91.35	91.39	91.56	91.38	91.21
20	91.26	91.05	90.99	91.13	91.57	91.62	92.05	91.50	91.39	91.55	91.36	91.20
21	91.25	91.04	90.98	91.20	91.61	91.61	92.03	91.52	91.45	91.54	91.37	91.19
22	91.24	91.04	90.97	91.26	91.65	91.60	91.93	91.53	91.44	91.52	91.35	91.17
23	91.22	91.03	90.98	91.27	91.66	91.59	91.92	91.54	91.43	91.51	91.33	91.16
24	91.21	91.02	91.04	91.26	91.66	91.59	91.92	91.54	91.44	91.51	91.31	91.16
25	91.20	91.02	91.03	91.27	91.66	91.60	91.91	91.53	91.43	91.49	91.29	91.15
26	91.19	91.01	91.03	91.29	91.66	91.80	91.90	91.52	91.44	91.47	91.26	91.13
27	91.19	91.01	91.02	91.28	91.66	91.90	91.89	91.51	91.50	91.45	91.24	91.12
28	91.19	91.00	91.01	91.28	91.66	91.89	91.89	91.49	91.54	91.43	91.22	91.11
29	91.19	91.00	91.01	91.28	---	92.29	91.88	91.48	91.61	91.41	91.20	91.10
30	91.19	91.00	91.00	91.28	---	92.38	91.87	91.46	91.61	91.39	91.18	91.12
31	91.19	---	91.04	91.27	---	92.11	---	91.45	---	91.39	91.15	---
MEAN	91.32	91.08	91.00	91.19	91.50	91.74	91.91	91.68	91.44	91.55	91.33	91.18
MAX	91.47	91.20	91.04	91.29	91.66	92.38	92.05	92.04	91.61	91.66	91.43	91.26
MIN	91.19	91.00	90.96	91.12	91.26	91.59	91.63	91.28	91.37	91.39	91.15	91.10

CAL YR 1986	MEAN 91.45	MAX 92.30	MIN 90.96
WTR YR 1987	MEAN 91.41	MAX 92.38	MIN 90.96

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237011 PALATLAKAHA RIVER BELOW STRUCTURE M-6, NEAR MASCOTTE, FL

LOCATION.--Lat 28°38'38", long 81°52'21", in SE¼ sec.23, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 150 ft downstream from control structure M-6, 1.5 mi west of State Highway 565, and 4.6 mi north of Mascotte.

DRAINAGE AREA.--186 mi².

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 91.90 ft, Mar. 30, 1987; minimum, 85.85 ft, May 31, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 91.90 ft, Mar. 30; minimum, 88.28 ft, Sept. 28-30.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	88.79	88.72	88.81	89.30	91.59	89.32	88.78	88.81	88.64	88.39
2	---	---	88.78	88.72	88.79	89.33	91.51	89.30	88.78	88.79	88.62	88.38
3	---	---	88.78	88.71	88.78	89.34	91.45	89.29	88.77	88.78	88.60	88.39
4	---	---	88.76	88.75	88.77	89.34	91.42	89.29	88.76	88.77	88.59	88.45
5	---	---	88.75	88.81	88.77	89.34	91.39	89.30	88.75	88.77	88.58	88.49
6	---	---	88.73	88.81	88.86	89.33	91.36	89.31	88.77	88.78	88.56	88.48
7	---	---	88.72	88.80	88.90	89.48	91.39	89.30	88.76	88.77	88.62	88.46
8	---	---	88.70	88.80	89.02	89.72	91.53	89.29	88.74	88.86	88.62	88.44
9	---	---	88.69	88.79	89.01	89.63	91.60	89.29	88.73	88.85	88.60	88.43
10	---	---	88.68	88.78	89.00	89.41	91.63	89.30	88.72	88.83	88.58	88.41
11	---	---	88.71	88.77	89.00	89.26	91.66	89.38	88.72	88.81	88.58	88.41
12	---	---	88.70	88.75	89.00	89.12	91.68	89.53	88.71	88.80	88.60	88.44
13	---	---	88.71	88.74	89.01	89.05	91.68	89.53	88.73	88.80	88.58	88.47
14	---	---	88.69	88.72	89.01	89.03	91.67	89.67	88.70	88.80	88.60	88.45
15	---	---	88.67	88.71	89.01	89.03	91.69	89.91	88.68	88.80	88.63	88.43
16	---	---	88.66	88.70	89.08	89.03	91.69	89.84	88.66	88.83	88.66	88.41
17	---	---	88.65	88.69	89.10	89.04	91.70	89.73	88.63	88.83	88.64	88.39
18	---	---	88.63	88.69	89.10	89.04	91.70	89.43	88.62	88.83	88.62	88.37
19	---	---	88.62	88.68	89.11	89.08	91.70	88.99	88.59	88.86	88.60	88.36
20	---	---	88.62	88.68	89.11	89.08	91.57	88.93	88.59	88.86	88.59	88.35
21	---	---	88.60	88.76	89.16	89.08	91.02	88.82	88.67	88.84	88.57	88.34
22	---	---	88.59	88.81	89.19	89.07	90.56	88.81	88.63	88.82	88.56	88.33
23	---	---	88.60	88.82	89.22	89.07	89.56	88.84	88.60	88.80	88.54	88.32
24	---	88.85	88.66	88.82	89.22	89.06	89.37	88.84	88.59	88.78	88.52	88.32
25	---	88.84	88.66	88.83	89.24	89.07	89.35	88.83	88.58	88.76	88.50	88.31
26	---	88.83	88.66	88.84	89.25	89.20	89.35	88.82	88.61	88.74	88.48	88.30
27	---	88.82	88.65	88.83	89.25	89.42	89.34	88.81	88.69	88.72	88.47	88.29
28	---	88.81	88.64	88.82	89.26	90.05	89.33	88.80	88.72	88.69	88.45	88.29
29	---	88.80	88.62	88.82	---	90.96	89.33	88.79	88.81	88.67	88.44	88.28
30	---	88.79	88.61	88.82	---	91.61	89.33	88.79	88.80	88.64	88.42	88.30
31	---	---	88.65	88.82	---	91.75	---	88.78	---	88.64	88.41	---
MEAN	---	---	88.68	88.77	89.04	89.46	90.94	89.19	88.70	88.78	88.56	88.38
MAX	---	---	88.79	88.84	89.26	91.75	91.70	89.91	88.81	88.86	88.66	88.49
MIN	---	---	88.59	88.68	88.77	89.03	89.33	88.78	88.58	88.64	88.41	88.28

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237050 PALATLAKAHA RIVER AT STRUCTURE M-5, NEAR OKAHUMPKA, FL

LOCATION.--Lat 28°40'43", long 81°53'05", in NW¼ sec.11, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 50 ft upstream from control structure M-5, 325 ft upstream from Bridges Road, 1.9 mi west of U.S. Highway 27, and 4.8 mi south of Okahumpka.

DRAINAGE AREA.--193 mi².

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 150 ft downstream from spillway.

REMARKS.--Flow regulated at station by manipulation of gates in spillway.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 90.59 ft, Aug. 14, 1983; minimum, 82.96 ft, May 31, 1981, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 89.53 ft, May 13; minimum, 87.36 ft, Mar. 29.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89.30	89.00	88.74	88.67	88.78	89.27	88.13	89.29	88.75	88.73	88.55	88.17
2	89.28	89.00	88.74	88.66	88.77	89.31	87.95	89.28	88.74	88.72	88.53	88.15
3	89.26	89.01	88.73	88.66	88.76	89.32	87.82	89.27	88.72	88.71	88.51	88.14
4	89.25	89.01	88.71	88.71	88.75	89.31	87.72	89.27	88.71	88.71	88.50	88.21
5	89.23	89.00	88.69	88.76	88.74	89.30	87.65	89.27	88.69	88.71	88.48	88.28
6	89.22	88.98	88.67	88.76	88.83	89.30	87.59	89.28	88.71	88.71	88.47	88.29
7	89.21	88.97	88.65	88.76	88.87	89.38	87.56	89.28	88.71	88.71	88.56	88.29
8	89.19	88.95	88.64	88.76	88.99	89.35	87.69	89.27	88.69	88.79	88.53	88.27
9	89.18	88.94	88.63	88.75	88.97	89.32	87.81	89.27	88.68	88.78	88.51	88.25
10	89.18	88.93	88.62	88.75	88.97	89.23	87.86	89.27	88.68	88.76	88.49	88.23
11	89.20	88.91	88.65	88.72	88.98	89.06	87.89	89.34	88.66	88.74	88.49	88.22
12	89.21	88.90	88.64	88.71	88.98	88.93	87.89	89.51	88.64	88.73	88.50	88.27
13	89.20	88.88	88.64	88.69	88.97	88.96	87.94	89.52	88.65	88.73	88.48	88.30
14	89.18	88.86	88.62	88.68	88.97	88.97	88.02	89.42	88.64	88.73	88.49	88.28
15	89.17	88.84	88.61	88.67	88.98	88.97	88.04	88.85	88.61	88.72	88.52	88.26
16	89.15	88.83	88.60	88.66	89.03	88.98	88.03	88.36	88.59	88.73	88.56	88.24
17	89.12	88.82	88.59	88.65	89.06	89.00	87.99	87.86	88.57	88.73	88.54	88.22
18	89.09	88.80	88.57	88.65	89.06	89.00	87.95	87.67	88.54	88.75	88.52	88.19
19	89.07	88.82	88.56	88.65	89.06	89.03	87.93	88.21	88.52	88.80	88.51	88.16
20	89.05	88.85	88.56	88.64	89.07	89.03	88.09	88.57	88.50	88.79	88.49	88.14
21	89.03	88.84	88.54	88.72	89.11	89.03	88.18	88.68	88.54	88.77	88.46	88.11
22	89.03	88.82	88.52	88.78	89.16	89.02	88.24	88.73	88.53	88.75	88.44	88.08
23	89.03	88.82	88.54	88.79	89.19	89.02	89.21	88.78	88.52	88.73	88.42	88.06
24	89.02	88.81	88.61	88.79	89.19	89.01	89.32	88.78	88.52	88.71	88.40	88.04
25	89.01	88.80	88.62	88.80	89.21	89.02	89.32	88.77	88.51	88.69	88.37	88.01
26	88.99	88.79	88.61	88.81	89.22	89.15	89.31	88.76	88.53	88.66	88.34	87.98
27	88.99	88.77	88.59	88.80	89.23	89.23	89.30	88.75	88.61	88.64	88.31	87.95
28	88.98	88.76	88.58	88.80	89.24	88.76	89.30	88.75	88.64	88.62	88.29	87.93
29	88.98	88.75	88.56	88.80	---	87.73	89.30	88.74	88.69	88.59	88.26	87.91
30	88.98	88.74	88.55	88.81	---	87.83	89.30	88.74	88.71	88.56	88.23	87.91
31	88.97	---	88.58	88.79	---	88.37	---	88.75	---	88.55	88.20	---
MEAN	89.12	88.87	88.62	88.73	89.00	89.01	88.28	88.91	88.63	88.71	88.45	88.15
MAX	89.30	89.01	88.74	88.81	89.24	89.38	89.32	89.52	88.75	88.80	88.56	88.30
MIN	88.97	88.74	88.52	88.64	88.74	87.73	87.56	87.67	88.50	88.55	88.20	87.91

CAL YR 1986 MEAN 89.03 MAX 89.74 MIN 87.28
WTR YR 1987 MEAN 88.71 MAX 89.52 MIN 87.56

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

LOCATION.--Lat 28°40'45", long 81°53'05", in NW¼ sec.11, T.21 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 150 ft downstream from control structure M-5, 125 ft upstream from Bridges Road, 1.9 mi west of U.S. Highway 27, and 4.8 mi south of Okahumpka.

DRAINAGE AREA.--193 mi².

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 87.50 ft, Feb. 23, 1983; minimum, 81.18 ft May 31, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 87.46 ft, Mar. 31; minimum, 84.18 ft, Sept. 29,30.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.82	84.46	84.35	84.36	84.30	84.43	87.29	85.09	84.39	84.36	84.33	84.25
2	84.79	84.44	84.34	84.33	84.30	84.44	87.16	85.07	84.38	84.35	84.32	84.25
3	84.77	84.43	84.33	84.31	84.30	84.44	87.07	85.04	84.41	84.34	84.31	84.27
4	84.75	84.42	84.32	84.34	84.30	84.43	87.01	85.01	84.37	84.34	84.32	84.33
5	84.73	84.41	84.32	84.34	84.31	84.42	86.96	85.00	84.34	84.33	84.31	84.33
6	84.71	84.41	84.31	84.32	84.39	84.41	86.93	84.99	84.39	84.34	84.30	84.30
7	84.72	84.40	84.31	84.32	84.40	84.65	86.90	84.96	84.39	84.36	84.37	84.28
8	84.70	84.40	84.31	84.32	84.45	85.11	86.97	84.94	84.37	84.38	84.33	84.27
9	84.68	84.39	84.31	84.31	84.42	85.12	87.06	84.92	84.36	84.35	84.31	84.25
10	84.67	84.39	84.31	84.31	84.40	85.13	87.11	84.91	84.35	84.34	84.32	84.25
11	84.67	84.38	84.33	84.30	84.40	85.14	87.14	84.97	84.35	84.34	84.33	84.27
12	84.66	84.38	84.32	84.29	84.39	84.92	87.16	85.21	84.33	84.33	84.34	84.31
13	84.63	84.37	84.32	84.29	84.39	84.52	87.15	85.20	84.34	84.34	84.32	84.31
14	84.62	84.36	84.31	84.29	84.38	84.43	87.14	85.48	84.34	84.34	84.34	84.29
15	84.60	84.36	84.31	84.29	84.38	84.41	87.15	85.97	84.34	84.33	84.38	84.27
16	84.58	84.36	84.30	84.29	84.41	84.40	87.15	85.94	84.32	84.34	84.39	84.27
17	84.56	84.35	84.30	84.29	84.41	84.39	87.15	85.87	84.30	84.34	84.35	84.26
18	84.54	84.35	84.29	84.29	84.41	84.38	87.14	85.45	84.29	84.38	84.33	84.25
19	84.52	84.37	84.29	84.29	84.40	84.41	87.15	84.93	84.31	84.40	84.32	84.24
20	84.50	84.38	84.29	84.29	84.40	84.40	87.04	85.04	84.32	84.37	84.31	84.24
21	84.49	84.36	84.29	84.36	84.41	84.39	86.79	84.90	84.35	84.36	84.30	84.23
22	84.47	84.35	84.29	84.37	84.42	84.38	86.24	84.72	84.33	84.35	84.30	84.23
23	84.46	84.35	84.31	84.35	84.43	84.38	85.52	84.57	84.32	84.35	84.29	84.22
24	84.45	84.35	84.33	84.33	84.42	84.37	85.42	84.55	84.33	84.34	84.28	84.22
25	84.45	84.34	84.31	84.33	84.42	84.36	85.34	84.54	84.32	84.33	84.28	84.22
26	84.44	84.34	84.31	84.33	84.42	84.45	85.29	84.52	84.33	84.33	84.27	84.21
27	84.44	84.34	84.30	84.32	84.41	84.76	85.24	84.51	84.37	84.34	84.26	84.20
28	84.43	84.34	84.30	84.31	84.41	85.82	85.19	84.51	84.36	84.33	84.26	84.21
29	84.43	84.34	84.30	84.31	---	86.55	85.16	84.48	84.36	84.32	84.26	84.19
30	84.43	84.34	84.29	84.31	---	87.02	85.13	84.42	84.35	84.31	84.26	84.22
31	84.43	---	84.34	84.31	---	87.41	---	84.40	---	84.32	84.26	---
MEAN	84.59	84.38	84.31	84.32	84.39	84.83	86.57	84.97	84.35	84.34	84.31	84.25
MAX	84.82	84.46	84.35	84.37	84.45	87.41	87.29	85.97	84.41	84.40	84.39	84.33
MIN	84.43	84.34	84.29	84.29	84.30	84.36	85.13	84.40	84.29	84.31	84.26	84.19

WTR YR 1987 MEAN 84.63 MAX 87.41 MIN 84.19

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237206 PALATLAKAHA RIVER AT STRUCTURE M-4, NEAR OKAHUMPKA, FL

LOCATION.--Lat 28°42'53", long 81°53'04", in SW¼ sec.26, T.20 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 50 ft upstream from control structure M-4, 1.4 mi west of U.S. Highway 27, and 2.3 mi south of Okahumpka.

DRAINAGE AREA.--208 mi².

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 150 ft downstream from spillway.

REMARKS.--Flow regulated at station by manipulation of gates in spillway.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 86.81 ft, Feb. 23, 1983; minimum unknown, below lowest recordable stage May 28 to June 19, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 85.55 ft. Apr. 22.23; minimum, 83.40 ft. Sept. 30.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.77	84.23	83.95	83.89	83.99	84.25	84.74	85.09	84.39	84.03	83.80	83.57
2	84.75	84.23	83.95	83.88	83.98	84.27	84.60	85.06	84.35	84.02	83.78	83.55
3	84.72	84.22	83.94	83.88	83.97	84.27	84.44	85.03	84.15	84.01	83.77	83.54
4	84.69	84.21	83.92	83.92	83.96	84.25	84.30	85.01	84.03	84.00	83.75	83.60
5	84.66	84.19	83.90	83.94	83.96	84.23	84.21	84.99	84.07	83.98	83.73	83.67
6	84.64	84.18	83.88	83.94	84.07	84.22	84.14	84.97	84.12	84.00	83.71	83.68
7	84.64	84.16	83.87	83.94	84.13	84.28	84.07	84.95	84.15	84.06	83.76	83.68
8	84.63	84.14	83.87	83.94	84.23	84.19	84.05	84.93	84.14	84.06	83.75	83.66
9	84.60	84.13	83.86	83.94	84.23	84.17	84.15	84.90	84.12	84.05	83.73	83.64
10	84.59	84.11	83.85	83.93	84.23	84.16	84.24	84.89	84.11	84.02	83.73	83.62
11	84.59	84.09	83.87	83.91	84.23	84.15	84.28	84.93	84.09	84.00	83.76	83.62
12	84.57	84.08	83.87	83.89	84.23	84.15	84.30	85.19	84.07	83.98	83.78	83.67
13	84.55	84.06	83.87	83.88	84.22	84.13	84.32	85.19	84.06	83.97	83.76	83.70
14	84.52	84.03	83.85	83.87	84.21	84.21	84.31	85.08	84.04	83.96	83.76	83.70
15	84.50	84.02	83.84	83.87	84.21	84.21	84.31	84.60	84.02	83.94	83.83	83.68
16	84.47	84.00	83.83	83.86	84.24	84.21	84.30	84.50	84.00	83.93	83.94	83.66
17	84.44	83.99	83.83	83.84	84.24	84.20	84.26	84.40	83.98	83.92	83.94	83.64
18	84.41	83.97	83.82	83.84	84.24	84.19	84.24	84.46	83.97	83.96	83.92	83.63
19	84.38	84.00	83.81	83.82	84.22	84.20	84.22	84.90	83.96	84.02	83.90	83.60
20	84.35	84.05	83.80	83.81	84.21	84.19	84.37	84.99	83.95	84.02	83.88	83.59
21	84.33	84.05	83.79	83.92	84.21	84.18	84.90	84.70	84.03	84.01	83.85	83.57
22	84.31	84.03	83.77	84.00	84.23	84.17	85.15	84.37	84.02	83.99	83.83	83.54
23	84.29	84.02	83.78	84.01	84.25	84.16	85.50	84.46	84.00	83.97	83.81	83.52
24	84.27	84.00	83.83	84.01	84.25	84.14	85.41	84.47	83.99	83.94	83.78	83.51
25	84.25	83.99	83.83	84.03	84.25	84.13	85.33	84.47	83.97	83.91	83.75	83.48
26	84.24	83.97	83.82	84.04	84.25	84.19	85.27	84.46	83.96	83.89	83.72	83.46
27	84.22	83.96	83.81	84.02	84.24	84.25	85.23	84.45	84.00	83.90	83.69	83.44
28	84.22	83.95	83.79	84.02	84.23	83.73	85.19	84.43	84.01	83.87	83.67	83.43
29	84.21	83.94	83.78	84.01	---	83.60	85.16	84.42	84.03	83.84	83.65	83.42
30	84.20	83.94	83.76	84.01	---	84.07	85.12	84.41	84.03	83.82	83.62	83.43
31	84.20	---	83.80	83.99	---	84.65	---	84.40	---	83.80	83.59	---
MEAN	84.46	84.06	83.84	83.93	84.18	84.17	84.60	84.75	84.06	83.96	83.77	83.58
MAX	84.77	84.23	83.95	84.04	84.25	84.65	85.50	85.19	84.39	84.06	83.94	83.70
MIN	84.20	83.94	83.76	83.81	83.96	83.60	84.05	84.37	83.95	83.80	83.59	83.42
CAL YR 1986	MEAN	84.39	MAX	85.13	MIN	83.61						
WTR YR 1987	MEAN	84.11	MAX	85.50	MIN	83.42						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237207 PALATLAKAHA RIVER BELOW STRUCTURE M-4, NEAR OKAHUMPKA, FL

LOCATION.--Lat 28°42'56", long 81°53'03", in SW¼ sec.26, T.20 S., R.24 E., Lake County, Hydrologic Unit 03080102, on right bank 150 ft downstream from control structure M-4, 1.4 mi west of U.S. Highway 27, and 2.3 mi south of Okahumpka.

DRAINAGE AREA.--208 mi².

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 84.59 ft, Mar. 22, 1983; minimum, 76.35 ft, June 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 84.50 ft, Mar. 31, Apr. 1; minimum, 79.69 ft, June 2.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80.35	80.26	80.18	80.16	80.17	80.19	84.47	80.14	79.71	80.18	80.17	80.13
2	80.35	---	80.16	80.16	80.17	80.19	84.34	80.13	80.12	80.18	80.17	80.13
3	80.35	---	80.15	80.15	80.16	80.19	84.21	80.13	81.23	80.18	80.17	80.13
4	80.36	---	80.14	80.17	80.15	80.18	84.08	80.14	80.57	80.17	80.16	80.15
5	80.35	---	80.11	80.16	80.16	80.17	84.00	80.15	80.07	80.17	80.16	80.16
6	80.35	---	80.09	80.17	80.18	80.16	83.94	80.16	80.09	80.18	80.15	80.17
7	80.36	80.24	80.09	80.17	80.19	80.61	83.88	80.17	80.10	80.18	80.16	80.16
8	80.35	80.23	80.09	80.16	80.19	81.38	83.86	80.18	80.11	80.18	80.15	80.16
9	80.35	80.23	80.08	80.16	80.19	81.38	83.95	80.19	80.11	80.18	80.14	80.16
10	80.35	80.22	80.08	80.16	80.20	81.39	84.03	80.20	80.12	80.18	80.15	80.15
11	80.35	80.22	80.08	80.16	80.20	81.39	84.07	80.22	80.12	80.17	80.17	80.16
12	80.34	80.22	80.07	80.16	80.20	81.39	84.08	80.32	80.13	80.17	80.17	80.17
13	80.34	80.21	80.07	80.16	80.19	80.77	84.06	80.33	80.13	80.18	80.17	80.18
14	80.34	80.21	80.07	80.16	80.19	80.13	84.02	81.29	80.13	80.17	80.17	80.18
15	80.33	80.21	80.07	80.16	80.20	80.13	84.03	82.47	80.14	80.18	80.19	80.17
16	80.33	80.20	80.07	80.16	80.20	80.12	84.01	82.45	80.14	80.17	80.20	80.17
17	80.33	80.20	80.06	80.15	80.20	80.12	83.99	82.43	80.14	80.18	80.20	80.17
18	80.32	80.19	80.06	80.15	80.20	80.12	83.97	81.33	80.15	80.22	80.19	80.17
19	80.31	80.21	80.06	80.14	80.20	80.13	83.96	80.20	80.16	80.21	80.19	80.16
20	80.31	80.21	80.06	80.14	80.19	80.12	83.70	80.76	80.17	80.21	80.18	80.16
21	80.30	80.20	80.07	80.17	80.19	80.13	83.31	81.30	80.18	80.20	80.18	80.16
22	80.29	80.20	80.12	80.18	80.19	80.13	82.17	81.32	80.18	80.20	80.18	80.15
23	80.28	80.21	80.13	80.18	80.19	80.14	80.95	80.15	80.18	80.20	80.18	80.15
24	80.27	80.20	80.14	80.18	80.19	80.14	80.75	80.15	80.18	80.19	80.17	80.15
25	80.27	80.20	80.14	80.19	80.18	80.14	80.57	80.15	80.17	80.19	80.17	80.14
26	80.27	80.20	80.14	80.18	80.18	80.16	80.42	80.15	80.17	80.19	80.17	80.14
27	80.26	80.19	80.13	80.17	80.18	80.78	80.32	80.15	80.18	80.20	80.16	80.13
28	80.26	80.19	80.13	80.17	80.18	82.22	80.23	80.15	80.18	80.19	80.16	80.14
29	80.26	80.19	80.13	80.17	---	83.10	80.17	80.03	80.18	80.18	80.15	80.14
30	80.26	80.19	80.13	80.17	---	83.88	80.15	79.72	80.18	80.17	80.14	80.14
31	80.26	---	80.16	80.17	---	84.39	---	79.72	---	80.17	80.14	---
MEAN	80.32	---	80.11	80.16	80.19	80.82	82.99	80.53	80.18	80.18	80.17	80.15
MAX	80.36	---	80.18	80.19	80.20	84.39	84.47	82.47	81.23	80.22	80.20	80.18
MIN	80.26	---	80.06	80.14	80.15	80.12	80.15	79.72	79.71	80.17	80.14	80.13

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

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

LOCATION.--Lat 28°44'39", long 81°52'22", in SE¼ sec.14, T.20 S., R.24 E., Lake County, Hydrologic Unit 03080102, on left bank 150 ft upstream from structure M-1, 270 ft downstream from Seaboard Coast Line Railroad bridge, 0.3 mi upstream from bridge on State Highway 48, and 1.4 mi east of Okahumpka.

DRAINAGE AREA.--221 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: June 3-15. Records fair. Flow regulated by manipulation of gates in spillway.

COOPERATION.--Gate-opening record was provided by Oklawaha Basin Recreation and Water Conservation and Control Authority.

AVERAGE DISCHARGE.--16 years (water years 1971-75, 1977-87), 19.3 ft³/s, 1.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 486 ft³/s, Mar. 12, 1970; maximum gage height, 74.18 ft, Apr. 3, 1970; no flow for many days in most years; minimum gage height, 66.26 ft, June 24,25, 1985, gates opened for structure repairs.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 451 ft³/s, Apr. 2; maximum gage height, 72.76 ft, Apr. 22; no flow part of each day Apr. 22, June 2,3; minimum gage height, 66.38 ft, June 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.0	4.6	3.5	3.1	3.4	426	7.0	14	3.3	2.1	1.8
2	3.4	3.1	5.0	3.2	3.1	3.5	451	6.7	8.0	3.0	2.1	2.1
3	3.3	3.1	5.2	3.1	3.1	3.4	375	6.4	2.9	2.9	2.1	2.0
4	3.2	3.0	4.5	3.2	3.1	3.3	347	5.6	3.2	2.9	2.1	2.0
5	3.2	3.0	4.0	3.4	3.1	3.2	330	6.7	2.9	2.7	2.2	2.4
6	3.2	3.0	3.2	3.2	3.5	3.2	318	7.8	2.8	2.7	2.0	2.3
7	3.1	3.0	2.9	3.2	3.5	6.0	308	7.2	2.5	3.2	2.0	2.2
8	3.1	2.9	2.8	3.1	3.7	40	302	7.0	2.3	3.9	2.1	2.0
9	3.1	2.9	2.6	3.1	3.6	41	314	6.4	2.1	3.7	2.0	2.0
10	3.1	2.9	2.6	3.0	3.4	41	330	5.4	2.2	3.4	2.0	1.9
11	3.2	2.8	2.6	2.9	3.4	41	345	5.4	2.2	3.2	2.3	2.0
12	3.1	2.8	2.6	2.9	3.3	41	351	7.8	2.3	3.0	2.5	2.4
13	3.1	2.8	2.6	2.9	3.3	34	347	7.8	2.8	2.9	2.4	2.8
14	3.1	2.8	2.5	2.9	3.3	7.8	347	53	2.8	2.9	2.3	2.4
15	3.1	2.8	2.4	2.8	3.3	5.9	340	106	2.3	2.8	2.6	2.1
16	3.0	2.8	2.4	2.8	3.4	5.0	336	106	1.9	2.8	2.9	2.0
17	3.0	2.8	2.3	2.8	3.4	4.3	332	106	2.1	2.8	2.8	2.0
18	2.9	2.8	2.3	2.8	3.3	3.8	330	89	2.9	2.9	2.6	2.0
19	2.9	3.0	2.3	2.9	3.3	4.3	328	32	2.8	3.1	2.4	1.9
20	2.9	3.7	2.2	3.1	3.2	4.3	296	36	3.0	3.0	2.3	1.9
21	2.9	3.9	2.2	3.8	3.3	4.1	236	68	3.0	2.9	2.2	2.0
22	2.8	3.7	2.1	4.2	3.3	4.1	156	80	3.0	2.8	2.1	2.0
23	2.8	3.7	2.4	3.7	3.4	3.8	41	31	3.0	2.7	2.1	1.9
24	2.8	3.7	3.0	3.5	3.3	3.7	31	24	3.0	2.6	2.0	1.9
25	2.8	3.7	2.9	3.4	3.3	3.7	23	21	3.1	2.4	1.9	1.8
26	2.8	3.7	2.8	3.4	3.3	5.5	15	20	3.0	2.4	1.9	1.5
27	2.9	3.7	2.8	3.3	3.3	13	12	18	3.2	2.4	1.8	1.5
28	2.9	3.7	2.8	3.2	3.3	78	9.4	18	3.6	2.3	1.8	1.4
29	2.9	3.7	2.7	3.2	---	161	8.1	18	3.6	2.3	1.8	1.2
30	3.0	3.9	2.7	3.2	---	308	7.4	16	3.4	2.2	1.8	1.7
31	3.0	---	2.9	3.1	---	408	---	15	---	2.1	1.7	---
TOTAL	94.0	96.4	90.9	98.8	92.9	1292.3	7391.9	944.2	99.9	88.2	66.9	59.1
MEAN	3.03	3.21	2.93	3.19	3.32	41.7	246	30.5	3.33	2.85	2.16	1.97
MAX	3.4	3.9	5.2	4.2	3.7	408	451	106	14	3.9	2.9	2.8
MIN	2.8	2.8	2.1	2.8	3.1	3.2	7.4	5.4	1.9	2.1	1.7	1.2
CFSM	.01	.01	.01	.01	.02	.19	1.11	.14	.02	.01	.01	.01
IN.	.02	.02	.02	.02	.02	.22	1.24	.16	.02	.01	.01	.01

CAL YR 1986 TOTAL 4429.35 MEAN 12.1 MAX 296 MIN .00 CFSM .05 IN. .75
WTR YR 1987 TOTAL 10415.5 MEAN 28.5 MAX 451 MIN 1.2 CFSM .13 IN. 1.75

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71.02	70.88	71.22	71.03	70.89	71.02	69.79	71.33	66.38	70.97	70.68	70.60
2	71.00	70.90	71.24	70.95	70.89	71.04	69.61	71.32	66.46	70.87	70.68	70.67
3	70.97	70.89	71.25	70.90	70.89	70.99	69.47	71.31	---	70.83	70.68	70.65
4	70.95	70.88	71.21	70.94	70.89	70.96	69.34	71.27	---	70.83	70.68	70.69
5	70.94	70.87	71.15	71.02	70.90	70.94	69.26	71.32	---	70.79	70.69	70.74
6	70.92	70.87	70.95	70.95	71.03	70.94	69.20	71.36	---	70.79	70.66	70.72
7	70.90	70.86	70.84	70.93	71.04	71.18	69.15	71.34	---	70.93	70.65	70.70
8	70.90	70.85	70.80	70.90	71.12	71.82	69.12	71.33	---	71.22	70.67	70.66
9	70.89	70.83	70.77	70.89	71.07	71.84	69.18	71.31	---	71.11	70.65	70.65
10	70.91	70.83	70.76	70.88	71.02	71.84	69.26	71.26	---	71.00	70.64	70.63
11	70.93	70.82	70.77	70.85	71.00	71.84	69.33	71.26	---	70.92	70.71	70.65
12	70.93	70.82	70.77	70.84	70.98	71.84	69.36	71.36	---	70.87	70.75	70.74
13	70.91	70.82	70.77	70.83	70.97	71.75	69.34	71.36	---	70.84	70.74	70.82
14	70.89	71.81	70.75	70.83	70.97	71.36	69.34	69.76	---	70.83	70.72	70.74
15	70.89	70.81	70.73	70.82	70.96	71.29	69.31	67.97	70.71	70.81	70.76	70.67
16	70.88	70.81	70.73	70.82	71.00	71.24	69.29	67.95	70.65	70.82	70.85	70.65
17	70.86	70.81	70.72	70.82	71.00	71.20	69.27	67.93	70.62	70.81	70.80	70.65
18	70.85	70.80	70.72	70.82	70.97	71.16	69.26	67.61	70.67	70.83	70.77	70.65
19	70.84	70.87	70.71	70.84	70.96	71.20	69.25	66.62	70.85	70.89	70.74	70.63
20	70.83	71.12	70.70	70.91	70.95	71.20	69.09	66.68	70.81	70.87	70.72	70.63
21	70.83	71.15	70.70	71.12	70.96	71.18	68.73	67.22	70.87	70.84	70.70	70.65
22	70.82	71.13	70.68	71.19	70.97	71.18	70.39	67.46	70.86	70.82	70.68	70.64
23	70.82	71.11	70.74	71.12	71.00	71.15	71.84	66.61	70.87	70.79	70.67	70.62
24	70.82	71.10	70.87	71.03	70.98	71.11	71.71	66.52	70.88	70.76	70.65	70.63
25	70.82	71.10	70.85	70.99	70.97	71.11	71.61	66.48	70.89	70.74	70.63	70.60
26	70.82	71.11	70.82	71.00	70.97	71.24	71.52	66.47	70.87	70.74	70.62	70.54
27	70.83	71.12	70.80	70.96	70.96	71.44	71.46	66.45	70.92	70.74	70.61	70.55
28	70.85	71.12	70.80	70.94	70.96	69.74	71.41	66.44	71.07	70.71	70.61	70.51
29	70.85	71.13	70.79	70.93	---	68.42	71.37	66.44	71.07	70.71	70.60	70.48
30	70.86	71.17	70.78	70.92	---	68.97	71.35	66.42	71.02	70.69	70.60	70.58
31	70.87	---	70.85	70.91	---	69.66	---	66.40	---	70.67	70.59	---
MEAN	70.88	70.98	70.85	70.93	70.97	71.03	69.92	68.86	---	70.84	70.68	70.64
MAX	71.02	71.81	71.25	71.19	71.12	71.84	71.84	71.36	---	71.22	70.85	70.82
MIN	70.82	70.80	70.68	70.82	70.89	68.42	68.73	66.40	---	70.67	70.59	70.48

CAL YR 1986 MEAN 71.02 MAX 72.45 MIN 67.04

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN
02237700 APOPKA-BEAUCLAIR CANAL NEAR ASTATULA, FL--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-73, 1975-83, 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH LAB (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT									
21...	1100	460	7.5	21.0	40	6.8	4.5	32	19
DEC									
08...	1130	490	6.9	--	140	6.7	--	47	21
JAN									
20...	0900	451	7.9	19.5	50	10	2.8	43	19
FEB									
26...	1115	630	7.3	18.5	90	5.8	4.9	56	21
MAR									
17...	1100	530	7.8	20.5	90	18	6.5	44	18
29-30	1700	470	7.1	--	140	20	--	56	18
31...	1030	420	7.1	--	180	15	--	46	16
APR									
01...	0300	440	7.1	--	180	13	--	47	16
02...	1600	550	7.3	--	160	13	--	44	17
06...	1430	350	7.3	--	100	18	--	47	18
20...	0930	--	--	--	--	--	--	--	--
30...	1030	290	7.4	--	40	17	--	37	17
JUN									
04...	1410	440	--	31.0	--	--	3.7	--	--
JUL									
28...	1200	--	--	--	--	--	--	--	--
SEP									
21...	1000	--	--	--	--	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
21...	13	19	118	32	44	0.010	--	0.040	--
DEC									
08...	18	13	141	19	38	0.010	--	0.090	--
JAN									
20...	16	11	133	21	39	0.020	--	0.260	--
FEB									
26...	14	8.7	154	43	38	0.040	--	0.680	--
MAR									
17...	15	9.9	142	23	39	0.010	--	0.220	--
MAR									
29-30	12	12	121	52	29	0.120	0.100	3.70	3.50
31...	10	12	101	39	24	0.120	0.110	4.40	4.40
APR									
01...	11	12	110	39	28	0.110	0.100	3.70	3.60
02...	13	10	119	31	30	0.060	0.050	0.470	0.470
06...	14	12	139	32	39	0.110	0.110	2.50	2.40
20...	--	--	--	--	--	0.010	--	0.030	--
30...	15	9.6	140	23	38	<0.010	<0.010	<0.020	<0.020
JUN									
04...	--	--	--	--	--	<0.010	<0.010	0.020	0.060
JUL									
28...	--	--	--	--	--	0.020	0.020	0.110	0.110
SEP									
21...	--	--	--	--	--	<0.010	<0.010	0.020	<0.020

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237700 APOPKA-BEAUCLAIR CANAL NEAR ASTATULA, FL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
21...	0.100	--	5.3	--	0.200	--	0.100	--	42
DEC									
08...	0.080	--	3.9	--	0.420	--	0.250	--	40
JAN									
20...	0.130	--	4.4	--	0.310	--	0.170	--	30
FEB									
26...	0.060	--	3.5	--	0.300	--	0.150	--	31
MAR									
17...	0.040	--	5.8	--	0.360	--	0.100	--	30
MAR									
29-30	0.340	0.350	7.8	3.0	0.990	0.670	0.750	0.650	39
31...	0.360	0.370	6.2	2.8	1.00	0.810	0.860	0.780	37
APR									
01...	0.380	0.370	5.2	3.0	0.920	0.650	0.720	0.630	40
02...	0.330	0.340	7.4	2.8	0.620	0.340	0.410	0.300	37
06...	0.130	0.140	5.8	3.7	0.710	0.540	0.430	0.480	35
20...	0.020	--	5.7	--	0.320	--	0.060	--	--
30...	0.020	0.020	6.4	4.3	0.400	0.230	0.220	0.180	32
JUN									
04...	0.020	0.020	3.8	3.1	0.140	0.130	0.050	0.120	--
JUL									
28...	0.070	0.070	3.8	2.8	0.560	0.450	0.430	0.440	--
SEP									
21...	0.030	0.040	3.6	2.6	0.330	0.090	0.090	0.070	--

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02237802 DORA CANAL AT TAVARES, FL

LOCATION.--Lat 28°48'39", long 81°44'33", in NE¼ sec.30, T.19 S., R.26 E., Lake County, Hydrologic Unit 03080102, at bridge on U.S. Highway 441 just upstream from Lake Eustis, 0.9 mi northwest of Tavares, and 1.1 mi downstream from Lake Dora.

DRAINAGE AREA.--238 mi².

PERIOD OF RECORD.--1958-59 (two or three discharge measurements each water year), October 1963 to current year (discharge measurements only).

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

REMARKS.--Flow occasionally reversed as a result of wind effect.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 610 ft³/s, Mar. 25, 1958; minimum measured, -74 ft³/s, June 22, 1981.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 to SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
NOV			APR		
12...	1200	0.0	23...	1115	482
DEC			JUN		
23...	1000	55	16...	0820	71

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02238000 HAINES CREEK AT LISBON, FL

LOCATION.--Lat 28°52'14", long 81°47'02", in NW¼ sec.2, T.19 S., R.25 E., Lake County, Hydrologic Unit 03080102, on left bank at upstream side of Burrell lock and dam, 900 ft upstream from bridge on State Highway 44, 0.2 mi south of Lisbon, and 7 mi northeast of Leesburg.

DRAINAGE AREA.--648 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 National Geodetic Vertical Datum of 1929. Prior to Aug. 22, 1956, nonrecording gage at site 1,000 ft downstream at datum 58.93 ft higher and Aug. 22, 1956, to Mar. 5, 1957, at present datum. Mar. 6 to Oct. 8, 1957, nonrecording gage at present site and datum. Mar. 6 to Oct. 8, 1957, auxiliary nonrecording gage and since Oct. 9, 1957, auxiliary water-stage recorder at downstream side of lock and dam at present datum.

REMARKS.--Records fair. Since Dec. 23, 1956, flow regulated at station by manipulation of gates in spillway.

AVERAGE DISCHARGE.--14 years (water years 1943-56), 292 ft³/s, 6.20 in/yr; 24 years (water years 1957-78, 1986-87), 243 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,490 ft³/s, Mar. 30, 1987; maximum gage height, 64.50 ft, Apr. 5, 7, 8, 1960; no flow Sept. 21 to Dec. 22, 1956, result of temporary coffer dam upstream; minimum gage height, 56.84 ft, Jan. 20, 1957, former site and present datum; minimum discharge prior to closure of coffer dam, 66 ft³/s, Sept. 18, 1956, gage height, 58.54 ft, former site and present datum. Minimum daily discharge after closure of lock and dam, gates closed and no flow for many days in 1975, Oct. 18-22, 1986; minimum gage height, 60.30 ft, Mar. 12, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1926 reached a stage of about 65.3 ft, former site and present datum, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,490 ft³/s, Mar. 30; maximum gage height, 63.32 ft, Mar. 29; no flow Oct. 18-22; minimum gage height, 62.12 ft, Sept. 1, affected by wind.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	66	78	95	91	57	1440	645	187	161	28	12
2	22	66	78	98	100	55	1440	454	185	164	27	16
3	21	66	72	93	93	256	1420	451	181	166	24	16
4	19	64	62	97	93	367	1390	439	173	164	25	20
5	17	68	54	91	92	347	1380	430	167	161	25	25
6	15	66	52	98	121	340	1360	421	168	164	22	30
7	15	66	52	83	130	376	1360	422	164	161	25	28
8	15	66	60	62	147	398	1340	419	153	166	30	22
9	13	64	62	65	91	678	1340	408	153	164	28	20
10	12	64	64	68	22	930	1330	397	148	158	19	20
11	11	62	76	62	25	887	1320	400	145	153	22	26
12	10	62	78	57	27	867	1310	410	145	153	28	36
13	10	56	64	57	26	840	1300	354	148	148	25	44
14	10	43	64	60	30	835	1290	256	145	140	25	43
15	6.2	48	66	62	30	826	1310	259	142	135	31	43
16	3.9	50	66	62	35	421	1330	260	137	135	35	43
17	.50	52	66	65	39	187	1310	263	132	74	31	41
18	.00	52	68	67	37	186	1290	257	130	27	28	40
19	.00	56	69	66	32	191	1290	256	132	26	28	42
20	.00	70	70	64	28	187	1270	259	132	26	27	47
21	.00	66	64	77	36	189	1250	256	135	25	25	34
22	.00	64	58	96	46	186	1240	252	127	27	29	31
23	39	64	68	90	43	178	1180	252	125	27	28	29
24	58	64	83	93	40	180	957	247	120	24	22	25
25	60	66	82	96	46	180	841	237	117	27	21	24
26	58	68	80	100	44	204	821	220	120	29	19	24
27	56	66	76	90	46	232	804	213	127	28	18	24
28	54	60	76	93	52	246	804	204	130	25	18	17
29	56	62	73	94	---	638	790	200	145	26	20	17
30	60	72	75	97	---	1490	782	193	153	23	19	23
31	62	---	80	92	---	1460	---	194	---	21	13	---
TOTAL	727.60	1859	2136	2490	1642	14414	36289	9928	4366	2928	765	862
MEAN	23.5	62.0	68.9	80.3	58.6	465	1210	320	146	94.5	24.7	28.7
MAX	62	72	83	100	147	1490	1440	645	187	166	35	47
MIN	.00	43	52	57	22	55	782	193	117	21	13	12

CAL YR 1986 TOTAL 39598.10 MEAN 108 MAX 1220 MIN .00
WTR YR 1987 TOTAL 78406.60 MEAN 215 MAX 1490 MIN .00

02238000 HAINES CREEK AT LISBON, FL--Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.74	62.48	62.54	62.61	62.78	63.22	62.94	62.69	62.47	62.38	62.25	62.17
2	62.73	62.48	62.54	62.62	62.82	63.21	62.93	62.75	62.46	62.39	62.25	62.21
3	62.72	62.48	62.51	62.60	62.79	63.16	62.91	62.74	62.45	62.40	62.26	62.21
4	62.71	62.47	62.46	62.62	62.79	63.12	62.86	62.73	62.42	62.39	62.26	62.24
5	62.69	62.49	62.42	62.60	62.79	63.07	62.85	62.70	62.40	62.38	62.26	62.26
6	62.68	62.48	62.41	62.62	62.91	63.05	62.83	62.68	62.39	62.39	62.24	62.26
7	62.68	62.48	62.41	62.65	62.94	63.15	62.82	62.68	62.37	62.38	62.26	62.26
8	62.68	62.48	62.45	62.65	63.01	63.21	62.80	62.67	62.35	62.40	62.28	62.25
9	62.66	62.47	62.46	62.66	63.01	63.12	62.79	62.63	62.35	62.39	62.26	62.24
10	62.65	62.47	62.47	62.67	63.01	62.99	62.78	62.61	62.33	62.37	62.23	62.24
11	62.64	62.46	62.53	62.64	63.02	62.90	62.77	62.62	62.32	62.35	62.25	62.28
12	62.63	62.46	62.54	62.63	63.03	62.86	62.75	62.65	62.32	62.35	62.28	62.32
13	62.63	62.43	62.47	62.62	63.03	62.80	62.74	62.67	62.33	62.33	62.27	62.38
14	62.63	62.36	62.47	62.63	63.04	62.78	62.73	62.70	62.32	62.30	62.27	62.39
15	62.58	62.39	62.48	62.64	63.05	62.76	62.75	62.71	62.31	62.28	62.28	62.39
16	62.55	62.40	62.48	62.64	63.10	62.87	62.78	62.70	62.29	62.28	62.31	62.39
17	62.50	62.41	62.48	62.65	63.11	62.96	62.76	62.71	62.27	62.26	62.30	62.38
18	62.46	62.41	62.49	62.66	63.10	62.96	62.73	62.70	62.26	62.26	62.29	62.37
19	62.43	62.43	62.49	62.67	63.08	62.98	62.72	62.70	62.27	62.25	62.28	62.37
20	62.41	62.50	62.49	62.66	63.06	62.96	62.70	62.71	62.27	62.27	62.28	62.36
21	62.43	62.48	62.46	62.73	63.09	62.96	62.67	62.70	62.28	62.27	62.27	62.34
22	62.42	62.47	62.43	62.82	63.13	62.95	62.66	62.68	62.25	62.27	62.27	62.32
23	62.43	62.47	62.49	62.79	63.13	62.94	62.57	62.67	62.24	62.26	62.26	62.31
24	62.44	62.47	62.56	62.79	63.11	62.95	62.67	62.65	62.22	62.25	62.26	62.28
25	62.45	62.48	62.56	62.81	63.14	62.95	62.79	62.62	62.21	62.24	62.24	62.27
26	62.44	62.49	62.53	62.83	63.14	63.03	62.75	62.58	62.22	62.27	62.23	62.25
27	62.43	62.48	62.52	62.79	63.15	63.12	62.72	62.56	62.25	62.29	62.22	62.23
28	62.42	62.45	62.51	62.80	63.17	63.16	62.72	62.53	62.26	62.27	62.22	62.22
29	62.43	62.46	62.50	62.80	---	63.20	62.69	62.51	62.32	62.26	62.21	62.23
30	62.45	62.51	62.51	62.81	---	63.00	62.67	62.48	62.35	62.25	62.19	62.27
31	62.46	---	62.55	62.79	---	62.96	---	62.47	---	62.23	62.18	

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238001 HAINES CREEK BELOW BURRELL DAM, AT LISBON, FL

LOCATION.--Lat 28°52'16", long 81°47'04", in NW¼ sec.2, T.19 S., R.25 E., Lake County, Hydrologic Unit 03080102, on left bank at downstream side of Burrell lock and dam, 750 ft upstream from bridge on State Highway 44, 0.2 mi south of Lisbon, and 7 mi northeast of Leesburg.

DRAINAGE AREA.--648 mi².

PERIOD OF RECORD.--March 1955 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and available in files of the Orlando Subdistrict Office. Prior to October 1967, published as Haines Creek at Lisbon (auxiliary).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 61.48 ft, Oct. 9, 1960; minimum observed, 52.90 ft, June 26, 1984, result of drawdown of Lake Griffin.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 60.92 ft, Mar. 31; minimum, 58.18 ft, Sept. 1, affected by wind.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.88	58.68	58.72	59.00	59.30	59.28	60.84	59.05	58.67	58.46	58.56	58.36
2	58.87	58.68	58.73	58.98	59.31	59.32	60.78	58.89	58.64	58.48	58.56	58.36
3	58.86	58.69	58.74	58.95	59.32	59.39	60.75	58.89	58.63	58.49	58.54	58.35
4	58.84	58.68	58.71	58.99	59.33	59.44	60.69	58.89	58.60	58.48	58.54	58.37
5	58.83	58.67	58.69	59.05	59.34	59.46	60.59	58.89	58.59	58.49	58.52	58.38
6	58.81	58.66	58.68	59.05	59.48	59.37	60.53	58.90	58.59	58.50	58.50	58.38
7	58.79	58.65	58.68	59.05	59.52	59.48	60.46	58.91	58.57	58.49	58.52	58.38
8	58.78	58.64	58.68	59.05	59.63	59.61	60.37	58.92	58.53	58.48	58.50	58.37
9	58.77	58.63	58.68	59.05	59.60	59.82	60.28	58.89	58.51	58.48	58.48	58.35
10	58.76	58.62	58.69	59.06	59.52	59.95	60.20	58.89	58.49	58.49	58.49	58.33
11	58.75	58.62	58.73	59.08	59.43	59.89	60.14	58.91	58.48	58.52	58.53	58.33
12	58.74	58.62	58.75	59.07	59.37	59.88	60.08	58.94	58.48	58.54	58.58	58.36
13	58.72	58.60	58.73	59.05	59.30	59.84	60.00	58.89	58.61	58.54	58.58	58.45
14	58.72	58.57	58.72	59.04	59.28	59.80	59.98	58.86	58.59	58.54	58.57	58.47
15	58.72	58.58	58.73	59.04	59.27	59.76	60.03	58.87	58.57	58.55	58.57	58.46
16	58.69	58.57	58.73	59.05	59.36	59.42	60.03	58.86	58.55	58.55	58.57	58.45
17	58.67	58.57	58.73	59.05	59.37	59.23	60.00	58.89	58.52	58.53	58.56	58.44
18	58.65	58.57	58.75	59.05	59.37	59.23	59.98	58.88	58.49	58.53	58.55	58.43
19	58.61	58.60	58.73	59.08	59.34	59.26	59.92	58.88	58.48	58.53	58.53	58.43
20	58.53	58.66	58.75	59.08	59.33	59.23	59.89	58.96	58.45	58.53	58.52	58.42
21	58.55	58.65	58.73	59.13	59.33	59.23	59.88	58.94	58.42	58.53	58.52	58.41
22	58.53	58.63	58.72	59.25	59.38	59.20	59.85	58.93	58.41	58.52	58.51	58.39
23	58.53	58.62	58.75	59.26	59.37	59.15	59.92	58.91	58.38	58.51	58.50	58.39
24	58.53	58.61	58.85	59.24	59.29	59.14	59.64	58.88	58.37	58.47	58.48	58.38
25	58.53	58.61	58.83	59.25	59.25	59.14	59.32	58.86	58.35	58.46	58.46	58.36
26	58.53	58.61	58.84	59.32	59.22	59.21	59.26	58.82	58.33	58.48	58.44	58.34
27	58.53	58.60	58.83	59.31	59.21	59.33	59.22	58.80	58.34	58.60	58.42	58.32
28	58.53	58.59	58.83	59.29	59.20	59.42	59.23	58.76	58.37	58.59	58.41	58.30
29	58.53	58.60	58.83	59.29	---	59.63	59.20	58.73	58.41	58.57	58.39	58.29
30	58.65	58.68	58.83	59.31	---	60.56	59.18	58.72	58.45	58.54	58.37	58.36
31	58.66	---	58.85	59.33	---	60.90	---	58.69	---	58.54	58.36	---
MEAN	58.68	58.63	58.75	59.12	59.36	59.53	60.01	58.87	58.50	58.52	58.50	58.38
MAX	58.88	58.69	58.85	59.33	59.63	60.90	60.84	59.05	58.67	58.60	58.58	58.47
MIN	58.53	58.57	58.68	58.95	59.20	59.14	59.18	58.69	58.33	58.46	58.36	58.29
CAL YR 1986	MEAN	58.81	MAX	60.22	MIN	58.16						
WTR YR 1987	MEAN	58.90	MAX	60.90	MIN	58.29						

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238499 OKLAWAHA RIVER ABOVE MOSS BLUFF DAM, AT MOSS BLUFF, FL

LOCATION.--Lat 29°04'52", long 81°52'51", in SW¼ sec.23, T.16 S., R.24 E., Marion County, Hydrologic Unit 03080102, at upstream side of spillway structure of Moss Bluff Dam, 0.3 mi upstream from bridge on State Highway 464, 0.4 mi southwest of Moss Bluff, 3.9 mi northeast of Oklawaha, and 64.3 mi upstream from mouth.

DRAINAGE AREA.--879 mi².

PERIOD OF RECORD.--October 1965 to June 1967 and October 1969 to current year (gage heights only).

REVISED RECORDS.--WDR FL-74-1: Drainage area.

GAGE.--Dual water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 20, 1965, to June 8, 1967, at datum 0.12 ft lower and Oct. 1, 1969, to Mar. 5, 1971, at datum 0.30 ft higher. This is the auxiliary gage for station 02238500 located at downstream side of spillway structure.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 60.10 ft, present datum, Dec. 10, 1969; minimum, 45.45 ft, Mar. 6, 1973, result of dike failure.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 59.56 ft, Feb. 8; minimum, 57.69 ft, Apr. 13.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.81	58.52	58.61	58.90	59.19	59.19	58.63	58.54	58.51	58.37	58.47	58.25
2	58.79	58.53	58.65	58.85	59.27	59.15	58.61	58.59	58.48	58.40	58.47	58.24
3	58.76	58.53	58.59	58.83	59.20	59.10	58.57	58.57	58.47	58.41	58.46	58.22
4	58.76	58.52	58.54	58.93	59.18	59.03	58.43	58.58	58.44	58.38	58.47	58.25
5	58.73	58.56	58.48	58.76	59.17	59.00	58.38	58.55	58.40	58.37	58.45	58.28
6	58.71	58.54	58.46	58.87	59.36	58.94	58.31	58.54	58.38	58.40	58.42	58.25
7	58.70	58.54	58.52	58.95	59.37	59.12	58.23	58.61	58.36	58.40	58.43	58.26
8	58.70	58.53	58.58	58.94	59.45	59.28	58.15	58.61	58.37	58.38	58.41	58.25
9	58.69	58.52	58.61	58.94	59.35	59.11	58.07	58.54	58.37	58.38	58.37	58.23
10	58.68	58.50	58.61	58.99	59.27	58.89	57.97	58.58	58.35	58.40	58.37	58.24
11	58.66	58.50	58.67	58.91	59.22	58.86	57.87	58.60	58.33	58.40	58.43	58.22
12	58.63	58.50	58.70	58.93	59.14	58.86	57.79	58.63	58.34	58.45	58.49	58.25
13	58.65	58.42	58.55	58.93	59.12	58.81	58.05	58.62	58.48	58.44	58.45	58.34
14	58.65	58.34	58.59	58.95	59.16	58.85	58.26	58.63	58.46	58.43	58.45	58.35
15	58.57	58.42	58.62	58.97	59.17	58.83	58.27	58.67	58.45	58.48	58.47	58.34
16	58.53	58.46	58.61	58.97	59.26	58.98	58.26	58.64	58.42	58.45	58.50	58.33
17	58.51	58.47	58.63	58.96	59.24	59.04	58.22	58.68	58.40	58.42	58.47	58.33
18	58.42	58.47	58.65	58.99	59.22	59.04	58.20	58.68	58.35	58.40	58.45	58.32
19	58.38	58.48	58.64	59.00	59.16	59.07	58.14	58.68	58.36	58.42	58.43	58.32
20	58.38	58.58	58.63	58.95	59.15	59.01	58.16	58.76	58.33	58.45	58.42	58.28
21	58.42	58.50	58.59	59.00	59.19	59.01	58.17	58.76	58.32	58.43	58.41	58.26
22	58.38	58.52	58.53	59.15	59.25	58.98	58.15	58.70	58.28	58.43	58.40	58.24
23	58.42	58.53	58.67	59.10	59.14	58.94	58.16	58.71	58.25	58.42	58.40	58.25
24	58.43	58.54	58.74	59.12	59.09	58.98	58.35	58.68	58.24	58.38	58.39	58.22
25	58.44	58.54	58.71	59.18	59.06	58.98	58.46	58.65	58.23	58.38	58.37	58.23
26	58.45	58.55	58.68	59.16	59.03	59.07	58.40	58.62	58.22	58.43	58.34	58.22
27	58.44	58.52	58.68	59.14	59.07	59.14	58.43	58.61	58.25	58.52	58.32	58.20
28	58.43	58.46	58.66	59.17	59.12	59.20	58.51	58.56	58.23	58.51	58.31	58.17
29	58.45	58.48	58.68	59.18	---	59.24	58.47	58.54	58.29	58.48	58.28	58.17
30	58.48	58.58	58.69	59.22	---	58.89	58.49	58.52	58.33	58.45	58.26	58.26
31	58.53	---	58.74	59.16	---	58.68	---	58.52	---	58.47	58.24	---
MEAN	58.57	58.50	58.62	59.00	59.20	59.01	58.27	58.62	58.36	58.42	58.41	58.26
MAX	58.81	58.58	58.74	59.22	59.45	59.28	58.63	58.76	58.51	58.52	58.50	58.35
MIN	58.38	58.34	58.46	58.76	59.03	58.68	57.79	58.52	58.22	58.37	58.24	58.17
CAL YR	1986	MEAN	58.64	MAX	59.28	MIN	57.52					
WTR YR	1987	MEAN	58.60	MAX	59.45	MIN	57.79					

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02238500 OKLAWAHA RIVER AT MOSS BLUFF, FL

LOCATION.--Lat 29°04'52", long 81°52'51", in SW¼ sec.23, T.16 S., R.24 E., Marion County, Hydrologic Unit 03080102, at downstream side of spillway structure of Moss Bluff Dam, 0.3 mi upstream from bridge on State Highway 464, 0.4 mi southwest of Moss Bluff, 3.9 mi northeast of Oklawaha, and 64.3 mi upstream from mouth.

DRAINAGE AREA.--879 mi².

PERIOD OF RECORD.--February to September 1943 (discharge measurements only), October 1943 to September 1955, April 1956 and March 1958 to July 1967 (discharge measurements only), August 1967 to current year.

REVISED RECORDS.--WDR FL-74-1: Drainage area.

GAGE.--Dual water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1943, nonrecording gage and Aug. 12, 1943, to Sept. 30, 1955, water-stage recorder at site 0.3 mi downstream at datum 0.12 ft lower; Aug. 11, 1967, to Sept. 30, 1969, water-stage recorder at site 0.3 mi downstream at present datum. Auxiliary gage at upstream side of spillway structure.

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

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

AVERAGE DISCHARGE.--32 years (water years 1944-55, 1968-87), 285 ft³/s, 206,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,340 ft³/s, Feb. 20, 1983; maximum gage height, 50.71 ft, present datum, Sept. 12, 1960, from U.S. Army Corps of Engineers records; gates closed and no flow for many days in 1973-74; minimum gage height, 34.04 ft, Dec. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,860 ft³/s, Apr. 12; maximum daily gage height, 44.51 ft, Mar. 31; minimum daily discharge, 24 ft³/s, many days; minimum daily gage height, 35.34 ft, Oct. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	27	28	27	42	129	1840	454	230	34	48	24
2	25	33	28	29	32	128	1840	324	236	32	44	26
3	37	28	26	33	27	324	1840	324	235	39	29	24
4	52	27	29	28	27	421	1840	300	231	48	32	26
5	50	24	26	27	24	423	1840	302	234	40	28	36
6	27	29	32	27	24	425	1840	299	240	26	35	45
7	24	29	24	27	29	425	1840	303	247	29	32	54
8	24	41	29	30	45	435	1840	300	180	29	39	24
9	29	48	27	27	275	697	1850	314	130	31	45	24
10	27	25	34	34	592	930	1840	322	128	29	24	28
11	41	33	27	27	598	928	1850	299	130	40	24	24
12	42	33	28	24	587	930	1860	300	127	43	32	33
13	32	29	29	24	225	930	1400	270	142	24	33	34
14	29	30	27	24	29	941	1190	234	141	24	25	29
15	24	32	27	29	38	948	1190	230	128	26	33	24
16	25	33	32	27	27	463	1190	247	131	28	44	26
17	29	29	27	45	27	239	1200	251	130	25	24	28
18	39	27	24	46	68	228	1210	237	125	41	24	29
19	40	27	27	29	125	228	1210	231	130	44	24	37
20	24	27	29	25	91	228	1190	235	142	26	24	40
21	28	30	27	25	62	247	1200	222	147	26	26	30
22	25	37	27	24	283	260	1190	231	125	33	45	26
23	27	37	27	24	428	236	1190	259	123	30	49	24
24	32	29	29	29	423	228	806	257	125	34	25	214
25	32	32	27	29	425	232	608	257	128	44	29	28
26	44	32	27	29	343	232	611	233	125	45	30	38
27	24	32	27	24	130	228	580	238	134	26	32	45
28	27	32	45	24	142	236	592	235	141	24	24	24
29	24	34	27	28	---	455	598	231	125	26	50	26
30	24	27	30	27	---	1520	590	243	55	32	43	24
31	24	---	24	37	---	1840	---	247	---	24	29	---
TOTAL	960	933	877	889	5168	16114	39865	8429	4645	1002	1025	1094
MEAN	31.0	31.1	28.3	28.7	185	520	1329	272	155	32.3	33.1	36.5
MAX	52	48	45	46	598	1840	1860	454	247	48	50	214
MIN	24	24	24	24	24	128	580	222	55	24	24	24
AC-FT	1900	1850	1740	1760	10250	31960	79070	16720	9210	1990	2030	2170
CAL YR 1986	TOTAL	38242	MEAN	105	MAX	2120	MIN	24	AC-FT	75850		
WTR YR 1987	TOTAL	81001	MEAN	222	MAX	1860	MIN	24	AC-FT	160700		

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238500 OKLAWAHA RIVER AT MOSS BLUFF, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.63	35.44	36.03	35.65	35.63	37.29	44.36	39.03	37.43	36.48	36.02	35.78
2	35.58	35.56	36.09	35.75	35.59	37.47	44.23	38.47	37.41	36.33	36.07	35.75
3	35.58	35.56	36.00	35.68	35.55	38.00	44.16	38.30	37.39	36.26	36.00	35.76
4	35.63	35.52	35.94	35.66	35.50	38.64	44.09	38.17	37.36	36.26	35.96	35.79
5	35.65	35.47	35.95	35.88	35.59	38.72	44.01	38.14	37.34	36.29	35.93	35.82
6	35.57	35.53	35.85	35.80	37.08	38.73	43.96	38.16	37.42	36.31	35.92	35.85
7	35.56	35.54	35.69	35.71	37.22	39.00	43.91	38.09	37.42	36.33	35.87	35.87
8	35.52	35.56	35.61	35.67	37.05	39.34	43.87	38.05	37.24	36.27	35.86	35.77
9	35.56	35.59	35.55	35.57	37.50	40.44	43.80	38.07	36.91	36.21	35.87	35.70
10	35.55	35.53	35.53	35.53	39.19	41.45	43.73	38.08	36.79	36.17	35.85	35.67
11	35.59	35.53	35.65	35.53	39.52	41.10	43.69	38.07	36.78	36.16	35.88	35.64
12	35.60	35.53	35.70	35.51	39.59	41.04	43.62	38.10	36.75	36.17	35.97	35.69
13	35.58	35.53	35.71	35.49	38.78	41.02	42.65	37.98	36.82	36.11	35.97	35.84
14	35.55	35.53	35.65	35.42	37.28	41.04	41.91	37.83	36.89	36.04	35.91	35.86
15	35.52	35.53	35.60	35.40	36.57	41.05	41.77	37.84	36.82	36.02	35.95	35.83
16	35.51	35.51	35.59	35.37	36.35	39.78	41.72	38.13	36.78	36.02	35.98	35.75
17	35.50	35.49	35.53	35.42	36.31	38.46	41.70	38.07	36.74	35.98	35.92	35.71
18	35.52	35.48	35.50	35.43	36.32	38.08	41.70	37.92	36.71	36.03	35.93	35.70
19	35.53	35.53	35.45	35.44	36.63	37.94	41.65	37.88	36.70	36.12	35.82	35.72
20	35.47	35.63	35.44	35.39	36.56	37.83	41.60	37.85	36.73	36.06	35.78	35.76
21	35.44	35.62	35.43	35.42	36.66	37.79	41.59	37.81	36.76	36.02	35.84	35.78
22	35.41	35.61	35.40	35.60	37.99	37.77	41.53	37.77	36.66	36.01	36.09	35.72
23	35.38	35.58	35.44	35.71	39.01	37.68	41.51	37.76	36.60	35.98	36.07	35.73
24	35.39	35.52	35.66	35.71	39.07	37.62	40.67	37.74	36.62	35.97	35.93	35.74
25	35.39	35.49	35.65	35.70	39.03	37.61	39.70	37.70	36.59	35.98	35.85	35.69
26	35.47	35.49	35.58	35.87	38.53	37.69	39.54	37.62	36.56	36.02	35.83	35.69
27	35.49	35.49	35.51	35.89	37.70	37.94	39.41	37.57	36.66	35.97	35.80	35.72
28	35.42	35.50	35.50	35.85	37.33	38.87	39.40	37.52	36.87	35.93	35.77	35.64
29	35.38	35.51	35.49	35.78	---	39.48	39.37	37.46	36.72	35.89	35.80	35.60
30	35.38	35.70	35.53	35.73	---	42.91	39.33	37.48	36.55	35.88	35.82	35.70
31	35.34	---	35.50	35.69	---	44.51	---	37.49	---	35.93	35.78	---
MEAN	35.51	35.54	35.64	35.62	37.33	39.24	42.14	37.94	36.90	36.10	35.90	35.74
MAX	35.65	35.70	36.09	35.89	39.59	44.51	44.36	39.03	37.43	36.48	36.09	35.87
MIN	35.34	35.44	35.40	35.37	35.50	37.29	39.33	37.46	36.55	35.88	35.77	35.60
CAL YR	1986	MEAN	36.35	MAX	43.60	MIN	35.34					
WTR YR	1987	MEAN	36.96	MAX	44.51	MIN	35.34					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02239500 SILVER SPRINGS NEAR OCALA, FL

LOCATION.--Lat 29°12'44", long 82°03'15", in SE¼ sec.1, T.15 S., R.23 E., Marion County, Hydrologic Unit 03080102, in canal at glass bottom boat docking shed, 1,400 ft downstream from head of springs, and 5.3 mi northeast of Ocala.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is 38.96 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 20, 1947, nonrecording gage at same site and datum. Feb. 20, 1947, to May 23, 1974, at site 800 ft north at same datum.

REMARKS.--Records fair. Discharge measurements made 4 to 5 mi downstream from head of springs; surface inflow between head of springs and measuring site is subtracted when measureable. Prior to Nov. 20, 1959, measurements made at site 0.7 mi downstream from head of springs. Discharge computed from relation between artesian pressure at Sharpes Ferry Well and discharge at measuring site. Artesian pressures are published as water levels for Sharpes Ferry Well (291115081592501) in Volume 1B: Northeast Florida, Ground Water.

AVERAGE DISCHARGE.--55 years (water years 1933-87), 811 ft³/s, 524 mgd.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,290 ft³/s, Oct. 7, 13-17, 20, 1960; maximum gage height observed, 5.50 ft, Sept. 6, 1933; minimum daily discharge, 539 ft³/s, May 7, 1957; minimum gage height, -0.99 ft, June 22, 23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 938 ft³/s, Apr. 29, 30, May 7, 8; maximum gage height, 2.68 ft, Mar. 31; minimum daily discharge, 734 ft³/s, Jan. 24; minimum gage height, 0.34 ft, Feb. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	796	771	758	756	741	782	844	937	907	883	852	825
2	796	773	756	742	747	778	855	936	905	885	853	824
3	794	775	749	740	744	776	868	934	907	884	850	824
4	794	775	745	755	741	776	871	932	906	884	849	826
5	794	773	747	750	740	776	879	934	906	881	849	826
6	793	768	748	742	754	780	888	936	907	880	846	824
7	791	764	751	743	760	795	895	938	910	883	843	824
8	790	764	754	744	755	799	899	938	908	881	842	822
9	790	765	756	745	748	800	904	934	905	883	842	819
10	792	765	757	751	741	796	908	932	901	885	843	818
11	790	766	758	743	746	789	910	935	897	886	845	816
12	789	765	754	740	753	792	912	937	894	886	844	817
13	790	761	745	742	758	797	915	936	893	883	841	819
14	791	757	746	743	760	801	918	934	895	877	839	819
15	789	761	750	746	762	804	925	935	894	874	838	819
16	787	763	753	746	767	807	931	937	892	872	838	819
17	784	763	755	745	762	809	932	933	889	866	837	818
18	781	761	756	746	757	814	929	932	886	864	831	819
19	779	760	751	744	752	820	924	932	886	863	829	818
20	779	760	750	739	755	817	924	928	886	861	833	817
21	779	756	744	744	764	818	927	924	879	862	832	814
22	779	755	745	754	771	821	928	922	868	863	833	813
23	778	755	754	737	767	810	930	922	861	868	834	815
24	780	754	758	734	764	826	932	922	883	862	833	817
25	781	754	750	747	766	838	932	921	881	859	830	815
26	780	755	746	747	768	840	933	919	879	858	828	811
27	778	754	748	737	773	842	934	917	884	857	827	809
28	773	753	746	735	778	845	937	916	883	853	827	808
29	774	755	747	736	---	846	938	916	879	852	827	812
30	776	760	748	743	---	848	938	915	878	850	825	820
31	773	---	752	744	---	846	---	913	---	850	824	---
TOTAL	24340	22861	23277	23060	21194	25088	27360	28797	26749	26995	25964	24547
MEAN	785	762	751	744	757	809	912	929	892	871	838	818
MAX	796	775	758	756	778	848	938	938	910	886	853	826
MIN	773	753	744	734	740	776	844	913	861	850	824	808
CAL YR	1986	TOTAL	289279	MEAN	793	MAX	855	MIN	744			
WTR YR	1987	TOTAL	300232	MEAN	823	MAX	938	MIN	734			

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02239500 SILVER SPRINGS NEAR OCALA, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.83	.64	.63	.45	.37	.89	2.60	1.92	1.64	1.36	1.08	.96
2	.81	.65	.63	.45	.37	.95	2.50	1.89	1.62	1.32	1.08	.94
3	.80	.65	.61	.45	.36	.96	2.44	1.86	1.61	1.29	1.07	.94
4	.80	.64	.59	.47	.34	1.00	2.42	1.84	1.60	1.28	1.05	.94
5	.79	.63	.58	.48	.39	1.03	2.41	1.84	1.61	1.31	1.04	.94
6	.79	.62	.56	.48	.69	1.05	2.41	1.85	1.61	1.30	1.03	.93
7	.78	.62	.54	.46	.80	1.20	2.41	1.84	1.59	1.29	1.02	.93
8	.77	.62	.53	.44	.75	1.39	2.41	1.82	1.58	1.27	1.01	.91
9	.80	.62	.52	.43	.68	1.38	2.41	1.82	1.54	1.26	1.00	.89
10	.78	.61	.50	.42	.78	1.48	2.40	1.81	1.51	1.24	.99	.87
11	.78	.60	.52	.40	.89	1.51	2.40	1.81	1.49	1.23	1.02	.87
12	.77	.59	.52	.39	.95	1.50	2.39	1.80	1.47	1.23	1.03	.90
13	.77	.59	.51	.39	.97	1.49	2.38	1.80	1.47	1.21	1.02	.92
14	.75	.58	.50	.38	.83	1.50	2.27	1.79	1.48	1.19	1.01	.91
15	.74	.58	.49	.37	.69	1.51	2.21	1.80	1.47	1.18	1.02	.90
16	.74	.57	.49	.37	.63	1.50	2.19	1.83	1.45	1.18	1.02	.88
17	.73	.56	.48	.37	.60	1.36	2.18	1.80	1.43	1.16	1.01	.87
18	.72	.55	.47	.37	.58	1.26	2.18	1.80	1.42	1.16	.99	.86
19	.71	.57	.46	.37	.60	1.23	2.17	1.81	1.41	1.16	.97	.86
20	.70	.58	.45	.36	.61	1.20	2.16	1.80	1.40	1.16	.96	.87
21	.69	.57	.44	.37	.68	1.18	2.16	1.78	1.40	1.15	1.01	.86
22	.68	.56	.43	.40	.85	1.17	2.16	1.76	1.39	1.14	1.06	.85
23	.67	.55	.47	.41	1.02	1.17	2.15	1.75	1.39	1.13	1.05	.85
24	.67	.54	.50	.42	1.09	1.16	2.15	1.74	1.38	1.11	1.03	.85
25	.67	.52	.48	.42	1.08	1.17	2.05	1.73	1.36	1.11	.99	.83
26	.69	.52	.46	.42	1.06	1.19	1.98	1.71	1.35	1.11	.98	.82
27	.69	.51	.46	.42	.97	1.28	1.95	1.69	1.37	1.10	.97	.82
28	.66	.52	.44	.41	.89	1.69	1.94	1.68	1.41	1.09	.96	.81
29	.66	.52	.43	.40	---	1.88	1.93	1.67	1.40	1.07	.95	.80
30	.66	.58	.43	.39	---	2.16	1.93	1.65	1.38	1.06	.95	.85
31	.64	---	.44	.38	---	2.64	---	1.65	---	1.06	.95	---
MEAN	.73	.58	.50	.41	.73	1.36	2.24	1.79	1.47	1.19	1.01	.88
MAX	.83	.65	.63	.48	1.09	2.64	2.60	1.92	1.64	1.36	1.08	.96
MIN	.64	.51	.43	.36	.34	.89	1.93	1.65	1.35	1.06	.95	.80

WTR YR 1987 MEAN 1.08 MAX 2.64 MIN .34

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

LOCATION.--Lat 29°12'52", long 81°59'10", in SW¼ sec. 2, T.15 S., R.23 E., Marion County, Hydrologic Unit 03080102, on right bank 75 ft upstream from bridge on State Highway 40, 0.2 mi downstream from Silver River, 1.5 mi southwest of Conner, 8 mi east of Ocala, and 51.0 mi upstream from mouth.

DRAINAGE AREA.--1,196 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to September 1946, March 1963 to September 1977 (gage heights only), October 1977 to current year.

REVISED RECORDS.--WDR FL-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 31.79 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Aug. 18 to Sept. 22. Records good. Some effect from Moss Bluff Dam 13.3 mi upstream.

AVERAGE DISCHARGE.--26 years (water years 1931-36, 1978-87), 1,160 ft³/s, 13.17 in/yr, 840,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,430 ft³/s, Apr. 9, 1982; maximum gage height, 9.14 ft, Sept. 6, 1933; minimum discharge, 622 ft³/s, Jan. 11, 1982; minimum gage height, 2.26 ft, Nov. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,400 ft³/s, Mar. 31, gage height, 7.74 ft; minimum, 748 ft³/s, Oct. 31; minimum gage height, 3.55 ft, Jan. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	805	767	860	805	794	1070	3340	1600	1150	972	876	811
2	797	784	872	816	789	1110	3220	1450	1140	943	886	815
3	794	788	856	810	784	1130	3140	1370	1140	925	878	823
4	797	783	843	809	779	1230	3090	1330	1130	922	872	850
5	801	775	843	831	796	1280	3060	1320	1130	930	867	846
6	793	782	832	828	1030	1280	3050	1330	1150	937	864	842
7	792	786	813	816	1080	1410	3040	1310	1130	942	857	838
8	784	787	801	809	1030	1610	3030	1290	1120	928	851	835
9	790	791	793	798	998	1620	3020	1290	1050	917	852	832
10	788	788	786	791	1200	1980	3000	1300	1020	908	850	827
11	793	783	807	784	1340	1990	2980	1310	1020	901	857	823
12	794	785	823	782	1410	1950	2980	1320	1010	903	870	835
13	793	784	811	783	1380	1920	2900	1300	1020	895	867	898
14	788	782	803	775	1110	1900	2610	1280	1040	883	859	960
15	781	783	796	773	955	1900	2490	1280	1030	863	863	922
16	777	782	793	770	908	1810	2440	1340	1020	789	869	882
17	776	779	787	771	891	1420	2410	1320	1010	785	863	862
18	778	776	781	776	877	1270	2410	1290	999	787	850	847
19	780	785	776	776	907	1210	2390	1290	995	809	842	840
20	775	802	772	770	911	1180	2380	1270	995	825	835	835
21	768	798	769	772	948	1160	2360	1260	1000	825	836	828
22	763	796	766	795	1120	1150	2350	1240	994	825	840	824
23	759	791	775	811	1320	1130	2330	1240	985	824	842	827
24	761	785	807	814	1400	1130	2260	1230	986	824	840	827
25	762	779	806	809	1390	1120	1920	1220	976	824	835	821
26	771	780	795	823	1340	1140	1760	1210	971	837	831	819
27	782	776	785	825	1190	1200	1700	1190	992	872	826	821
28	766	778	781	823	1080	1590	1660	1180	1040	863	823	816
29	760	780	782	813	---	1720	1650	1170	1020	855	819	812
30	762	811	789	806	---	2390	1630	1160	992	853	816	824
31	755	---	784	800	---	3330	---	1160	---	862	814	---
TOTAL	24185	23546	24887	24764	29757	47330	76600	39850	31255	27028	26350	25242
MEAN	780	785	803	799	1063	1527	2553	1285	1042	872	850	841
MAX	805	811	872	831	1410	3330	3340	1600	1150	972	886	960
MIN	755	767	766	770	779	1070	1630	1160	971	785	814	811
AC-FT	47970	46700	49360	49120	59020	93880	151900	79040	61990	53610	52270	50070
CFSM	.65	.66	.67	.67	.89	1.28	2.13	1.07	.87	.73	.71	.70
IN.	.75	.73	.77	.77	.93	1.47	2.38	1.24	.97	.84	.82	.79

CAL YR 1986 TOTAL 346870 MEAN 950 MAX 2840 MIN 755 AC-FT 688000 CFSM .79 IN. 10.79
WTR YR 1987 TOTAL 400794 MEAN 1098 MAX 3340 MIN 755 AC-FT 795000 CFSM .92 IN. 12.47

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.84	3.65	4.15	3.81	3.72	5.02	7.69	6.05	5.23	4.69	4.23	---
2	3.81	3.73	4.21	3.87	3.68	5.12	7.60	5.86	5.21	4.56	4.28	---
3	3.79	3.75	4.13	3.84	3.65	5.16	7.54	5.73	5.19	4.47	4.24	---
4	3.81	3.73	4.05	3.84	3.61	5.43	7.50	5.66	5.17	4.46	4.21	---
5	3.82	3.68	4.05	3.97	3.72	5.54	7.47	5.64	5.18	4.50	4.18	---
6	3.79	3.72	3.98	3.95	4.89	5.56	7.46	5.66	5.21	4.53	4.17	---
7	3.78	3.74	3.87	3.88	5.04	5.78	7.45	5.61	5.19	4.56	4.13	---
8	3.75	3.74	3.80	3.83	4.91	6.06	7.45	5.59	5.15	4.49	4.11	---
9	3.77	3.76	3.75	3.76	4.78	6.07	7.44	5.58	4.97	4.43	4.11	---
10	3.76	3.75	3.72	3.72	5.35	6.48	7.42	5.59	4.88	4.39	4.10	---
11	3.79	3.72	3.83	3.68	5.68	6.49	7.41	5.61	4.86	4.35	4.13	---
12	3.79	3.73	3.92	3.66	5.80	6.45	7.40	5.63	4.85	4.37	4.20	---
13	3.79	3.72	3.85	3.67	5.74	6.42	7.34	5.60	4.87	4.32	4.18	---
14	3.76	3.71	3.81	3.62	5.13	6.40	7.08	5.56	4.92	4.27	4.14	---
15	3.73	3.71	3.77	3.60	4.61	6.40	6.97	5.55	4.90	4.14	4.16	---
16	3.71	3.71	3.75	3.58	4.39	6.30	6.93	5.68	4.85	3.67	4.20	---
17	3.70	3.70	3.72	3.59	4.30	5.80	6.90	5.64	4.82	3.64	4.17	---
18	3.71	3.68	3.68	3.61	4.23	5.51	6.90	5.58	4.80	3.66	---	---
19	3.72	3.72	3.65	3.62	4.38	5.39	6.88	5.57	4.78	3.82	---	---
20	3.70	3.82	3.63	3.58	4.41	5.29	6.87	5.53	4.78	3.93	---	---
21	3.66	3.79	3.61	3.59	4.56	5.24	6.86	5.49	4.81	3.93	---	---
22	3.64	3.78	3.58	3.74	5.16	5.21	6.84	5.46	4.77	3.93	---	---
23	3.62	3.75	3.64	3.84	5.64	5.19	6.83	5.44	4.74	3.92	---	3.94
24	3.63	3.72	3.82	3.86	5.78	5.16	6.76	5.43	4.74	3.92	---	3.94
25	3.63	3.69	3.82	3.83	5.76	5.15	6.41	5.41	4.71	3.92	---	3.90
26	3.67	3.69	3.75	3.91	5.67	5.19	6.24	5.38	4.68	4.00	---	3.89
27	3.73	3.67	3.69	3.93	5.33	5.35	6.17	5.33	4.76	4.21	---	3.90
28	3.65	3.68	3.67	3.91	5.05	6.03	6.13	5.30	4.92	4.17	---	3.86
29	3.62	3.69	3.67	3.85	---	6.20	6.11	5.26	4.87	4.13	---	3.84
30	3.63	3.86	3.72	3.80	---	6.86	6.09	5.24	4.76	4.12	---	3.92
31	3.59	---	3.69	3.76	---	7.69	---	5.25	---	4.16	---	---
MEAN	3.72	3.73	3.81	3.76	4.82	5.80	7.00	5.55	4.92	4.18	---	---
MAX	3.84	3.86	4.21	3.97	5.80	7.69	7.69	6.05	5.23	4.69	---	---
MIN	3.59	3.65	3.58	3.58	3.61	5.02	6.09	5.24	4.68	3.64	---	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-77, 1982 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1972 to September 1973, October 1983 to current year.

WATER TEMPERATURE: January 1983 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 442 microsiemens, Feb. 18,19,20, 1984; minimum daily mean, 297 microsiemens, July 26, 1984.

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 436 microsiemens, Sept. 28,29; minimum daily mean, 268 microsiemens, Mar. 31.

WATER TEMPERATURE: Maximum daily mean, 25.0°C, several days in June; minimum daily mean, 16.5°C, Apr. 5,6.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	415	412	406	408	425	397	282	381	415	424	428	430
2	414	409	411	416	430	389	307	385	415	426	428	431
3	413	409	411	424	429	384	325	386	416	427	428	432
4	411	411	404	410	428	374	336	390	416	426	429	431
5	411	412	402	410	425	371	335	390	415	426	430	430
6	413	409	406	420	395	378	343	389	413	423	430	430
7	412	408	410	409	361	366	344	393	415	426	430	429
8	413	407	421	408	382	337	348	403	417	425	430	431
9	410	408	424	416	418	347	349	410	420	426	429	432
10	412	410	419	413	381	342	348	409	421	426	430	432
11	411	410	414	415	362	360	346	407	420	426	428	433
12	411	410	410	417	373	366	347	408	422	426	427	432
13	414	411	412	415	379	370	352	411	421	427	428	429
14	415	412	412	412	396	371	361	407	421	427	429	430
15	415	411	416	410	407	374	362	406	421	428	428	429
16	414	412	424	412	409	381	365	397	424	428	427	430
17	412	412	418	417	408	394	363	404	421	427	429	432
18	411	412	415	416	410	399	366	414	422	428	427	432
19	410	410	415	414	416	398	367	403	422	426	430	432
20	412	408	417	413	411	399	365	411	422	426	431	433
21	413	407	414	412	408	399	364	408	422	427	426	433
22	413	408	413	411	369	399	364	416	423	427	422	433
23	414	411	412	409	360	398	366	411	423	427	427	433
24	413	412	413	411	362	398	370	412	423	427	428	432
25	413	411	413	406	375	397	378	412	423	428	430	432
26	410	410	414	405	377	396	381	413	424	427	430	432
27	411	409	414	418	386	387	381	414	422	427	431	434
28	413	409	411	406	397	328	380	414	415	427	432	436
29	414	411	409	408	---	314	379	414	421	429	431	436
30	415	407	408	406	---	296	379	414	424	429	430	431
31	415	---	409	421	---	268	---	414	---	429	431	---
MEAN	413	410	413	413	396	370	355	405	420	427	429	432
MAX	415	412	424	424	430	399	381	416	424	429	432	436
MIN	410	407	402	405	360	268	282	381	413	423	422	429

WTR YR 1987 MEAN 407 MAX 436 MIN 268

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.2	23.3	23.2	21.7	21.1	22.2	17.7	23.2	24.7	24.4	23.9	24.3
2	24.2	23.2	23.1	21.0	21.6	21.5	17.3	23.2	24.9	24.6	24.1	24.0
3	24.1	23.3	22.6	20.9	21.8	21.1	17.6	23.5	25.0	24.5	24.3	23.8
4	24.1	23.2	21.9	21.1	21.8	20.9	17.2	23.9	25.0	24.3	24.3	23.9
5	24.2	23.3	21.7	20.9	21.7	20.5	16.6	23.8	24.9	24.3	24.2	24.1
6	24.1	23.5	21.9	20.9	20.0	20.3	16.7	23.6	24.9	24.0	24.4	24.1
7	24.1	23.6	22.0	21.3	20.3	19.9	17.3	23.7	24.8	24.4	24.4	24.3
8	23.9	23.6	22.5	21.5	20.5	19.9	17.9	23.9	24.6	24.5	24.5	24.2
9	24.0	23.6	22.7	21.6	20.0	19.8	18.2	23.9	24.5	24.4	24.5	24.1
10	23.7	23.6	22.9	22.0	18.3	19.2	18.6	23.7	24.6	24.3	24.2	24.1
11	23.9	23.6	22.9	21.5	17.8	19.0	19.1	23.7	24.6	24.4	24.2	24.0
12	24.1	23.7	22.7	20.9	17.9	18.6	19.8	23.9	24.7	24.4	24.4	23.8
13	24.1	23.5	22.0	21.2	18.7	18.3	20.8	24.0	24.7	24.5	24.3	24.0
14	24.1	22.8	22.0	21.5	20.0	18.2	21.8	23.8	24.6	24.5	23.9	24.2
15	23.6	22.6	22.4	22.0	21.1	18.5	22.5	24.0	24.7	24.1	23.9	24.3
16	23.3	22.9	22.5	22.5	21.7	19.4	22.1	24.1	24.7	24.0	24.2	24.2
17	23.0	23.1	22.5	22.5	21.5	20.9	21.8	24.2	24.8	24.3	24.4	24.2
18	23.0	23.4	22.6	22.5	21.6	21.4	21.6	24.3	24.7	24.2	24.5	24.1
19	23.0	23.3	22.5	22.5	21.3	22.0	21.3	24.0	24.8	24.1	24.3	24.1
20	22.9	23.3	22.7	22.1	21.2	22.0	21.6	24.1	24.8	24.1	24.1	24.1
21	22.8	23.0	22.2	21.9	20.7	22.1	22.2	24.3	24.9	24.2	24.2	24.2
22	22.8	22.5	22.1	21.6	19.7	22.1	23.0	24.4	24.7	24.1	24.3	24.0
23	23.1	22.8	22.4	20.8	19.6	22.2	23.4	24.5	24.7	24.3	24.4	23.9
24	23.2	23.2	22.6	20.7	19.1	22.3	23.9	24.5	24.7	24.3	24.3	23.9
25	23.3	23.3	22.2	21.1	19.6	22.7	23.4	24.6	24.9	24.4	24.3	23.8
26	23.3	23.3	22.0	21.0	20.3	22.6	23.1	24.5	24.8	24.3	24.4	23.8
27	23.2	23.2	21.9	20.3	21.4	22.5	22.8	24.3	24.6	24.4	24.3	23.9
28	22.9	23.1	22.1	20.4	22.1	21.7	22.9	24.5	24.7	24.2	24.3	23.9
29	23.0	23.2	21.8	21.1	---	21.8	23.3	24.5	24.7	24.3	24.4	23.9
30	23.1	23.2	21.8	21.3	---	21.0	23.0	24.5	24.2	24.3	24.4	23.7
31	23.4	---	21.6	21.3	---	19.4	---	24.6	---	24.2	24.3	---
MEAN	23.5	23.2	22.3	21.4	20.4	20.8	20.6	24.1	24.7	24.3	24.3	24.0
MAX	24.2	23.7	23.2	22.5	22.1	22.7	23.9	24.6	25.0	24.6	24.5	24.3
MIN	22.8	22.5	21.6	20.3	17.8	18.2	16.6	23.2	24.2	24.0	23.9	23.7

WTR YR 1987 MEAN 22.8 MAX 25.0 MIN 16.6

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 24...	1430	3.72	785	418	7.6	23.5	0.60	5.5	210	67	10
JAN 06...	1249	3.94	827	448	--	21.0	1.2	6.8	210	67	10
FEB 09...	1552	4.69	972	450	7.4	20.0	2.6	6.3	210	66	9.9
MAY 05...	0733	5.62	1310	421	7.9	23.0	3.2	3.7	190	59	10
JUL 01...	0801	4.70	975	440	--	24.0	1.2	4.4	200	65	9.7
SEP 02...	1400	4.02	838	418	7.6	24.5	0.70	--	220	70	9.9

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
NOV 24...	6.8	1.1	--	54	11	0.20	9.9	249	252	--	<0.010
JAN 06...	7.3	1.0	--	66	11	0.20	10	270	261	--	<0.010
FEB 09...	7.0	1.4	103	88	12	0.20	11	281	262	1.09	0.010
MAY 05...	8.3	2.3	159	43	13	0.20	7.4	231	242	0.590	0.010
JUL 01...	6.9	1.3	--	48	11	0.20	9.2	246	247	--	<0.010
SEP 02...	6.5	1.0	--	47	9.8	0.20	9.7	246	250	--	<0.010

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)
NOV 24...	0.790	0.030	0.040	0.27	0.30	0.060	0.040	0.030	<10	1
JAN 06...	0.780	0.030	0.030	0.37	0.40	0.040	0.030	0.030	--	--
FEB 09...	1.10	0.060	0.060	1.3	1.4	0.040	0.030	0.030	--	--
MAY 05...	0.600	0.080	0.070	1.1	1.2	0.040	0.050	0.030	30	1
JUL 01...	0.740	0.060	0.050	0.54	0.60	0.030	0.050	0.020	<10	1
SEP 02...	0.730	0.030	0.040	0.17	0.20	0.050	0.050	0.040	<10	1

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 24...	6	<0.5	<1	<1	<3	2	11	<5	9	<1
JAN 06...	--	--	--	--	--	--	--	--	--	--
FEB 09...	--	--	--	--	--	--	--	--	--	--
MAY 05...	22	<0.5	2	<1	<3	2	38	<5	10	6
JUL 01...	5	<0.5	<1	3	<3	1	11	<5	6	2
SEP 02...	4	<0.5	<1	<1	<3	<1	7	<5	<4	<1

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 24...	--	<10	<1	<1	<1.0	560	<6	13	2	45
JAN 06...	--	--	--	--	--	--	--	--	4	84
FEB 09...	--	--	--	--	--	--	--	--	--	--
MAY 05...	<0.1	<10	<1	<1	<1.0	470	<6	10	--	--
JUL 01...	0.4	<10	1	<1	<1.0	550	<6	<3	18	89
SEP 02...	--	<10	<1	<1	<1.0	590	<6	<3	39	79

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240500 OKLAWAHA RIVER AT EUREKA, FL

LOCATION.--Lat 29°22'18", long 81°54'07", in SW¼ sec.9, T.13 S., R.24 E., Marion County, Hydrologic Unit 03080102, near right bank on upstream end of pier of bridge on county road 316 in Eureka, 3.1 mi downstream from Eaton Creek, and 33.1 mi upstream from mouth.

DRAINAGE AREA.--1,367 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 National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Feb. 13, 1930, to June 30, 1934, nonrecording gage, and Sept. 16, 1943, to Dec. 31, 1952, water-stage recorder near present site at datum 15.44 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--19 years (water years 1931-34, 1944-52, 1982-87), 1,360 ft³/s, 13.49 in/yr, 983,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,230 ft³/s, Sept. 7, 1933; maximum gage height, 26.52 ft, Apr. 11, 1982; minimum discharge, 626 ft³/s, Feb. 2, 1933, gage height, 18.08 ft, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,180 ft³/s, Apr. 1, gage height, 24.62 ft; minimum, 724 ft³/s, Nov. 18,19, gage height, 19.64 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	740	826	935	933	855	1550	4090	1620	1150	1180	913	892
2	738	817	956	936	834	1540	4140	1590	1150	1180	946	898
3	739	810	966	935	821	1510	3940	1570	1140	1120	904	896
4	741	802	952	947	812	1480	3690	1520	1140	1050	902	962
5	743	792	935	982	863	1440	3470	1460	1140	1030	921	961
6	744	781	919	993	1080	1410	3300	1420	1150	1050	904	929
7	760	774	890	985	1200	1470	3190	1380	1140	1020	883	915
8	762	768	854	961	1310	1620	3130	1360	1130	999	864	903
9	769	762	819	930	1350	1800	3080	1380	1120	978	852	896
10	783	759	796	899	1330	1930	3040	1410	1100	961	875	890
11	795	754	879	881	1280	1940	3010	1380	1080	940	929	888
12	798	748	923	865	1250	1970	2980	1370	1050	925	955	923
13	799	749	926	856	1270	2040	2950	1350	1050	924	937	1000
14	803	748	916	854	1320	2050	2920	1390	1100	908	935	1050
15	812	745	900	845	1370	2030	2850	1640	1080	899	942	1020
16	815	738	888	838	1370	2010	2700	1800	1050	892	926	973
17	813	733	876	834	1290	1980	2540	1700	1030	883	902	933
18	814	727	856	830	1180	1940	2430	1590	1020	885	882	901
19	819	731	835	826	1090	1830	2360	1510	1010	897	867	883
20	823	764	826	827	1030	1660	2320	1470	1010	911	853	883
21	816	759	821	835	1070	1510	2300	1410	1010	961	848	899
22	808	754	820	894	1150	1400	2280	1370	1010	933	853	885
23	801	752	851	931	1230	1320	2260	1330	1020	911	866	871
24	797	749	937	938	1320	1270	2240	1290	1110	903	868	861
25	800	747	971	936	1420	1250	2210	1260	1090	898	860	851
26	804	746	979	935	1500	1260	2160	1240	1040	901	851	840
27	832	747	959	922	1550	1300	2030	1220	1020	890	846	833
28	827	755	932	907	1550	1760	1870	1210	1070	874	847	828
29	827	768	908	898	---	2620	1750	1200	1100	851	843	827
30	864	844	889	886	---	3270	1670	1180	1130	837	841	845
31	845	---	891	872	---	3700	---	1170	---	866	847	---
TOTAL	24631	22949	27805	27911	33695	55860	82900	43790	32440	29457	27462	27136
MEAN	795	765	897	900	1203	1802	2763	1413	1081	950	886	905
MAX	864	844	979	993	1550	3700	4140	1800	1150	1180	955	1050
MIN	738	727	796	826	812	1250	1670	1170	1010	837	841	827
AC-FT	48860	45520	55150	55360	66830	110800	164400	86860	64340	58430	54470	53820
CFSM	.58	.56	.66	.66	.88	1.32	2.02	1.03	.79	.70	.65	.66
IN.	.67	.62	.76	.76	.92	1.52	2.26	1.19	.88	.80	.75	.74

CAL YR 1986 TOTAL 361310 MEAN 990 MAX 2400 MIN 727 AC-FT 716700 CFSM .72 IN. 9.83
WTR YR 1987 TOTAL 436036 MEAN 1195 MAX 4140 MIN 727 AC-FT 864900 CFSM .87 IN. 11.87

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240902 PRAIRIE CREEK NEAR GAINESVILLE, FL

LOCATION.--Lat. 29°36'41", long 82°14'56", in NW¼ sec.19, T.10 S., R.21 E., Alachua County, Hydrologic Unit 03080102, on upstream side of bridge on State Highway 20, 50 ft downstream from control at outlet of Newnans Lake, 7 mi southeast of Gainesville, and 8.4 mi upstream from mouth (at Orange Lake).

DRAINAGE AREA.--114 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 National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Aug. 24, 1978, nonrecording gage at same site at datum 0.50 ft higher.

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

AVERAGE DISCHARGE.--9 years, 73.9 ft³/s, 8.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 812 ft³/s, Mar. 15, 1948; maximum gage height observed, 8.02 ft, present datum, Mar. 15, 1948; minimum discharge measured, 0.37 ft³/s, Apr. 23, 1956; minimum gage height, 1.65 ft, present datum, Apr. 23, 1956, June 15, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 490 ft³/s, Apr. 3, gage height, 7.64 ft; minimum, 8.4 ft³/s, Oct. 26, Sept. 27, 28; minimum gage height, 2.29 ft, Oct. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	28	11	28	70	155	273	470	178	42	17	15	12	
2	26	10	29	74	148	295	485	173	38	15	15	12	
3	23	9.8	32	80	153	307	482	168	34	16	15	12	
4	21	10	34	86	152	311	474	165	30	16	16	12	
5	19	14	36	101	162	313	458	162	32	15	15	11	
6	18	14	37	98	173	312	444	154	47	16	15	11	
7	20	14	31	98	181	313	427	146	40	19	15	11	
8	20	14	30	100	185	319	410	140	33	24	15	11	
9	20	14	30	102	190	329	393	140	28	27	15	11	
10	22	14	30	101	191	335	376	132	25	31	14	11	
11	24	14	31	103	191	338	362	124	23	28	13	11	
12	22	13	36	101	188	331	348	118	21	25	14	11	
13	19	14	49	101	189	324	337	116	19	23	13	11	
14	17	15	48	101	187	315	325	116	18	23	13	11	
15	19	12	46	100	186	307	314	112	17	21	13	11	
16	16	12	46	102	191	299	303	109	17	22	13	10	
17	15	12	47	103	199	296	294	103	17	22	13	10	
18	15	12	47	99	199	285	283	96	18	23	13	10	
19	16	12	51	100	199	278	273	96	17	19	13	9.8	
20	12	12	50	104	199	272	265	91	16	18	13	9.8	
21	10	12	51	107	204	263	253	90	16	20	13	9.7	
22	9.8	12	57	113	214	256	245	102	15	20	13	9.6	
23	9.7	12	51	123	233	251	240	95	15	18	12	9.6	
24	9.7	12	55	134	252	240	229	89	14	19	12	9.6	
25	9.5	12	58	142	264	232	219	84	14	19	12	9.4	
26	9.5	12	62	146	268	227	212	76	14	18	12	9.0	
27	9.8	12	61	150	266	233	205	71	16	17	12	8.6	
28	11	12	61	154	264	267	196	67	19	16	12	8.5	
29	10	15	58	156	---	290	190	60	19	15	12	8.6	
30	11	20	55	152	---	335	183	54	18	15	12	8.6	
31	11	---	62	156	---	418	---	48	---	16	12	---	
TOTAL	503.0	383.8	1399	3457	5583	9164	9695	3475	692	613	415	309.8	
MEAN	16.2	12.8	45.1	112	199	296	323	112	23.1	19.8	13.4	10.3	
MAX	28	20	62	156	268	418	485	178	47	31	16	12	
MIN	9.5	9.8	28	70	148	227	183	48	14	15	12	8.5	
CFSM	.14	.11	.40	.98	1.75	2.59	2.83	.98	.20	.17	.12	.09	
IN.	.16	.13	.46	1.13	1.82	2.99	3.16	1.13	.23	.20	.14	.10	
CAL YR	1986	TOTAL	25475.7	MEAN	69.8	MAX	299	MIN	4.2	CFSM	.61	IN.	8.31
WTR YR	1987	TOTAL	35689.6	MEAN	97.8	MAX	485	MIN	8.5	CFSM	.86	IN.	11.65

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240902 PRAIRIE CREEK NEAR GAINESVILLE, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.06	2.42	3.13	4.07	5.34	6.50	7.56	5.66	3.37	2.63	2.58	2.47
2	3.00	2.40	3.16	4.14	5.25	6.65	7.62	5.60	3.26	2.59	2.56	2.46
3	2.91	2.37	3.26	4.25	5.31	6.73	7.61	5.54	3.16	2.62	2.58	2.46
4	2.83	2.38	3.32	4.36	5.30	6.76	7.58	5.48	3.07	2.60	2.59	2.46
5	2.75	2.56	3.37	4.62	5.42	6.77	7.51	5.42	3.10	2.57	2.59	2.45
6	2.74	2.58	3.39	4.56	5.56	6.77	7.45	5.32	3.49	2.62	2.58	2.45
7	2.79	2.58	3.21	4.55	5.66	6.78	7.38	5.22	3.33	2.71	2.57	2.44
8	2.79	2.58	3.17	4.58	5.70	6.81	7.31	5.15	3.15	2.89	2.57	2.44
9	2.79	2.57	3.16	4.61	5.76	6.88	7.23	5.14	3.02	2.97	2.56	2.43
10	2.88	2.57	3.16	4.58	5.77	6.93	7.15	5.04	2.93	3.08	2.55	2.43
11	2.95	2.55	3.19	4.62	5.77	6.94	7.08	4.92	2.86	3.01	2.51	2.42
12	2.90	2.54	3.35	4.57	5.74	6.90	7.00	4.83	2.79	2.92	2.52	2.43
13	2.77	2.59	3.67	4.56	5.75	6.85	6.93	4.78	2.72	2.87	2.52	2.42
14	2.69	2.60	3.66	4.55	5.72	6.79	6.86	4.79	2.69	2.87	2.51	2.42
15	2.75	2.50	3.59	4.52	5.71	6.74	6.78	4.71	2.66	2.79	2.51	2.42
16	2.64	2.49	3.61	4.56	5.76	6.68	6.70	4.65	2.64	2.82	2.51	2.41
17	2.59	2.48	3.63	4.58	5.86	6.66	6.64	4.55	2.65	2.84	2.52	2.40
18	2.61	2.48	3.61	4.51	5.85	6.58	6.58	4.43	2.69	2.84	2.51	2.40
19	2.63	2.50	3.70	4.50	5.86	6.53	6.50	4.43	2.64	2.73	2.50	2.39
20	2.46	2.49	3.68	4.56	5.86	6.49	6.44	4.35	2.61	2.67	2.50	2.39
21	2.38	2.51	3.70	4.61	5.91	6.42	6.35	4.33	2.59	2.76	2.52	2.38
22	2.36	2.49	3.83	4.72	6.02	6.37	6.29	4.54	2.58	2.75	2.51	2.38
23	2.36	2.48	3.68	4.90	6.18	6.33	6.22	4.41	2.57	2.69	2.49	2.38
24	2.36	2.48	3.79	5.06	6.34	6.24	6.15	4.32	2.55	2.70	2.49	2.38
25	2.35	2.48	3.85	5.16	6.42	6.17	6.08	4.23	2.53	2.70	2.48	2.38
26	2.34	2.47	3.92	5.23	6.46	6.13	6.00	4.09	2.55	2.69	2.48	2.36
27	2.36	2.48	3.90	5.28	6.45	6.18	5.93	3.98	2.62	2.63	2.49	2.35
28	2.40	2.50	3.90	5.33	6.42	6.45	5.86	3.92	2.73	2.60	2.48	2.35
29	2.40	2.63	3.82	5.35	---	6.62	5.78	3.77	2.71	2.57	2.48	2.35
30	2.45	2.83	3.75	5.30	---	6.91	5.72	3.63	2.69	2.57	2.47	2.35
31	2.43	---	3.89	5.35	---	7.34	---	3.50	---	2.59	2.47	---
MEAN	2.64	2.52	3.55	4.71	5.83	6.64	6.74	4.67	2.83	2.74	2.52	2.41
MAX	3.06	2.83	3.92	5.35	6.46	7.34	7.62	5.66	3.49	3.08	2.59	2.47
MIN	2.34	2.37	3.13	4.07	5.25	6.13	5.72	3.50	2.53	2.57	2.47	2.35
CAL YR	1986	MEAN	3.58	MAX	6.56	MIN	2.03					
WTR YR	1987	MEAN	3.97	MAX	7.62	MIN	2.34					

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240954 HOGTOWN CREEK NEAR ARREDONDO, FL

LOCATION.--Lat 29°38'17", long 82°23'33", in NE¼ sec.10, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080102, near right bank at downstream side of bridge on county road 30, 2.5 mi northeast of Arredondo, and 4.2 mi west of Gainesville.

DRAINAGE AREA.--41.2 mi².

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

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

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

AVERAGE DISCHARGE.--15 years (water years 1973-87), 19.9 ft³/s, 6.56 in/yr, 14,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 671 ft³/s, Aug. 26, 1972, gage height, 60.11 ft; minimum, 1.2 ft³/s, May 23, 1981; minimum gage height, 55.95 ft, June 14,15, July 28, 1977, May 23,24, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 392 ft³/s, Mar. 31, gage height, 58.88 ft; minimum, 2.5 ft³/s, Sept. 29; minimum gage height, 56.20 ft, Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	5.8	11	77	50	20	78	236	7.4	4.7	10	8.1	5.6		
2	5.4	9.1	59	54	19	142	134	7.0	4.2	8.6	7.9	14		
3	5.1	8.1	61	38	21	90	90	6.6	4.2	8.1	13	17		
4	4.9	7.6	45	32	20	61	76	6.4	4.4	7.4	17	9.9		
5	4.6	7.2	29	45	25	45	62	6.6	5.4	7.0	16	8.8		
6	4.6	7.0	21	38	121	36	52	6.6	5.4	6.4	11	7.4		
7	6.8	7.0	17	28	112	46	43	6.4	4.7	7.9	8.1	7.2		
8	18	6.8	15	24	80	96	38	6.2	4.0	9.3	6.2	6.2		
9	52	6.6	14	20	58	79	33	7.6	3.9	8.6	5.2	5.4		
10	78	6.4	12	19	42	60	30	7.2	3.7	21	4.7	4.7		
11	69	7.0	14	20	34	46	26	6.4	3.6	41	8.1	4.7		
12	41	14	40	18	27	38	24	13	3.6	24	34	12		
13	25	16	64	16	25	34	22	13	3.9	13	37	32		
14	19	12	49	15	22	30	21	11	4.0	9.3	27	25		
15	18	9.3	33	14	20	27	21	12	4.9	26	18	13		
16	14	8.6	25	16	38	25	24	13	3.7	26	14	9.1		
17	11	7.9	21	20	68	24	20	9.1	3.3	16	11	6.8		
18	9.6	7.4	18	22	46	23	18	8.1	3.2	9.9	8.1	7.0		
19	8.6	7.0	16	19	34	24	16	26	8.3	9.9	7.0	23		
20	8.1	6.8	15	20	27	25	15	28	9.9	9.3	6.2	17		
21	7.9	7.2	14	20	39	22	14	19	6.2	16	5.8	10		
22	7.4	6.8	13	65	86	20	13	44	6.0	17	5.4	6.8		
23	7.0	6.0	14	119	111	19	12	27	23	11	4.7	5.8		
24	6.8	5.6	41	80	87	17	12	16	22	16	4.4	5.0		
25	6.6	5.4	35	58	63	17	10	10	11	12	4.4	4.6		
26	7.4	5.1	25	56	49	18	9.6	8.1	11	9.3	4.2	3.9		
27	11	5.1	20	45	38	24	9.1	7.0	19	9.3	4.0	3.3		
28	12	5.2	17	35	32	195	8.6	8.1	36	12	4.6	2.9		
29	9.1	16	15	29	---	252	7.6	6.4	23	7.6	4.4	2.7		
30	16	83	14	25	---	252	7.4	5.6	14	6.0	3.9	2.9		
31	16	---	15	23	---	374	---	5.1	---	7.4	4.2	---		
TOTAL	515.7	318.2	868	1083	1364	2239	1104.3	363.9	264.2	402.3	317.6	283.7		
MEAN	16.6	10.6	28.0	34.9	48.7	72.2	36.8	11.7	8.81	13.0	10.2	9.46		
MAX	78	83	77	119	121	374	236	44	36	41	37	32		
MIN	4.6	5.1	12	14	19	17	7.4	5.1	3.2	6.0	3.9	2.7		
AC-FT	1020	631	1720	2150	2710	4440	2190	722	524	798	630	563		
CFSM	.40	.26	.68	.85	1.18	1.75	.89	.28	.21	.31	.25	.23		
IN.	.47	.29	.78	.98	1.23	2.02	1.00	.33	.24	.36	.29	.26		
CAL YR 1986	TOTAL	7251.4	MEAN	19.9	MAX	159	MIN	2.4	AC-FT	14380	CFSM	.48	IN.	6.55
WTR YR 1987	TOTAL	9123.9	MEAN	25.0	MAX	374	MIN	2.7	AC-FT	18100	CFSM	.61	IN.	8.24

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02240956 HAILE SINK NEAR ARREDONDO, FL

LOCATION.--Lat 29°37'41", long 82°24'40", in NE¼ sec.16, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080102, on northwest rim of sink, 1.6 mi north of Arredondo, and 5.2 mi west of Gainesville.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1971 to September 1977 and February 1978 to current year (gage heights only).

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

REMARKS.--Sink has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 58.41 ft, Aug. 29, 1972; minimum, unknown, water level below lowest recordable gage height for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 56.97 ft, Apr. 3; minimum, 47.40 ft, Nov. 28.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48.32	48.61	51.69	49.07	49.42	52.93	56.62	54.75	53.79	52.95	51.63	50.40
2	48.29	48.43	51.85	50.40	49.25	53.45	56.88	54.67	53.72	52.87	51.59	50.55
3	48.26	48.33	51.70	50.26	49.16	53.61	56.95	54.60	53.65	52.80	51.65	50.79
4	48.23	48.24	51.33	49.75	49.16	53.63	56.95	54.53	53.59	52.72	51.72	50.66
5	48.20	48.17	50.39	49.84	49.36	53.60	56.91	54.47	53.55	52.64	51.84	50.46
6	48.18	48.10	49.30	50.07	51.36	53.49	56.85	54.40	53.52	52.57	51.78	50.36
7	48.25	48.06	48.78	49.69	52.83	53.48	56.75	54.35	53.45	52.48	51.62	50.34
8	48.44	48.02	48.56	49.29	52.86	53.66	56.66	54.29	53.38	52.46	51.42	50.29
9	49.79	47.99	48.43	48.98	52.70	53.82	56.58	54.22	53.32	52.43	51.25	50.20
10	51.27	47.95	48.35	48.80	52.49	53.86	56.49	54.20	53.25	52.49	51.13	50.08
11	52.07	47.97	48.42	48.64	52.15	53.82	56.39	54.14	53.18	52.72	51.18	50.03
12	51.96	48.40	49.07	48.53	51.65	53.74	56.30	54.11	53.13	52.82	51.97	50.30
13	51.37	48.47	50.37	48.36	51.14	53.64	56.20	54.13	53.08	52.72	52.31	51.15
14	50.50	48.21	50.91	48.24	50.62	53.53	56.11	54.12	53.02	52.59	52.40	51.42
15	49.85	47.96	50.39	48.20	50.23	53.42	56.05	54.12	53.00	52.59	52.30	51.03
16	49.44	47.85	49.63	48.27	50.53	53.30	55.98	54.14	52.94	52.69	52.10	50.55
17	49.07	47.80	49.17	48.44	51.71	53.18	55.90	54.11	52.87	52.65	51.87	50.30
18	48.85	47.78	48.92	48.59	52.14	53.08	55.81	54.07	52.81	52.53	51.63	50.18
19	48.68	47.79	48.69	48.60	51.80	52.98	55.73	54.14	52.77	52.39	51.41	50.58
20	48.57	47.79	48.54	48.45	51.33	52.88	55.64	54.28	52.80	52.31	51.22	50.84
21	48.48	47.73	48.36	48.50	51.12	52.77	55.55	54.29	52.77	52.34	51.07	50.47
22	48.40	47.66	48.18	49.69	52.08	52.64	55.47	54.32	52.72	52.39	50.97	50.14
23	48.34	47.55	48.24	52.00	52.89	52.52	55.37	54.38	52.78	52.35	50.90	49.98
24	48.32	47.48	48.92	52.58	53.08	52.38	55.30	54.36	52.94	52.29	50.83	49.88
25	48.29	47.45	49.65	52.37	53.03	52.24	55.22	54.30	52.91	52.26	50.76	49.78
26	48.34	47.43	49.18	52.11	52.97	52.14	55.13	54.22	52.85	52.13	50.70	49.68
27	48.45	47.43	48.77	51.77	52.87	52.25	55.05	54.14	52.92	52.04	50.64	49.62
28	48.52	47.41	48.51	51.26	52.73	53.51	54.97	54.08	53.03	52.05	50.60	49.55
29	48.39	47.96	48.32	50.54	---	54.29	54.90	54.02	53.07	51.96	50.55	49.52
30	48.53	49.94	48.17	50.04	---	54.29	54.83	53.93	53.04	51.80	50.49	49.50
31	48.83	---	48.17	49.73	---	55.98	---	53.86	---	51.67	50.43	---
MEAN	49.05	48.00	49.32	49.71	51.52	53.36	55.98	54.25	53.13	52.44	51.35	50.29
MAX	52.07	49.94	51.85	52.58	53.08	55.98	56.95	54.75	53.79	52.95	52.40	51.42
MIN	48.18	47.41	48.17	48.20	49.16	52.14	54.83	53.86	52.72	51.67	50.43	49.50
CAL YR	1986	MEAN	49.33	MAX	53.97	MIN	46.95					
WTR YR	1987	MEAN	51.53	MAX	56.95	MIN	47.41					

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02241000 CAMPS CANAL NEAR ROCHELLE, FL

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

DRAINAGE AREA.--775 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 National Geodetic Vertical Datum of 1929. Mar. 16, 1948 to Nov. 14, 1952, reference point at datum 15.27 ft higher. Aug. 8, 1957, to Oct. 28, 1960, water-stage recorder at datum 5.00 ft higher.

REMARKS.--Records fair. Seasonal diversion out of or into canal above station by drainage and/or pumpage for irrigation of pastures in Paynes Prairie.

AVERAGE DISCHARGE.--12 years (water years 1958-60, 1979-87), 88.9 ft³/s, 1.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft³/s, Mar. 24, 1959, gage height, 13.21 ft, present datum; no flow June 8-13, July 11, 12, 1985; minimum gage height, 6.15 ft, June 12, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 546 ft³/s, Apr. 3, gage height, 11.09 ft; minimum, 6.8 ft³/s, Sept. 28, 29, gage height 7.17 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	32	9.0	27	89	197	280	493	196	56	16	12	8.1	
2	29	8.8	30	92	196	290	528	190	48	14	11	8.2	
3	26	8.4	32	95	194	296	544	186	41	14	12	8.1	
4	23	8.3	34	104	195	303	542	182	34	14	13	8.1	
5	20	9.5	35	115	203	307	526	175	35	13	12	8.2	
6	18	13	38	122	219	310	505	169	62	13	11	8.0	
7	19	13	36	125	222	330	482	163	54	16	10	7.9	
8	20	13	32	128	226	344	460	158	43	23	10	7.8	
9	20	13	31	129	229	341	440	156	33	22	10	7.8	
10	22	13	30	132	234	341	419	152	28	25	10	7.7	
11	23	13	31	133	236	341	399	145	24	25	10	7.7	
12	25	13	37	133	235	341	377	140	21	23	10	8.5	
13	21	13	47	131	235	336	364	135	19	21	10	8.7	
14	18	14	55	130	235	325	353	136	18	19	9.7	8.3	
15	17	13	57	129	229	316	347	136	17	19	9.7	8.1	
16	17	11	57	130	212	306	335	130	16	19	10	7.9	
17	14	11	58	132	201	298	323	125	15	18	9.8	7.8	
18	13	10	58	132	198	292	310	120	16	18	9.2	7.7	
19	14	10	60	130	196	285	295	120	15	18	8.9	7.9	
20	13	11	61	131	195	276	284	114	14	15	9.0	8.1	
21	9.6	11	61	134	212	269	274	112	13	17	9.9	7.9	
22	8.5	11	64	140	233	262	261	119	14	16	9.2	7.7	
23	8.2	11	68	146	238	255	252	117	14	15	8.8	7.6	
24	8.2	10	71	156	239	248	244	112	13	15	8.6	7.5	
25	8.2	10	71	170	248	241	238	106	13	14	8.4	7.4	
26	8.2	9.7	74	180	257	237	230	100	12	15	8.3	7.3	
27	8.2	9.7	77	185	260	243	223	93	14	15	8.2	7.1	
28	8.3	10	78	190	261	345	216	88	16	13	8.1	6.9	
29	8.7	16	78	194	---	354	209	82	17	12	8.1	6.9	
30	9.7	23	75	196	---	395	201	73	17	11	8.1	7.2	
31	9.3	---	76	196	---	462	---	65	---	11	8.1	---	
TOTAL	499.1	349.4	1639	4329	6235	9569	10674	4095	752	519	301.1	234.1	
MEAN	16.1	11.6	52.9	140	223	309	356	132	25.1	16.7	9.71	7.80	
MAX	32	23	78	196	261	462	544	196	62	25	13	8.7	
MIN	8.2	8.3	27	89	194	237	201	65	12	11	8.1	6.9	
CFSM	.02	.02	.07	.18	.29	.40	.46	.17	.03	.02	.01	.01	
IN.	.02	.02	.08	.21	.30	.46	.51	.20	.04	.02	.01	.01	
CAL YR	1986	TOTAL	21666.1	MEAN	59.4	MAX	210	MIN	3.7	CFSM	.08	IN.	1.04
WTR YR	1987	TOTAL	39195.7	MEAN	107	MAX	544	MIN	6.9	CFSM	.14	IN.	1.88

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02241000 CAMPS CANAL NEAR ROCHELLE, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.84	7.31	7.86	8.56	9.37	9.88	10.88	9.36	8.23	7.57	7.45	7.27
2	7.78	7.30	7.92	8.57	9.37	9.94	11.02	9.33	8.14	7.52	7.43	7.29
3	7.73	7.27	7.95	8.61	9.36	9.97	11.08	9.30	8.05	7.52	7.47	7.28
4	7.67	7.25	7.97	8.68	9.36	10.00	11.07	9.27	7.97	7.52	7.49	7.28
5	7.61	7.32	7.99	8.77	9.42	10.02	11.01	9.22	7.98	7.49	7.45	7.28
6	7.55	7.43	8.03	8.83	9.52	10.04	10.92	9.19	8.29	7.48	7.43	7.27
7	7.58	7.45	8.00	8.86	9.54	10.13	10.83	9.14	8.21	7.58	7.41	7.26
8	7.60	7.45	7.95	8.87	9.57	10.20	10.74	9.10	8.08	7.77	7.40	7.25
9	7.61	7.45	7.92	8.88	9.58	10.18	10.65	9.08	7.96	7.75	7.39	7.25
10	7.66	7.45	7.91	8.91	9.61	10.18	10.56	9.06	7.87	7.82	7.39	7.24
11	7.68	7.45	7.92	8.91	9.62	10.18	10.47	9.01	7.79	7.82	7.39	7.24
12	7.71	7.45	8.02	8.91	9.62	10.18	10.36	8.97	7.72	7.76	7.40	7.31
13	7.63	7.45	8.13	8.90	9.62	10.15	10.30	8.93	7.66	7.70	7.39	7.33
14	7.55	7.47	8.22	8.89	9.62	10.11	10.25	8.93	7.61	7.67	7.38	7.30
15	7.52	7.45	8.23	8.89	9.59	10.07	10.21	8.93	7.59	7.66	7.38	7.27
16	7.52	7.41	8.24	8.89	9.47	10.02	10.15	8.89	7.56	7.65	7.39	7.26
17	7.44	7.39	8.25	8.90	9.41	9.98	10.11	8.85	7.53	7.63	7.38	7.25
18	7.42	7.39	8.25	8.91	9.38	9.95	10.02	8.81	7.57	7.63	7.36	7.24
19	7.44	7.39	8.27	8.89	9.37	9.91	9.96	8.82	7.55	7.62	7.35	7.26
20	7.43	7.40	8.28	8.90	9.36	9.86	9.91	8.77	7.52	7.56	7.35	7.27
21	7.32	7.40	8.28	8.92	9.47	9.83	9.85	8.74	7.49	7.59	7.39	7.25
22	7.26	7.39	8.31	8.97	9.61	9.78	9.78	8.80	7.50	7.57	7.36	7.24
23	7.24	7.39	8.36	9.02	9.64	9.74	9.72	8.79	7.51	7.55	7.34	7.23
24	7.24	7.38	8.38	9.09	9.64	9.70	9.68	8.75	7.49	7.54	7.32	7.22
25	7.24	7.38	8.39	9.19	9.70	9.66	9.64	8.70	7.47	7.52	7.31	7.21
26	7.24	7.38	8.41	9.26	9.75	9.64	9.59	8.65	7.44	7.55	7.29	7.20
27	7.24	7.38	8.44	9.29	9.78	9.67	9.55	8.58	7.50	7.53	7.29	7.19
28	7.25	7.39	8.45	9.33	9.78	10.21	9.50	8.54	7.57	7.48	7.28	7.18
29	7.28	7.56	8.45	9.36	---	10.25	9.45	8.48	7.60	7.44	7.28	7.18
30	7.34	7.76	8.42	9.37	---	10.45	9.40	8.41	7.60	7.42	7.27	7.20
31	7.32	---	8.43	9.37	---	10.75	---	8.32	---	7.42	7.27	---
MEAN	7.48	7.41	8.18	8.96	9.54	10.02	10.22	8.89	7.73	7.59	7.37	7.25
MAX	7.84	7.76	8.45	9.37	9.78	10.75	11.08	9.36	8.29	7.82	7.49	7.33
MIN	7.24	7.25	7.86	8.56	9.36	9.64	9.40	8.32	7.44	7.42	7.27	7.18
WTR YR	1987	MEAN	8.38	MAX	11.08	MIN	7.18					

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02242451 ORANGE LAKE OUTLET NEAR CITRA, FL

LOCATION.--Lat 29°26'30", long 82°06'33", in SE¼ sec.16, T.12 S., R.22 E., Alachua County, Hydrologic Unit 03080102, near left bank on upstream side of northbound bridge on U.S. Highway 301, 0.8 mi south of Island Grove, and 1.8 mi north of Citra.

DRAINAGE AREA.--1,012 mi².

PERIOD OF RECORD.--1941, 1957, 1960 (miscellaneous discharge measurements only); January 1947 to September 1955; April 1982 to current year.

GAGE.--Water-stage recorder and concrete weir with notch. Datum of gage is 53.41 ft above National Geodetic Vertical Datum of 1929. Prior to September 1955, near present site at same datum.

REMARKS.--Estimated daily discharges: Apr. 21 to June 9. Records poor. Orange and Lochloosa Lakes are connected by Cross Creek through which there is a natural diversion from one lake to the other.

AVERAGE DISCHARGE.--14 years (water years 1946-55, 1983-87), 114 ft³/s, 1.53 in/yr, 82,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft³/s, Apr. 4, 1987; maximum gage height, 7.81 ft, Mar. 17, 1948; no flow for many days in some years; outlet dry at gage for many days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft³/s, Apr. 4, gage height, 5.89 ft; minimum daily discharge, 6.9 ft³/s, Nov. 26; minimum gage height, 3.24 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	8.8	12	18	23	180	903	480	205	68	24	11
2	9.3	8.7	12	18	24	199	934	440	202	68	24	11
3	9.2	8.6	13	16	24	197	962	425	200	72	23	12
4	9.1	8.5	13	17	24	205	1010	415	198	70	22	12
5	9.0	8.4	12	18	25	201	986	390	196	66	22	12
6	9.0	8.3	12	18	28	208	958	375	194	63	21	12
7	10	8.2	12	18	29	243	948	360	190	61	20	12
8	10	7.9	12	19	33	317	940	347	185	72	20	11
9	10	7.9	11	18	38	304	921	340	179	68	19	11
10	11	7.8	11	19	33	264	902	335	168	69	18	10
11	11	7.6	13	20	34	254	877	330	158	65	18	10
12	11	7.8	15	19	38	259	856	325	150	60	21	11
13	11	8.6	15	19	38	227	834	330	151	55	20	11
14	11	8.3	15	18	39	191	810	335	156	51	20	11
15	11	8.3	15	18	37	188	834	340	149	48	20	10
16	11	8.0	15	18	48	179	839	330	144	45	19	9.9
17	10	7.9	15	18	54	169	795	320	136	40	19	9.8
18	9.8	8.0	15	18	58	169	763	310	132	37	19	9.6
19	9.5	7.9	14	19	59	175	813	300	122	36	18	9.5
20	9.4	7.8	14	18	60	166	812	290	84	34	17	9.5
21	9.1	7.8	14	19	91	165	800	280	79	36	17	9.5
22	8.9	7.5	14	22	93	159	775	272	75	33	17	9.3
23	8.6	7.3	14	23	83	144	720	264	72	32	16	9.1
24	8.4	7.2	16	22	83	139	690	256	68	30	16	8.9
25	8.3	7.1	16	22	94	137	650	250	68	29	15	8.6
26	8.4	6.9	15	24	102	133	620	243	61	28	14	8.3
27	8.5	7.0	15	24	112	167	590	236	64	28	13	8.1
28	8.3	7.0	15	23	115	410	550	230	66	27	13	7.8
29	8.3	7.5	15	23	---	528	525	225	62	26	12	7.6
30	8.8	11	15	24	---	725	500	218	66	25	12	7.8
31	8.7	---	15	24	---	857	---	210	---	24	11	---
TOTAL	295.1	239.6	430	615	1519	7859	24117	9801	3980	1466	560	300.3
MEAN	9.52	7.99	13.9	19.8	54.2	254	804	316	133	47.3	18.1	10.0
MAX	11	11	16	24	115	857	1010	480	205	72	24	12
MIN	8.3	6.9	11	16	23	133	500	210	61	24	11	7.6
AC-FT	585	475	853	1220	3010	15590	47840	19440	7890	2910	1110	596
CFSM	.01	.01	.01	.02	.05	.25	.79	.31	.13	.05	.02	.01
IN.	.01	.01	.02	.02	.06	.29	.89	.36	.15	.05	.02	.01

CAL YR 1986 TOTAL 19147.5 MEAN 52.5 MAX 304 MIN 6.9 AC-FT 37980 CFSM .05 IN. .70
WTR YR 1987 TOTAL 51182.0 MEAN 140 MAX 1010 MIN 6.9 AC-FT 101500 CFSM .14 IN. 1.88

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02242500 LOCHLOOSA SLOUGH NEAR LOCHLOOSA, FL

LOCATION.--Lat 29°29'17", long 82°06'07", in SW¼ sec.34, T.11 S., R.22 E., Alachua County, Hydrologic Unit 03080102, near left bank at upstream side of culverts on U.S. Highway 301, 1.2 mi south of Lochloosa, and 2.4 mi north of Island Grove.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1947 to September 1955; April 1982 to current year. Prior to April 1982, published as Lochloosa Lake Outlet near Lochloosa.

GAGE.--Water-stage recorder. Datum of gage is 53.41 ft above National Geodetic Vertical Datum of 1929. Prior to September 1955, near present site at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Apr. 21 to June 8. Records poor. Station does not represent the entire outflow of Lochloosa Lake as there is a natural diversion through Cross Creek into Orange Lake.

AVERAGE DISCHARGE.--14 years (water years 1947-55, 1983-87), 23.1 ft³/s, 16,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 341 ft³/s, Mar. 12,13, 1948, gage height, 6.04 ft, site and datum then in use; no flow for many days in most years; slough dry at times in 1955, 1985, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 151 ft³/s, Mar. 31, gage height, 7.52 ft; no flow for many days; minimum gage height, 4.90 ft, Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.44	.93	1.2	13	138	30	10	4.2	.57	.00
2	.00	.00	.50	.85	1.2	14	133	28	10	3.8	.49	.00
3	.00	.00	.47	.75	1.2	14	131	27	9.8	4.0	.41	.00
4	.00	.00	.32	.89	1.2	14	127	26	9.2	3.9	.35	.00
5	.00	.00	.22	1.1	1.8	13	118	25	8.8	3.7	.27	.00
6	.00	.00	.15	.98	2.9	14	112	24	8.0	3.6	.19	.00
7	.00	.00	.09	.88	2.9	18	109	23	7.8	3.4	.08	.00
8	.00	.00	.05	.81	2.9	23	105	22	7.6	3.6	.00	.00
9	.00	.00	.0	.74	2.8	27	101	21	7.3	3.5	.00	.00
10	.00	.00	.00	.72	2.7	27	96	20	7.0	3.6	.01	.00
11	.00	.00	.37	.70	2.5	26	92	20	6.6	3.3	.07	.00
12	.00	.00	.85	.63	2.5	25	88	21	6.2	3.0	.24	.00
13	.00	.00	.88	.57	2.7	23	83	21	6.3	2.9	.20	.00
14	.00	.00	.72	.50	2.7	23	79	22	6.6	2.7	.17	.00
15	.00	.00	.61	.47	2.6	22	82	22	6.3	2.5	.17	.00
16	.00	.00	.50	.47	3.2	21	83	22	6.0	2.4	.11	.00
17	.00	.00	.42	.45	3.6	21	79	21	5.6	2.1	.02	.00
18	.00	.00	.36	.42	3.6	20	73	20	5.8	1.9	.00	.00
19	.00	.00	.30	.44	3.6	21	67	19	5.5	1.7	.00	.00
20	.00	.00	.26	.44	3.4	21	63	18	4.8	1.6	.00	.00
21	.00	.00	.22	.60	4.7	20	56	17	4.8	1.7	.00	.00
22	.00	.00	.18	1.3	6.5	19	52	16	4.4	1.6	.00	.00
23	.00	.00	.30	1.4	9.3	18	48	15	4.2	1.5	.00	.00
24	.00	.00	.57	1.3	9.7	17	45	14	4.0	1.4	.00	.00
25	.00	.00	.55	1.3	10	17	42	14	3.8	1.2	.00	.00
26	.00	.00	.45	1.3	10	17	40	13	3.6	1.1	.00	.00
27	.00	.00	.39	1.3	10	22	38	13	3.8	1.0	.00	.00
28	.00	.00	.33	1.3	10	56	36	12	3.9	.92	.00	.00
29	.00	.00	.28	1.2	---	76	34	12	4.1	.80	.00	.00
30	.00	.10	.24	1.2	---	111	32	11	4.2	.71	.00	.00
31	.00	---	.39	1.3	---	145	---	11	---	.62	.00	---
TOTAL	0.00	0.10	11.41	27.24	121.4	918	2382	600	186.0	73.95	3.35	0.00
MEAN	.00	.003	.37	.88	4.34	29.6	79.4	19.4	6.20	2.39	.11	.00
MAX	.00	.10	.88	1.4	10	145	138	30	10	4.2	.57	.00
MIN	.00	.00	.00	.42	1.2	13	32	11	3.6	.62	.00	.00
AC-FT	.0	.2	23	54	241	1820	4720	1190	369	147	6.6	.0

CAL YR 1986 TOTAL 592.80 MEAN 1.62 MAX 12 MIN .00 AC-FT 1180
WTR YR 1987 TOTAL 4323.45 MEAN 11.8 MAX 145 MIN .00 AC-FT 8580

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02243000 ORANGE CREEK AT ORANGE SPRINGS, FL

LOCATION.--Lat 29°30'34", long 81°56'47", in NE¼ sec.25, T.11 S., R.23 E., Marion County, Hydrologic Unit 03080102, near right bank at downstream side of bridge on State Highway 21, 0.2 mi northwest of Orange Springs, and 1.2 mi upstream from Little Orange Creek.

DRAINAGE AREA.--1,119 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 National Geodetic Vertical Datum of 1929. Prior to Oct. 18, 1955, and Oct. 13, 1971, to May 6, 1975, nonrecording gage at same site and datum. Feb. 4, 1980, to May 7, 1981, temporary gage 125 ft downstream at same datum.

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

AVERAGE DISCHARGE.--38 years (water years 1943-52, 1956-71, 1976-87), 162 ft³/s, 2.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft³/s, Sept. 13, 1964, gage height, 9.86 ft; minimum daily, 2.0 ft³/s, May 31, June 1, 3-5, 9-14, 1956; minimum gage height, 0.94 ft, part of each day June 1-7, 1985.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	0600	*1010	*8.02	May 14	2300	521	6.83

Minimum discharge, 11 ft³/s, Sept. 30, gage height, 1.43 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	19	58	70	54	234	891	454	230	88	27	25
2	19	19	55	64	53	253	835	440	220	89	26	67
3	18	18	55	62	50	244	799	426	211	88	25	37
4	16	18	45	64	50	229	775	413	200	94	25	33
5	16	17	40	75	86	218	763	400	193	107	26	35
6	16	17	34	71	186	213	757	387	183	96	24	27
7	25	16	31	66	170	279	742	375	166	92	23	23
8	24	15	34	61	162	340	726	371	113	82	22	21
9	27	15	30	56	136	323	721	377	82	78	21	20
10	27	15	31	53	127	311	708	357	121	79	25	18
11	26	15	38	52	121	307	692	361	132	78	36	17
12	23	15	51	47	111	308	684	373	140	68	28	21
13	21	16	60	46	99	307	671	358	155	65	28	29
14	20	17	56	43	91	309	659	392	159	62	28	24
15	20	17	51	44	94	310	684	433	153	60	30	20
16	19	16	47	41	100	316	670	380	142	58	28	18
17	18	17	46	42	103	316	655	355	134	55	25	17
18	18	16	44	40	96	320	648	330	127	51	23	16
19	17	16	40	40	93	324	631	357	125	49	22	16
20	17	16	38	45	89	321	618	346	121	48	21	16
21	16	15	36	53	134	321	600	330	118	47	21	16
22	16	14	35	95	172	317	582	325	116	46	20	15
23	16	14	47	101	215	312	563	315	114	42	19	15
24	15	14	68	85	200	315	550	307	111	39	18	14
25	15	14	54	76	190	309	537	296	101	39	17	14
26	16	13	49	78	185	275	522	287	93	40	17	13
27	17	13	45	71	188	292	507	277	92	35	16	13
28	16	17	42	67	187	767	493	269	90	37	16	12
29	17	20	39	63	---	782	483	260	92	32	16	12
30	22	41	38	58	---	872	466	251	93	28	15	13
31	20	---	40	58	---	978	---	240	---	27	16	---
TOTAL	593	505	1377	1887	3542	11322	19632	10842	4127	1899	704	637
MEAN	19.1	16.8	44.4	60.9	126	365	654	350	138	61.3	22.7	21.2
MAX	27	41	68	101	215	978	891	454	230	107	36	67
MIN	15	13	30	40	50	213	466	240	82	27	15	12
CFSM	.02	.02	.04	.06	.12	.34	.61	.33	.13	.06	.02	.02
IN.	.02	.02	.05	.07	.12	.39	.68	.38	.14	.07	.02	.02
CAL YR 1986	TOTAL	30738	MEAN	84.2	MAX	508	MIN	13	CFSM	.08	IN.	1.07

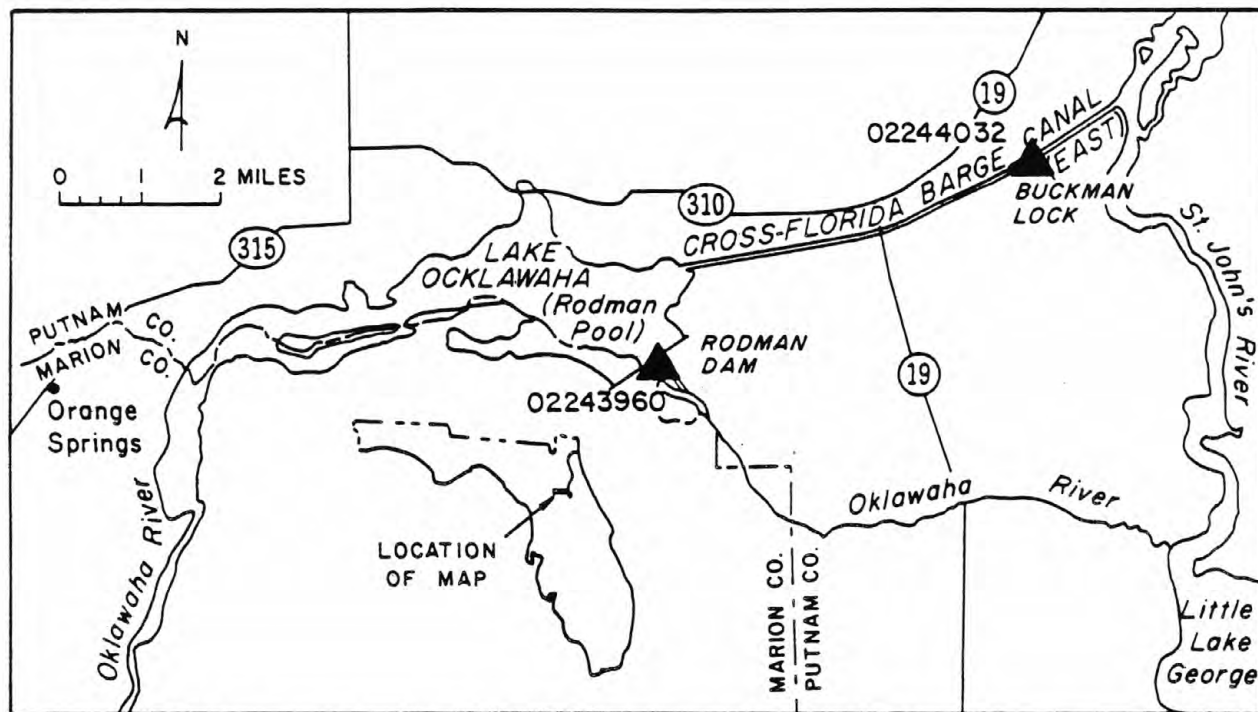


Figure 17.--Location of stream gaging stations in the lower Oklawaha River basin.

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

LOCATION.--Lat 29°30'30", long 81°48'15", in NW¼ sec.28, T.11 S., R.25 E., Putnam County, Hydrologic Unit 03080102, at downstream side of control structure of Rodman Dam, 8.4 mi east of Orange Springs, and 11.6 mi upstream from mouth.

DRAINAGE AREA.--2,747 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.--Dual water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Auxiliary gage at upstream side of control structure at same datum.

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

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

AVERAGE DISCHARGE.--19 years, 1,490 ft³/s, 1,077,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 9,560 ft³/s, Feb. 5, 1970; maximum gage height, 9.64 ft, Apr. 12, 1982; gates closed and flow consists of unknown leakage Mar. 9, 1969; minimum gage height, 0.80 ft, June 3, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,580 ft³/s, Mar. 31; maximum gage height, 8.86 ft, Mar. 31; minimum daily discharge, 353 ft³/s, Oct. 1; minimum gage height, 3.09 ft, Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	854	845	966	1010	1420	7480	1620	1060	866	705	879
2	357	845	845	977	807	1670	5030	1620	955	966	705	1320
3	357	845	845	977	705	1670	5480	1620	955	1300	705	1100
4	357	845	845	966	713	1670	6300	1450	955	1350	713	713
5	357	845	1100	977	565	1670	6220	1360	955	1240	713	713
6	357	845	1260	977	1230	1670	3530	1460	955	1140	713	713
7	357	845	1240	1060	2240	1650	3220	1580	955	1010	790	565
8	361	678	1240	1120	1790	2290	4570	1630	955	955	826	478
9	361	592	839	948	1400	2620	4630	1630	955	877	826	478
10	361	592	592	704	1500	2620	3960	1620	955	826	779	478
11	361	592	592	665	1500	2250	3680	1620	955	826	713	555
12	361	592	592	713	1500	2070	3680	1620	955	826	795	742
13	361	592	592	713	1490	2070	3680	1620	955	835	1000	978
14	365	592	592	713	1490	2070	3680	1620	955	835	1270	1050
15	365	592	732	713	1130	2070	3850	1630	790	835	1300	990
16	484	592	1000	713	966	2040	3920	1860	705	826	1050	966
17	578	592	1100	713	1310	2040	3390	2400	713	749	789	888
18	578	592	1020	713	1500	2390	3110	1960	713	705	705	835
19	578	592	724	864	1490	2590	2760	1630	790	705	705	835
20	597	559	592	966	1150	2110	2640	1880	914	556	705	835
21	605	539	592	966	955	1770	2700	2020	966	479	705	835
22	605	539	592	1150	1150	1770	2700	1850	1150	479	560	748
23	605	539	592	1240	1820	1130	2700	1530	1240	621	473	705
24	605	556	592	1240	2320	1070	2700	1200	1240	785	473	632
25	605	565	592	1240	1590	1600	2700	1090	1240	905	473	585
26	605	565	770	1240	966	1810	2410	1090	1070	1230	478	585
27	605	565	866	1000	978	1810	2300	1090	966	1380	550	519
28	605	565	922	760	978	2510	2300	1090	794	1210	592	473
29	605	565	966	713	---	4420	2300	1240	713	912	592	473
30	756	748	966	786	---	6860	1870	1290	713	748	592	478
31	854	---	966	998	---	7580	---	1230	---	705	672	---
TOTAL	15261	19419	25603	28491	36243	72980	109490	48150	28192	27682	22667	22144
MEAN	492	647	826	919	1294	2354	3650	1553	940	893	731	738
MAX	854	854	1260	1240	2320	7580	7480	2400	1240	1380	1300	1320
MIN	353	539	592	665	565	1070	1870	1090	705	479	473	473
AC-FT	30270	38520	50780	56510	71890	144800	217200	95510	55920	54910	44960	43920
CAL YR	1986	TOTAL	364606	MEAN	999	MAX	4290	MIN	187	AC-FT	723200	
WTR YR	1987	TOTAL	456322	MEAN	1250	MAX	7580	MIN	353	AC-FT	905100	

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

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

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.19	4.26	4.23	4.75	4.71	5.18	8.78	5.68	4.94	4.24	4.00	3.97
2	3.14	4.25	4.26	4.70	4.66	5.49	8.27	5.63	4.80	4.36	4.00	4.63
3	3.13	4.27	4.23	4.68	4.46	5.55	7.77	5.61	4.75	4.69	3.99	4.85
4	3.11	4.28	4.01	4.69	4.38	5.55	8.28	5.50	4.73	5.02	3.96	4.32
5	3.10	4.26	4.40	4.65	4.24	5.55	8.28	5.33	4.72	5.02	3.98	4.23
6	3.13	4.30	4.96	4.61	4.80	5.55	7.43	5.32	4.72	4.94	4.03	4.24
7	3.13	4.32	5.03	4.82	5.72	5.60	6.74	5.37	4.73	4.77	4.03	3.93
8	3.15	4.31	5.08	5.10	5.93	5.85	7.28	5.41	4.73	4.60	4.07	3.55
9	3.19	4.05	4.81	5.02	5.52	6.27	7.57	5.43	4.73	4.49	4.07	3.52
10	3.17	4.02	4.27	4.73	5.49	6.32	7.32	5.42	4.72	4.37	4.12	3.43
11	3.16	4.00	4.24	4.40	5.47	6.21	7.08	5.42	4.71	4.35	4.16	3.41
12	3.26	4.00	4.17	4.29	5.45	6.04	7.05	5.42	4.71	4.33	4.17	3.70
13	3.35	4.00	4.07	4.20	5.45	6.02	7.02	5.41	4.70	4.37	4.31	4.26
14	3.37	4.01	4.05	4.16	5.43	6.01	7.02	5.41	4.70	4.38	4.63	4.57
15	3.35	4.04	4.23	4.26	5.26	5.98	7.07	5.42	4.49	4.37	4.96	4.62
16	3.34	4.04	4.73	4.41	5.00	5.99	7.14	5.51	4.19	4.36	4.87	4.57
17	3.36	4.04	4.80	4.42	5.09	5.98	7.00	5.88	4.14	4.26	4.52	4.47
18	3.36	4.02	4.83	4.42	5.31	6.08	6.79	5.92	4.14	4.14	4.18	4.32
19	3.27	3.99	4.60	4.52	5.33	6.25	6.64	5.64	4.14	4.15	4.12	4.28
20	3.49	3.89	4.22	4.64	5.22	6.12	6.46	5.64	4.24	3.90	4.09	4.27
21	3.81	3.74	4.14	4.66	5.06	5.80	6.45	5.70	4.32	3.56	4.09	4.26
22	3.83	3.69	4.15	4.81	5.05	5.73	6.45	5.67	4.52	3.51	3.84	4.22
23	3.83	3.65	4.21	4.95	5.37	5.42	6.44	5.52	4.76	3.58	3.51	4.15
24	3.75	3.65	4.26	4.96	6.02	4.84	6.44	5.22	4.77	3.81	3.47	4.05
25	3.69	3.63	4.21	4.96	5.82	5.13	6.43	5.01	4.77	4.14	3.45	3.90
26	3.65	3.62	4.24	4.98	5.12	5.47	6.34	4.96	4.72	4.63	3.45	3.87
27	3.77	3.60	4.30	4.93	4.98	5.56	6.21	4.95	4.68	4.93	3.45	3.72
28	3.87	3.58	4.39	4.60	4.95	5.99	6.18	4.95	4.48	4.92	3.44	3.50
29	3.90	3.61	4.61	4.41	---	6.89	6.18	4.97	4.17	4.61	3.43	3.47
30	4.04	3.94	4.70	4.37	---	8.14	5.99	5.03	4.17	4.03	3.41	3.48
31	4.24	---	4.74	4.50	---	8.83	---	5.03	---	4.05	3.60	---
MEAN	3.46	3.97	4.42	4.63	5.19	5.98	7.00	5.40	4.57	4.35	3.98	4.06
MAX	4.24	4.32	5.08	5.10	6.02	8.83	8.78	5.92	4.94	5.02	4.96	4.85
MIN	3.10	3.58	4.01	4.16	4.24	4.84	5.99	4.95	4.14	3.51	3.41	3.41
CAL YR	1986	MEAN	4.25	MAX	6.93	MIN	1.94					
WTR YR	1987	MEAN	4.75	MAX	8.83	MIN	3.10					

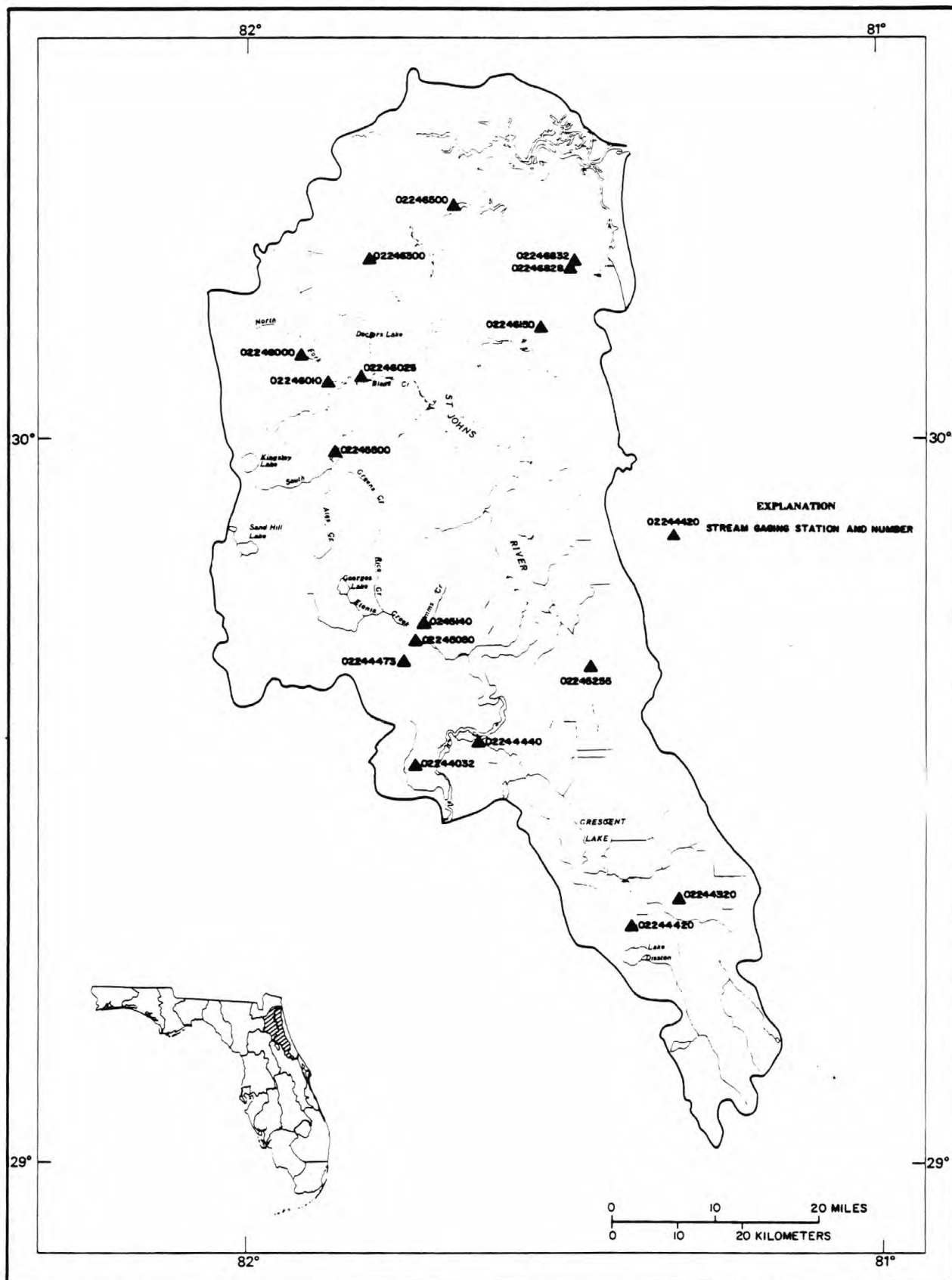


Figure 18.--Location of stream gaging stations in the St. Johns River basin below the Oklawaha River basin.

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244032 CROSS-FLORIDA BARGE CANAL AT BUCKMAN LOCK, NEAR PALATKA, FL

LOCATION.--Lat 29°32'45", long 81°43'35", in land grant 37, T.11 S., R.26 E., Putnam County, Hydrologic Unit 03080103, at downstream side of Buckman Lock, 1.7 mi upstream from mouth, and 9.0 mi southwest of Palatka.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1969 to current year. Prior to October 1974, published as "at St. Johns Lock".

GAGE.--Nonrecording gage.

REMARKS.--Discharge at station is a diversion of flow, for boat lockages, from Lake Ocklawaha and Oklawaha River into St. Johns River and is computed using daily volume of water used for lockage.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 199 ft³/s, May 27, 1978; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 154 ft³/s, Sept. 5; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	107	25	.00	118	36	.00	42	14	60	15	.00
2	.00	95	15	19	41	82	34	102	15	35	127	.00
3	33	50	14	58	58	69	36	92	.00	63	.00	15
4	79	48	15	36	81	47	103	14	44	85	4.0	44
5	90	27	36	13	14	82	92	.00	15	79	23	154
6	34	58	111	13	16	14	26	.00	93	39	.00	121
7	22	57	36	35	89	.00	15	46	47	16	15	144
8	34	85	79	122	56	34	27	60	.00	14	82	100
9	22	84	36	123	13	39	47	90	15	48	80	111
10	68	51	35	110	35	94	59	56	15	23	23	68
11	132	103	57	64	78	24	105	34	50	39	36	69
12	77	50	59	14	85	67	105	57	39	68	.00	107
13	.00	71	16	.00	74	78	93	35	108	14	26	73
14	.00	59	68	58	102	92	38	.00	69	.00	.00	79
15	22	47	46	36	91	102	50	35	14	13	109	79
16	41	58	36	35	11	90	35	114	.00	.00	70	80
17	62	59	36	71	82	112	91	93	38	14	15	67
18	83	27	24	70	37	.00	102	36	61	14	15	45
19	94	14	13	.00	91	46	48	.00	16	68	.00	118
20	.00	46	35	81	54	88	58	47	94	14	15	127
21	51	46	87	80	13	131	14	72	37	93	15	92
22	.00	58	34	.00	33	97	26	46	15	11	83	85
23	.00	84	13	11	57	56	48	120	7.0	38	96	14
24	6.6	36	35	60	78	14	57	99	54	26	59	28
25	95	58	.00	86	72	47	122	68	28	58	63	14
26	87	47	68	16	78	47	67	47	16	92	27	123
27	64	26	47	14	87	99	34	15	35	.00	37	123
28	57	69	56	.00	129	56	13	101	85	27	34	47
29	57	112	89	69	---	48	58	124	37	22	146	44
30	41	56	57	68	---	.00	86	123	48	84	118	22
31	94	---	14	67	---	.00	---	79	---	.00	.00	---
TOTAL	1445.60	1788	1292.00	1429.00	1773	1791.00	1689.00	1847.00	1109.00	1157.00	1333.00	2193.00
MEAN	46.6	59.6	41.7	46.1	63.3	57.8	56.3	59.6	37.0	37.3	43.0	73.1
MAX	132	112	111	123	129	131	122	124	108	93	146	154
MIN	.00	14	.00	.00	11	.00	.00	.00	.00	.00	.00	.00
AC-FT	2870	3550	2560	2830	3520	3550	3350	3660	2200	2290	2640	4350
CAL YR 1986	TOTAL 15149.60			MEAN 41.5	MAX 153	MIN .00	AC-FT 30050					
WTR YR 1987	TOTAL 18846.60			MEAN 51.6	MAX 154	MIN .00	AC-FT 37380					

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244320 MIDDLE HAW CREEK NEAR KORONA, FL

LOCATION.--Lat 29°21'35", long 81°18'42", in NW¼ sec.19, T.13 S., R.30 E., Flagler County, Hydrologic Unit 03080103, near center of span on downstream side of bridge on State Highway 11, 1.2 mi north of Codys Corner and 7.7 mi southwest of Korona.

DRAINAGE AREA.--78.3 mi².

PERIOD OF RECORD.--July 1975 to current year.

REVISED RECORDS.--WDR FL-78-1: 1977.

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

REMARKS.--Estimated daily discharges: Dec. 5 to Jan. 22, Jan. 31 to Feb. 9. Records fair.

AVERAGE DISCHARGE.--12 years, 78.8 ft³/s, 13.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s, Sept. 30, 1979, gage height, 12.72 ft; no flow for many days in most years; minimum gage height, 4.12 ft, July 3, 1981, but may have been lower during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 787 ft³/s, Mar. 31, gage height, 10.97 ft; no flow June 1-23; minimum gage height, 4.54 ft, June 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	1.5	29	22	54	167	751	5.6	.00	.11	.54	1.3
2	15	1.7	55	17	55	183	636	4.4	.00	.08	4.4	5.2
3	12	1.6	64	14	53	190	541	3.4	.00	.10	5.2	11
4	9.7	1.4	56	11	52	187	479	2.7	.00	.07	3.8	25
5	7.9	1.3	45	12	140	179	424	2.3	.00	.74	2.6	64
6	6.5	1.1	26	13	330	168	375	1.9	.00	1.6	1.9	107
7	6.7	1.0	6.2	13	390	187	336	1.6	.00	.54	1.5	156
8	7.6	.85	6.0	13	355	281	300	1.3	.00	.26	1.2	167
9	10	.79	6.1	14	328	302	265	1.3	.00	.14	1.1	148
10	10	.99	6.3	15	291	281	237	1.0	.00	.07	1.5	121
11	8.7	1.3	6.4	15	269	257	211	.88	.00	.04	1.8	102
12	7.0	1.6	6.5	15	254	237	188	1.1	.00	.04	2.6	96
13	5.7	1.8	6.7	15	243	218	168	2.2	.00	.05	3.9	94
14	4.7	1.9	6.9	15	230	199	149	2.2	.00	.07	4.7	86
15	3.8	2.3	7.0	15	215	182	131	2.8	.00	.04	7.9	79
16	3.2	2.3	7.1	17	230	168	112	2.7	.00	.03	7.5	69
17	2.6	2.3	7.2	17	257	155	94	2.1	.00	.02	12	59
18	2.2	2.2	7.4	17	254	144	79	1.8	.00	.01	19	50
19	1.8	2.4	7.6	19	227	134	66	1.7	.00	.01	22	42
20	1.5	2.8	7.8	21	198	123	56	1.5	.00	1.3	22	35
21	1.3	2.5	7.9	25	186	111	47	1.1	.00	2.2	20	29
22	1.1	2.1	8.0	33	206	99	39	.82	.00	2.3	18	25
23	.86	1.9	8.1	46	239	87	32	.58	.00	2.1	16	21
24	.70	1.8	13	58	233	77	27	.42	.01	1.8	12	19
25	.59	1.7	14	58	212	68	22	.30	.03	1.5	8.6	18
26	.49	1.7	8.0	70	194	62	18	.21	.04	1.5	6.2	18
27	.44	1.7	6.4	74	180	82	14	.14	.04	1.1	4.5	18
28	.49	1.8	6.4	70	167	318	11	.11	.14	.71	3.4	18
29	.70	3.0	6.6	63	---	503	9.0	.07	.11	.44	2.6	18
30	1.1	11	7.2	57	---	574	7.1	.03	.12	.34	2.0	17
31	1.1	---	11	55	---	751	---	.01	---	.28	1.6	---
TOTAL	154.47	62.33	466.8	919	6042	6674	5824.1	48.27	0.49	19.59	222.04	1718.5
MEAN	4.98	2.08	15.1	29.6	216	215	194	1.56	.016	.63	7.16	57.3
MAX	19	11	64	74	390	751	751	5.6	.14	2.3	22	167
MIN	.44	.79	6.0	11	52	62	7.1	.01	.00	.01	.54	1.3
CFSM	.06	.03	.19	.38	2.76	2.75	2.48	.02	.00	.01	.09	.73
IN.	.07	.03	.22	.44	2.87	3.17	2.77	.02	.00	.01	.11	.82

CAL YR 1986 TOTAL 13520.29 MEAN 37.0 MAX 636 MIN .00 CFSM .47 IN. 6.42
WTR YR 1987 TOTAL 22151.59 MEAN 60.7 MAX 751 MIN .00 CFSM .78 IN. 10.52

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244420 LITTLE HAW CREEK NEAR SEVILLE, FL

LOCATION.--Lat 29°19'20", long 81°23'10", in SE¼ sec.32, T.13 S., R.29 E., Flagler County, Hydrologic Unit 03080103, on right bank 600 ft downstream from bridge on State Highway 305, 1.4 mi downstream from Lake Disston, and 6.4 mi east of Seville.

DRAINAGE AREA.--93.0 mi².

PERIOD OF RECORD.--January 1951 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 5.74 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 5, 1953, at site 600 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Aug. 15 to Sept. 25, Sept. 30. Records fair.

AVERAGE DISCHARGE.--36 years (water years 1952-87), 86.0 ft³/s, 12.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,630 ft³/s, Oct. 19, 20, 1968, gage height, 9.18 ft; no flow for many days in some years; minimum gage height, 0.14 ft³/s, July 7, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 640 ft³/s, Mar. 31, gage height, 7.41 ft; minimum, 1.1 ft³/s, all or part of each day Nov. 17-19, 22-29; minimum gage height, 0.98 ft, Nov. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	1.6	8.1	19	41	200	622	29	11	4.1	2.6	14
2	3.6	1.5	6.5	18	41	223	586	26	9.6	3.8	2.8	22
3	3.6	1.4	4.9	16	42	207	547	23	8.7	6.5	3.3	36
4	3.6	1.4	3.7	16	41	193	504	21	7.9	4.8	3.1	60
5	3.6	1.3	3.2	18	53	180	461	19	7.5	5.1	3.3	92
6	3.4	1.3	3.0	18	222	170	425	18	6.7	6.0	3.4	107
7	3.4	1.3	2.9	18	265	219	394	16	5.9	4.9	3.6	145
8	3.5	1.2	3.0	18	241	378	364	16	5.1	4.2	3.6	190
9	3.3	1.2	3.1	19	204	376	334	19	4.5	3.8	3.5	210
10	3.2	1.2	3.4	20	176	333	309	18	4.0	3.5	3.9	155
11	3.4	1.2	3.7	20	172	283	284	18	3.7	3.3	4.0	130
12	3.3	1.2	4.2	20	177	250	261	18	3.4	3.2	6.9	115
13	3.0	1.2	4.7	20	182	225	238	17	3.2	3.6	14	110
14	2.9	1.2	4.9	20	184	210	220	28	3.0	7.0	15	96
15	2.7	1.3	5.2	20	184	198	206	42	2.8	5.4	16	85
16	2.6	1.2	5.6	21	223	187	186	34	2.6	4.6	14	84
17	2.3	1.1	6.0	21	276	176	163	28	2.4	4.2	22	77
18	2.1	1.1	6.3	21	259	166	146	33	3.2	3.8	35	73
19	1.9	1.1	6.5	22	235	163	131	67	5.1	4.4	37	68
20	1.7	1.4	6.6	23	214	151	118	70	5.2	4.6	39	65
21	1.6	1.2	6.7	27	217	139	107	63	3.7	4.1	35	62
22	1.5	1.2	6.7	40	255	128	95	51	3.1	3.7	30	59
23	1.5	1.1	7.1	42	277	116	85	41	2.8	3.5	26	56
24	1.4	1.1	12	37	245	108	76	34	2.8	3.4	22	54
25	1.4	1.1	12	37	224	103	65	28	3.2	3.2	19	53
26	1.4	1.1	11	44	209	101	56	23	3.5	3.1	16	51
27	1.4	1.1	11	42	196	140	48	19	5.0	3.0	13	49
28	1.5	1.1	11	40	185	367	42	17	5.8	2.8	11	48
29	1.5	2.1	11	39	---	458	37	15	4.8	2.7	9.5	48
30	1.6	5.6	11	40	---	547	32	13	4.1	2.5	8.2	47
31	1.5	---	11	41	---	638	---	12	---	2.6	7.4	---
TOTAL	76.9	42.1	206.0	817	5240	7333	7142	876	144.3	125.4	433.1	2461
MEAN	2.48	1.40	6.65	26.4	187	237	238	28.3	4.81	4.05	14.0	82.0
MAX	3.6	5.6	12	44	277	638	622	70	11	7.0	39	210
MIN	1.4	1.1	2.9	16	41	101	32	12	2.4	2.5	2.6	14
CFSM	.03	.02	.07	.28	2.01	2.54	2.56	.30	.05	.04	.15	.88
IN.	.03	.02	.08	.33	2.10	2.93	2.86	.35	.06	.05	.17	.98

CAL YR 1986 TOTAL 14012.28 MEAN 38.4 MAX 520 MIN .45 CFSM .41 IN. 5.60
WTR YR 1987 TOTAL 24896.8 MEAN 68.2 MAX 638 MIN 1.1 CFSM .73 IN. 9.96

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244440 DUNNS CREEK NEAR SATSUMA, FL

LOCATION.--Lat 29°34'39", long 81°37'35", in NE¼ sec.1, T.11 S., R.27 E., Putnam County, Hydrologic Unit 03080103, on bridge 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.--492 mi².

PERIOD OF RECORD.--January 1978 to current year (incomplete).

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929. Prior to July 21, 1987, at site 200 ft downstream at present datum.

REMARKS.--Records poor. Discharge record not available this year due to bridge construction.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,650 ft³/s, Feb. 19, 1983; maximum gage height, 13.40 ft, Oct. 30, 1985; maximum daily reverse flow, 4,520 ft³/s, May 10, 1986; minimum gage height, 8.84 ft, June 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.64 ft, Jan. 6; minimum, 9.37 ft, July 5.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.66	11.63	11.71	11.71	10.61	11.60	11.58	10.88	10.80	10.40	10.48	10.58
2	10.63	11.57	11.71	11.52	10.48	11.42	11.49	10.77	10.64	10.31	10.36	10.64
3	10.59	11.55	11.56	11.32	10.50	11.37	11.32	10.76	10.47	10.14	10.35	10.75
4	10.57	11.70	11.35	11.36	10.67	11.36	10.94	10.67	10.43	10.10	10.24	10.94
5	10.53	11.67	11.47	12.19	11.18	11.43	10.50	10.88	10.62	10.08	10.14	11.07
6	10.58	11.49	11.71	12.21	11.75	11.64	10.55	11.38	10.93	10.11	10.09	11.19
7	10.85	11.31	11.62	11.81	11.81	11.73	10.73	11.19	11.06	10.20	10.13	11.26
8	11.07	11.24	11.36	11.38	11.78	11.55	10.72	11.03	10.91	10.32	10.28	11.23
9	11.04	11.17	11.16	11.29	11.45	11.02	10.61	11.20	10.71	10.35	10.51	11.08
10	10.95	11.08	10.96	11.09	11.17	10.94	10.61	11.22	10.51	10.43	10.63	10.93
11	11.17	11.19	10.90	10.82	11.00	11.57	10.69	11.06	10.43	10.51	10.61	10.89
12	11.54	11.20	10.81	10.42	10.76	11.61	10.62	11.01	10.57	10.53	10.79	10.87
13	11.44	11.27	11.09	10.36	10.66	11.61	10.49	11.06	10.50	10.44	11.08	10.74
14	11.26	11.76	11.47	10.65	10.84	11.58	10.52	11.06	10.41	10.55	11.24	10.69
15	11.28	11.70	11.50	10.66	10.87	11.57	10.64	11.03	10.32	10.60	11.22	10.70
16	11.37	11.47	11.42	10.72	11.14	11.43	10.66	11.00	10.27	10.60	11.03	10.76
17	11.52	11.21	11.34	10.92	11.49	11.55	10.84	10.94	10.27	10.65	10.78	10.77
18	11.60	11.06	11.26	11.21	11.39	11.64	10.92	10.88	10.28	10.65	10.61	10.63
19	11.85	11.16	11.25	11.01	11.37	11.62	11.09	10.75	10.33	10.70	10.55	10.50
20	11.81	11.38	11.30	10.72	11.46	11.71	11.11	10.62	10.35	10.70	10.60	10.56
21	11.65	11.38	11.47	10.81	11.64	11.60	11.06	10.64	10.27	10.75	10.75	10.84
22	11.54	11.26	11.90	11.05	11.75	11.48	11.06	11.02	10.21	10.78	10.88	10.99
23	11.41	11.27	11.91	10.71	11.66	11.60	11.07	11.07	10.23	10.81	10.79	11.09
24	11.18	11.19	11.67	10.44	11.41	11.56	11.07	10.96	10.24	11.00	10.62	11.20
25	11.04	10.99	11.32	10.46	11.49	11.53	11.15	10.88	10.26	11.09	10.74	11.18
26	10.98	10.84	11.19	10.50	11.68	11.49	11.32	10.85	10.40	11.01	10.80	11.13
27	11.10	10.82	11.26	10.60	11.76	11.53	11.35	10.93	10.28	10.80	10.72	11.08
28	11.14	10.97	11.53	10.65	11.74	11.72	11.30	11.17	10.37	10.54	10.58	11.10
29	11.14	11.33	11.61	10.75	---	11.78	11.40	11.22	10.60	10.42	10.40	11.06
30	11.35	11.49	11.51	10.64	---	11.87	11.24	11.16	10.53	10.52	10.32	10.90
31	11.58	---	11.48	10.53	---	11.84	---	11.00	---	10.56	10.43	---
MEAN	11.17	11.31	11.41	10.98	11.27	11.55	10.95	10.98	10.47	10.54	10.60	10.91
MAX	11.85	11.76	11.91	12.21	11.81	11.87	11.58	11.38	11.06	11.09	11.24	11.26
MIN	10.53	10.82	10.81	10.36	10.48	10.94	10.49	10.62	10.21	10.08	10.09	10.50

CAL YR 1986 MEAN 10.95 MAX 11.92 MIN 10.08
WTR YR 1987 MEAN 11.01 MAX 12.21 MIN 10.08

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244473 RICE CREEK NEAR SPRINGSIDE, FL

LOCATION.--Lat 29°41'17", long 81°44'32", in land grant 40, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on State Highway 100, 1.8 mi northwest of Springside, 5.9 mi northwest of Palatka, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--43.2 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.04 ft above National Geodetic Vertical Datum of 1929 (levels by Wardlin Engineering Associates).

REMARKS.--Records good.

AVERAGE DISCHARGE.--14 years, 45.5 ft³/s, 14.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft³/s, Aug. 1, 1978, gage height, 9.80 ft, from rating curve extended above 820 ft³/s; minimum daily discharge, 2.2 ft³/s, June 18, 19, July 12, 13, 1981; minimum gage height, 2.12 ft, July 12, 13, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 7	0400	388	6.97	Mar. 7	2300	380	6.94
Feb. 23	1300	502	7.25	Mar. 31	0700	*1,430	*8.53

Minimum daily discharge, 3.0 ft³/s, Sept. 28, 29; minimum gage height, 2.23 ft, Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	5.6	8.1	23	52	28	151	830	7.3	5.7	4.0	4.5	3.7	
2	5.2	7.8	21	85	25	195	493	6.7	5.2	3.5	4.7	4.8	
3	4.9	7.4	22	65	24	180	333	6.2	4.7	3.5	4.5	5.6	
4	4.7	6.9	18	46	22	145	247	5.9	4.3	4.7	5.3	5.8	
5	4.6	6.7	13	59	39	118	188	5.6	4.3	5.1	4.7	6.3	
6	4.5	6.5	11	63	270	96	145	5.7	4.1	5.2	4.2	6.3	
7	5.8	6.2	9.7	51	366	100	113	5.7	3.9	4.5	3.7	8.2	
8	5.8	5.9	9.5	39	301	302	88	5.6	3.6	7.4	3.3	6.7	
9	5.6	5.6	9.1	32	262	327	61	7.1	3.6	8.4	3.1	5.7	
10	7.0	5.4	8.6	29	215	236	42	7.3	3.5	9.7	3.5	4.9	
11	7.8	5.2	22	29	171	189	32	6.8	3.4	9.8	5.1	4.5	
12	7.1	5.6	35	26	137	155	27	7.0	3.4	6.8	15	4.8	
13	6.3	6.3	41	22	112	128	22	7.7	3.4	15	43	5.4	
14	5.8	5.9	37	20	91	106	19	10	3.4	13	84	5.1	
15	5.5	6.0	26	19	70	86	23	12	3.4	10	68	4.4	
16	5.4	6.2	20	18	93	62	60	11	3.3	8.6	52	3.9	
17	4.9	6.1	18	17	182	45	73	8.9	3.2	6.5	29	3.6	
18	4.6	5.9	16	17	170	37	62	8.9	3.2	5.3	14	3.5	
19	4.4	5.9	14	17	121	33	53	12	3.4	5.3	9.1	3.4	
20	4.4	6.0	13	18	92	29	41	16	3.3	6.4	7.2	3.7	
21	4.4	6.2	13	22	114	26	31	15	3.3	11	6.8	4.5	
22	4.3	6.0	12	80	278	23	24	12	3.2	8.1	7.8	3.8	
23	4.2	5.9	14	150	481	20	19	9.3	3.4	5.9	8.6	3.7	
24	4.3	5.7	32	135	377	18	16	8.1	4.5	4.9	6.6	3.6	
25	4.3	5.6	39	97	273	17	13	6.7	4.4	4.2	5.4	3.3	
26	4.8	5.5	31	81	218	17	11	5.7	3.9	4.1	4.7	3.1	
27	5.3	5.5	23	68	176	24	11	5.5	3.8	4.1	4.2	3.1	
28	5.3	5.7	19	54	143	447	9.7	7.6	4.4	4.5	4.2	3.0	
29	5.6	6.4	17	44	---	738	8.8	7.1	4.4	3.8	3.8	3.0	
30	7.9	12	15	37	---	951	7.9	5.9	4.2	3.7	3.7	3.2	
31	8.5	---	16	32	---	1300	---	5.3	---	4.2	3.7	---	
TOTAL	168.8	190.1	617.9	1524	4851	6301	3103.4	251.6	115.8	201.2	427.4	134.6	
MEAN	5.45	6.34	19.9	49.2	173	203	103	8.12	3.86	6.49	13.8	4.49	
MAX	8.5	12	41	150	481	1300	830	16	5.7	15	84	8.2	
MIN	4.2	5.2	8.6	17	22	17	7.9	5.3	3.2	3.5	3.1	3.0	
CFSM	.13	.15	.46	1.14	4.01	4.71	2.39	.19	.09	.15	.32	.10	
IN.	.15	.16	.53	1.31	4.18	5.43	2.67	.22	.10	.17	.37	.12	
CAL YR	1986	TOTAL	13252.4	MEAN	36.3	MAX	708	MIN	3.2	CFSM	.84	IN.	11.41
WTR YR	1987	TOTAL	17886.8	MEAN	49.0	MAX	1300	MIN	3.0	CFSM	1.13	IN.	15.40

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244473 RICE CREEK NEAR SPRINGSIDE, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.59	2.82	3.77	4.66	4.02	5.81	7.80	2.74	2.59	2.40	2.42	2.33
2	2.55	2.80	3.69	5.19	3.87	6.12	7.23	2.69	2.55	2.35	2.45	2.46
3	2.52	2.76	3.70	4.93	3.80	6.03	6.77	2.65	2.49	2.35	2.42	2.55
4	2.50	2.71	3.51	4.62	3.72	5.78	6.41	2.62	2.45	2.48	2.51	2.57
5	2.48	2.69	3.22	4.86	4.16	5.54	6.08	2.58	2.45	2.52	2.44	2.62
6	2.47	2.67	3.05	4.92	6.48	5.32	5.78	2.60	2.43	2.54	2.38	2.62
7	2.61	2.65	2.96	4.72	6.89	5.35	5.50	2.60	2.39	2.45	2.32	2.80
8	2.60	2.62	2.94	4.44	6.65	6.63	5.23	2.58	2.37	2.74	2.28	2.66
9	2.59	2.59	2.91	4.20	6.48	6.75	4.89	2.73	2.36	2.83	2.25	2.56
10	2.72	2.57	2.87	4.05	6.24	6.35	4.51	2.74	2.36	2.94	2.29	2.48
11	2.79	2.55	3.68	4.05	5.97	6.09	4.19	2.70	2.34	2.94	2.48	2.43
12	2.73	2.58	4.29	3.90	5.72	5.86	3.94	2.72	2.34	2.68	3.25	2.48
13	2.66	2.66	4.50	3.74	5.49	5.64	3.75	2.78	2.33	3.31	4.48	2.54
14	2.61	2.62	4.36	3.63	5.27	5.43	3.57	3.01	2.34	3.21	5.18	2.50
15	2.58	2.63	3.93	3.56	5.01	5.20	3.75	3.17	2.34	3.00	4.98	2.42
16	2.57	2.65	3.63	3.51	5.23	4.90	4.84	3.09	2.32	2.84	4.74	2.37
17	2.52	2.64	3.49	3.48	6.04	4.61	5.04	2.89	2.31	2.64	4.01	2.33
18	2.48	2.62	3.38	3.45	5.96	4.38	4.91	2.88	2.31	2.52	3.21	2.31
19	2.46	2.62	3.29	3.44	5.57	4.22	4.75	3.15	2.34	2.53	2.87	2.30
20	2.46	2.63	3.23	3.48	5.27	4.07	4.49	3.37	2.33	2.62	2.70	2.34
21	2.46	2.65	3.18	3.73	5.46	3.91	4.15	3.33	2.33	3.05	2.66	2.44
22	2.45	2.63	3.14	5.07	6.51	3.76	3.84	3.11	2.31	2.79	2.76	2.36
23	2.44	2.62	3.24	5.82	7.21	3.62	3.59	2.92	2.33	2.58	2.83	2.34
24	2.45	2.60	4.16	5.70	6.92	3.50	3.41	2.82	2.46	2.48	2.65	2.33
25	2.45	2.59	4.43	5.33	6.53	3.44	3.23	2.69	2.46	2.39	2.52	2.30
26	2.50	2.58	4.14	5.14	6.26	3.43	3.09	2.60	2.40	2.38	2.45	2.28
27	2.56	2.57	3.78	4.99	6.00	3.77	3.03	2.58	2.38	2.38	2.39	2.27
28	2.56	2.59	3.59	4.77	5.77	6.96	2.96	2.78	2.45	2.42	2.39	2.26
29	2.59	2.66	3.46	4.56	---	7.69	2.88	2.72	2.45	2.35	2.35	2.26
30	2.80	3.13	3.37	4.38	---	7.96	2.80	2.62	2.43	2.33	2.33	2.29
31	2.85	---	3.40	4.20	---	8.39	---	2.56	---	2.38	2.33	---
MEAN	2.57	2.66	3.56	4.40	5.66	5.37	4.55	2.81	2.39	2.63	2.88	2.43
MAX	2.85	3.13	4.50	5.82	7.21	8.39	7.80	3.37	2.59	3.31	5.18	2.80
MIN	2.44	2.55	2.87	3.44	3.72	3.43	2.80	2.56	2.31	2.33	2.25	2.26
CAL YR	1986	MEAN	3.59	MAX	7.59	MIN	2.28					
WTR YR	1987	MEAN	3.48	MAX	8.39	MIN	2.25					

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245050 ETONIA CREEK AT BARDIN, FL

LOCATION.--Lat 29°43'00", long 81°43'31", in NW¼ sec.17, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, near left bank on downstream side of bridge on Bardin Road, 0.2 mi north of Bardin, 4.6 mi upstream from mouth, and 6.2 mi northwest of Palatka.

DRAINAGE AREA.--219 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.60 ft above National Geodetic Vertical Datum of 1929 (levels by Wardlin Engineering Associates).

REMARKS.--Records poor. Records include an appreciable amount of ground-water flow from Hudson Pulp and Paper Corporation production wells.

AVERAGE DISCHARGE.--14 years, 100 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,210 ft³/s, May 12, 1979, gage height, 7.74 ft; minimum daily discharge, 35 ft³/s, Apr. 7, 1982, estimated; minimum gage height, 0.70 ft, Apr. 7, 1982, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 761 ft³/s, Feb. 23, gage height, 6.81 ft; minimum, 49 ft³/s, all or part of each day July 25-28, Aug. 9,10, gage height, 1.06 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	67	106	118	97	199	541	67	68	54	54	57
2	63	66	113	140	93	257	376	66	66	52	53	58
3	62	66	111	135	90	308	287	64	64	52	53	57
4	62	66	102	115	88	250	232	63	63	54	52	57
5	61	65	91	155	98	186	180	62	59	54	52	58
6	61	65	82	201	237	137	174	62	59	59	51	58
7	62	65	78	175	370	139	153	61	58	54	51	70
8	61	64	76	137	347	405	134	61	57	55	50	68
9	61	64	74	116	260	566	118	64	56	53	49	64
10	74	64	73	106	196	372	112	62	56	55	49	60
11	70	64	88	101	157	270	109	61	55	55	53	57
12	67	64	136	97	135	203	104	61	55	53	88	57
13	65	64	153	93	120	165	103	61	54	53	189	58
14	64	65	134	89	110	141	98	69	54	52	188	57
15	63	58	113	86	104	123	101	67	54	53	227	56
16	63	55	100	84	131	110	104	71	53	53	155	55
17	62	55	94	83	177	103	99	68	53	51	112	54
18	62	62	90	82	187	97	99	66	57	51	93	53
19	61	65	87	81	165	93	97	65	58	52	78	53
20	61	64	84	82	141	89	92	70	54	53	71	53
21	61	62	81	86	162	85	88	71	54	58	68	54
22	61	62	79	145	280	81	84	68	53	53	67	53
23	61	62	80	224	516	77	82	65	54	51	66	52
24	61	62	100	238	593	74	80	63	57	50	64	52
25	61	62	106	176	399	72	77	61	56	49	62	52
26	62	62	101	153	302	72	74	59	54	49	60	51
27	63	62	93	144	245	77	73	60	54	49	59	51
28	62	62	87	131	206	234	72	76	54	51	58	51
29	63	63	83	116	---	353	70	66	53	53	57	51
30	68	85	81	107	---	453	69	61	55	52	56	51
31	68	---	80	102	---	664	---	65	---	52	56	---
TOTAL	1960	1912	2956	3898	6006	6455	4082	2006	1697	1635	2441	1678
MEAN	63.2	63.7	95.4	126	214	208	136	64.7	56.6	52.7	78.7	55.9
MAX	74	85	153	238	593	664	541	76	68	59	227	70
MIN	61	55	73	81	88	72	69	59	53	49	49	51

CAL YR 1986 TOTAL 38376 MEAN 105 MAX 899 MIN 55
WTR YR 1987 TOTAL 36726 MEAN 101 MAX 664 MIN 49

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245140 SIMMS CREEK NEAR BARDIN, FL

LOCATION.--Lat 29°44'07", long 81°42'36", in NE¼ sec.9, T.9 S., R.26 E., Putnam County, Hydrologic Unit 03080103, on right bank 0.4 mi downstream from bridge on Simms Creek Road, 1.7 mi northeast of Bardin, 2.7 mi upstream from Etonia Creek, and 6.7 mi northwest of Palatka.

DRAINAGE AREA.--47.3 mi².

PERIOD OF RECORD.--October 1973 to September 1975, March 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Wardlin Engineering Associates). Prior to Feb. 26, 1976, at bridge 0.4 mi upstream at datum 7.26 ft higher.

REMARKS.--Estimated daily discharges: Dec. 13 to Jan. 20. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--13 years (water years 1974-75, 1977-87), 48.6 ft³/s, 13.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft³/s, Dec. 7, 1979, gage height, 13.78 ft; minimum, 5.7 ft³/s, July 5, 1981; minimum gage height, 6.86 ft, July 27,28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 23	2200	*800	*12.94	No other peak greater than base discharge.			
Minimum discharge, 7.8 ft ³ /s, Aug. 9,10, gage height, 7.25 ft.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	22	60	38	117	437	13	13	9.7	16	9.8
2	11	12	29	92	33	139	291	13	12	9.0	14	11
3	11	12	33	78	31	167	248	13	11	9.3	12	11
4	11	12	28	62	29	146	164	13	11	13	12	11
5	10	11	24	76	40	121	124	12	11	21	11	13
6	10	11	20	82	137	97	98	13	10	70	9.6	12
7	10	11	18	74	355	93	76	13	10	33	8.8	29
8	9.9	11	17	60	290	232	60	13	9.7	41	8.3	25
9	10	10	16	46	197	338	50	13	9.4	28	7.9	22
10	18	10	15	39	142	235	43	13	9.3	22	8.0	22
11	18	9.8	27	35	109	166	37	12	9.1	16	8.8	19
12	15	9.9	58	33	85	128	33	13	9.0	14	9.6	17
13	14	10	60	29	67	105	29	15	8.8	13	16	16
14	13	11	54	26	56	87	27	18	12	12	29	15
15	12	11	40	24	48	71	29	17	11	17	115	14
16	12	11	30	23	65	59	35	25	9.6	18	97	12
17	11	11	22	22	102	52	29	23	9.3	14	66	11
18	11	11	19	21	100	46	28	17	9.7	13	39	11
19	10	11	17	20	84	43	26	16	17	16	25	10
20	10	11	16	23	69	39	23	16	12	19	19	10
21	10	11	15	29	86	36	21	15	11	30	16	10
22	9.8	10	15	81	192	32	20	14	9.8	19	14	9.7
23	9.7	10	19	124	511	30	18	13	10	14	13	9.5
24	9.7	10	35	139	571	27	18	13	11	12	13	9.3
25	9.6	9.8	50	116	327	26	16	12	10	11	12	8.9
26	10	9.7	46	95	219	26	16	11	9.3	11	11	8.6
27	11	9.6	38	83	162	33	15	14	9.8	10	11	8.5
28	11	9.8	30	70	130	136	15	24	10	9.5	10	8.4
29	11	10	25	58	---	245	14	16	9.5	8.9	9.9	8.3
30	14	15	20	49	---	375	14	14	9.3	9.2	9.6	8.3
31	14	---	28	44	---	605	---	13	---	13	9.2	---
TOTAL	357.7	324.6	886	1813	4275	4052	2054	460	313.6	555.6	660.7	390.3
MEAN	11.5	10.8	28.6	58.5	153	131	68.5	14.8	10.5	17.9	21.3	13.0
MAX	18	15	60	139	571	605	437	25	17	70	115	29
MIN	9.6	9.6	15	20	29	26	14	11	8.8	8.9	7.9	8.3
CFSM	.24	.23	.60	1.24	3.23	2.76	1.45	.31	.22	.38	.45	.28
IN.	.28	.26	.70	1.43	3.36	3.19	1.62	.36	.25	.44	.52	.31
CAL YR 1986	TOTAL	15669.7	MEAN	42.9	MAX	1230	MIN	6.9	CFSM	.91	IN.	12.32
WTR YR 1987	TOTAL	16142.5	MEAN	44.2	MAX	605	MIN	7.9	CFSM	.94	IN.	12.70

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245255 DEEP CREEK NEAR HASTINGS, FL

LOCATION.--Lat 29°40'52", long 81°26'56", in NW¼ sec.35, T.9 S., R.28 E., St. Johns County, Hydrologic Unit 03080103, near right bank at downstream side of bridge on county road, 1.3 mi upstream from Sixteenmile Creek, and 4.2 mi southeast of Hastings.

DRAINAGE AREA.--20.7 mi².

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6.99 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 18 to Jan. 21, and May 8 to June 21. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years, 8.63 ft³/s, 5.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 308 ft³/s, Sept. 28, 1984; maximum gage height, 8.03 ft, June 18, 1982; no flow for many days in most years; minimum gage height, 2.89 ft, Aug. 9, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 175 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 6	0800	201	7.17	Mar. 30	1000	*221	*7.29

Minimum discharge, 0.02 ft³/s, Aug. 31, Sept. 1,2; minimum gage height, 3.94 ft, all or part of each day Oct. 19-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	1.1	14	3.2	.85	18	102	3.8	1.0	3.5	.26	.02
2	.32	.72	4.4	2.6	.76	21	68	3.4	.90	.85	.21	.19
3	.32	.56	3.0	2.0	.75	14	46	3.4	.72	1.2	.20	.33
4	.32	.49	1.5	1.8	.68	9.4	33	3.5	.60	1.2	.24	.45
5	.31	.48	1.1	2.0	17	6.1	23	3.6	.50	.79	.10	.57
6	.31	.43	.97	2.5	153	4.5	18	4.2	.45	.71	.07	.37
7	.35	.38	.88	2.2	122	60	16	3.9	.40	.43	.07	.30
8	.35	.36	.83	2.0	71	129	14	1.8	.35	.28	.10	.21
9	.28	.38	.76	1.8	41	79	12	1.5	.28	.21	.11	.21
10	.24	.39	.68	1.7	25	48	9.8	1.2	.23	.17	.11	.20
11	.22	.41	.79	1.6	19	26	8.6	1.0	.40	.13	.11	3.5
12	.21	.39	2.3	1.5	15	18	7.9	.96	.50	2.1	.11	3.2
13	.20	.38	3.8	1.4	12	13	7.1	.92	.70	2.9	.07	1.5
14	.25	.36	1.8	1.3	9.0	9.0	7.5	.88	.90	.62	.36	.71
15	.31	.35	1.4	1.2	6.8	6.3	7.9	.85	1.2	.55	.69	.49
16	.25	.36	1.2	1.2	21	4.7	5.4	.80	.90	.63	.36	.39
17	.18	.34	1.1	1.1	23	3.4	4.9	.77	.70	.32	.23	.33
18	.17	.31	1.0	1.1	18	2.7	3.1	.74	.50	.21	.14	.33
19	.17	.31	.92	1.0	13	2.5	2.3	.72	.30	.18	.11	.34
20	.17	.35	.88	1.0	8.8	3.0	2.1	.68	.20	.20	.10	.32
21	.17	.42	.85	1.2	49	3.6	3.4	.64	.14	.18	.13	.43
22	.17	.47	.82	12	73	3.5	3.8	.60	.12	.13	.14	.29
23	.17	.50	1.0	7.9	71	3.9	4.1	.56	.15	.11	.13	.21
24	.17	.52	1.3	3.7	41	4.4	4.5	.52	.71	.11	.11	.17
25	.17	.55	1.7	2.7	27	4.9	3.5	.50	.64	.14	.10	.12
26	.19	.58	1.5	2.7	20	6.2	4.0	.60	.32	.17	.08	.11
27	.40	.59	1.3	1.8	15	10	5.0	.70	.28	.45	.05	.14
28	.33	.63	1.2	1.4	11	155	4.5	.80	.26	.18	.05	.15
29	.33	1.5	1.1	1.2	---	126	3.9	.90	.18	.10	.04	.15
30	.54	12	1.0	1.1	---	173	4.0	1.0	9.1	.10	.03	.14
31	.67	---	1.5	.98	---	165	---	1.5	---	.20	.03	---
TOTAL	8.54	26.61	56.58	70.88	884.64	1133.1	439.3	46.94	23.63	19.05	4.64	15.87
MEAN	.28	.89	1.83	2.29	31.6	36.6	14.6	1.51	.79	.61	.15	.53
MAX	.67	12	14	12	153	173	102	4.2	9.1	3.5	.69	3.5
MIN	.17	.31	.68	.98	.68	2.5	2.1	.50	.12	.10	.03	.02
CFSM	.01	.04	.09	.11	1.53	1.77	.71	.07	.04	.03	.01	.03
IN.	.02	.05	.10	.13	1.59	2.04	.79	.08	.04	.03	.01	.03

CAL YR 1986 TOTAL 1612.65 MEAN 4.42 MAX 91 MIN .03 CFSM .21 IN. 2.90
WTR YR 1987 TOTAL 2729.78 MEAN 7.48 MAX 173 MIN .02 CFSM .36 IN. 4.91

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245500 SOUTH FORK BLACK CREEK NEAR PENNEY FARMS, FL

LOCATION.--Lat 29°58'45", long 81°51'08", in NE¼ sec.13, T.6 S., R.24 E., Clay County, Hydrologic Unit 03080103, on right bank at upstream side of bridge on State Highway 16, 0.7 mi downstream from Greens Creek, 2.5 mi west of Penney Farms, 9.5 mi west of Green Cove Springs, and 24 mi upstream from mouth of Black Creek.

DRAINAGE AREA.--134 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. Datum of gage is 9.82 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 18, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1-9. Records good.

AVERAGE DISCHARGE.--48 years, 156 ft³/s, 15.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft³/s, Oct. 19, 1944, gage height, 26.33 ft, from floodmarks, from rating curve extended above 11,000 ft³/s; minimum, about 9.4 ft³/s, June 24, 1955; minimum gage height, 0.25 ft, June 19, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 23	1600	*2,910	*15.96	Mar. 31	1400	2,060	14.06
Mar. 8	2200	1,860	14.04				

Minimum discharge, 22 ft³/s, June 17, gage height, 0.60 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	36	39	211	280	99	408	1380	53	32	35	82	64	
2	35	38	136	289	93	1050	729	51	31	32	49	90	
3	34	37	108	197	101	787	422	49	30	31	47	87	
4	33	34	85	165	90	444	340	47	29	44	45	142	
5	33	33	74	262	152	311	284	46	31	109	36	111	
6	32	32	64	317	571	244	235	48	29	76	34	89	
7	31	31	58	245	736	282	199	47	28	60	30	164	
8	30	29	55	191	582	1220	170	44	27	48	28	112	
9	47	28	51	150	373	1410	150	60	26	79	26	74	
10	51	27	48	124	267	753	134	51	25	70	34	61	
11	59	27	108	123	202	431	121	47	24	58	86	52	
12	48	27	203	107	159	311	110	53	24	42	167	55	
13	40	27	243	94	132	257	102	52	24	38	274	67	
14	48	27	155	85	114	215	96	58	25	34	277	56	
15	43	28	115	79	101	184	140	68	26	75	847	51	
16	37	28	99	76	149	162	173	80	24	98	422	45	
17	34	27	92	80	254	145	120	67	23	55	197	41	
18	31	27	82	86	225	136	106	58	29	44	127	38	
19	30	28	74	87	189	135	96	99	36	42	93	37	
20	29	28	68	90	154	124	89	113	30	46	76	38	
21	28	33	64	107	292	114	83	65	34	55	69	37	
22	28	30	60	378	642	105	79	55	50	48	63	34	
23	28	28	71	520	2150	98	75	49	63	40	58	34	
24	27	26	183	346	1700	93	72	45	37	36	56	33	
25	27	26	148	266	859	92	67	41	33	34	74	31	
26	28	25	105	277	507	94	64	38	35	41	54	30	
27	29	25	90	232	370	110	63	36	45	35	48	29	
28	29	25	81	186	302	442	61	39	98	36	46	28	
29	30	33	74	151	---	854	58	38	50	32	44	28	
30	55	150	68	129	---	955	55	35	36	31	41	29	
31	47	---	69	113	---	1930	---	33	---	40	40	---	
TOTAL	1117	1003	3142	5832	11565	13896	5873	1665.1	1034	1544	3570	1787	
MEAN	36.0	33.4	101	188	413	448	196	53.7	34.5	49.8	115	59.6	
MAX	59	150	243	520	2150	1930	1380	113	98	109	847	164	
MIN	27	25	48	76	90	92	55	33	23	31	26	28	
CFSM	.27	.25	.76	1.40	3.08	3.35	1.46	.40	.26	.37	.86	.44	
IN.	.31	.28	.87	1.62	3.21	3.86	1.63	.46	.29	.43	.99	.50	
CAL YR	1986	TOTAL	43897	MEAN	120	MAX	1980	MIN	20	CFSM	.90	IN.	12.19
WTR YR	1987	TOTAL	52028.1	MEAN	143	MAX	2150	MIN	23	CFSM	1.06	IN.	14.44

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246000 NORTH FORK BLACK CREEK NEAR MIDDLEBURG, FL

LOCATION.--Lat 30°06'47", long 81°54'24", in NE¼ sec.33, T.4 S., R.24 E., Clay County, Hydrologic Unit 03080103, on left bank 0.3 mi upstream from Big Branch, 4 mi northwest of Middleburg, and 7.5 mi upstream from confluence with South Fork.

DRAINAGE AREA.--177 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. Datum of gage is 0.62 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 31, 1933, nonrecording gage at site 0.4 mi downstream at different datum. Mar. 31, 1933 to Apr. 28, 1955, nonrecording gage at present site and datum.

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

AVERAGE DISCHARGE.--56 years, 194 ft³/s, 14.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s, May 3, 1964, gage height, 23.91 ft; minimum observed, 3.6 ft³/s, June 8, 1935, gage height, 0.26 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1919 reached a stage of 25.3 ft, from information by local resident, discharge, 15,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 7	2400	1,300	11.88	Mar. 9	0600	2,070	14.52
Feb. 24	0900	2,290	15.04	Mar. 31	0900	*3,580	*16.61

Minimum discharge, 20 ft³/s, June 17,18, gage height, 0.78 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	69	220	447	175	424	2230	51	36	41	75	39
2	39	66	180	671	154	668	1210	51	33	36	154	45
3	38	61	160	571	187	650	725	51	32	33	179	119
4	37	72	140	399	182	485	477	51	30	36	140	149
5	36	72	120	369	233	343	368	50	36	83	88	175
6	35	51	104	367	691	266	292	51	37	74	63	158
7	35	44	88	305	1150	313	238	48	34	94	51	368
8	35	42	75	249	1240	1060	197	43	31	116	44	449
9	37	41	68	209	929	1920	164	44	29	85	40	335
10	44	39	64	183	555	1220	143	43	27	85	36	205
11	55	38	111	246	355	712	127	42	26	122	48	171
12	59	38	212	249	265	438	114	48	25	84	126	318
13	58	39	237	193	217	343	104	49	24	67	613	421
14	57	45	221	152	185	284	98	81	28	54	683	395
15	58	47	204	134	161	239	101	90	27	63	636	252
16	56	44	173	136	166	202	109	87	25	76	958	164
17	52	40	141	245	245	178	95	66	23	71	680	113
18	47	45	118	329	216	173	90	62	22	70	301	85
19	47	48	103	294	185	188	85	59	25	62	190	71
20	45	50	94	275	164	194	81	58	26	58	137	65
21	41	64	88	256	247	172	76	63	24	81	152	57
22	39	62	92	527	706	153	71	91	23	64	130	49
23	36	51	103	900	1350	142	68	93	34	50	107	45
24	35	46	188	972	2150	133	66	65	40	44	78	42
25	34	44	200	637	1300	123	62	54	33	42	66	39
26	35	43	159	568	703	192	60	46	29	51	58	38
27	37	43	141	545	460	1230	60	41	31	57	52	36
28	38	50	126	407	362	1810	59	42	41	48	46	34
29	40	80	110	319	---	1320	57	42	41	42	43	34
30	56	160	97	254	---	1300	55	39	41	39	41	34
31	70	---	93	209	---	3330	---	38	---	37	39	---
TOTAL	1371	1634	4230	11617	14933	20205	7682	1739	913	1965	6054	4505
MEAN	44.2	54.5	136	375	533	652	256	56.1	30.4	63.4	195	150
MAX	70	160	237	972	2150	3330	2230	93	41	122	958	449
MIN	34	38	64	134	154	123	55	38	22	33	36	34
CFSM	.25	.31	.77	2.12	3.01	3.68	1.45	.32	.17	.36	1.10	.85
IN.	.29	.34	.89	2.44	3.14	4.25	1.61	.37	.19	.41	1.27	.95

CAL YR 1986	TOTAL 55003	MEAN 151	MAX 1350	MIN 15	CFSM .85	IN. 11.56
WTR YR 1987	TOTAL 76848	MEAN 211	MAX 3330	MIN 22	CFSM 1.19	IN. 16.15

02246010 NORTH FORK BLACK CREEK AT MIDDLEBURG, FL

DRAINAGE AREA.--197 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 9.80 ft below National Geodetic Vertical Datum of 1929. Prior to Feb. 28, 1986, at site 50 ft downstream at present datum.

REMARKS.--Stage affected by tide at times.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 14.41 ft, Mar. 31, 1987; minimum, 9.34 ft, Dec. 23, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.41 ft, Mar. 31; minimum, 10.62 ft, Jan. 13.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.62	12.33	12.49	12.58	11.37	12.50	13.52	11.83	11.83	11.54	11.63	11.60
2	11.54	12.21	12.52	12.29	11.40	12.24	12.75	11.77	11.68	11.46	11.53	11.75
3	11.48	12.22	12.18	12.03	11.25	12.14	12.22	11.79	11.55	11.28	11.53	11.80
4	11.45	12.44	11.90	12.11	11.43	12.01	11.53	11.73	11.54	11.22	11.38	11.90
5	11.40	12.44	11.89	12.69	12.06	12.03	11.14	11.95	11.73	11.24	11.23	12.05
6	11.41	12.20	12.25	12.96	12.72	12.15	11.34	12.46	12.05	11.24	11.20	12.20
7	11.77	12.00	12.21	12.52	12.87	12.54	11.57	12.26	12.21	11.32	11.22	12.40
8	11.91	11.94	12.01	11.98	12.77	12.71	11.56	12.04	12.00	11.45	11.35	12.35
9	11.84	11.86	11.82	11.94	11.98	12.56	11.47	12.27	11.77	11.47	11.60	12.25
10	11.71	11.77	11.64	11.81	11.78	11.91	11.53	12.29	11.51	11.50	11.68	12.12
11	11.95	11.98	11.67	11.21	11.60	12.30	11.66	12.11	11.47	11.59	11.75	12.00
12	12.31	11.95	11.57	10.91	11.33	12.31	11.53	12.08	11.71	11.67	12.04	11.90
13	12.23	11.87	11.59	10.97	11.28	12.22	11.38	12.12	11.60	11.84	12.45	11.80
14	12.03	12.32	12.16	11.38	11.54	12.27	11.46	12.10	11.51	11.89	12.58	11.70
15	11.91	12.36	12.19	11.43	11.62	12.28	11.70	12.09	11.42	11.83	12.55	11.76
16	11.98	12.16	12.12	11.47	12.00	12.10	11.71	12.07	11.37	11.83	12.28	11.80
17	12.12	11.90	12.03	11.71	12.29	12.19	11.85	12.03	11.37	11.98	12.18	11.70
18	12.19	11.77	11.99	12.13	12.09	12.45	11.92	11.99	11.43	12.24	11.90	11.60
19	12.43	11.84	11.93	11.85	11.98	12.36	12.07	11.81	11.53	12.23	11.60	11.50
20	12.40	12.17	12.00	11.38	12.04	12.57	12.14	11.71	11.53	12.12	11.70	11.62
21	12.26	12.04	12.17	11.51	12.34	12.59	12.10	11.78	11.39	11.96	11.80	11.84
22	12.16	11.97	12.62	11.96	12.76	12.45	12.10	12.13	11.31	11.81	11.96	12.00
23	12.05	12.03	12.80	11.49	12.97	12.69	12.17	12.20	11.32	11.85	11.85	12.10
24	11.84	11.94	12.43	11.36	13.07	12.79	12.12	12.03	11.33	12.07	11.68	12.18
25	11.73	11.73	11.96	11.39	12.61	12.68	12.11	11.91	11.36	12.13	11.76	12.12
26	11.71	11.68	11.78	11.28	12.46	12.58	12.27	11.86	11.55	12.07	11.86	12.08
27	11.83	11.54	11.89	11.39	12.53	12.82	12.36	11.97	11.43	11.83	11.80	12.04
28	11.81	11.63	12.18	11.48	12.56	13.30	12.33	12.22	11.48	11.52	11.70	12.10
29	11.78	12.10	12.23	11.57	---	13.15	12.39	12.28	11.72	11.44	11.60	12.04
30	11.97	12.32	12.17	11.43	---	13.34	12.25	12.20	11.68	11.64	11.44	11.96
31	12.30	---	12.13	11.12	---	14.17	---	12.04	---	11.68	11.50	

CAL YR 1986	MEAN 11.75	MAX 13.02	MIN 10.29
WTR YR 1987	MEAN 11.94	MAX 14.17	MIN 10.91

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246025 BLACK CREEK NEAR DOCTORS INLET, FL

LOCATION.--Lat 30°04'57", long 81°48'34", in NW¼ sec. 9, T.5 S., R.25 E., Clay County, Hydrologic Unit 03080103, on downstream side of bridge on State Highway 204, 1.7 mi upstream from Little Black Creek, 3.4 mi southwest of Doctors Inlet, and 8.0 mi upstream from mouth.

DRAINAGE AREA.--403 mi².

PERIOD OF RECORD.--October 1981 to current year (incomplete).

GAGE.--Water-stage and electromagnetic current meter recorders. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Discharge computed using continuous velocity record obtained from recording electromagnetic current meter and represents net of much larger upstream and downstream discharges. Discharge for some days adjusted due to faulty velocity record.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,690 ft³/s, Mar. 29, 1984; maximum gage height, 13.53 ft, Oct. 30, 1985; maximum daily reverse flow, 198 ft³/s, Sept. 29, 1983; minimum gage height, 9.05 ft, Feb. 29, Mar. 1, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,060 ft³/s, Mar. 31; maximum gage height, 12.60 ft, Jan. 6; maximum daily reverse flow, 176 ft³/s, Dec. 5; minimum gage height, 9.58 ft, Jan. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	385	574	831	1000	504	1100	4130	381	374	185	628	435	
2	261	560	771	1000	485	1670	2230	356	322	223	695	609	
3	383	515	474	699	515	1480	1420	415	455	200	169	688	
4	364	495	-5.5	574	472	1020	1110	317	376	150	831	763	
5	392	472	-176	536	539	738	874	278	318	180	947	678	
6	264	471	-124	686	1290	595	652	462	255	200	653	809	
7	246	412	14	725	1870	788	769	442	391	120	560	1110	
8	361	434	299	562	1870	2490	619	393	353	160	450	954	
9	352	451	247	444	1240	3360	600	336	296	200	380	756	
10	360	498	289	512	833	2300	560	413	311	190	300	514	
11	221	509	300	542	593	1200	520	444	235	150	250	532	
12	370	571	420	486	500	869	500	443	313	180	190	750	
13	419	580	553	369	358	613	460	482	429	150	850	844	
14	420	563	527	381	408	495	410	565	362	160	1220	647	
15	362	651	557	346	365	480	350	615	294	200	1890	620	
16	388	627	520	454	365	581	400	532	266	290	1660	550	
17	414	598	464	601	625	541	528	381	220	310	1200	497	
18	417	564	427	741	622	614	427	449	180	400	694	529	
19	464	494	367	748	549	638	460	478	150	469	644	480	
20	421	517	353	583	485	507	419	539	120	557	538	451	
21	386	478	352	575	614	551	367	364	110	603	560	443	
22	425	505	361	1080	1310	500	400	395	100	447	521	510	
23	452	450	574	1180	3100	450	437	437	90	346	600	522	
24	422	484	818	927	3620	449	417	370	84	388	503	556	
25	418	437	614	854	2350	511	348	345	80	411	506	581	
26	382	419	508	957	1320	586	375	338	90	614	521	542	
27	429	376	477	791	990	1300	416	328	150	559	502	546	
28	502	307	465	649	762	2240	617	422	220	436	472	534	
29	477	510	454	545	---	2080	388	512	250	291	482	543	
30	509	781	462	629	---	2580	548	452	210	316	459	478	
31	443	---	405	490	---	5060	---	454	---	361	399	---	
TOTAL	12109	15303	12597.5	20666	28554	38386	21751	13138	7404	9446	20274	18471	
MEAN	391	510	406	667	1020	1238	725	424	247	305	654	616	
MAX	509	781	831	1180	3620	5060	4130	615	455	614	1890	1110	
MIN	221	307	-176	346	358	449	348	278	80	120	169	435	
CFSM	.97	1.27	1.01	1.65	2.53	3.07	1.80	1.05	.61	.76	1.62	1.53	
IN.	1.12	1.41	1.16	1.91	2.64	3.54	2.01	1.21	.68	.87	1.87	1.71	
WTR YR	1987	TOTAL	218099.5	MEAN	598	MAX	5060	MIN	-176	CFSM	1.48	IN.	20.13

NOTE.--Negative figures indicate reverse flow.

02246025 BLACK CREEK NEAR DOCTORS INLET, FL--Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.76	11.59	11.74	11.76	10.62	11.66	11.43	10.77	10.77	10.47	10.54	10.63
2	10.79	11.46	11.75	11.43	10.64	11.33	11.31	10.71	10.61	10.39	10.43	10.69
3	10.74	11.48	11.42	11.20	10.49	11.25	11.02	10.72	10.48	10.21	10.44	10.79
4	10.69	11.70	11.14	11.35	10.66	11.18	10.40	10.66	10.49	10.16	10.29	10.96
5	10.64	11.70	11.17	11.97	11.29	11.24	10.03	10.89	10.67	10.16	10.15	11.18
6	10.68	11.46	11.52	12.18	11.87	11.39	10.25	11.40	10.99	10.17	10.11	11.19
7	11.04	11.25	11.47	11.71	11.89	11.75	10.49	11.20	11.14	10.26	10.14	11.28
8	11.17	11.21	11.26	11.20	11.75	11.64	10.48	10.98	10.93	10.38	10.27	11.20
9	11.10	11.14	11.07	11.20	11.04	11.07	10.40	11.21	10.70	10.40	10.52	11.02
10	10.96	11.03	10.89	11.04	10.97	10.77	10.45	11.22	10.44	10.43	10.60	10.87
11	11.23	11.24	10.91	10.44	10.82	11.47	10.58	11.04	10.41	10.52	10.65	10.85
12	11.58	11.21	10.80	10.16	10.56	11.51	10.46	11.01	10.65	10.59	10.91	10.81
13	11.50	11.13	10.85	10.24	10.53	11.46	10.31	11.04	10.53	10.76	11.24	10.67
14	11.29	11.59	11.42	10.64	10.79	11.50	10.39	11.02	10.44	10.82	11.40	10.61
15	11.17	11.62	11.44	10.67	10.86	11.51	10.62	11.01	10.36	10.76	11.32	10.65
16	11.25	11.42	11.37	10.71	11.25	11.34	10.64	10.99	10.31	10.75	11.00	10.77
17	11.38	11.16	11.28	10.97	11.51	11.43	10.77	10.96	10.31	10.91	10.69	10.73
18	11.46	11.03	11.24	11.35	11.32	11.69	10.87	10.92	10.36	11.18	10.56	10.54
19	11.69	11.11	11.18	11.04	11.22	11.59	11.01	10.74	10.47	11.16	10.53	10.39
20	11.66	11.44	11.26	10.59	11.28	11.66	11.08	10.63	10.46	11.04	10.61	10.50
21	11.52	11.30	11.43	10.76	11.57	11.55	11.03	10.72	10.33	10.87	10.77	10.81
22	11.43	11.23	11.88	11.16	11.85	11.41	11.05	11.07	10.25	10.73	10.89	10.95
23	11.31	11.29	12.06	10.54	11.72	11.64	11.10	11.13	10.25	10.78	10.77	11.00
24	11.10	11.20	11.66	10.39	11.51	11.74	11.05	10.96	10.26	11.00	10.58	11.10
25	10.99	10.99	11.20	10.57	11.45	11.63	11.06	10.84	10.31	11.05	10.78	11.11
26	10.98	10.94	11.02	10.46	11.59	11.53	11.20	10.79	10.49	10.98	10.82	11.04
27	11.11	10.80	11.16	10.57	11.71	11.58	11.28	10.90	10.35	10.73	10.71	10.99
28	11.07	10.90	11.47	10.68	11.78	11.75	11.28	11.16	10.41	10.43	10.55	11.03
29	11.05	11.37	11.49	10.79	---	11.74	11.32	11.21	10.65	10.37	10.36	11.01
30	11.23	11.57	11.42	10.67	---	11.91	11.18	11.13	10.60	10.56	10.32	10.83
31	11.57	---	11.40	10.36	---	11.80	---	10.97	---	10.60	10.50	

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246150 BIG DAVIS CREEK AT BAYARD, FL

LOCATION.--Lat 30°09'05", long 81°31'35", in land grant 37, T.4 S., R.28 E., Duval County, Hydrologic Unit 03080103, at downstream end of culvert on U. S. Highway 1, 0.8 mi northwest of Bayard, 2.0 mi upstream from mouth, and 14.8 mi southeast of Union Station in Jacksonville.

DRAINAGE AREA.--13.6 mi².

PERIOD OF RECORD.--Annual maximum, water years 1964-66, 1970-74; August 1966 to September 1969 and June 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Feb. 18, 1965 to Aug. 21, 1966, crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 13-22. Records fair.

AVERAGE DISCHARGE.--16 years (water years 1967-69, 1975-87), 10.9 ft³/s, 10.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft³/s, Aug. 29, 1968, gage height, 10.47 ft; minimum, 0.05 ft³/s, July 25, 1977, June 19, 1981, gage height, 3.80 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 23	0630	*92	*7.10				

Minimum discharge, 0.73 ft³/s, June 16; minimum gage height, 4.27 ft, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	6.9	12	20	7.5	41	54	4.5	3.0	5.9	5.3	5.3
2	3.2	7.1	9.7	20	7.8	49	40	5.1	2.6	4.7	5.6	17
3	4.2	6.4	12	11	10	39	31	5.7	3.0	5.5	4.8	19
4	3.4	5.6	8.8	10	8.6	31	27	4.8	2.3	3.4	3.8	8.9
5	2.6	5.7	7.6	12	17	26	23	4.9	2.5	7.2	3.7	8.9
6	3.9	6.0	7.6	12	62	23	19	4.3	2.9	6.8	2.8	6.6
7	3.8	5.7	7.4	9.8	68	33	17	5.9	1.5	2.8	2.2	6.8
8	3.0	4.8	7.3	8.7	50	66	19	5.9	3.4	1.6	2.0	5.5
9	4.7	6.2	7.5	7.9	38	52	16	5.8	2.9	5.1	3.7	5.1
10	5.2	5.4	6.3	7.7	32	40	14	3.7	2.2	4.8	4.7	5.3
11	5.0	5.5	10	6.6	27	33	13	6.0	1.9	2.7	4.8	5.8
12	4.7	5.5	19	6.3	24	28	11	5.3	1.3	1.9	5.3	5.3
13	5.7	5.4	14	7.0	21	24	8.5	3.5	1.9	1.7	5.5	5.0
14	4.8	5.0	10	6.4	19	23	8.2	6.0	2.0	1.8	5.2	4.2
15	4.8	5.1	9.1	6.0	16	21	10	4.8	3.8	5.3	4.1	4.3
16	4.8	3.8	8.7	5.6	20	17	11	4.4	1.2	6.8	4.4	5.0
17	5.3	7.4	8.8	5.2	23	16	9.6	2.6	2.0	6.0	3.7	5.1
18	5.0	6.4	7.0	5.0	19	14	7.1	4.3	1.3	6.4	2.7	3.3
19	3.9	6.3	8.7	10	17	15	9.4	5.0	1.0	6.3	3.0	1.6
20	4.4	6.3	7.8	20	14	14	8.1	5.0	1.1	5.9	2.2	4.0
21	4.4	7.1	7.8	30	30	12	7.1	5.0	1.2	4.9	3.6	2.5
22	4.6	7.3	7.4	37	46	11	5.3	3.8	1.2	2.2	2.7	2.3
23	4.7	6.3	8.1	25	85	10	4.5	1.6	1.3	3.0	2.3	1.8
24	4.7	6.1	10	14	58	9.7	5.5	2.1	1.3	2.0	2.4	1.8
25	4.7	5.6	7.6	11	44	9.7	6.6	2.2	3.2	2.3	2.7	2.7
26	4.2	5.0	9.9	12	36	17	6.0	2.2	3.2	3.1	1.9	3.3
27	5.0	4.3	8.0	10	31	40	5.3	3.5	1.5	2.0	2.5	4.4
28	5.6	6.8	6.0	9.8	27	49	5.9	2.9	1.7	4.3	2.5	4.8
29	6.6	4.6	5.1	15	---	43	4.3	3.9	1.4	5.3	2.1	4.4
30	8.5	11	4.2	13	---	58	6.6	3.2	2.0	5.2	2.4	3.2
31	8.0	---	6.4	8.3	---	75	---	2.9	---	3.6	2.7	---
TOTAL	147.3	180.6	269.8	382.3	857.9	939.4	413.0	130.8	61.8	130.5	107.3	163.2
MEAN	4.75	6.02	8.70	12.3	30.6	30.3	13.8	4.22	2.06	4.21	3.46	5.44
MAX	8.5	11	19	37	85	75	54	6.0	3.8	7.2	5.6	19
MIN	2.6	3.8	4.2	5.0	7.5	9.7	4.3	1.6	1.0	1.6	1.9	1.6
CFSM	.35	.44	.64	.91	2.25	2.23	1.01	.31	.15	.31	.25	.40
IN.	.40	.49	.74	1.05	2.35	2.57	1.13	.36	.17	.36	.29	.45

CAL YR 1986 TOTAL 3799.6 MEAN 10.4 MAX 121 MIN 2.4 CFSM .77 IN. 10.39
WTR YR 1987 TOTAL 3783.9 MEAN 10.4 MAX 85 MIN 1.0 CFSM .76 IN. 10.35

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246300 ORTEGA RIVER AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'50", long 81°47'49", in NW¼ sec.15, T.3 S., R.25 E., Duval County, Hydrologic Unit 03080103, near center of span on downstream side of bridge on 103rd Street in Jacksonville, 15 mi upstream from mouth.

DRAINAGE AREA.--30.9 mi².

PERIOD OF RECORD.--Water years 1928, 1956, 1958-60, occasional low-flow measurements; January 1965 to July 1983, July 1984 to current year. Prior to October 1971, published as "near Jacksonville".

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

GAGE.--Water-stage recorder. Datum of gage is 0.02 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 21, 1965, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 12 to Jan. 23. Records fair.

AVERAGE DISCHARGE.--21 years (water years 1966-83, 1985-87), 36.2 ft³/s, 15.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,950 ft³/s, Aug. 30, 1968, gage height, 39.32 ft; no flow June 8-11, 1985; minimum gage height, 28.83 ft, June 5, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 23	0130	459	36.11	Mar. 31	0330	*505	*36.25

Minimum discharge, 0.89 ft³/s, June 12, gage height, 29.83 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	6.0	16	70	43	115	340	5.2	2.3	2.7	16	2.6
2	2.9	5.4	11	190	38	142	226	4.5	2.1	3.2	35	6.5
3	2.7	4.4	9.3	120	43	133	161	4.0	1.9	6.0	11	35
4	2.6	3.9	7.3	100	44	109	125	3.7	1.8	6.2	7.0	91
5	2.4	3.3	5.9	110	75	83	96	3.7	1.9	16	7.1	54
6	2.3	2.9	4.5	115	236	63	74	3.9	1.7	15	7.4	65
7	3.2	2.7	3.6	80	329	95	59	3.4	1.6	10	4.0	280
8	5.1	2.4	4.2	60	285	268	48	5.0	1.5	8.3	2.8	146
9	5.6	2.3	4.2	50	212	238	40	5.5	1.4	8.1	2.4	86
10	6.7	2.2	4.3	45	153	191	34	4.0	1.3	15	2.3	53
11	6.6	2.1	21	58	116	140	29	5.0	1.0	18	2.7	78
12	4.1	2.0	45	60	90	107	24	6.8	1.6	10	4.9	340
13	3.6	2.1	60	46	69	86	20	8.2	9.0	6.6	7.6	267
14	5.9	2.1	50	40	55	70	18	8.2	11	18	21	174
15	3.5	2.1	40	35	45	56	22	9.3	7.9	34	79	128
16	2.9	2.3	30	33	58	48	23	7.3	4.6	27	66	94
17	2.4	2.2	22	38	71	41	19	4.8	2.8	16	41	65
18	2.2	2.4	17	50	64	38	16	3.5	2.6	12	28	52
19	2.1	3.2	14	56	51	47	14	3.2	4.7	9.8	18	41
20	2.1	3.3	12	50	43	53	12	2.9	5.2	10	18	33
21	2.1	6.0	11	48	133	42	13	2.6	2.7	9.1	45	26
22	2.1	5.0	10	95	313	34	12	2.5	5.6	6.9	18	22
23	2.1	3.1	11	190	422	28	9.3	2.5	11	2.6	9.7	18
24	2.1	2.7	19	147	311	24	8.8	2.2	9.4	2.1	11	16
25	2.1	2.4	35	128	217	22	7.5	3.1	13	1.9	49	13
26	2.2	2.2	26	135	156	86	6.9	2.3	9.4	5.4	19	11
27	2.6	2.1	20	121	121	231	6.8	3.9	8.4	11	10	10
28	2.3	2.6	17	99	97	285	6.5	5.4	7.1	4.2	6.5	9.1
29	3.9	7.8	15	79	---	239	5.8	5.4	4.6	2.7	4.2	9.0
30	8.5	14	13	63	---	401	5.7	4.1	3.3	3.3	3.1	9.2
31	6.6	---	14	54	---	469	---	2.7	---	2.9	2.6	---
TOTAL	108.8	107.2	572.3	2565	3890	3984	1482.3	138.8	142.4	304.0	559.3	2234.4
MEAN	3.51	3.57	18.5	82.7	139	129	49.4	4.48	4.75	9.81	18.0	74.5
MAX	8.5	14	60	190	422	469	340	9.3	13	34	79	340
MIN	2.1	2.0	3.6	33	38	22	5.7	2.2	1.0	1.9	2.3	2.6
CFSM	.11	.12	.60	2.68	4.50	4.16	1.60	.14	.15	.32	.58	2.41
IN.	.13	.13	.69	3.09	4.68	4.80	1.78	.17	.17	.37	.67	2.69
CAL YR	1986	TOTAL	11295.38	MEAN	30.9	MAX	396	MIN	.56	CFSM	1.00	IN. 13.60
WTR YR	1987	TOTAL	16088.5	MEAN	44.1	MAX	469	MIN	1.0	CFSM	1.43	IN. 19.37

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL

LOCATION.--Lat 30°19'13", long 81°39'32", in land grant 44, T.2 S., R.26 E., Duval County, Hydrologic Unit 03080103, near right bank at downstream side of Main Street Bridge at Jacksonville, 2.3 mi upstream from Arlington River, and 22.7 mi upstream from mouth.

DRAINAGE AREA.--8,754 mi², includes Paynes Prairie, a diked sinkhole area of about 650 mi², which is noncontributing except for pumpage.

PERIOD OF RECORD.--February 1954 to September 1970 (volume of flow), October 1970 to September 1971 (gage heights only) October 1971 to September 1974, October 1974 to September 1980 (gage heights only), October 1980 to September 1981, October 1981 to current year (gage heights only).

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

GAGE.--Water-stage recorder. Datum of gage is 9.99 ft below National Geodetic Vertical Datum of 1929. Feb. 11, 1954 to Apr. 12, 1966, water-stage recorder at same site and datum. Apr. 13, 1966 to Sept. 30, 1971, water-stage recorder at same site and datum. October 1971 to September 1986, water-stage and deflection meter recorder at site 0.3 mi upstream at same datum.

REMARKS.--The stage record published is the maximum and minimum tide event for each calendar day.

AVERAGE DISCHARGE.--21 years (water years 1955-74, 1981), 5,546 ft³/s, 4,018,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.20 ft, Sept. 10, 1964; minimum gage height, 7.90 ft, Feb. 29, 1984.

Water years 1954-70: Maximum volume of flow downstream, 5,280,000 ft³, Sept. 10, 1964; maximum volume of flow upstream, 4,410,000 ft³, Sept. 9, 1964.

Water years 1971-74: Maximum daily discharge, 64,000 ft³/s, June 20, 1972; maximum daily reverse flow, 62,700 ft³/s, Oct. 20, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.58 ft, Dec. 23; minimum, 8.85 ft, Jan. 31.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.22	12.17	12.40	12.50	11.52	12.44	11.87	11.50	11.28	11.18	11.30	11.53
2	11.17	12.10	12.48	12.08	11.70	12.10	11.87	11.30	11.17	11.13	11.15	11.37
3	11.17	12.21	12.02	11.84	11.27	11.88	11.69	11.31	11.20	11.04	11.32	11.54
4	11.13	12.39	11.81	12.09	11.31	11.82	10.96	11.24	11.24	11.00	11.08	11.76
5	11.07	12.39	11.75	12.31	11.70	11.75	10.48	11.46	11.49	11.22	11.05	11.97
6	11.14	12.14	11.96	12.56	12.27	11.78	10.68	11.40	11.72	11.04	11.12	11.93
7	11.40	11.89	11.99	12.39	12.24	12.21	10.83	11.51	11.57	11.25	11.23	12.11
8	11.47	11.88	11.83	11.81	12.28	12.34	10.85	11.32	11.45	11.37	11.38	12.05
9	11.34	11.76	11.69	11.76	11.29	11.65	10.84	11.64	11.31	11.35	11.53	11.94
10	11.22	11.65	11.56	11.82	11.49	11.26	11.16	11.59	11.56	11.44	11.53	11.77
11	11.46	12.00	11.59	10.97	11.53	11.86	11.35	11.62	11.65	11.56	11.42	11.61
12	11.68	11.89	11.55	10.86	11.30	12.02	11.16	11.78	11.37	11.59	11.62	11.53
13	11.75	11.75	11.53	11.19	11.38	11.90	11.00	11.78	11.37	11.65	11.88	11.41
14	11.63	12.08	11.97	11.41	11.56	12.03	11.06	11.78	11.18	11.74	12.15	11.27
15	11.79	12.18	12.04	11.39	11.64	12.04	11.35	11.78	11.17	11.61	11.92	11.36
16	11.86	12.02	11.97	11.43	12.10	11.88	11.27	11.77	11.13	11.48	11.68	11.46
17	11.89	11.83	11.88	11.81	12.12	12.22	11.35	11.64	11.24	11.51	11.35	11.34
18	11.96	11.74	11.93	12.05	12.00	12.29	11.45	11.62	11.33	11.68	11.25	11.22
19	12.06	11.84	11.80	11.89	11.80	12.31	11.55	11.41	11.32	11.69	11.30	11.19
20	12.07	12.17	11.86	11.23	11.73	12.13	11.65	11.24	11.09	11.59	11.50	11.42
21	11.97	11.86	12.00	11.38	12.00	12.22	11.60	11.44	11.13	11.50	11.55	11.63
22	11.95	11.79	12.24	11.78	12.27	11.93	11.60	11.60	11.16	11.46	11.57	11.68
23	11.80	11.89	12.58	11.34	12.11	12.10	11.69	11.65	11.17	11.57	11.46	11.70
24	11.65	11.74	12.41	11.03	11.81	12.17	11.67	11.49	11.30	11.72	11.41	11.78
25	11.61	11.62	11.84	11.33	11.95	12.22	11.70	11.39	11.36	11.78	11.59	11.78
26	11.57	11.68	11.58	11.18	12.18	12.15	11.80	11.42	11.42	11.75	11.58	11.68
27	11.70	11.47	11.76	11.44	12.39	12.21	11.84	11.68	11.40	11.61	11.51	11.61
28	11.63	11.65	12.09	11.52	12.51	12.21	11.95	11.73	11.24	11.31	11.37	11.65
29	11.66	12.06	12.18	11.66	---	12.31	11.88	11.71	11.30	11.11	11.18	11.63
30	11.88	12.30	12.16	11.66	---	12.35	11.90	11.59	11.37	11.30	11.04	11.53
31	12.24	---	12.49	11.29	---	12.20	---	11.49	---	11.36	11.23	---
MEAN	11.62	11.94	11.97	11.65	11.84	12.06	11.40	11.54	11.32	11.44	11.43	11.61
MAX	12.24	12.39	12.58	12.56	12.51	12.44	11.95	11.78	11.72	11.78	12.15	12.11
MIN	11.07	11.47	11.53	10.86	11.27	11.26	10.48	11.24	11.09	11.00	11.04	11.19

CAL YR 1986 MEAN 11.37 MAX 12.58 MIN 10.41
WTR YR 1987 MEAN 11.65 MAX 12.58 MIN 10.48

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246828 PABLO CREEK AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'07", long 81°28'42", in land grant 39, T.3 S., R.28 E., Duval County, Hydrologic Unit 03080103, near right bank on upstream side of timber bridge on private road, 0.5 mi upstream from Cedar Swamp Creek, 4.8 mi upstream from mouth, and 12.5 mi southeast of Main Street Bridge in Jacksonville.

DRAINAGE AREA.--25.8 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 8 to Jan. 9. Records good.

AVERAGE DISCHARGE.--13 years, 33.2 ft³/s, 17.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s, Sept. 19, 1984, gage height, 8.06 ft; minimum, 1.6 ft³/s, July 15, 1981; minimum gage height, 2.89 ft, June 12,13, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 6	2345	*223	*6.46				

Minimum discharge, 4.9 ft³/s, June 12,13, gage height, 2.89 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	18	20	54	26	64	129	9.6	6.4	17	19	8.8
2	9.4	17	28	42	25	87	90	9.3	6.2	8.8	18	19
3	9.2	16	25	33	27	81	69	9.0	5.9	7.6	15	26
4	8.9	15	31	30	26	64	58	8.7	5.8	7.5	15	24
5	8.6	14	29	32	42	53	50	8.7	6.1	10	15	38
6	8.4	13	28	30	148	46	42	9.0	5.8	8.5	12	34
7	8.6	13	27	28	203	58	36	8.7	5.6	7.6	10	26
8	10	12	26	26	139	136	31	8.5	5.4	7.1	9.3	20
9	12	13	25	25	95	138	28	9.2	5.3	7.6	8.8	18
10	23	12	25	24	72	97	25	9.0	5.3	7.7	9.6	15
11	35	11	30	25	60	74	23	9.1	5.2	7.0	8.2	13
12	41	11	44	24	52	62	21	8.8	5.2	6.7	7.9	12
13	32	10	36	22	45	55	19	8.5	5.8	7.3	11	14
14	24	11	32	20	39	52	18	8.5	10	6.7	16	13
15	19	12	28	19	35	47	30	8.5	8.3	7.3	18	11
16	18	15	25	20	37	39	41	8.2	6.8	7.5	15	10
17	16	19	23	23	39	34	39	7.8	6.4	7.0	15	9.4
18	14	18	22	25	37	33	30	7.5	6.0	8.2	13	9.0
19	13	17	24	25	33	34	24	8.0	5.9	9.2	11	8.7
20	12	16	24	25	30	33	21	8.4	5.8	13	9.3	8.0
21	11	17	23	30	46	31	19	7.4	5.7	16	10	7.6
22	11	18	22	63	70	28	17	7.1	5.9	13	9.0	7.1
23	10	17	24	87	130	25	15	6.9	6.1	10	8.4	7.0
24	10	16	28	73	131	23	15	6.7	5.7	9.2	7.9	6.8
25	9.8	15	25	58	92	23	13	6.5	5.6	8.6	7.4	6.5
26	11	13	28	56	72	26	13	6.3	6.0	10	7.0	6.1
27	12	12	26	53	61	49	12	6.3	7.5	11	7.1	5.9
28	11	15	24	45	54	71	12	6.9	7.7	9.5	6.8	5.8
29	13	13	22	37	---	74	11	7.2	6.7	8.7	6.6	5.7
30	20	12	20	32	---	96	10	6.8	16	8.7	6.4	5.7
31	20	---	34	29	---	158	---	6.5	---	15	6.8	---
TOTAL	470.4	431	828	1115	1866	1891	961	247.6	196.1	289.0	339.5	401.1
MEAN	15.2	14.4	26.7	36.0	66.6	61.0	32.0	7.99	6.54	9.32	11.0	13.4
MAX	41	19	44	87	203	158	129	9.6	16	17	19	38
MIN	8.4	10	20	19	25	23	10	6.3	5.2	6.7	6.4	5.7
CFSM	.59	.56	1.04	1.39	2.58	2.36	1.24	.31	.25	.36	.42	.52
IN.	.68	.62	1.19	1.61	2.69	2.73	1.39	.36	.28	.42	.49	.58

CAL YR 1986	TOTAL	11111.0	MEAN	30.4	MAX	382	MIN	4.4	CFSM	1.18	IN.	16.02
WTR YR 1987	TOTAL	9035.7	MEAN	24.8	MAX	203	MIN	5.2	CFSM	.96	IN.	13.03

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02246832 CEDAR SWAMP CREEK AT JACKSONVILLE, FL

LOCATION.--Lat 30°14'38", long 81°28'26", in NE¼ sec.15, T.3 S., R.28 E., Duval County, Hydrologic Unit 03080103, on left bank 10 ft upstream from timber bridge on private road, 0.4 mi upstream from mouth, and 12.4 mi southeast of Main Street Bridge in Jacksonville.

DRAINAGE AREA.--3.40 mi².

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.36 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 6 to Jan. 9. Records fair.

AVERAGE DISCHARGE.--13 years, 7.91 ft³/s, 31.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 270 ft³/s, Sept. 26, 1979; maximum gage height, 5.57 ft, Aug. 5, 1974; minimum discharge, 0.14 ft³/s, Sept. 14-16, 1981; minimum gage height, 0.68 ft, July 21-25, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 6	2000	*142	*4.58				

Minimum discharge, 0.65 ft³/s, June 11; minimum gage height, 1.05 ft, Oct. 6,7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.4	4.2	4.0	7.2	28	50	3.4	1.4	4.0	8.7	2.8
2	2.2	3.3	5.0	6.8	7.1	44	25	3.1	1.2	2.4	5.9	7.1
3	2.1	3.1	4.6	6.4	8.0	24	16	2.9	1.0	1.9	4.4	8.1
4	2.0	2.9	4.8	5.6	7.3	16	14	2.8	1.1	2.1	4.4	7.3
5	1.8	5.2	4.2	7.0	21	13	11	3.4	1.2	3.7	4.1	10
6	1.6	7.2	3.6	6.2	113	11	9.4	3.7	1.1	2.8	3.4	10
7	1.7	5.6	3.4	6.4	109	25	9.0	2.9	.89	1.7	2.8	8.2
8	2.4	4.8	3.2	6.2	65	83	8.0	2.7	.74	1.3	2.3	6.8
9	2.6	4.0	3.0	6.7	35	56	7.3	3.6	.72	2.6	1.9	6.5
10	8.3	3.8	2.8	6.6	21	30	6.9	3.2	1.3	2.5	2.1	5.7
11	7.9	4.0	4.0	7.5	15	19	6.4	2.7	.84	1.5	3.1	5.2
12	6.5	4.2	5.4	6.7	13	15	6.0	2.6	.76	1.4	2.3	5.9
13	5.1	4.0	5.0	5.9	11	13	5.7	2.5	1.3	3.6	4.8	5.7
14	4.2	3.6	4.6	5.6	10	11	5.9	2.4	3.8	2.5	7.1	4.8
15	3.7	3.3	4.4	5.3	9.5	10	11	2.4	2.8	3.5	6.3	4.3
16	3.3	4.0	4.2	5.7	11	9.6	12	2.3	1.9	2.8	4.8	4.1
17	2.8	4.6	3.8	6.7	11	9.1	8.5	2.1	1.4	1.5	4.8	4.2
18	2.6	4.5	3.6	6.8	9.4	8.7	7.6	2.0	1.5	3.1	3.8	5.0
19	2.5	4.2	4.4	6.6	8.7	8.7	7.4	4.2	1.3	8.2	3.1	3.9
20	2.4	3.8	4.2	6.5	8.2	8.6	6.9	3.9	1.2	7.9	4.2	3.5
21	2.2	4.0	4.0	9.0	19	8.1	6.3	2.7	1.1	12	5.0	3.1
22	2.1	4.8	3.8	36	30	7.6	5.1	2.1	1.1	6.9	3.6	2.9
23	2.1	4.5	3.6	46	84	6.9	5.1	1.8	1.2	5.2	2.9	2.8
24	1.9	4.0	3.8	22	55	7.0	4.7	1.7	1.4	4.8	2.4	2.6
25	1.9	3.8	4.0	16	30	7.1	5.0	1.9	1.8	4.1	2.3	2.4
26	2.1	3.2	4.5	19	20	8.4	5.0	1.8	1.8	4.9	2.3	2.3
27	2.4	2.8	4.0	14	16	13	4.7	1.8	2.6	3.8	2.2	2.2
28	2.3	3.0	3.4	11	13	21	3.8	2.2	2.7	2.9	1.9	2.1
29	2.7	2.7	3.0	9.7	---	16	3.5	2.4	1.7	2.6	1.4	2.2
30	5.1	3.4	2.6	8.7	---	47	3.6	2.2	7.5	2.8	1.8	3.2
31	4.0	---	3.0	8.0	---	84	---	1.7	---	6.0	1.5	---
TOTAL	96.7	119.7	122.1	324.6	767.4	668.8	280.8	81.1	50.35	117.0	111.6	144.9
MEAN	3.12	3.99	3.94	10.5	27.4	21.6	9.36	2.62	1.68	3.77	3.60	4.83
MAX	8.3	7.2	5.4	46	113	84	50	4.2	7.5	12	8.7	10
MIN	1.6	2.7	2.6	4.0	7.1	6.9	3.5	1.7	.72	1.3	1.4	2.1
CFSM	.92	1.17	1.16	3.08	8.06	6.35	2.75	.77	.49	1.11	1.06	1.42
IN.	1.06	1.31	1.34	3.55	8.40	7.32	3.07	.89	.55	1.28	1.22	1.59

CAL YR 1986 TOTAL 2558.17 MEAN 7.01 MAX 103 MIN .41 CFMS 2.06 IN. 27.99
WTR YR 1987 TOTAL 2885.05 MEAN 7.90 MAX 113 MIN .72 CFMS 2.32 IN. 31.57

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

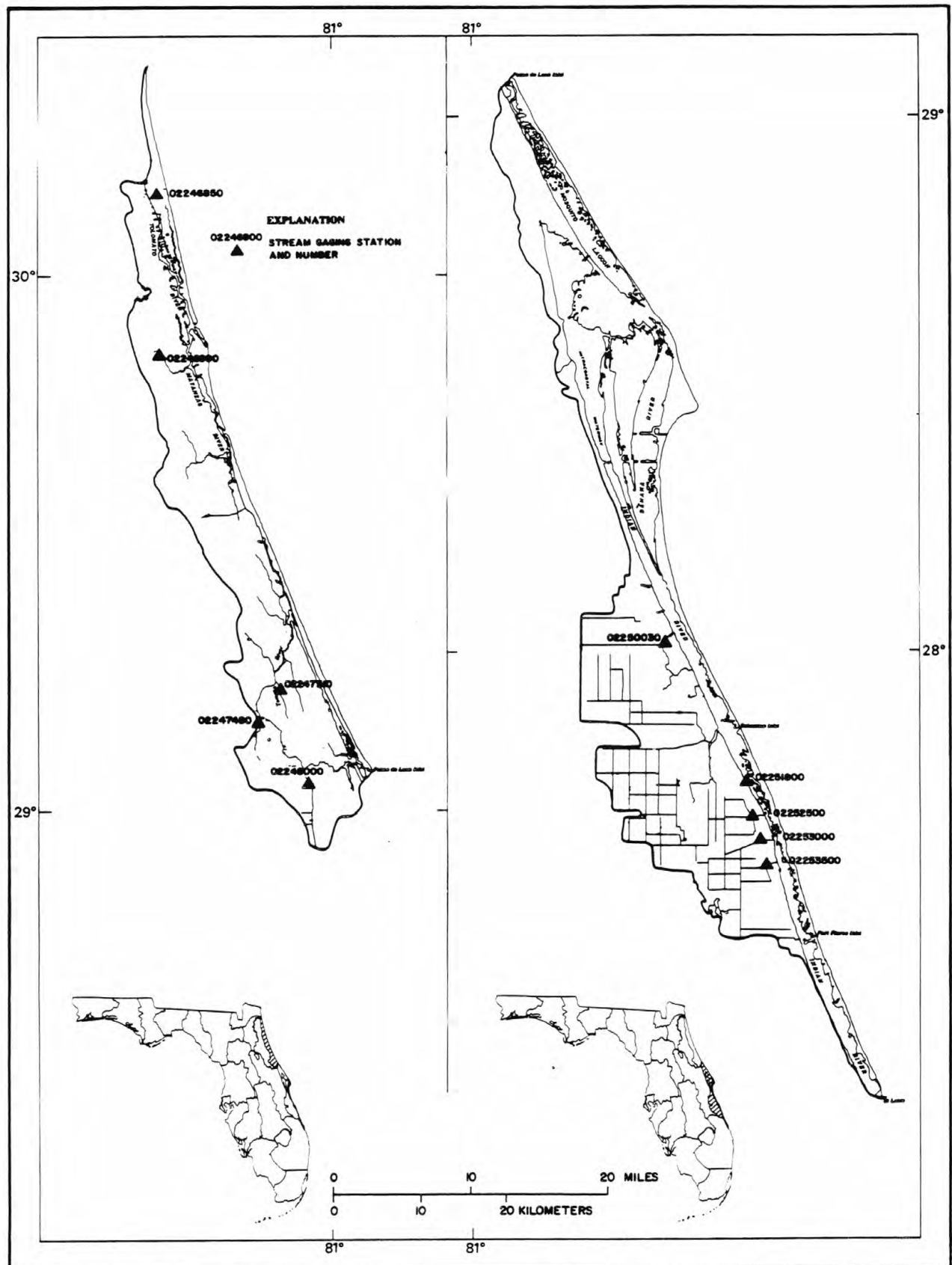


Figure 19.--Location of stream gaging stations in the coastal area between the St. Johns and St. Lucie Rivers.

ST. JOHNS RIVER

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

02246850 DIEGO PLAINS SWAMP DRAIN AT MICKLER LANDING, FL

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

DRAINAGE AREA.--4.95 mi².

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

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

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 149 ft³/s, Sept. 20, 1984; maximum gage height, 6.67 ft, Sept. 2, 1985; no flow for many days each year; minimum gage height, 4.00 ft, July 30, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 29 ft³/s, Feb. 8; maximum gage height, 6.17 ft, Feb. 24; no flow June 5 to July 31; minimum gage height, 4.00 ft, July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	5.1	15	13	14	24	18	.47	.15	.00	.02	.71
2	2.1	5.0	16	14	13	26	18	.46	.09	.00	.26	.83
3	2.0	4.8	17	14	13	25	17	.38	.09	.00	.36	1.1
4	1.9	4.9	17	14	13	23	16	.38	.05	.00	.47	1.5
5	1.9	5.0	16	15	14	20	14	.38	.00	.00	.54	1.7
6	1.8	4.9	15	16	22	18	13	.38	.00	.00	.66	2.2
7	1.8	4.8	15	15	27	19	11	.38	.00	.00	.66	2.7
8	1.9	4.8	14	15	29	23	9.5	.38	.00	.00	.66	2.9
9	2.0	4.9	14	14	28	24	8.2	.38	.00	.00	.66	3.3
10	2.2	4.8	13	14	27	23	7.1	.38	.00	.00	.64	3.3
11	2.2	4.8	14	14	25	20	6.0	.38	.00	.00	.57	3.3
12	2.3	5.2	15	14	23	19	5.3	.38	.00	.00	.57	3.0
13	2.4	5.9	15	13	20	17	4.6	.38	.00	.00	.61	2.8
14	2.4	6.8	15	13	18	15	4.1	.38	.00	.00	.69	2.4
15	2.4	7.6	14	12	17	13	3.7	.38	.00	.00	.85	2.0
16	2.5	7.7	14	12	17	12	3.4	.31	.00	.00	1.1	1.8
17	2.5	7.8	13	12	17	11	3.0	.28	.00	.00	1.3	1.7
18	2.5	8.0	13	12	16	10	2.6	.33	.00	.00	1.3	1.6
19	2.5	8.1	12	12	14	9.6	2.2	.38	.00	.00	1.3	1.5
20	2.7	8.3	12	13	13	8.7	1.9	.31	.00	.00	1.2	1.5
21	2.8	8.8	12	14	16	8.0	1.5	.28	.00	.00	1.2	1.4
22	2.8	8.9	11	18	20	7.2	1.2	.28	.00	.00	1.1	1.3
23	2.8	8.8	11	19	27	6.4	.97	.28	.00	.00	1.1	1.3
24	2.9	8.8	12	19	28	5.9	.94	.28	.00	.00	1.1	1.2
25	3.0	8.7	12	19	27	5.4	.81	.26	.00	.00	1.0	1.2
26	3.1	8.7	12	19	26	6.2	.76	.19	.00	.00	1.0	1.1
27	3.2	8.6	12	18	24	7.8	.75	.19	.00	.00	.92	1.0
28	3.2	8.7	11	17	21	9.7	.66	.25	.00	.00	.86	.99
29	3.5	9.2	11	17	---	10	.66	.19	.00	.00	.83	.92
30	4.6	12	11	15	---	14	.55	.19	.00	.00	.76	.93
31	4.6	---	11	15	---	18	---	.19	---	.00	.72	---
TOTAL	80.8	210.4	415	461	569	458.9	177.40	10.06	0.38	0.00	25.01	53.18
MEAN	2.61	7.01	13.4	14.9	20.3	14.8	5.91	.32	.013	.00	.81	1.77
MAX	4.6	12	17	19	29	26	18	.47	.15	.00	1.3	3.3
MIN	1.8	4.8	11	12	13	5.4	.55	.19	.00	.00	.02	.71

CAL YR 1986 TOTAL 3113.44 MEAN 8.53 MAX 25 MIN .00

WTR YR 1987 TOTAL 2461.13 MEAN 6.74 MAX 29 MIN .00

ST. JOHNS RIVER

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

02246900 MOULTRIE CREEK AT STATE HIGHWAY 207, NEAR ST. AUGUSTINE, FL

LOCATION.--Lat 29°50'50", long 81°21'39", in SE¼ sec.34, T.7 S., R.29 E., St. Johns County, Hydrologic Unit 03080201, at center on downstream side of box culverts on State Highway 207, 2.0 mi upstream from Fort Peyton Branch, 4.2 mi southwest of St. Augustine, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--19.8 mi².

PERIOD OF RECORD.--October 1961 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 14.24 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--26 years, 18.3 ft³/s, 12.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 860 ft³/s, Sept. 21, 1969, gage height, 9.16 ft; no flow for many days in some years; minimum gage height, 1.84 ft, July 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 6	1100	*515	*7.91	Feb. 23	0200	400	7.57

Minimum daily discharge, 0.01 ft³/s, Aug. 29-31, Sept. 1, 27-30; minimum gage height, 2.23 ft, Aug. 31, Sept. 1, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	1.3	7.2	6.2	2.3	100	114	1.5	.57	.52	.71	.01
2	.20	.88	4.5	4.2	2.1	98	94	1.3	.53	.38	.57	.39
3	.21	.81	3.5	3.3	2.1	82	78	1.1	.48	.63	.43	.73
4	.20	.74	2.7	3.3	2.0	70	65	.95	.42	1.2	.26	.70
5	.20	.68	2.3	4.7	11	61	55	.84	.37	.79	.29	.88
6	.18	.64	2.1	4.0	323	55	48	.82	.35	.63	.23	.70
7	.19	.60	1.9	3.5	175	80	41	.77	.28	.54	.22	.57
8	.19	.58	1.8	3.0	99	154	36	.69	.18	.42	.16	.50
9	.19	.57	1.7	2.7	69	117	31	1.4	.11	.27	.09	.36
10	.20	.61	1.5	2.6	56	103	27	1.1	.08	.19	.06	.29
11	.21	.70	1.6	2.6	47	87	24	.64	.06	.16	.04	.28
12	.23	.72	1.9	2.3	41	75	21	.54	.04	.14	.04	.43
13	.25	.77	2.1	2.1	35	65	19	.82	.03	.11	.04	.54
14	.24	.83	1.8	2.0	30	58	17	.68	.55	.10	.08	.48
15	.22	.93	1.7	1.8	26	50	17	.61	.56	.15	.18	.39
16	.24	.91	1.7	1.7	38	43	17	.46	.33	.20	.16	.29
17	.21	.87	1.6	1.7	50	39	15	.32	.15	.16	.10	.19
18	.19	.85	1.5	1.7	42	36	13	.19	.07	.14	.07	.13
19	.14	.89	1.4	1.7	36	33	11	.16	.05	.17	.04	.09
20	.10	.90	1.3	1.8	32	30	9.9	.53	.04	.33	.16	.08
21	.09	1.0	1.3	3.0	47	27	8.5	.51	.03	.37	.61	.07
22	.07	1.1	1.2	11	122	24	7.3	.27	.02	.25	.50	.04
23	.06	1.1	1.4	9.7	302	22	6.4	.21	.99	.17	.36	.04
24	.04	1.1	2.8	6.0	182	20	5.4	.21	1.5	.11	.21	.04
25	.03	1.2	2.2	5.0	150	18	4.3	.24	.88	.07	.10	.02
26	.04	1.2	1.8	4.9	124	17	3.5	.27	.73	.05	.05	.02
27	.18	1.2	1.7	4.2	106	18	3.0	.29	.64	.05	.03	.01
28	.22	1.3	1.6	3.5	89	53	2.5	.69	.73	.03	.02	.01
29	.51	1.6	1.5	3.1	---	62	2.1	.75	.56	.02	.01	.01
30	1.9	5.8	1.4	2.9	---	122	1.8	.71	.50	.18	.01	.01
31	1.3	---	2.0	2.5	---	154	---	.60	---	.67	.01	---
TOTAL	8.43	32.38	64.7	112.7	2240.5	1973	797.7	20.17	11.83	9.20	5.84	8.30
MEAN	.27	1.08	2.09	3.64	80.0	63.6	26.6	.65	.39	.30	.19	.28
MAX	1.9	5.8	7.2	11	323	154	114	1.5	1.5	1.2	.71	.88
MIN	.03	.57	1.2	1.7	2.0	17	1.8	.16	.02	.02	.01	.01
CFSM	.01	.05	.11	.18	4.04	3.21	1.34	.03	.02	.01	.01	.01
IN.	.02	.06	.12	.21	4.21	3.71	1.50	.04	.02	.02	.01	.02

CAL YR 1986 TOTAL 2302.91 MEAN 6.31 MAX 81 MIN .03 CFSM .32 IN. 4.33
WTR YR 1987 TOTAL 5284.75 MEAN 14.5 MAX 323 MIN .01 CFSM .73 IN. 9.93

ST. JOHNS RIVER

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

02247480 TIGER BAY CANAL NEAR DAYTONA BEACH, FL

LOCATION.--Lat 29°09'58", long 81°09'18", in SW¼ sec.25, T.15 S., R.31 E., Volusia County, Hydrologic Unit 03080201, at center on downstream side of bridge on Indian Lake Road, 2.4 mi north of its intersection with U.S. Highway 92, and 8 mi west of Daytona Beach.

DRAINAGE AREA.--29 mi², approximately.

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

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

REMARKS.--Records poor.

AVERAGE DISCHARGE.--9 years, 22.2 ft³/s, 16,080 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 263 ft³/s, Mar. 7, 1979, gage height, 32.94 ft; no flow for many days in some years; minimum gage height, 26.00 ft, July 16, 1981, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 170 ft³/s, Apr. 1, gage height, 32.40 ft; no flow for many days; minimum gage height, 27.58 ft, Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.00	.00	7.0	9.7	54	167	4.2	.00	.00	.00	.00
2	.00	.00	.00	8.0	8.9	68	163	3.4	.00	.00	.00	.00
3	.00	.00	.00	9.0	8.2	70	155	2.7	.00	.00	.00	.00
4	.00	.00	.00	9.7	7.6	64	146	2.2	.00	.00	.00	.00
5	.00	.00	.01	9.5	11	57	133	1.9	.00	.00	.00	.00
6	.00	.00	.41	9.2	41	50	118	1.9	.00	.00	.00	.00
7	.09	.00	.85	8.9	70	55	101	1.6	.00	.00	.00	.00
8	.13	.00	1.2	8.5	77	72	88	1.4	.00	.00	.00	.00
9	.11	.00	1.5	7.9	74	78	76	1.7	.00	.00	.00	.00
10	.08	.00	1.8	7.6	68	74	66	1.6	.00	.00	.00	.00
11	.07	.00	1.9	7.2	62	66	57	1.5	.00	.00	.00	.00
12	.02	.00	2.1	6.6	56	59	49	1.9	.00	.00	.00	.00
13	.02	.00	2.0	6.0	51	53	42	2.7	.00	.00	.00	.00
14	.08	.00	2.1	5.5	47	47	35	2.6	.00	.00	.00	.00
15	.03	.00	2.1	5.0	43	42	31	3.1	.00	.00	.00	.00
16	.00	.00	2.2	4.6	50	37	27	2.7	.00	.00	.00	.00
17	.00	.00	2.2	4.4	64	33	23	2.3	.00	.00	.00	.00
18	.00	.00	2.2	4.2	67	30	25	1.9	.00	.00	.00	.00
19	.00	.00	2.1	4.0	64	29	32	1.6	.00	.00	.00	.00
20	.00	.00	2.1	4.0	61	27	32	1.4	.00	.00	.00	.00
21	.00	.00	2.1	6.8	62	24	29	1.1	.00	.00	.00	.00
22	.00	.00	2.0	10	69	22	24	1.3	.00	.00	.00	.00
23	.00	.00	2.2	12	74	20	20	1.1	.00	.00	.00	.00
24	.00	.00	3.1	13	71	18	16	.86	.00	.00	.00	.00
25	.00	.00	3.1	14	66	17	13	.66	.00	.00	.00	.00
26	.00	.00	3.5	15	61	16	11	.49	.00	.00	.00	.00
27	.00	.00	3.7	15	55	20	8.8	.35	.00	.00	.00	.00
28	.00	.00	3.7	14	50	41	7.4	.26	.00	.00	.00	.00
29	.00	.00	3.7	13	---	72	6.3	.17	.00	.00	.00	.00
30	.00	.00	3.6	12	---	108	5.2	.09	.00	.00	.00	.00
31	.00	---	4.5	11	---	160	---	.03	---	.00	.00	---
TOTAL	0.65	0.00	61.97	272.6	1448.4	1583	1706.7	50.71	0.00	0.00	0.00	0.00
MEAN	.021	.00	2.00	8.79	51.7	51.1	56.9	1.64	.00	.00	.00	.00
MAX	.13	.00	4.5	15	77	160	167	4.2	.00	.00	.00	.00
MIN	.00	.00	.00	4.0	7.6	16	5.2	.03	.00	.00	.00	.00
AC-FT	1.3	.0	123	541	2870	3140	3390	101	.0	.0	.0	.0

CAL YR 1986 TOTAL 2890.09 MEAN 7.92 MAX 158 MIN .00 AC-FT 5730
WTR YR 1987 TOTAL 5124.03 MEAN 14.0 MAX 167 MIN .00 AC-FT 10160

ST. JOHNS RIVER

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

02247510 TOMOKA RIVER NEAR HOLLY HILL, FL

LOCATION.--Lat 29°13'02", long 81°06'32", in NW¼ sec.9, T.15 S., R.32 E., Volusia County, Hydrologic Unit 03080201, near center of span on downstream side of bridge on 11th Street extension, 0.3 mi southwest of Interstate Highway 95, 2 mi upstream from Priest Branch, 4.5 mi southwest of Holly Hill, and 12 mi upstream from mouth.

DRAINAGE AREA.--76.8 mi².

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--23 years, 56.0 ft³/s, 9.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, Oct. 19, 1968, gage height, 12.92 ft; no flow for part or all of Feb. 16, 20-26, Feb. 28 to Mar. 1, 1968 (creek dry at gage), caused by temporary earthen dam just upstream, and June 26 to July 8, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 11, 1964, reached a stage of 12.65 ft, from floodmarks, discharge, 2,170 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	0800	*678	*10.55	No other peak greater than base discharge.			
Minimum discharge, 0.79 ft ³ /s, June 21,22; minimum gage height, 6.02 ft, July 24,25.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	3.1	35	23	17	116	426	9.9	3.9	8.4	3.2	4.4
2	1.8	2.6	28	24	15	186	318	8.4	3.0	4.8	4.2	5.5
3	1.7	2.3	22	21	14	154	265	7.0	2.5	6.1	6.2	11
4	1.6	2.9	18	18	13	124	234	5.8	2.3	7.3	22	26
5	1.5	5.3	15	17	17	106	208	5.0	2.3	7.6	21	50
6	1.4	5.5	13	15	199	94	187	8.3	2.6	12	13	43
7	15	4.0	15	13	235	115	170	9.8	3.1	6.4	7.9	25
8	24	3.0	16	12	162	187	153	8.4	2.7	3.5	5.5	18
9	13	2.5	19	11	126	160	137	26	2.4	2.3	4.3	25
10	8.5	2.2	17	9.8	95	130	121	18	2.2	1.6	3.5	20
11	6.6	2.1	15	8.7	76	107	107	12	1.9	1.2	3.1	14
12	5.3	2.9	13	7.7	65	90	94	10	1.9	1.5	3.8	12
13	4.4	5.9	11	6.9	65	74	82	8.5	1.9	1.5	4.4	12
14	3.7	4.4	9.1	6.3	70	57	72	7.5	6.6	1.3	14	13
15	3.2	4.8	8.0	6.0	70	45	65	7.6	6.1	1.6	42	10
16	2.9	4.6	7.6	6.3	91	38	57	8.6	2.2	3.0	19	8.3
17	2.5	3.4	7.1	6.4	128	35	50	8.3	1.4	2.4	12	9.0
18	2.2	2.9	6.6	6.3	117	27	43	6.6	1.1	1.6	11	6.8
19	1.9	3.6	6.4	6.1	103	21	50	5.5	1.0	1.3	8.0	6.0
20	1.8	11	8.4	6.4	90	18	54	6.1	.96	2.1	6.9	6.0
21	1.7	10	7.5	13	92	16	49	7.4	.86	1.9	19	5.4
22	1.6	6.5	6.2	27	142	15	43	13	.82	1.3	21	4.7
23	1.5	4.9	6.2	35	152	13	38	12	.95	1.1	14	7.6
24	1.4	4.0	9.2	28	141	14	32	7.9	1.2	1.0	9.7	10
25	2.2	3.5	9.8	25	129	22	27	5.9	1.2	1.0	6.9	9.3
26	3.0	3.3	10	32	120	31	23	4.7	1.4	1.2	5.7	7.7
27	2.4	3.1	8.3	31	105	60	20	3.9	2.2	1.8	5.2	5.7
28	2.2	3.0	7.0	26	99	120	17	3.6	5.6	1.7	5.2	4.7
29	3.1	5.1	8.3	23	---	215	14	3.2	22	1.7	4.7	4.0
30	6.6	26	6.9	21	---	323	12	2.9	13	2.1	4.8	4.4
31	4.6	---	7.5	19	---	623	---	3.4	---	3.5	5.0	---
TOTAL	135.3	148.4	377.1	510.9	2748	3336	3168	255.2	101.29	95.8	316.2	388.5
MEAN	4.36	4.95	12.2	16.5	98.1	108	106	8.23	3.38	3.09	10.2	12.9
MAX	24	26	35	35	235	623	426	26	22	12	42	50
MIN	1.4	2.1	6.2	6.0	13	13	12	2.9	.82	1.0	3.1	4.0
CFSM	.06	.06	.16	.21	1.28	1.40	1.37	.11	.04	.04	.13	.17
IN.	.07	.07	.18	.25	1.33	1.62	1.53	.12	.05	.05	.15	.19

CAL YR 1986 TOTAL 8894.28 MEAN 24.4 MAX 831 MIN .69 CFSM .32 IN. 4.31
WTR YR 1987 TOTAL 11580.69 MEAN 31.7 MAX 623 MIN .82 CFSM .41 IN. 5.61

ST. JOHNS RIVER

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

02248000 SPRUCE CREEK NEAR SAMSULA, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°03'01", long 81°02'49", in SE¼ sec.1, T.17 S., R.32 E., Volusia County, Hydrologic Unit 03080201, on left bank 50 ft downstream from bridge on State Highway 40A, 1.8 mi north of Samsula, 8 mi west of New Smyrna Beach, 10 mi upstream from Turnbull Bay, and 13 mi upstream from mouth.

DRAINAGE AREA.--33.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 1624: 1958. WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6.25 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 13, 1971, at sites within 100 ft at same datum.

REMARKS.--Records fair. Some diversions for irrigation above station.

AVERAGE DISCHARGE.--36 years, 32.6 ft³/s, 13.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft³/s, Sept. 10, 1964; maximum gage height, 15.49 ft, Oct. 8, 1953; no flow Apr. 23-26, May 17, 1962; minimum gage height, 0.37 ft, May 22, 23, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 6	0600	520	9.92	Mar. 30	2200	*602	*10.69

Minimum discharge, 0.80 ft³/s, June 21, 22, July 11-15; minimum gage height, 1.14 ft, June 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.1	65	40	8.2	64	338	3.4	1.3	1.2	2.0	1.3
2	4.6	3.8	44	29	7.4	76	253	3.2	1.2	1.2	1.9	1.3
3	4.2	3.6	31	23	6.9	55	168	2.8	1.2	1.6	2.1	3.3
4	3.9	3.3	23	22	6.3	43	101	2.7	1.1	1.4	1.8	8.3
5	3.6	3.1	19	26	63	35	66	2.6	1.1	1.1	1.6	15
6	3.4	2.9	18	22	429	29	51	2.7	1.4	1.0	1.6	15
7	104	2.7	24	19	266	70	40	2.5	1.4	1.0	1.4	14
8	102	2.6	21	17	218	106	33	2.5	1.2	1.0	1.2	10
9	63	2.5	18	15	135	73	27	2.9	1.2	.97	1.1	8.3
10	40	2.4	15	14	90	53	23	3.1	1.1	.91	1.0	6.7
11	28	2.4	14	12	67	40	20	3.2	1.0	.86	.94	5.5
12	22	3.3	12	10	54	32	17	3.6	.95	.80	1.2	6.3
13	17	3.2	11	9.4	45	28	15	3.7	1.2	.81	3.4	14
14	15	3.0	9.8	8.2	39	24	13	3.8	2.2	.82	3.3	30
15	12	3.1	9.0	8.0	34	21	12	4.1	1.3	.88	3.0	26
16	10	2.8	8.2	7.4	59	19	11	3.9	1.0	.88	3.1	20
17	9.0	2.7	7.7	6.6	73	17	10	3.3	.93	2.1	2.8	15
18	7.7	2.5	7.2	6.4	59	15	9.7	2.8	.90	1.7	2.4	11
19	6.6	4.0	6.7	6.2	50	15	9.7	2.6	.92	1.9	2.0	9.3
20	5.8	5.9	6.2	5.9	43	14	8.9	2.5	.88	2.0	1.6	8.0
21	5.1	5.2	5.8	8.1	58	13	7.9	2.3	.86	1.5	2.8	7.7
22	4.5	4.7	5.4	16	93	11	7.1	2.1	.89	1.4	4.6	6.7
23	4.1	4.4	6.5	18	133	10	6.4	2.0	1.1	1.3	4.7	6.0
24	3.8	3.9	16	15	81	9.2	5.8	1.8	1.0	1.2	4.0	5.4
25	3.4	3.6	17	14	62	8.4	5.2	1.7	1.1	1.1	3.2	4.6
26	3.2	3.4	14	18	51	9.1	4.8	1.6	1.1	1.1	2.5	4.0
27	3.3	3.1	13	16	43	16	4.5	1.5	1.1	1.1	2.4	3.5
28	3.4	2.9	11	13	36	43	4.3	1.5	1.1	1.0	1.9	3.1
29	3.7	53	10	12	---	149	3.9	1.4	1.3	.98	1.7	2.8
30	4.3	120	9.4	11	---	385	3.7	1.4	1.2	.93	1.5	3.3
31	4.5	---	14	9.5	---	472	---	1.3	---	2.1	1.4	---
TOTAL	510.2	268.1	491.9	457.7	2309.8	1954.7	1279.9	80.5	34.23	37.84	70.14	275.4
MEAN	16.5	8.94	15.9	14.8	82.5	63.1	42.7	2.60	1.14	1.22	2.26	9.18
MAX	104	120	65	40	429	472	338	4.1	2.2	2.1	4.7	30
CFSM	.49	.27	.48	.44	2.47	1.89	1.28	.08	.03	.04	.07	.27
IN.	.57	.30	.55	.51	2.57	2.18	1.43	.09	.04	.04	.08	.31

CAL YR 1986 TOTAL 6391.95 MEAN 17.5 MAX 629 CFSM .52 IN. 7.12
WTR YR 1987 TOTAL 7770.41 MEAN 21.3 MAX 472 CFSM .64 IN. 8.65

ST. JOHNS RIVER

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

02248000 SPRUCE CREEK NEAR SAMSULA, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-71, 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1975 to April 1981; October 1983 to current year
WATER TEMPERATURE: March 1975 to April 1981; October 1983 to current year.

INSTRUMENTATION.--Water-quality monitor since March 1975. Digital recorder--60-minute interval.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 987 microsiemens, Apr. 3, 1976; minimum daily mean, 21 microsiemens, Sept. 16, 1976.
WATER TEMPERATURE: Maximum daily mean, 29.0°C, July 12, 1976; minimum daily mean, 7.0°C, Jan. 20, 1977.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum observed, 31.0°C, Aug. 17, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 808 microsiemens, Aug. 3; minimum daily mean, 49 microsiemens, Mar. 31, Apr. 2.
WATER TEMPERATURE: Maximum daily mean, 26.5°C, Oct. 9, 14; minimum daily mean, 10.0°C, Mar. 21, 23.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	---	282	---	---	112	55	---	621	661	656	521
2	250	---	256	---	---	118	49	---	629	651	716	570
3	250	---	253	---	---	115	61	---	635	645	808	632
4	262	---	250	---	---	132	82	508	640	635	754	611
5	281	---	248	---	---	270	88	510	642	645	712	---
6	304	---	243	172	---	248	94	511	638	646	760	---
7	188	---	254	---	96	191	97	522	635	648	728	---
8	145	---	220	---	91	115	103	524	627	651	686	---
9	146	---	233	---	103	136	106	518	651	651	676	---
10	153	---	258	---	117	148	114	522	622	644	697	---
11	153	---	275	---	119	183	113	523	623	635	716	---
12	156	---	270	---	129	208	116	528	628	632	698	---
13	156	---	273	---	134	215	135	532	628	628	633	---
14	159	---	280	---	129	202	181	537	649	629	618	---
15	161	---	281	---	119	161	216	541	636	634	607	---
16	147	---	278	---	126	159	219	547	627	639	604	---
17	149	---	288	---	120	153	219	553	631	675	619	---
18	162	---	260	---	113	158	236	555	630	674	627	---
19	164	---	318	---	120	165	---	562	629	635	614	---
20	201	---	313	---	124	166	---	596	629	625	609	---
21	229	---	315	---	122	170	---	634	631	614	609	---
22	240	---	314	---	122	182	---	598	633	640	611	---
23	---	---	315	---	93	195	---	576	642	651	598	---
24	---	284	315	---	117	206	---	581	642	657	625	---
25	---	285	319	---	117	218	---	587	643	661	634	560
26	---	294	319	---	118	228	---	592	651	668	630	552
27	---	303	322	---	115	222	---	597	658	672	630	543
28	---	315	328	---	105	201	---	601	656	697	624	550
29	---	281	333	---	---	213	---	605	657	769	577	547
30	---	368	340	---	---	106	---	611	665	778	490	549
31	---	---	347	---	---	49	---	615	---	776	484	---
MEAN	---	---	287	---	---	172	---	---	638	660	647	---
MAX	---	---	347	---	---	270	---	---	665	778	808	---
MIN	---	---	220	---	---	49	---	---	621	614	484	---

ST. JOHNS RIVER

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

02248000 SPRUCE CREEK NEAR SAMSULA, FL--Continued
(National stream-quality accounting network station)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	22.6	16.6	14.9	19.7	16.1	20.3	22.2	22.7	23.7	24.1
2	24.7	---	21.9	14.5	16.7	17.3	9.7	17.5	22.3	23.0	24.0	23.8
3	23.9	---	20.3	13.6	17.5	16.6	16.7	17.6	22.3	22.0	24.6	23.6
4	24.3	---	17.4	14.6	17.7	17.7	15.8	19.0	22.4	22.2	24.8	23.5
5	24.2	---	16.8	15.1	17.5	17.3	14.9	21.9	22.4	22.7	25.2	23.2
6	24.6	---	18.5	15.4	17.4	17.5	14.6	22.0	22.7	22.5	25.3	23.2
7	23.6	---	19.1	15.9	17.8	18.3	16.7	21.8	22.5	22.8	25.8	23.2
8	25.0	---	19.3	16.3	16.1	19.4	17.4	21.9	22.2	23.0	26.0	23.4
9	26.4	---	19.7	16.0	14.7	19.2	17.8	21.9	22.1	23.1	25.8	23.5
10	25.9	---	20.5	17.0	12.6	18.3	18.4	21.8	22.2	23.3	25.7	23.5
11	25.1	---	21.6	16.9	12.8	17.2	19.2	21.9	22.2	23.5	24.8	23.5
12	25.4	---	21.5	13.6	13.6	15.6	19.9	21.9	22.5	23.8	24.5	23.3
13	26.1	---	19.7	13.2	15.0	14.8	21.3	22.2	22.5	23.6	24.8	23.2
14	26.6	---	18.6	13.9	14.8	15.0	22.2	22.2	22.8	23.4	24.7	23.5
15	25.6	---	19.2	16.0	15.0	15.7	22.4	22.4	22.9	22.9	24.6	25.2
16	22.9	---	19.6	17.9	17.7	15.4	21.5	22.4	22.8	22.7	25.0	25.7
17	22.7	---	18.9	19.0	17.2	10.3	---	22.3	22.7	23.5	25.7	25.7
18	21.8	---	18.7	19.3	16.6	12.0	21.5	22.2	22.7	21.1	25.8	25.8
19	22.8	---	19.1	20.2	16.0	11.9	21.0	22.3	22.7	23.3	25.8	25.8
20	20.4	---	19.5	18.8	15.9	12.3	21.5	22.2	22.5	23.1	25.4	25.5
21	20.3	---	18.7	17.1	15.9	9.8	21.8	22.3	22.6	22.4	25.2	25.3
22	---	---	18.0	16.7	16.6	13.9	22.0	22.4	22.7	24.0	25.4	25.0
23	---	---	19.0	14.1	18.5	10.1	21.9	22.5	23.1	23.6	25.2	24.5
24	---	---	20.2	12.7	16.7	19.2	22.0	22.3	22.9	24.3	25.1	24.3
25	---	21.5	19.0	14.6	17.1	20.2	19.4	22.3	22.9	24.0	25.0	23.5
26	---	21.9	17.4	15.5	17.9	20.5	20.1	22.1	23.0	23.8	24.8	23.1
27	---	22.0	16.7	13.5	18.8	19.9	19.7	22.1	22.8	23.7	24.5	23.2
28	---	22.0	17.1	12.4	19.6	18.8	20.1	22.1	22.8	24.0	24.5	23.6
29	---	22.2	16.5	14.0	---	18.2	21.5	22.2	22.9	24.1	24.2	23.8
30	---	22.8	16.2	15.2	---	17.3	18.7	22.1	22.7	24.1	24.3	23.7
31	---	---	15.8	16.2	---	17.5	---	22.3	---	23.7	24.1	---
MEAN	---	---	18.9	15.7	16.4	16.4	---	21.7	22.6	23.2	25.0	24.1
MAX	---	---	22.6	20.2	19.6	20.5	---	22.5	23.1	24.3	26.0	25.8
MIN	---	---	15.8	12.4	12.6	9.8	---	17.5	22.1	21.1	23.7	23.1

ST. JOHNS RIVER

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

02248000 SPRUCE CREEK NEAR SAMSULA, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 24...	0930	1.37	4.0	284	7.2	20.0	2.5	6.5	--	--
JAN 06...	0757	2.31	23	172	6.9	14.0	1.9	7.8	--	--
FEB 09...	0815	5.06	180	108	6.1	14.5	1.9	8.9	--	--
MAY 04...	0806	1.30	2.8	508	7.9	20.5	3.0	5.3	E170	790
JUN 30...	0950	1.20	1.2	668	7.2	24.0	7.5	4.7	62	E50
SEP 01...	0900	1.19	1.3	520	7.6	23.5	2.4	4.6	230	--
DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 24...	38	3.9	20	1.1	--	24	30	0.10	9.9	201
JAN 06...	16	2.6	12	1.3	35	26	18	<0.10	6.9	160
FEB 09...	7.8	1.9	8.9	2.0	11	19	17	<0.10	4.2	108
MAY 04...	66	5.7	31	1.1	197	11	49	0.20	11	306
JUN 30...	90	7.1	41	1.4	265	19	66	0.20	14	407
SEP 01...	73	5.6	32	1.5	197	14	49	0.20	15	330
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 24...	0.010	0.130	0.050	0.020	1.0	0.080	0.050	0.050	8	61
JAN 06...	<0.010	0.110	0.090	0.070	1.4	0.080	0.030	0.050	7	71
FEB 09...	<0.010	0.130	0.480	0.470	1.8	0.160	0.130	0.110	27	63
MAY 04...	0.010	0.130	0.120	0.120	1.5	0.090	0.280	0.250	6	67
JUN 30...	<0.010	0.130	0.140	0.140	1.4	0.130	0.060	0.030	40	98
SEP 01...	<0.010	0.180	0.110	0.080	0.90	0.300	0.200	0.170	25	96

ST. JOHNS RIVER

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

02248000 SPRUCE CREEK NEAR SAMSULA, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 24...	0930	230	<1	17	<0.5	2	<1	<3	9	840	<5
MAY 04...	0806	60	<1	34	<0.5	2	<1	<3	5	800	<5
JUN 30...	0950	20	<1	25	<0.5	<1	3	<3	2	91	<5
SEP 01...	0900	50	1	23	<0.5	<1	<1	<3	<1	1200	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 24...	6	9	--	<10	2	<1	<1.0	190	<6	60
MAY 04...	15	14	<0.1	<10	<1	<1	2.0	340	<6	21
JUN 30...	14	22	<0.1	<10	<1	<1	<1.0	480	<6	6
SEP 01...	7	31	1.0	<10	<1	<1	<1.0	380	<6	8

ST. JOHNS RIVER

COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET

02250030 TURKEY CREEK AT PALM BAY, FL

LOCATION.--Lat 28°01'00", long 80°35'46", in SE¼ sec.26, T.28 S., R.37 E., Brevard County, Hydrologic Unit 03080202, near right bank on downstream side of bridge on Port Malabar Boulevard, 1.6 mi southwest of the intersection of U.S. Highway 1 and State Highway 516 in Palm Bay, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--105 mi², approximately.

PERIOD OF RECORD.--February 1981 to September 1983. October 1983 to December 1986 (gage heights only), January to September 1987.

GAGE.--Water-stage recorder and electromagnetic current meter recorder. Datum of gage is 5.00 ft below National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1986 at datum 5.00 ft higher.

REMARKS.--No discharge was computed from Oct. 1 to Jan. 5 because of erroneous data recorded by the current meter. Records fair above 200 ft³/s and poor below. Stage and discharge are affected by tides in the Indian River.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge recorded, 895 ft³/s, Mar. 1, 1983; maximum gage height, 9.73 ft, present datum, Sept. 21, 1985; minimum daily discharge recorded, 33 ft³/s, Feb. 3, 1987, but may have been less during periods of low flow during water years 1983-86; minimum gage height, 4.62 ft, present datum, Apr. 5, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge during period January to September, 548 ft³/s, Sept. 5; maximum gage height, 7.41 ft, May 11; minimum daily, 33 ft³/s, Feb. 3; minimum gage height, 4.84 ft, Apr. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, PERIOD JANUARY TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	52	59	332	68	95	72	170	113
2	---	---	---	---	35	47	297	67	92	64	214	119
3	---	---	---	---	33	44	198	64	91	69	295	128
4	---	---	---	---	39	43	164	51	90	63	251	364
5	---	---	---	---	39	46	146	39	84	66	192	548
6	---	---	---	264	40	46	89	41	75	72	128	465
7	---	---	---	257	43	157	92	37	81	64	166	353
8	---	---	---	221	39	188	128	36	87	42	154	299
9	---	---	---	135	64	138	118	38	82	53	130	507
10	---	---	---	67	77	150	121	110	73	64	122	340
11	---	---	---	62	83	118	115	210	74	56	112	500
12	---	---	---	80	79	108	105	215	78	50	111	448
13	---	---	---	60	75	101	81	140	68	88	145	531
14	---	---	---	88	74	105	67	73	63	79	339	480
15	---	---	---	113	74	97	84	75	64	210	443	488
16	---	---	---	69	60	68	91	84	66	231	375	449
17	---	---	---	72	52	54	73	72	61	327	302	404
18	---	---	---	71	81	71	66	103	57	259	239	349
19	---	---	---	58	94	65	68	271	52	279	208	302
20	---	---	---	50	87	66	71	295	47	108	180	290
21	---	---	---	53	82	73	65	302	46	101	159	272
22	---	---	---	55	84	71	63	252	44	138	184	261
23	---	---	---	52	67	65	60	207	42	165	259	287
24	---	---	---	49	60	66	56	176	39	148	197	268
25	---	---	---	50	54	65	57	150	39	141	166	257
26	---	---	---	71	65	79	55	128	41	136	153	236
27	---	---	---	69	69	127	56	118	44	118	147	180
28	---	---	---	63	62	115	59	124	48	117	133	164
29	---	---	---	49	---	120	55	119	102	116	129	207
30	---	---	---	57	---	319	69	116	92	111	127	192
31	---	---	---	53	---	367	---	108	---	113	124	---
TOTAL	---	---	---	---	1763	3238	3101	3889	2017	3720	6054	9801
MEAN	---	---	---	---	63.0	104	103	125	67.2	120	195	327
MAX	---	---	---	---	94	367	332	302	102	327	443	548
MIN	---	---	---	---	33	43	55	36	39	42	111	113

ST. JOHNS RIVER

COASTAL AREA BETWEEN PONCE DE LEON INLET AND SEBASTIAN INLET

02250030 TURKEY CREEK AT PALM BAY, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.50	---	6.03	6.63	5.46	5.60	6.52	5.51	5.52	5.31	5.50	5.38
2	5.58	---	6.10	6.62	5.24	5.95	6.20	5.45	5.46	5.15	5.55	5.38
3	5.56	---	6.15	6.51	5.41	5.97	5.90	5.36	5.39	5.15	5.77	5.47
4	5.54	---	6.24	6.34	5.50	5.95	5.95	5.40	5.37	5.16	5.56	6.32
5	5.53	---	6.21	6.68	5.49	5.92	5.69	5.39	5.33	5.11	5.53	6.68
6	5.56	---	6.20	6.78	5.58	5.70	5.44	5.51	5.50	5.09	5.39	7.25
7	5.63	---	6.00	6.43	5.74	5.94	5.34	5.61	5.61	5.07	5.26	7.22
8	5.65	---	5.98	6.32	6.03	5.86	5.35	5.50	5.52	5.00	5.28	6.89
9	5.66	---	---	6.15	5.92	5.72	5.31	5.63	5.44	5.03	5.36	6.65
10	5.71	---	---	5.97	5.81	5.78	5.26	5.74	5.44	5.07	5.33	6.56
11	5.78	---	---	5.99	5.58	6.04	5.18	6.52	5.40	5.06	5.36	6.53
12	5.84	---	---	5.76	5.46	5.96	5.12	6.58	5.33	5.06	5.31	6.71
13	5.87	---	---	5.59	5.39	6.08	5.03	6.17	5.29	5.25	5.53	6.94
14	5.91	---	---	5.60	5.38	5.85	4.99	5.90	5.24	5.32	6.31	6.84
15	6.05	---	---	5.63	5.36	5.68	5.04	5.85	5.24	5.67	6.23	6.54
16	6.21	---	---	5.52	5.22	5.66	5.20	5.93	5.22	5.74	6.06	6.29
17	6.19	---	---	5.54	5.59	5.71	5.22	5.80	5.27	6.28	5.82	6.12
18	6.20	---	5.79	5.60	5.77	5.68	5.25	5.81	5.24	6.19	5.65	6.00
19	6.41	---	5.81	5.54	5.95	5.81	5.46	5.94	5.21	6.04	5.55	5.91
20	6.25	5.91	5.81	5.67	5.72	6.13	5.48	5.98	5.19	5.86	5.49	5.85
21	6.24	6.05	6.05	5.72	5.65	6.02	5.40	5.92	5.17	5.77	5.50	5.85
22	6.18	6.00	6.07	5.51	5.61	5.93	5.43	5.82	5.12	5.71	5.59	5.89
23	5.96	5.94	6.04	5.69	5.72	6.01	5.41	5.75	5.06	5.62	5.74	5.99
24	---	5.92	6.25	5.54	5.62	5.85	5.39	5.72	5.19	5.61	5.61	6.03
25	---	5.92	6.36	5.33	5.59	5.78	5.48	5.73	5.25	5.56	5.51	5.99
26	---	5.85	6.35	5.39	5.59	6.00	5.74	5.69	5.21	5.51	5.53	5.93
27	---	5.86	6.30	5.51	5.59	6.10	5.78	5.70	5.20	5.51	5.51	5.85
28	---	5.86	6.38	5.35	5.65	6.16	5.52	5.73	5.29	5.46	5.48	5.83
29	---	5.92	6.22	5.35	---	6.33	5.54	5.75	5.50	5.39	5.46	5.80
30	---	5.96	6.13	5.34	---	6.47	5.57	5.78	5.43	5.37	5.39	5.69
31	---	---	6.23	5.41	---	6.63	---	5.66	---	5.42	5.34	---
MEAN	---	---	---	5.84	5.59	5.94	5.47	5.77	5.32	5.44	5.56	6.21
MAX	---	---	---	6.78	6.03	6.63	6.52	6.58	5.61	6.28	6.31	7.25
MIN	---	---	---	5.33	5.22	5.60	4.99	5.36	5.06	5.00	5.26	5.38

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02251800 INDIAN RIVER AT WABASSO, FL

LOCATION.--Lat 27°45'15", long 80°25'40;; in SW¼ sec.27, T.31 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on north side near the southwest end of bridge on State Highway 510 at Wabasso.

PERIOD OF RECORD.--November 1940 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to June 26, 1970, at site 0.9 mi northeast at same datum.

REMARKS.--Stage affected by tide. The stage record published is the maximum and minimum tide event for each calendar day.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 4.76 ft, Sept. 22, 1948; minimum, -1.36 ft, Jan. 20, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 2.52 ft, Jan. 6; minimum, -0.46 ft, Apr. 14.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	1.43	1.20	1.40	---	---	1.36	.67	.58	---	.50	.50
2	.74	1.76	1.37	1.63	---	---	1.20	.57	.42	.15	.55	.44
3	.72	1.75	1.57	1.58	---	---	.85	.48	.31	.07	.33	.47
4	.74	1.63	1.61	1.33	---	---	.84	.45	.35	.13	.36	.97
5	.76	1.44	1.57	1.21	---	---	.76	.54	.35	.09	.23	.95
6	.77	1.42	1.65	2.52	---	---	.54	.77	.78	.09	.16	1.11
7	.85	1.20	1.19	1.61	---	---	.50	.92	.80	.18	.14	1.07
8	.86	1.10	1.04	1.32	---	---	.40	.76	.62	.18	.43	1.11
9	.78	1.05	.87	1.16	---	---	.42	.88	.45	.25	.48	1.01
10	.87	1.01	.91	1.00	---	---	.31	.83	.60	.32	.67	1.01
11	.97	1.12	.71	1.07	---	1.47	.30	.62	.40	.23	.65	.79
12	1.07	1.13	.74	1.00	---	1.53	.22	.67	.51	.31	.65	.86
13	1.01	1.33	1.17	.85	---	1.75	.09	.74	.43	.39	.91	.91
14	1.08	1.92	1.06	.78	---	1.50	-.02	.64	.23	.51	.90	.82
15	1.38	1.70	1.00	.63	---	.95	.01	.57	.19	.63	.76	.71
16	1.63	1.55	1.31	.60	---	.93	.44	.80	.26	.60	.72	.66
17	1.53	1.21	1.16	.77	---	.94	.51	.68	.32	.66	.53	.63
18	1.63	1.16	1.02	.76	---	.96	.62	.68	.30	.87	.46	.58
19	1.92	1.12	1.13	.61	---	.82	.79	.68	---	.81	.33	.49
20	1.70	1.12	1.01	.72	---	1.46	.89	.70	---	.70	.38	.77
21	1.68	1.48	1.56	.93	---	1.57	.81	.66	---	.64	.61	.76
22	1.44	1.20	1.38	.67	---	1.21	.71	.73	---	.78	.71	.77
23	1.10	1.00	1.13	.89	---	1.27	.74	.72	---	.70	.69	1.00
24	.95	.86	1.29	.70	---	1.10	.71	.76	---	.81	.59	.99
25	.77	.92	1.41	.56	---	.84	.91	.77	---	.63	.53	1.09
26	.75	.86	1.51	---	---	1.08	1.38	.80	---	.50	.59	.94
27	1.21	.94	1.51	---	---	1.21	1.32	.66	---	.54	.57	.72
28	1.40	1.01	1.86	---	---	1.36	.86	.98	---	.50	.53	.80
29	1.43	1.01	1.73	---	---	1.60	.73	1.00	---	.43	.43	.82
30	1.46	1.11	1.65	---	---	1.43	1.01	1.06	---	.41	.41	.69
31	1.48	---	1.43	---	---	1.42	---	.99	---	.48	.35	---
MEAN	1.14	1.25	1.28	---	---	---	.67	.73	---	---	.52	.81
MAX	1.92	1.92	1.86	---	---	---	1.38	1.06	---	---	.91	1.11
MIN	.61	.86	.71	---	---	---	-.02	.45	---	---	.14	.44

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02251800 INDIAN RIVER AT WABASSO, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.82	.55	.57	---	---	.86	-.01	.00	-.20	.10	-.01
2	.20	1.08	.75	.90	---	---	.47	-.05	-.04	-.40	.03	-.04
3	.18	1.04	.83	.96	---	---	.04	-.12	-.08	-.34	-.06	-.12
4	.18	.93	.95	.67	---	---	.43	.06	-.09	-.19	-.09	.08
5	.18	.77	.95	1.03	---	---	.18	.20	.01	-.29	-.16	.30
6	.16	.81	1.00	1.07	---	---	-.04	.46	.06	-.27	-.24	.59
7	.29	.68	.62	.89	---	---	.17	.59	.27	-.28	-.27	.57
8	.32	.65	.47	1.07	---	---	-.07	.25	.14	-.27	-.26	.49
9	.29	.58	.40	.75	---	---	.05	.38	-.06	-.27	-.05	.41
10	.34	.63	.48	.41	---	.66	-.04	.26	.04	-.25	.05	.44
11	.47	.60	.16	.38	---	1.14	-.16	.14	-.11	-.26	.05	.27
12	.54	.63	.13	.42	---	.94	-.30	.23	-.22	-.26	.04	.30
13	.52	.70	.87	.26	---	1.18	-.37	.06	-.31	-.11	.12	.39
14	.54	1.16	.52	.23	---	.92	-.46	-.03	-.36	-.02	.34	.36
15	.61	.77	.40	.06	---	.50	-.36	.08	-.45	.05	.22	.34
16	.92	.84	.60	.10	---	.36	-.08	.08	-.34	.03	.22	.27
17	1.05	.68	.74	.07	---	.43	-.04	.06	-.27	.24	.02	.26
18	1.00	.62	.53	.27	---	.24	.07	.00	-.19	.30	.08	.20
19	1.25	.59	.58	.11	---	.48	.29	.12	---	.23	.00	.11
20	1.14	.66	.48	.38	---	1.01	.41	.30	---	.23	-.04	.09
21	1.04	.70	.91	.40	---	.67	.25	.10	---	.35	.05	.20
22	.88	.65	.87	.02	---	.52	.15	.22	---	.24	.18	.30
23	.65	.58	.57	.33	---	.58	.21	.28	---	.22	.20	.34
24	.57	.52	.70	.18	---	.51	.05	.23	---	.30	.17	.44
25	.48	.53	1.01	-.06	---	.27	.26	.25	---	.08	.10	.48
26	.37	.36	1.16	---	---	.30	.56	.25	---	-.01	.11	.36
27	.41	.47	1.15	---	---	.48	.81	.34	---	.02	.09	.25
28	.89	.46	1.02	---	---	.61	.30	.35	---	-.08	.08	.31
29	.68	.42	1.15	---	---	.80	.32	.45	---	-.05	-.07	.32
30	.94	.56	.17	---	---	.71	.19	.57	---	-.08	-.10	.20
31	.84	---	.79	---	---	.93	---	.16	---	.07	-.12	---
MEAN	.58	.68	.69	---	---	---	.14	.20	---	-.04	.03	.28
MAX	1.25	1.16	1.16	---	---	---	.86	.59	---	.35	.34	.59
MIN	.14	.36	.13	---	---	---	-.46	-.12	---	-.40	-.27	-.12

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02252500 NORTH CANAL NEAR VERO BEACH, FL

LOCATION.--Lat 27°41'32", long 80°25'00", in SE¼ sec.15, T.32 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on left bank 600 ft upstream from bridge on State Highway 605, and 3.9 mi north of Vero Beach.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 27, 1952, at site 50 ft downstream at datum 0.81 ft lower. Feb. 27, 1952, to Nov. 5, 1957, at bridge 600 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Oct. 25 to Nov. 13. Records good except for estimated daily discharges, which are poor. Considerable pumping into canal for drainage above station. Since Sept. 7, 1954, low flow regulated by control structure 2 mi upstream.

AVERAGE DISCHARGE.--36 years (water years 1951-87), 31.5 ft³/s, 22,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft³/s, Sept. 23, 1960; maximum gage height, 11.78 ft, June 18, 1959; no flow part of each day Mar. 7,8, 1969; minimum gage height observed, 0.92 ft, June 22, 1956, site then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 443 ft³/s, Oct. 21, gage height, 8.12 ft, but may have been higher during period of no gage-height record Oct. 25 to Nov. 13; minimum, 5.7 ft³/s, June 19,20,21, gage height, 1.68 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	120	24	212	24	14	43	9.0	16	15	184	18
2	14	100	24	75	22	15	12	11	13	14	83	20
3	12	80	22	40	20	17	12	11	12	19	59	33
4	12	50	21	27	19	17	15	11	11	12	61	48
5	12	30	21	131	19	16	15	9.7	10	10	53	58
6	12	25	23	83	20	14	16	6.8	9.4	9.9	42	46
7	14	28	22	51	21	167	19	8.5	8.7	14	23	35
8	11	30	20	19	21	112	19	10	8.1	15	11	37
9	6.9	29	19	17	19	55	19	16	8.8	12	11	41
10	6.9	28	19	21	18	42	17	98	9.8	10	14	38
11	12	34	18	27	18	23	15	219	7.3	9.9	19	32
12	37	38	18	28	18	11	13	58	7.1	8.9	18	38
13	37	43	19	29	17	11	12	12	11	9.1	19	60
14	29	71	18	29	16	14	15	16	11	12	47	51
15	28	36	11	30	16	19	9.9	15	10	36	46	42
16	88	25	12	28	21	21	12	16	7.5	103	37	34
17	48	22	17	27	24	23	12	20	8.7	131	29	29
18	19	28	19	26	23	23	13	25	6.0	60	24	24
19	65	31	18	26	23	24	17	27	5.8	13	24	21
20	49	32	17	25	21	22	19	22	5.7	12	20	21
21	336	31	18	24	20	20	11	19	6.8	15	18	32
22	131	29	19	24	19	20	7.5	18	10	14	17	33
23	72	27	23	19	17	22	11	16	14	13	16	118
24	37	26	34	20	17	20	10	15	15	12	14	39
25	25	25	37	35	17	15	11	14	10	11	13	14
26	17	23	32	27	17	11	11	12	13	11	13	13
27	160	19	40	13	17	31	11	12	46	12	9.8	16
28	170	20	47	28	16	43	10	14	42	24	10	23
29	310	20	42	54	---	44	7.9	16	38	158	9.9	28
30	390	21	37	36	---	60	11	17	20	42	11	27
31	220	---	61	28	---	147	---	17	---	155	17	---
TOTAL	2393.8	1121	772	1259	540	1093	426.3	791.0	401.7	992.8	972.7	1069
MEAN	77.2	37.4	24.9	40.6	19.3	35.3	14.2	25.5	13.4	32.0	31.4	35.6
MAX	390	120	61	212	24	167	43	219	46	158	184	118
MIN	6.9	19	11	13	16	11	7.5	6.8	5.7	8.9	9.8	13
AC-FT	4750	2220	1530	2500	1070	2170	846	1570	797	1970	1930	2120

CAL YR 1986 TOTAL 11131.8 MEAN 30.5 MAX 390 MIN 6.5 AC-FT 22080
WTR YR 1987 TOTAL 11832.3 MEAN 32.4 MAX 390 MIN 5.7 AC-FT 23470

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02253000 MAIN CANAL AT VERO BEACH, FL
(National stream-quality accounting network station)

LOCATION.--Lat 27°38'54", long 80°24'10", in SE¼ sec.35, T.32 S., R.39 E., Indian River County, Hydrologic Unit 03080203, on right bank 8 ft upstream from dam, 700 ft upstream from U.S. Highway 1, and 0.6 mi northwest of Vero Beach.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1949 to current year. Monthly discharge only for some periods, published in WSP 1724.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Mar. 20, 1952, at datum 0.74 ft lower. Mar. 20, 1952, to Sept. 30, 1956, at datum 0.02 ft lower.

REMARKS.--Records good. Considerable pumping into canal for drainage upstream from station. Since Aug. 6, 1954, low flow regulated by control structure 1.5 mi upstream.

AVERAGE DISCHARGE.--38 years (water years 1950-87), 77.6 ft³/s, 56,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s, Sept. 23, 1960, gage height, 14.21 ft; maximum gage height, 14.38 ft, Sept. 24, 1963; no flow at times in some years; minimum gage height, 8.06 ft, Aug. 8, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,150 ft³/s, Oct. 29, gage height, 12.62 ft; minimum daily discharge, 2.2 ft³/s, July 20; minimum gage height, 8.12 ft, July 5, 20, 21, Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	246	37	421	34	27	73	22	29	5.1	511	19
2	26	167	40	166	31	25	12	25	20	124	293	25
3	24	126	36	68	29	27	15	30	17	413	218	48
4	22	47	36	146	28	29	16	29	17	90	283	86
5	24	5.8	37	252	27	28	26	21	11	3.7	161	371
6	26	16	41	124	30	19	31	21	9.4	18	107	94
7	36	37	37	70	32	451	34	34	11	27	46	28
8	29	44	33	4.7	32	242	34	33	19	27	4.1	60
9	15	45	31	4.7	29	110	34	45	13	19	11	61
10	12	44	31	17	28	51	30	80	8.5	19	26	52
11	30	49	30	31	28	8.8	23	376	14	26	30	45
12	106	57	29	39	28	6.5	24	80	14	26	28	43
13	146	59	24	35	26	4.3	29	36	14	26	34	39
14	62	507	26	36	26	16	30	48	19	34	69	38
15	56	233	30	36	27	23	19	23	20	259	66	37
16	318	49	25	43	41	26	17	13	20	241	54	33
17	150	17	20	32	42	29	23	25	13	132	47	162
18	3.1	39	21	32	40	28	33	34	17	84	42	43
19	478	46	18	31	40	26	33	39	19	3.5	39	2.3
20	247	48	27	31	37	21	37	34	11	2.2	35	11
21	609	46	33	30	34	18	25	31	9.7	169	29	23
22	266	44	34	28	32	19	24	29	15	54	21	138
23	147	42	44	17	29	30	26	28	18	4.1	23	456
24	46	39	58	28	30	32	24	25	20	4.3	29	96
25	5.1	37	64	140	31	25	37	24	14	5.2	25	2.7
26	13	33	50	96	31	27	36	22	30	12	21	8.0
27	31	29	64	8.8	30	58	35	16	114	17	15	23
28	287	29	81	44	29	76	30	19	114	38	6.5	29
29	917	30	67	92	---	72	21	26	361	369	8.6	31
30	827	31	56	54	---	92	22	34	94	102	7.4	208
31	457	---	211	42	---	354	---	32	---	450	12	---
TOTAL	5442.2	2241.8	1371	2199.2	881	2000.6	853	1334	1105.6	2804.1	2301.6	2312.0
MEAN	176	74.7	44.2	70.9	31.5	64.5	28.4	43.0	36.9	90.5	74.2	77.1
MAX	917	507	211	421	42	451	73	376	361	450	511	456
MIN	3.1	5.8	18	4.7	26	4.3	12	13	8.5	2.2	4.1	2.3
AC-FT	10790	4450	2720	4360	1750	3970	1690	2650	2190	5560	4570	4590

CAL YR 1986 TOTAL 27887.16 MEAN 76.4 MAX 917 MIN .25 AC-FT 55310
WTR YR 1987 TOTAL 24846.1 MEAN 68.1 MAX 917 MIN 2.2 AC-FT 49280

ST. JOHNS RIVER
COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER
02253000 MAIN CANAL AT VERO BEACH, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1975 to October 1981.

WATER TEMPERATURE: March 1975 to October 1981.

INSTRUMENTATION.--Water-quality monitor March 1975 to October 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean (more than 20 percent missing record), 2,370 micromsiemens, July 17, 1981; minimum daily mean, 284 micromsiemens, Sept. 4, 1979.

WATER TEMPERATURES: Maximum daily mean, 36.0°C, July 21, 1979; minimum daily mean, 12.5°C, Dec. 28, 1976.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 25...	0921	8.64	38	1290	8.8	24.5	2.5	5.7	--	--
JAN 07...	1545	8.93	75	1160	7.4	19.0	4.0	5.5	--	--
FEB 04...	1700	8.54	27	1580	7.7	20.0	1.6	8.7	--	--
MAY 06...	1847	8.48	22	2010	7.8	28.0	1.2	7.2	E6	3900
JUN 29...	1600	10.93	531	1620	7.3	28.5	6.5	2.0	1100	E2
AUG 31...	1543	8.34	11	1380	7.8	31.0	1.4	8.1	E24	--

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 25...	100	25	120	9.0	--	110	260	0.40	13	754
JAN 07...	92	21	92	6.2	181	90	210	0.30	11	668
FEB 04...	110	39	180	7.1	171	110	390	0.40	6.1	997
MAY 06...	120	44	210	9.1	214	130	470	0.50	7.4	1180
JUN 29...	84	36	170	12	147	100	380	0.40	12	913
AUG 31...	100	28	130	6.5	178	83	240	0.40	13	815

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 25...	0.020	0.340	0.090	0.100	0.80	0.190	0.150	0.110	3	69
JAN 07...	0.070	1.00	0.310	0.300	1.2	0.150	0.100	0.090	5	83
FEB 04...	<0.010	0.100	0.070	0.040	0.60	0.070	0.040	0.040	74	97
MAY 06...	<0.010	<0.100	0.080	0.080	1.0	0.180	0.130	0.120	3	67
JUN 29...	0.080	0.790	0.430	0.450	1.7	0.290	0.160	0.100	112	98
AUG 31...	<0.010	<0.100	0.040	0.040	1.0	0.200	0.160	0.100	59	98

ST. JOHNS RIVER

COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER

02253000 MAIN CANAL AT VERO BEACH, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 25...	0921	<10	1	34	<0.5	<1	<1	<3	7	170	7
MAY 06...	1847	20	<1	100	<10	<1	<1	<1	8	40	<5
JUN 29...	1600	20	1	51	<0.5	<1	4	<3	12	260	<5
AUG 31...	1543	20	1	37	<0.5	<1	<1	<3	3	46	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 25...	14	17	--	<10	3	<1	<1.0	3500	<6	15
MAY 06...	<10	20	<0.1	1	<1	<1	<1.0	7200	10	20
JUN 29...	14	81	1.3	<10	<1	<1	<1.0	5900	<6	15
AUG 31...	9	41	<0.1	<10	1	<1	<1.0	3900	<6	9

ST. JOHNS RIVER
COASTAL AREA SEBASTIAN INLET TO ST. LUCIE RIVER
02253500 SOUTH CANAL NEAR VERO BEACH, FL

LOCATION.--Lat 27°36'11; long 80°23'24; in SW¼ sec.13, T.33 S., T.39 E., Indian River County, Hydrologic Unit 03080203, on right bank 1,000 ft upstream from bridge on State Highway 605, and 2.5 mi south of Vero Beach.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 28, 1952, at downstream side of bridge 1,000 ft downstream from datum 1.26 ft lower. Feb. 28, 1952, to Nov. 6, 1957, 20 ft upstream from bridge at datum 0.46 ft lower.

REMARKS.--Records fair. Considerable pumping into canal for drainage above station. Since Jan. 6, 1956, low flow regulated by control structure upstream.

AVERAGE DISCHARGE.--37 years, 39.8 ft³/s, 28,840 acre-ft/yr.

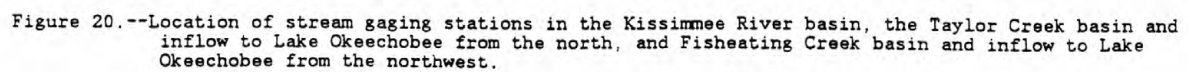
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft³/s, Sept. 24, 1963, gage height, 10.97 ft, from floodmarks; maximum gage height, 10.98 ft, Aug. 27, 1964; minimum discharge, 0.43 ft³/s, May 24, 1978; minimum gage height, 0.64 ft, Aug. 15, 1984, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 763 ft³/s, Oct. 19, gage height, 8.52 ft; minimum daily discharge, 4.5 ft³/s, June 21; minimum gage height, 0.71 ft, Aug. 30,31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	107	19	219	18	11	31	5.4	9.5	7.2	365	5.9
2	14	88	21	66	15	11	13	5.1	6.4	9.0	168	9.3
3	13	71	20	34	15	13	11	6.0	5.4	6.8	99	23
4	12	42	20	18	14	13	9.9	6.0	5.3	6.3	119	41
5	11	23	20	107	14	13	10	4.8	4.6	6.2	97	30
6	13	20	25	87	14	10	11	5.9	4.9	8.1	57	8.3
7	19	24	19	51	16	321	12	9.0	6.4	13	24	15
8	16	25	16	20	19	173	12	8.9	7.1	12	8.4	32
9	11	24	13	17	16	70	11	13	4.8	8.4	8.3	31
10	9.5	23	13	16	15	39	9.7	17	4.6	8.9	13	26
11	16	27	12	19	14	17	7.8	182	6.6	12	14	21
12	50	32	11	20	13	19	7.7	29	5.6	10	12	18
13	36	31	11	21	12	20	8.8	7.8	5.0	12	13	20
14	32	76	13	21	11	24	9.3	6.8	6.5	20	35	20
15	29	25	13	20	12	21	6.6	6.9	8.5	38	33	18
16	39	21	13	19	17	21	6.4	7.2	7.6	110	25	15
17	19	16	12	18	19	21	7.4	10	4.6	150	19	12
18	18	20	11	18	19	22	9.7	13	7.2	53	17	5.7
19	386	23	10	17	20	20	9.2	14	8.4	12	15	5.4
20	155	24	12	17	18	20	10	12	4.8	11	12	5.7
21	402	24	17	17	16	20	6.7	10	4.5	10	10	9.9
22	132	23	21	16	16	21	6.1	9.7	5.3	9.5	7.7	19
23	81	20	27	12	13	23	6.4	8.6	6.8	9.2	8.7	196
24	37	18	26	20	13	19	5.8	7.4	7.4	8.9	12	50
25	16	17	30	28	13	13	8.6	6.7	5.2	8.7	9.6	11
26	16	15	25	16	13	14	9.1	6.1	16	8.3	7.3	9.1
27	127	14	34	10	13	28	11	5.5	44	9.0	5.9	11
28	157	14	40	26	14	36	8.8	7.3	28	24	5.2	13
29	432	15	37	39	---	34	6.4	10	31	263	4.9	14
30	505	17	31	26	---	42	6.9	13	7.8	47	4.8	13
31	164	---	62	21	---	179	---	11	---	209	4.8	---
TOTAL	2982.5	919	654	1056	422	1308	289.3	465.1	279.8	1120.5	1234.6	708.3
MEAN	96.2	30.6	21.1	34.1	15.1	42.2	9.64	15.0	9.33	36.1	39.8	23.6
MAX	505	107	62	219	20	321	31	182	44	263	365	196
MIN	9.5	14	10	10	11	10	5.8	4.8	4.5	6.2	4.8	5.4
AC-FT	5920	1820	1300	2090	837	2590	574	923	555	2220	2450	1400

CAL YR 1986 TOTAL 15337.4 MEAN 42.0 MAX 613 MIN 6.9 AC-FT 30420
WTR YR 1987 TOTAL 11439.1 MEAN 31.3 MAX 505 MIN 4.5 AC-FT 22690



SOUTH FLORIDA

FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST

02256500 FISHEATING CREEK AT PALMDALE, FL
(National stream-quality accounting network station)

LOCATION.--Lat 26°55'56", long 81°18'54" in SW¼ sec.3, T.41 S., R.30 E., Glades County, Hydrologic Unit 03090103, near right bank on downstream side of southbound bridge on U.S. Highway 27, 1.0 mi south of Palmdale, and 16 mi upstream from Lake Okeechobee.

DRAINAGE AREA.--311 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 27.19 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 16, 1949, nonrecording gage and Mar. 16, 1949, to Jan. 23, 1956, water-stage recorder, at site 450 ft upstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--56 years, 254 ft³/s, 11.09 in/yr, 184,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 ft³/s, Oct. 3, 1951, gage height, 12.44 ft, from rating curve extended above 21,000 ft³/s; no flow at times in most years; minimum gage height observed, -0.61 ft, June 13, 1950.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 17	1000	*700	*5.44				

Minimum daily discharge, 0.03 ft³/s, June 25; minimum gage height, 0.36 ft, June 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	138	10	157	35	12	482	5.6	2.0	3.4	80	12
2	188	186	9.6	217	32	12	512	4.5	1.2	18	81	12
3	161	277	8.9	243	30	12	512	3.4	.77	37	81	16
4	142	261	8.1	343	28	12	510	2.5	.54	51	81	59
5	127	212	9.3	434	27	11	487	1.9	.38	54	79	138
6	113	169	12	382	30	10	444	1.4	.32	51	80	241
7	99	139	12	319	31	41	397	1.1	.49	47	103	392
8	85	111	11	281	31	97	354	.87	.54	41	152	510
9	73	91	10	260	29	99	309	.75	.39	32	198	481
10	66	78	9.2	239	27	90	262	.74	.28	26	233	422
11	65	66	8.5	210	26	90	221	.70	.19	21	293	348
12	80	58	8.0	175	24	97	183	1.1	.14	16	302	292
13	86	51	7.4	147	22	99	150	13	.10	11	317	256
14	81	45	6.8	123	20	88	122	36	.46	11	320	231
15	76	40	6.4	104	19	72	97	48	.53	14	290	259
16	72	36	6.1	90	19	57	79	47	.44	13	249	524
17	67	32	5.8	79	19	45	63	40	.47	13	212	688
18	63	29	5.4	70	18	36	50	36	.58	18	177	679
19	58	26	5.3	62	17	29	43	36	.46	17	147	600
20	52	24	5.4	55	16	24	41	33	.32	16	120	512
21	46	22	5.5	50	15	20	40	27	.22	37	97	432
22	41	20	5.4	48	14	16	36	22	.15	60	80	359
23	36	18	5.3	50	13	14	31	18	.10	88	67	307
24	33	17	6.4	47	13	13	26	16	.06	127	56	292
25	29	15	7.9	45	14	12	21	15	.03	150	47	337
26	27	14	9.9	45	14	17	16	13	.08	131	39	353
27	24	13	18	44	13	105	13	11	.27	103	32	298
28	23	12	40	43	12	196	11	8.1	.73	99	26	234
29	48	11	56	42	---	232	8.6	6.0	1.2	91	22	223
30	199	10	62	40	---	258	7.0	4.5	2.1	79	18	237
31	158	---	74	38	---	368	---	3.1	---	72	15	---
TOTAL	2639	2221	455.6	4482	608	2284	5527.6	457.26	15.54	1547.4	4094	9744
MEAN	85.1	74.0	14.7	145	21.7	73.7	184	14.8	.52	49.9	132	325
MAX	221	277	74	434	35	368	512	48	2.1	150	320	688
MIN	23	10	5.3	38	12	10	7.0	.70	.03	3.4	15	12
AC-FT	5230	4410	904	8890	1210	4530	10960	907	31	3070	8120	19330
CFSM	.27	.24	.05	.46	.07	.24	.59	.05	.00	.16	.42	1.04
IN.	.32	.27	.05	.54	.07	.27	.66	.05	.00	.19	.49	1.17

CAL YR 1986	TOTAL 77469.98	MEAN 212	MAX 3550	MIN .00	AC-FT 153700	CFSM .68	IN. 9.27
WTR YR 1987	TOTAL 34075.40	MEAN 93.4	MAX 688	MIN .03	AC-FT 67590	CFSM .30	IN. 4.08

SOUTH FLORIDA

FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST

02256500 FISHEATING CREEK AT PALMDALE, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1964 to September 1975, January 1978 to current year.

WATER TEMPERATURE: July 1964 to September 1975, January 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1980.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed (more than 20 percent missing record), 1,590 microsiemens, June 5, 1975; minimum observed, 38 microsiemens, Mar. 21, 1970.

WATER TEMPERATURE: Maximum observed, 33.0°C, June 21, 1973, June 16,17,23,24, 1987; minimum observed, 8.0°C, Jan. 8, 1970.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 372 microsiemens, May 22; minimum daily mean, 90 microsiemens, Oct. 30.

WATER TEMPERATURE: Maximum daily mean, 33.0°C, June 16,17,23,24; minimum daily mean, 15.5°C, Jan. 3-6.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	116	207	295	---	301	189	247	312	276	169	140
2	107	156	209	256	---	300	183	248	315	220	173	140
3	108	190	212	238	---	301	173	251	318	227	176	139
4	109	189	218	219	---	300	174	253	319	189	178	121
5	110	182	213	208	267	299	178	255	322	160	185	102
6	124	179	210	200	266	298	178	257	323	162	193	102
7	115	177	213	---	261	260	175	258	320	179	190	114
8	114	177	215	---	258	203	172	260	319	232	169	121
9	114	177	214	---	259	226	170	261	322	280	163	128
10	116	178	216	---	259	204	169	261	324	296	160	126
11	122	178	215	---	260	222	169	260	327	299	145	129
12	116	---	214	---	262	242	170	262	330	292	139	134
13	114	180	217	---	264	263	172	261	333	282	134	134
14	110	184	217	---	267	261	175	261	316	266	128	133
15	113	182	221	---	271	254	178	303	318	245	123	139
16	124	184	221	---	274	249	181	321	321	229	121	160
17	145	187	223	---	276	246	185	331	318	226	123	143
18	148	196	226	---	279	245	188	336	311	217	126	132
19	146	197	228	---	283	245	191	346	310	206	---	128
20	148	193	231	---	286	246	197	357	312	212	132	124
21	151	202	229	---	289	247	203	367	314	214	133	122
22	147	195	230	---	293	249	210	372	316	185	134	122
23	147	197	231	---	297	250	222	367	321	188	134	122
24	146	198	231	---	301	251	228	351	320	157	135	124
25	146	204	233	---	301	252	234	340	323	147	135	116
26	139	200	233	---	303	247	238	328	320	146	136	108
27	143	200	232	---	302	161	240	322	316	153	136	105
28	145	213	231	---	301	163	243	317	308	164	137	107
29	139	204	245	---	---	163	244	314	304	172	138	113
30	90	205	284	---	---	161	246	313	293	168	139	109
31	106	---	311	---	---	167	---	311	---	169	140	---
MEAN	126	---	227	---	---	241	196	300	317	212	---	125
MAX	151	---	311	---	---	301	246	372	333	299	---	160
MIN	90	---	207	---	---	161	169	247	293	146	---	102

SOUTH FLORIDA

FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST

02256500 FISHEATING CREEK AT PALMDALE, FL--Continued
(National stream-quality accounting network station)

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	26.0	25.7	17.8	---	23.7	18.5	26.0	30.2	30.9	29.4	31.2
2	28.7	26.0	25.3	17.6	---	22.5	18.0	26.5	31.5	30.8	28.9	30.7
3	28.7	24.5	25.0	15.6	---	21.7	19.5	28.0	31.7	30.5	28.8	30.0
4	28.1	24.0	23.2	15.6	---	22.0	19.0	29.0	31.6	30.1	29.0	28.6
5	28.1	25.5	22.0	15.5	20.1	20.5	17.0	29.5	31.8	30.0	29.1	27.3
6	28.3	26.0	20.9	15.6	20.3	19.0	18.0	29.8	31.2	30.1	30.0	27.1
7	28.5	26.0	20.9	---	20.7	20.0	18.5	29.5	29.9	30.0	30.4	27.5
8	28.4	26.0	21.9	---	20.1	22.0	19.0	29.2	29.1	30.0	30.1	28.0
9	28.6	26.0	22.6	---	19.2	22.0	19.5	28.8	29.7	31.3	30.2	28.9
10	28.4	25.5	23.9	---	17.7	21.5	20.0	28.5	31.4	32.2	30.2	28.7
11	28.2	25.5	24.5	---	17.4	20.5	20.0	28.8	31.5	32.4	28.4	28.4
12	28.5	---	24.6	---	18.3	20.5	21.0	30.0	31.7	32.3	28.0	28.2
13	28.6	26.3	24.7	---	18.3	19.5	22.5	29.4	31.7	31.5	27.5	28.7
14	28.4	26.1	22.9	---	18.6	19.0	23.5	28.1	31.7	30.3	27.2	28.5
15	28.4	25.8	22.6	---	19.4	20.0	25.0	27.4	32.6	29.5	27.2	28.7
16	27.5	25.9	23.0	---	21.7	20.5	24.5	27.2	33.0	29.1	28.3	28.6
17	26.0	25.5	23.4	---	21.8	21.5	24.5	27.6	32.8	29.6	29.1	28.7
18	25.0	25.7	23.2	---	21.8	22.5	23.5	28.1	32.4	29.8	29.8	28.8
19	24.5	25.9	23.0	---	21.5	23.5	23.5	28.4	31.9	29.9	---	28.9
20	24.5	26.3	23.0	---	22.0	24.0	24.0	29.4	31.6	29.3	29.8	28.8
21	24.5	26.3	23.2	---	23.0	24.0	24.5	29.7	31.9	28.6	29.9	29.1
22	24.5	25.7	22.2	---	23.4	24.0	24.5	29.6	32.3	29.0	29.8	29.0
23	24.5	25.3	22.3	---	24.0	24.5	25.5	29.3	33.0	29.1	29.8	28.4
24	25.0	25.6	22.5	---	22.0	23.5	27.0	29.4	32.9	28.9	29.8	27.5
25	25.0	25.6	22.8	---	21.8	23.5	27.0	29.3	32.3	28.8	30.2	27.6
26	25.5	25.6	22.3	---	22.9	24.0	26.0	29.1	31.8	28.8	30.8	27.6
27	26.5	25.8	21.0	---	23.3	22.5	25.5	29.3	30.7	29.0	31.4	27.7
28	26.0	25.9	20.1	---	24.3	24.0	26.0	29.1	29.9	29.1	31.6	27.6
29	25.5	26.0	19.6	---	---	25.0	26.5	28.6	30.7	28.9	31.6	27.2
30	24.5	26.1	19.4	---	---	23.5	26.5	28.5	30.3	28.9	31.7	27.2
31	25.5	---	18.1	---	---	22.0	---	29.2	---	29.4	32.1	---
MEAN	---	---	22.6	---	---	22.2	22.6	28.7	31.5	29.9	---	28.4
MAX	---	---	25.7	---	---	25.0	27.0	30.0	33.0	32.4	---	31.2
MIN	---	---	18.1	---	---	19.0	17.0	26.0	29.1	28.6	---	27.1

SOUTH FLORIDA

FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST

02256500 FISHEATING CREEK AT PALMDALE, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 24...	1200	1.49	17	220	6.2	26.0	0.60	6.3	--	--
JAN 07...	0933	4.92	388	195	7.3	16.0	0.60	6.4	--	--
FEB 04...	0828	1.92	28	170	6.9	18.5	0.70	6.7	--	--
MAY 06...	1007	0.67	1.0	273	6.5	27.0	1.2	5.7	70	500
JUN 29...	1000	0.68	1.2	316	6.8	27.5	2.5	5.8	E60	E2
AUG 31...	0918	1.43	15	142	7.4	30.0	0.50	5.6	62	110

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 24...	11	4.9	21	7.5	--	26	42	0.10	3.6	157
JAN 07...	9.2	4.4	18	3.2	10	27	41	<0.10	6.1	153
FEB 04...	12	6.2	27	3.8	17	27	55	<0.10	2.4	184
MAY 06...	14	6.9	23	3.3	23	31	45	0.10	1.8	196
JUN 29...	12	7.5	29	4.0	--	30	61	0.20	1.3	199
AUG 31...	7.8	3.5	14	0.70	15	20	25	0.10	3.1	124

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 24...	<0.010	0.180	0.040	0.050	1.5	0.170	0.160	0.180	1	33
JAN 07...	<0.010	<0.100	0.020	0.020	1.2	0.060	0.050	0.020	3	72
FEB 04...	<0.010	<0.100	0.040	0.020	1.3	0.080	0.070	0.060	20	85
MAY 06...	<0.010	<0.100	0.070	0.070	2.0	0.160	0.140	0.120	6	67
JUN 29...	<0.010	<0.100	0.100	0.100	1.4	0.180	0.180	0.100	22	95
AUG 31...	<0.010	<0.100	0.090	0.070	1.8	0.100	0.060	0.040	13	92

SOUTH FLORIDA

FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST

02256500 FISHEATING CREEK AT PALMDALE, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 24...	1200	120	<1	18	<0.5	1	<1	<3	14	380	<5
MAY 06...	1007	100	<1	28	<0.5	<1	<1	--	2	520	<5
JUN 29...	1000	60	<1	27	<0.5	<1	4	<3	3	340	<5
AUG 31...	0918	110	<1	14	<0.5	<1	<1	<3	2	510	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 24...	4	15	--	<10	5	<1	1.0	540	<6	28
MAY 06...	4	14	0.2	<10	<1	<1	<1.0	750	<6	13
JUN 29...	4	13	1.7	<10	3	<1	<1.0	860	<6	18
AUG 31...	<4	14	<0.1	<10	<1	<1	<1.0	410	<6	13

SOUTH FLORIDA

181

FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST

02257800 HARNEY POND CANAL AT S-71, NEAR LAKEPORT, FL

LOCATION.--27°02'00", long 81°84'15", in NE¼ sec.1, T.40 S., R.32 E., Glades County, Hydrologic Unit 03090103, near left bank 220 ft upstream from control structure 71, 0.1 mi west of State Highway 721, 2.3 mi upstream from bridge on State Highway 78, and 5.2 mi northeast of Lakeport.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1962 to current year.

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

REMARKS.--Records fair. Flow may be diverted to Indian Prairie Canal by the combined operation of structures 70 and 75 upstream.

COOPERATION.--Gate-operation record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--25 years, 202 ft³/s, 146,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,670 ft³/s, Mar. 27, 1970; maximum gage height, 25.90 ft, June 8, 1968; no flow for many days each year; minimum gage height, 12.97 ft, Feb. 9, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 960 ft³/s, Sept. 9; maximum gage height, 20.51 ft, Aug. 17; no flow for many days; minimum gage height, 18.03 ft, July 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	217	.00	665	212	.00	628	.00	134	94	804	.00
2	.00	.00	.00	361	216	.00	695	.00	.00	116	496	.00
3	.00	132	.00	108	345	.00	156	.00	.00	.00	514	.00
4	100	.00	.00	383	256	.00	63	.00	.00	.00	573	233
5	.00	.00	.00	535	.00	.00	74	.00	.00	.00	587	568
6	.00	131	.00	353	222	.00	209	.00	.00	.00	378	420
7	.00	.00	.00	191	129	405	181	.00	.00	.00	214	.00
8	.00	.00	.00	50	160	320	292	.00	.00	.00	249	949
9	.00	.00	.00	100	.00	182	211	.00	6.0	.00	216	960
10	93	.00	.00	221	.00	261	326	.00	.00	.00	52	674
11	.00	.00	.00	.00	166	.00	571	106	.00	.00	305	720
12	116	.00	.00	87	285	94	423	228	.00	.00	154	904
13	.00	.00	.00	.00	.00	203	505	94	.00	.00	611	555
14	.00	.00	.00	217	190	.00	418	135	.00	.00	255	573
15	82	.00	.00	.00	330	.00	475	355	.00	.00	115	226
16	.00	.00	.00	.00	199	.00	426	333	.00	101	.00	433
17	.00	.00	.00	.00	122	.00	431	526	93	.00	267	.00
18	.00	.00	.00	.00	147	.00	287	245	.00	.00	.00	.00
19	.00	.00	.00	87	148	.00	380	258	.00	.00	.00	350
20	99	.00	.00	127	125	.00	288	220	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	396	292	.00	73	.00	.00
22	.00	299	.00	.00	339	.00	328	276	.00	87	.00	.00
23	.00	356	.00	.00	.00	.00	154	226	.00	.00	.00	.00
24	.00	231	.00	.00	204	.00	.00	.00	.00	.00	.00	.00
25	.00	140	.00	.00	179	.00	178	111	.00	.00	.00	153
26	.00	.00	.00	.00	176	327	176	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	166	688	.00	108	.00	.00	.00	200
28	.00	.00	.00	123	.00	496	.00	.00	.00	.00	.00	330
29	.00	106	.00	234	---	562	.00	106	.00	.00	.00	.00
30	.00	.00	.00	374	---	537	100	.00	94	.00	.00	201
31	159	---	.00	247	---	755	---	.00	---	160	.00	---
TOTAL	741.00	1612.00	0.00	4463.00	4316.00	4830.00	8371.00	3619.00	327.00	631.00	5790.00	8449.00
MEAN	23.9	53.7	.00	144	154	156	279	117	10.9	20.4	187	282
MAX	159	356	.00	665	345	755	695	526	134	160	804	960
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	1470	3200	.0	8850	8560	9580	16600	7180	649	1250	11480	16760

CAL YR 1986 TOTAL 55493.00 MEAN 152 MAX 1710 MIN .00 AC-FT 110100
WTR YR 1987 TOTAL 43149.00 MEAN 118 MAX 960 MIN .00 AC-FT 85590

SOUTH FLORIDA

FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST

02259200 INDIAN PRAIRIE CANAL AT S-72, NEAR OKEECHOBEE, FL

LOCATION.--Lat 27°05'35", long 81°00'25", in SE¼ sec.10, T.39 S., R.33 E., Glades County, Hydrologic Unit 03090103, near left bank 230 ft upstream from control structure 72, 2.6 mi upstream from bridge on State Highway 78, and 15 mi southwest of Okeechobee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage and deflection-meter recorders. Datum of gage is 9.0 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--June 22-25. Records fair. Flow regulated by operation of structure 72, by storage releases upstream at structures 68, 75, and 82, and several small diversions for irrigation. Flow may be diverted to Harney Pond Canal by the combined operation of structures 70 and 75.

COOPERATION.--Gate-operation record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--25 years, 41.7 ft³/s, 30,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,130 ft³/s, Oct. 3, 1969; maximum gage height, 14.21 ft, June 19, 1972; no flow for many days each year; minimum gage height, 6.55 ft, Oct. 11, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 271 ft³/s, Jan. 5; maximum gage height, 12.38 ft, Jan. 2; no flow for many days; minimum gage height, 8.25 ft, Oct. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	153	.00	.00	65	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	162	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	142	.00	.00	.00	20	.00	.00	.00	.00
5	.00	.00	.00	271	.00	.00	.00	5.0	.00	.00	.00	.00
6	.00	.00	.00	117	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	113	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	59	.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	34	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	64	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	62	.00
15	.00	.00	.00	.00	.00	.00	.00	68	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	68	.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	60	.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	55	.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	---	59	---	.00	---	.00	.00	---
TOTAL	0.00	55.00	0.00	992.00	0.00	118.00	65.00	221.00	0.00	0.00	126.00	0.00
MEAN	.00	1.83	.00	32.0	.00	3.81	2.17	7.13	.00	.00	4.06	.00
MAX	.00	55	.00	271	.00	59	65	68	.00	.00	64	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	109	.0	1970	.0	234	129	438	.0	.0	250	.0

CAL YR 1986 TOTAL 7592.00 MEAN 20.8 MAX 636 MIN .00 AC-FT 15060
WTR YR 1987 TOTAL 1577.00 MEAN 4.32 MAX 271 MIN .00 AC-FT 3130

SOUTH FLORIDA

FISHEATING CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTHWEST

02259200 INDIAN PRAIRIE CANAL AT S-72, NEAR OKEECHOBEE, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.60	11.09	10.32	11.93	11.60	11.06	11.65	10.87	11.25	9.97	11.79	9.29
2	10.52	11.15	10.73	11.39	11.60	10.96	11.74	11.09	11.05	9.74	12.04	9.20
3	10.43	11.13	10.91	11.56	11.54	10.84	11.88	11.32	11.09	10.03	11.89	9.53
4	9.99	11.10	10.96	11.76	11.46	10.63	11.90	11.32	11.09	10.25	11.71	9.86
5	9.60	11.01	11.07	11.71	11.51	10.40	11.86	11.19	11.17	10.37	11.60	10.19
6	9.29	10.94	11.00	11.74	11.60	10.32	11.83	11.21	11.30	10.44	11.40	10.45
7	9.30	10.98	10.93	11.73	11.63	10.89	11.84	11.30	11.38	10.29	11.24	10.62
8	10.09	11.22	10.84	11.98	11.63	11.64	11.84	11.34	11.24	9.96	11.33	11.20
9	10.47	11.28	10.77	12.05	11.62	11.82	11.83	11.45	10.50	9.87	11.28	11.52
10	10.55	11.21	10.67	12.02	11.58	12.00	11.76	11.62	10.14	9.72	11.17	11.51
11	10.72	10.94	10.63	11.94	11.47	11.94	11.73	11.67	10.26	9.71	11.11	11.44
12	10.82	10.75	10.67	11.75	11.38	11.87	11.75	11.85	10.30	9.86	11.24	11.34
13	10.92	10.68	10.81	11.67	11.36	11.82	11.75	11.90	10.17	9.97	11.76	11.26
14	11.21	10.64	10.89	11.68	11.50	11.75	11.50	11.85	10.08	10.03	11.93	11.20
15	11.07	10.61	10.90	11.68	11.60	11.71	11.38	11.83	9.96	10.06	11.64	11.11
16	10.41	10.58	10.63	11.67	11.66	11.64	11.42	11.68	9.83	10.20	11.95	11.02
17	10.09	10.50	10.03	11.66	11.64	11.60	11.44	11.87	10.04	10.55	11.94	10.95
18	10.76	10.34	9.57	11.64	11.55	11.66	11.42	11.64	10.19	10.85	11.53	10.89
19	11.17	10.32	9.18	11.63	11.47	11.72	11.39	11.99	10.52	11.01	11.21	10.82
20	11.33	10.43	9.45	11.61	11.44	11.73	11.51	12.01	10.41	11.10	11.01	10.73
21	11.16	10.19	9.70	11.58	11.59	11.73	11.42	11.97	10.31	11.14	10.95	10.67
22	10.45	10.33	9.81	11.60	11.66	11.72	11.10	11.97	10.17	10.92	10.93	11.23
23	9.88	10.41	9.67	11.60	11.61	11.59	10.75	12.00	9.90	10.82	10.89	11.87
24	9.47	10.43	9.52	11.57	11.37	11.16	10.46	11.98	9.74	10.86	10.86	11.95
25	9.12	10.91	9.67	11.63	11.00	10.90	10.51	11.96	10.00	10.90	10.74	11.82
26	8.82	11.63	9.78	11.64	11.07	10.75	10.53	11.90	10.15	10.92	10.51	11.62
27	8.54	10.99	9.95	11.62	11.22	10.87	10.55	11.70	10.17	10.94	9.78	11.43
28	8.48	10.61	10.19	11.60	11.23	11.23	10.73	11.46	10.35	10.94	9.43	11.32
29	9.59	10.40	10.32	11.54	---	11.75	10.82	11.35	10.50	11.18	9.51	11.27
30	10.91	10.26	10.36	11.54	---	11.97	10.89	11.33	10.50	11.21	9.59	11.22
31	11.00	---	10.50	11.57	---	11.70	---	11.32	---	11.39	9.54	---
MEAN	10.22	10.77	10.34	11.69	11.49	11.40	11.37	11.61	10.46	10.49	11.08	10.95
MAX	11.33	11.63	11.07	12.05	11.66	12.00	11.90	12.01	11.38	11.39	12.04	11.95
MIN	8.48	10.19	9.18	11.39	11.00	10.32	10.46	10.87	9.74	9.71	9.43	9.20
CAL YR 1986	MEAN 11.03	MAX 12.04	MIN 8.48									
WTR YR 1987	MEAN 10.99	MAX 12.05	MIN 8.48									

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02262900 BOGGY CREEK NEAR TAFT, FL

LOCATION.--Lat 28°22'16", long 81°18'39", in NE¼ sec.28, T.24 S., R.30 E., Orange County, Hydrologic Unit 03090101, on left bank 450 ft downstream from Boggy Creek Swamp, 2.0 mi upstream from bridge on State Highway 530, 3.5 mi upstream from mouth, and 5.5 mi southeast of Taft.

DRAINAGE AREA.--83.6 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 56.08 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Auxiliary water-stage recorder on the south side of East Lake Tohopekaliga since Oct. 1, 1973, and prior to July 19, 1968. From July 19, 1968, to Sept. 30, 1973, auxiliary water-stage recorder at St. Cloud Canal above S-59.

REMARKS.--Records good. Some diversion to ground water through drainage wells in lakes upstream from station.

AVERAGE DISCHARGE.--28 years, 46.1 ft³/s, 7.49 in/yr, 33,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,680 ft³/s, Mar. 18, 1960, gage height, 13.64 ft, from floodmarks; no flow May 19, 1981; May 18-21, June 9, 1985; minimum gage height, 1.66 ft, May 18, 19, 20, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 826 ft³/s, Mar. 31, gage height, 10.42 ft; minimum discharge 2.9 ft³/s, June 4, gage height, 2.11 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	30	24	58	19	23	780	17	4.6	35	29	12
2	21	36	26	70	19	25	693	17	4.1	50	29	13
3	19	44	28	63	18	26	593	16	3.6	70	30	14
4	17	44	26	63	17	25	500	16	3.4	65	42	40
5	15	72	24	67	17	23	409	15	3.6	55	51	55
6	21	51	23	69	18	21	337	15	5.5	50	78	65
7	77	43	21	62	20	56	280	14	11	70	77	66
8	88	38	20	56	30	81	231	13	13	80	64	54
9	69	34	18	50	28	87	197	12	10	70	56	46
10	93	32	17	46	29	71	164	15	9.0	60	47	42
11	113	31	19	41	25	59	131	19	8.0	55	55	45
12	161	31	18	37	23	50	110	19	7.0	50	55	56
13	136	28	16	34	22	44	95	20	6.5	45	50	69
14	107	25	15	32	20	39	83	18	6.0	50	49	68
15	88	23	14	30	20	34	82	17	6.0	55	46	63
16	79	22	14	28	23	30	83	15	5.5	58	43	57
17	72	21	13	27	27	27	81	13	4.5	51	35	51
18	56	19	13	27	28	26	89	15	4.5	53	28	47
19	48	19	13	26	28	30	76	23	5.5	86	27	42
20	42	21	13	25	26	28	65	18	6.0	123	25	41
21	37	21	12	25	30	26	56	14	5.5	94	32	42
22	33	21	12	32	28	25	47	12	5.0	95	33	41
23	30	20	17	30	25	23	40	11	4.5	83	34	45
24	27	23	60	28	24	21	35	9.4	4.5	71	28	44
25	25	29	61	28	24	20	30	8.6	5.0	63	23	42
26	23	24	54	26	23	42	27	7.8	7.0	56	20	37
27	32	22	44	24	23	134	25	7.1	9.0	48	23	33
28	31	21	36	23	22	204	23	6.7	13	46	23	32
29	29	20	31	22	---	315	21	6.0	17	48	17	29
30	32	21	28	21	---	568	19	5.3	25	36	15	35
31	32	---	36	20	---	796	---	4.9	---	31	13	---
TOTAL	1676	886	766	1190	656	2979	5402	419.8	222.8	1902	1177	1326
MEAN	54.1	29.5	24.7	38.4	23.4	96.1	180	13.5	7.43	61.4	38.0	44.2
MAX	161	72	61	70	30	796	780	23	25	123	78	69
MIN	15	19	12	20	17	20	19	4.9	3.4	31	13	12
CFSM	.65	.35	.30	.46	.28	1.15	2.15	.16	.09	.73	.45	.53
IN.	.75	.39	.34	.53	.29	1.33	2.40	.19	.10	.85	.52	.59

CAL YR 1986 TOTAL 15481.45 MEAN 42.4 MAX 422 MIN .19 AC-FT 30710 CFSM .51 IN. 6.89
WTR YR 1987 TOTAL 18602.6 MEAN 51.0 MAX 796 MIN 3.4 AC-FT 36900 CFSM .61 IN. 8.28

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02263800 SHINGLE CREEK AT AIRPORT, NEAR KISSIMMEE, FL

LOCATION.--Lat 28°18'14", long 81°27'04", in NW¼ sec.19, T.25 S., R.29 E., Osceola County, Hydrologic Unit 03090101, near center of span on downstream side of bridge on U.S. Highway 192, 1.0 mi northwest of Kissimmee Airport, 3.0 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--29 years, 71.1 ft³/s, 10.82 in/yr, 51,510 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,320 ft³/s, Mar. 18, 1960, gage height, 11.00 ft; no flow for many days in some years; minimum gage height, 2.21 ft, June 9, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,680 ft³/s, Mar. 31, gage height, 9.75 ft; minimum, 5.7 ft³/s, June 3,4,5,24, gage height, 3.97 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	59	89	85	43	39	1570	16	7.1	67	48	22
2	58	58	99	86	37	41	1350	16	6.2	87	53	21
3	55	65	99	96	31	43	1040	15	5.8	95	50	27
4	52	91	96	113	26	48	705	13	5.8	103	65	61
5	48	115	93	119	25	51	518	12	9.6	98	69	80
6	46	121	88	113	25	48	418	13	29	115	52	124
7	58	116	81	110	25	88	351	13	35	126	53	169
8	64	106	75	107	29	117	295	14	55	121	48	206
9	90	95	69	104	35	121	242	18	56	105	41	227
10	117	85	63	96	52	125	193	18	44	94	41	219
11	126	79	60	87	70	132	153	17	33	81	63	197
12	135	73	59	75	72	131	120	22	24	63	83	183
13	151	68	57	62	64	119	95	25	19	45	82	197
14	161	64	55	58	54	100	76	30	15	35	79	199
15	159	60	54	54	45	81	69	47	12	31	71	199
16	144	57	53	48	45	65	69	52	9.7	31	62	193
17	121	56	51	45	46	54	63	45	7.6	29	52	179
18	98	56	49	43	46	45	58	36	7.9	32	44	160
19	80	56	47	42	47	45	53	31	16	45	37	136
20	69	58	44	38	47	43	47	34	12	61	38	109
21	62	59	42	35	48	42	42	33	7.8	78	48	85
22	58	61	41	41	46	43	37	32	6.1	91	62	80
23	55	62	42	45	43	40	33	31	6.1	94	76	89
24	51	61	62	49	39	36	30	27	5.8	89	85	70
25	48	74	61	54	38	32	27	23	8.8	75	81	58
26	46	88	62	57	37	50	25	19	11	63	67	51
27	53	88	64	55	37	117	23	15	14	58	52	45
28	53	87	64	51	38	170	22	13	21	61	38	40
29	54	85	60	49	---	391	20	11	37	62	30	36
30	61	83	57	47	---	1010	18	9.3	47	53	26	39
31	63	---	63	46	---	1620	---	8.1	---	50	24	---
TOTAL	2493	2286	1999	2110	1190	5087	7762	708.4	574.3	2238	1720	3501
MEAN	80.4	76.2	64.5	68.1	42.5	164	259	22.9	19.1	72.2	55.5	117
MAX	161	121	99	119	72	1620	1570	52	56	126	85	227
MIN	46	56	41	35	25	32	18	8.1	5.8	29	24	21
AC-FT	4940	4530	3970	4190	2360	10090	15400	1410	1140	4440	3410	6940
CFSM	.90	.85	.72	.76	.48	1.84	2.90	.26	.21	.81	.62	1.31
IN.	1.04	.95	.83	.88	.50	2.12	3.24	.30	.24	.93	.72	1.46

CAL YR 1986 TOTAL 35769 MEAN 98.0 MAX 745 MIN 21 AC-FT 70950 CFSM 1.10 IN. 14.92
WTR YR 1987 TOTAL 31668.7 MEAN 86.8 MAX 1620 MIN 5.8 AC-FT 62810 CFSM .97 IN. 13.21

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02264000 CYPRESS CREEK AT VINELAND, FL

LOCATION.--Lat 28°23'25", long 81°31'11", in NW¼ sec.21, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, at upstream side of culverts on State Highway 535, 1.0 mi west of Vineland.

DRAINAGE AREA.--30.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 96.20 ft above National Geodetic Vertical Datum of 1929. Prior to June 13, 1946, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Sept. 6-30. Records fair. Some diversions by pumping above station for irrigation.

AVERAGE DISCHARGE.--42 years, 5.53 ft³/s, 2.48 in/yr, 4,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 354 ft³/s, Sept. 11, 1960, gage height, 4.66 ft; no flow for many days in most years; creek dry at gage for many days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	0425	*70	*3.39	No other peaks greater than base discharge.			

Minimum discharge, 0.13 ft³/s, Oct. 26,27, June 18; minimum gage height, 1.48 ft, Oct. 26,27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	.32	1.4	1.7	.50	1.2	57	6.5	2.4	5.0	2.9	.66
2	.68	.50	1.6	1.5	.45	1.5	48	5.9	2.1	4.1	2.7	.61
3	.60	.56	1.5	1.3	.41	1.4	43	5.5	1.8	3.5	2.3	1.9
4	.52	.56	1.4	1.7	.38	1.2	39	5.0	1.5	5.7	1.9	9.8
5	.45	.58	1.2	1.9	.36	1.1	35	5.2	1.3	4.4	1.5	13
6	.39	.60	1.2	1.7	.35	1.0	32	6.8	1.4	3.3	1.2	9.9
7	.35	.59	1.1	1.6	.35	4.9	30	6.3	1.3	2.6	.96	8.0
8	.33	.60	1.1	1.5	.80	6.9	27	5.6	1.1	2.1	.75	6.6
9	.29	.60	1.0	1.4	.70	6.1	25	5.2	.88	1.6	.64	5.9
10	.38	.60	.93	1.3	.67	5.3	23	5.0	.76	1.3	.54	7.5
11	.49	.56	.93	1.2	.63	4.6	22	5.1	.65	1.0	.57	6.8
12	.48	.56	.91	1.1	.61	4.1	20	5.3	.55	.80	.75	6.3
13	.45	.56	.84	.96	.57	3.6	18	5.3	.42	.70	.64	6.8
14	.42	.53	.77	.89	.54	3.1	17	5.4	.35	.73	.62	6.7
15	.42	.53	.73	.82	.50	2.8	17	5.6	.28	.61	.68	6.2
16	.41	.52	.70	.76	.61	2.5	16	5.7	.22	.64	.58	6.1
17	.37	.50	.68	.73	.75	2.3	16	5.9	.17	.78	.43	5.9
18	.35	.47	.66	.70	.92	2.1	15	6.2	.14	.90	.33	5.5
19	.32	.45	.62	.68	.96	2.6	14	6.4	.30	1.2	1.4	5.5
20	.28	.48	.60	.67	.92	2.4	13	6.7	.37	2.5	4.8	5.3
21	.24	.49	.56	.70	1.0	2.1	12	6.5	.38	2.5	9.7	5.2
22	.21	.46	.51	.95	1.1	1.9	12	6.2	.38	2.1	7.4	5.1
23	.19	.43	.50	.95	1.1	1.8	11	5.9	1.2	1.6	5.6	4.7
24	.17	.57	.83	.84	.98	1.6	11	5.5	1.1	1.3	4.1	4.6
25	.15	.84	.77	.81	1.1	1.5	10	5.2	.83	1.2	2.9	4.5
26	.14	.72	.73	.79	.97	5.4	9.5	4.8	1.4	1.9	2.2	4.5
27	.16	.69	.70	.72	.89	13	8.9	4.4	4.0	1.7	1.8	5.7
28	.24	.65	.68	.67	.79	14	8.4	3.9	3.8	2.0	1.5	5.3
29	.26	.63	.64	.64	---	34	7.7	3.4	5.6	2.8	1.2	4.9
30	.31	.90	.61	.61	---	49	7.0	3.0	5.5	2.1	.98	4.8
31	.33	---	.93	.56	---	66	---	2.7	---	2.2	.79	---
TOTAL	11.11	17.05	27.33	32.35	19.91	251.0	624.5	166.1	42.18	64.86	64.36	174.27
MEAN	.36	.57	.88	1.04	.71	8.10	20.8	5.36	1.41	2.09	2.08	5.81
MAX	.73	.90	1.6	1.9	1.1	66	57	6.8	5.6	5.7	9.7	13
MIN	.14	.32	.50	.56	.35	1.0	7.0	2.7	.14	.61	.33	.61
AC-FT	22	34	54	64	39	498	1240	329	84	129	128	346
CFSM	.01	.02	.03	.03	.02	.27	.69	.18	.05	.07	.07	.19
IN.	.01	.02	.03	.04	.02	.31	.77	.20	.05	.08	.08	.21

CAL YR 1986 TOTAL 706.15 MEAN 1.93 MAX 16 MIN .00 AC-FT 1400 CFSM .06 IN. .87
WTR YR 1987 TOTAL 1495.02 MEAN 4.10 MAX 66 MIN .14 AC-FT 2970 CFSM .14 IN. 1.84

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02264000 CYPRESS CREEK AT VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1966, 1969-74, 1976-80, 1982 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 03...	1039	148	3.2	22.0	560	<0.10	2.1	1.5	2.8	8.7
MAR 02...	1040	120	3.7	16.5	320	0.50	3.2	1.4	2.6	9.4
JUN 22...	1310	--	--	--	320	0.10	--	2.1	3.3	11
AUG 18...	1115	135	3.6	25.0	400	--	3.8	2.1	3.0	10

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 03...	1.1	<1.0	47	23	0.020	0.020	1.5	0.030	0.020	80
MAR 02...	1.5	<1.0	22	24	<0.020	0.020	1.1	0.030	0.020	51
JUN 22...	2.3	<0.1	--	31	<0.020	0.050	2.0	0.020	0.020	--
AUG 18...	2.5	<1.0	35	22	<0.020	0.050	1.6	0.040	0.030	60

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
JUN 22...	200	<1	<10	1	<10	6	930
AUG 18...	280	<1	<10	1	<10	2	830

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
JUN 22...	<5	<10	0.40	1	<1	<10
AUG 18...	<5	20	<0.10	5	<1	<10

DATE	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG 18...	<0.1	<1	<0.10	<1.0	<0.010	<0.1	<0.1	1.0	<0.010	<0.1	<0.010

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02264000 CYPRESS CREEK AT VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...	<0.5	0.020	<0.1	<0.01	<0.1	0.070	0.1	<0.010	<0.1	<0.010	<0.1
DATE	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	
AUG 18...	<0.01	<0.1	<0.010	<0.1	<0.010	<0.1	<0.01	<0.010	<0.1	<0.01	
DATE	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL THION, TOT. IN BOTTOM MATL. (UG/L)	METHYL THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PER- THANE TOTAL (UG/L)	
AUG 18...	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.1	
DATE	PER- THANE IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	
AUG 18...	<1.00	<1	<10	<0.01	<0.1	<0.01	<0.01	0.1	<0.01	<0.01	

ST. JOHNS RIVER
KISSIMMEE RIVER BASIN

02264051 BLACK LAKE OUTLET AT S-101A AT BUENA VISTA, FL

LOCATION.--Lat 28°22'28", long 81°31'01", in NE¼ sec.28, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on right upstream wingwall of drop culvert at Buena Vista Drive at Buena Vista, and 1.7 mi upstream from Bonnet Creek.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1986 to September 1987.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is National Geodetic Vertical Datum of 1929 (Reedy Creek Improvement District bench mark).

REMARKS.--Estimated daily discharges: Oct. 1-9. Records good except for estimated daily discharges and those below 5 ft³/s, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 69 ft³/s, Mar. 29, gage height 95.26 ft; minimum 0.15 ft³/s, Oct. 20, gage height 94.49 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	1.1	5.7	4.3	.51	2.9	14	1.3	.75	2.3	6.0	1.5
2	.50	1.2	5.0	1.5	.50	2.0	7.9	.85	.75	1.9	4.2	2.6
3	.45	.86	2.5	1.2	.51	1.3	5.1	.75	.83	5.3	3.8	8.3
4	.45	.75	1.6	2.4	.70	1.2	3.8	.77	1.0	3.8	2.5	14
5	.40	.75	1.4	2.1	.81	1.0	3.0	1.3	1.2	2.3	2.0	6.6
6	.80	.75	1.0	1.4	1.0	1.0	2.8	1.4	1.1	1.7	1.6	3.5
7	.75	.87	.99	1.2	1.1	18	2.8	1.1	.66	1.4	1.5	2.6
8	.60	.78	1.0	1.3	2.4	8.1	2.7	1.1	.63	1.4	1.4	2.1
9	.50	.78	1.0	1.2	1.2	3.2	2.6	1.1	.76	1.2	1.4	1.9
10	1.7	.78	1.0	1.3	1.0	2.2	2.2	1.2	.82	1.2	1.8	1.8
11	1.0	.77	1.0	1.2	1.0	1.7	2.7	1.2	.78	1.3	3.1	1.9
12	.88	.75	1.0	1.1	.99	1.5	2.2	1.2	.60	1.2	2.3	2.2
13	.77	.75	.94	1.0	1.0	1.4	1.9	1.5	.45	1.9	1.5	2.5
14	.78	.43	.89	1.0	1.0	1.3	2.1	1.6	.42	1.8	1.9	2.0
15	.79	.48	1.0	.67	1.1	1.4	3.9	2.4	.42	1.9	1.6	1.9
16	.67	.50	1.3	.55	2.4	1.2	3.0	1.6	.44	1.7	1.3	2.6
17	.47	.54	1.2	.71	1.7	1.3	2.2	1.3	.50	1.6	1.3	3.2
18	.44	.69	1.2	.70	1.9	1.2	2.0	1.2	10	2.2	1.2	6.8
19	.40	.92	1.2	.73	1.4	2.2	1.9	1.4	2.7	4.2	11	2.5
20	.37	.97	1.2	.75	1.2	1.5	1.8	1.4	1.5	6.1	14	2.3
21	.41	.64	1.0	.87	1.7	1.3	1.9	1.3	1.1	3.7	9.0	2.3
22	.49	.50	1.1	1.2	1.5	1.2	1.9	1.2	5.3	2.2	3.9	1.8
23	.73	.53	1.3	.93	1.4	1.3	1.9	1.1	3.0	1.8	2.8	1.8
24	.61	2.6	2.4	.75	1.3	1.2	1.9	1.3	1.5	1.6	2.1	1.8
25	.43	2.4	1.3	.77	1.5	1.3	1.8	1.1	1.3	1.5	1.8	1.7
26	.49	1.1	1.0	.74	.98	16	1.6	1.1	14	2.1	1.7	1.1
27	1.4	1.0	1.0	.59	.97	16	1.5	1.0	5.7	1.8	1.6	1.0
28	1.0	1.0	.98	.52	.88	8.9	1.4	1.0	3.8	6.7	1.6	1.0
29	.94	1.0	.98	.67	---	40	1.5	.78	3.1	5.4	1.5	1.0
30	1.0	1.5	.98	.68	---	35	1.5	.58	2.8	2.3	1.5	5.4
31	.91	---	4.3	.55	---	35	---	.62	---	8.7	1.4	---
TOTAL	21.73	27.69	48.46	34.58	33.65	212.8	87.5	36.75	67.91	84.2	94.3	91.7
MEAN	.70	.92	1.56	1.12	1.20	6.86	2.92	1.19	2.26	2.72	3.04	3.06
MAX	1.7	2.6	5.7	4.3	2.4	40	14	2.4	14	8.7	14	14
MIN	.37	.43	.89	.52	.50	1.0	1.4	.58	.42	1.2	1.2	1.0

WTR YR 1987 TOTAL 841.27 MEAN 2.30 MAX 40 MIN .37

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02264100 BONNET CREEK NEAR VINELAND, FL

LOCATION.--Lat 28°19'58", long 81°31'20", in NW¼ sec.9, T.25 S., R.28 E., Osceola County, Hydrologic Unit 03090101, on downstream side of bridge on U.S. Highway 192, about 1 mi upstream from Reedy Creek Swamp, and 4.5 mi south of Vineland.

DRAINAGE AREA.--56.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1966 to current year. Results of miscellaneous discharge measurements for some periods prior to May 1966 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder and steel sheet-pile weir with sluice gate. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Oct. 1, 1968, at datum 37.96 ft higher.

REMARKS.--Records poor. Since October 1968, flow regulated by automatic gates upstream and since December 1970, by control structure S-11-temporary 0.5 mi downstream. 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-temporary did not regulate the stream because of a washout of the bank around the structure.

AVERAGE DISCHARGE.--21 years, 22.9 ft³/s, 16,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 894 ft³/s, Mar. 29, 1987, maximum gage height, 78.58 ft, Nov. 1, 1969; no flow for many days in most years; minimum gage height, 68.18 ft, Oct. 18,23,25, 1985, estimated, result of washout around 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 894 ft³/s, Mar. 29; gage height, 75.75 ft, Mar. 29; no flow July 22-26; minimum gage height, 69.55 ft, June 10,11,12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	21	32	35	21	24	232	23	18	22	29	10
2	20	20	31	26	21	22	124	21	18	14	17	11
3	21	23	25	24	21	22	91	19	18	14	16	16
4	21	24	23	23	21	24	77	19	18	12	14	59
5	22	23	22	27	21	22	69	21	19	16	14	50
6	39	23	21	19	21	24	60	28	20	15	14	27
7	17	22	21	21	20	103	55	29	19	14	13	25
8	17	22	21	21	24	58	64	27	18	14	11	25
9	17	22	21	22	22	31	57	27	16	14	11	21
10	28	21	20	23	22	18	54	26	16	14	11	20
11	30	21	20	23	21	27	50	24	16	13	11	19
12	28	21	20	22	22	29	47	23	16	13	12	18
13	27	21	20	21	22	24	46	23	16	13	14	22
14	26	20	20	21	23	20	44	23	16	13	13	22
15	26	20	19	21	22	21	47	23	16	13	11	20
16	25	20	19	21	25	21	57	23	16	13	13	20
17	25	20	19	21	24	20	58	22	16	13	12	20
18	24	20	19	21	23	20	55	21	17	12	11	23
19	22	21	19	22	22	22	51	39	20	13	24	19
20	22	21	19	21	22	20	49	27	21	12	50	14
21	20	20	18	21	21	20	31	13	20	12	49	16
22	19	19	18	22	21	19	34	17	19	.00	15	18
23	18	19	19	21	21	19	28	24	23	.00	17	17
24	18	20	20	21	20	18	35	21	14	.00	15	16
25	18	20	21	20	20	18	30	20	13	.00	11	13
26	19	21	21	21	21	138	28	19	12	.00	10	12
27	22	21	20	21	21	110	30	19	41	2.1	11	11
28	22	20	20	21	21	64	28	18	17	9.9	11	11
29	24	20	20	21	---	491	26	18	16	17	11	12
30	25	22	21	21	---	507	25	18	16	19	11	14
31	22	---	23	21	---	516	---	18	---	12	10	---
TOTAL	705	628	652	686	606	2492	1682	693	541	349.00	492	601
MEAN	22.7	20.9	21.0	22.1	21.6	80.4	56.1	22.4	18.0	11.3	15.9	20.0
MAX	39	24	32	35	25	516	232	39	41	22	50	59
MIN	17	19	18	19	20	18	25	13	12	.00	10	10
AC-FT	1400	1250	1290	1360	1200	4940	3340	1370	1070	692	976	1190

CAL YR 1986 TOTAL 8605.72 MEAN 23.6 MAX 265 MIN .00 AC-FT 17070
WTR YR 1987 TOTAL 10127.00 MEAN 27.7 MAX 516 MIN .00 AC-FT 20090

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02264100 BONNET CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1971, 1973, 1976, 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV 04...	1420	--	--	--	--	--	--	--	--	--
NOV 06...	0957	122	5.7	24.0	240	0.80	2.2	11	4.0	6.7
JAN 06...	1255	128	7.2	16.0	180	2.5	8.2	--	--	--
MAR 03...	0955	115	6.7	18.5	120	7.8	4.6	13	3.7	7.6
MAR 31...	1345	79	--	--	--	--	--	--	--	--
MAY 28...	1250	126	6.8	26.0	--	--	3.8	--	--	--
JUN 22...	1100	--	--	--	240	0.20	--	10	3.5	8.0
JUL 29...	1115	--	--	--	--	--	--	--	--	--
AUG 18...	1045	120	6.1	25.0	200	--	0.7	10	3.2	8.3

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 04...	--	--	--	--	0.080	0.030	0.87	0.060	0.050	--
NOV 06...	2.4	25	33	15	0.140	0.040	0.92	0.080	0.050	38
JAN 06...	--	--	--	--	0.080	0.040	1.4	0.200	0.180	--
MAR 03...	2.4	30	17	16	0.110	0.050	0.52	0.120	0.070	15
MAR 31...	--	--	--	--	0.250	0.120	2.2	0.090	0.050	--
MAY 28...	--	--	--	--	0.020	0.030	1.0	0.060	0.030	--
JUN 22...	3.2	16	11	20	<0.020	0.020	1.4	0.080	0.040	25
JUL 29...	--	--	--	--	0.020	0.010	1.4	0.070	0.040	--
AUG 18...	2.7	15	25	14	0.020	0.010	1.4	0.110	0.070	38

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
JUN 22...	300	<1	<10	<1	<10	5	720
AUG 18...	430	1	<10	1	<10	5	600

KISSIMMEE RIVER BASIN

02264100 BONNET CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

				LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)			
DATE												
JUN 22...				<5	10	<0.10	1	<1	20			
AUG 18...				<5	20	<0.10	3	<1	10			
DATE		PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG 18...		<0.1	<1	<0.10	<1.0	<0.010	<0.1	<0.1	1.0	<0.010	0.1	<0.010
DATE		DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...		0.1	<0.010	<0.1	<0.01	0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1
DATE		ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	
AUG 18...		<0.01	<0.1	<0.010	<0.1	<0.010	<0.1	<0.01	<0.010	<0.1	0.06	
DATE		MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PER- THANE TOTAL (UG/L)	
AUG 18...		<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.1	
DATE		PER- THANE IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	
AUG 18...		<1.00	<1	<10	<0.01	<0.1	0.05	<0.01	<0.1	<0.01	<0.01	

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02264495 SHINGLE CREEK AT CAMPBELL. FL

LOCATION.--Lat 28°16'01", long 81°26'53", in SE¼ sec.31, T.25 S., R.29 E., Osceola County, Hydrologic Unit 03090101, on right bank 200 ft downstream from bridge on county road, 300 ft downstream from Atlantic Coast Line Railroad bridge. 0.8 mi northeast of Campbell, and 2.5 mi upstream from Lake Tohopekaliga.

DRAINAGE AREA.--180 mi², approximately, includes part of watershed in Reedy Creek Swamp.

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Water-stage recorder for Lake Tohopekalliga at Kissimmee (station 02264900) used as auxiliary gage for this station.

REMARKS.--Estimated daily discharges: Mar. 13 to July 15, July 21-27. Records poor. Natural flow of stream affected by several canals, levees, and control structures which divert an undetermined amount of water into Shinkle Creek above station or into the Reedy Creek basin.

AVERAGE DISCHARGE.--19 years, 135 ft³/s, 97,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,070 ft³/s, Apr. 1, 1987, gage height, 60.78 ft; minimum daily discharge, 3.1 ft³/s, May 9-10, 1971; minimum gage height, 49.78 ft, May 10, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 2,070 ft³/s, Apr. 1, gage height 60.78 ft; minimum daily discharge, 13 ft³/s, June 24; minimum gage height observed, 50.39 ft, June 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	83	93	153	63	52	1980	70	28	104	96	45
2	77	82	102	127	63	58	1880	71	25	175	127	43
3	74	80	107	119	64	55	1690	62	23	189	152	56
4	71	86	101	147	64	56	1440	56	22	202	134	124
5	69	96	102	193	65	58	1120	55	26	171	174	164
6	67	119	101	161	66	56	866	70	39	188	106	179
7	75	116	92	143	66	258	712	68	56	219	95	202
8	77	102	88	137	67	346	622	57	69	248	77	237
9	81	89	85	130	68	249	459	60	71	208	63	264
10	115	87	82	116	68	202	354	83	63	167	59	269
11	141	83	76	114	72	187	324	76	51	134	99	254
12	146	77	76	99	76	182	280	72	44	109	166	245
13	159	79	82	91	76	170	244	72	36	93	142	258
14	177	74	76	87	72	150	221	81	32	81	131	251
15	187	69	72	84	71	128	192	78	27	75	127	247
16	177	65	72	81	72	102	190	90	22	84	104	242
17	154	63	69	80	73	88	168	86	19	90	87	233
18	123	60	65	78	72	72	161	73	25	78	74	215
19	104	61	67	71	72	61	148	73	33	99	69	192
20	81	60	65	80	67	55	134	76	27	117	109	166
21	76	65	68	77	71	51	122	74	22	151	116	141
22	75	67	66	75	76	57	111	66	18	193	102	138
23	71	70	62	82	70	50	100	64	15	203	104	179
24	70	72	111	79	60	47	93	60	13	182	109	141
25	67	75	92	82	58	45	88	57	18	136	105	118
26	64	84	82	82	54	86	84	51	27	98	94	105
27	76	89	77	77	51	173	78	45	38	95	80	97
28	77	91	77	73	49	382	73	43	49	95	69	90
29	76	90	63	69	---	545	70	38	60	99	58	86
30	81	92	61	66	---	1370	63	34	78	84	53	96
31	81	---	82	63	---	1950	---	31	---	77	47	---
TOTAL	3049	2426	2514	3116	1866	7341	14067	1992	1076	4244	3128	5077
MEAN	98.4	80.9	81.1	101	66.6	237	469	64.3	35.9	137	101	169
MAX	187	119	111	193	76	1950	1980	90	78	248	174	269
MIN	64	60	61	63	49	45	63	31	13	75	47	43
AC-FT	6050	4810	4990	6180	3700	14560	27900	3950	2130	8420	6200	10070
CAL YR 1986	TOTAL 57472		MEAN 157	MAX 961	MIN 28	AC-FT	114000					
WTR YR 1987	TOTAL 49896		MEAN 137	MAX 1980	MIN 13	AC-FT	98970					

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL

LOCATION.--Lat 28°23'05", long 81°37'00", in NW¼ sec.21, T.24 S., R.27 E., Orange County, Hydrologic Unit 03090101, near center of channel, 12 ft downstream from culverts on Hartzog Road, 7 mi west of Vineland.

DRAINAGE AREA.--12.4 mi².

PERIOD OF RECORD.--May 1966 to current year.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder. Datum of gage is 7.23 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Aug. 12-26. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--21 years, 2.92 ft³/s, 3.20 in/yr, 2,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62 ft³/s, Mar. 31, Apr. 1,2, 1987; gage height, 94.82 ft; no flow for many days each year; creek dry at gage for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62 ft³/s, Mar. 31, Apr. 1,2, gage height, 94.82 ft; no flow for many days; creek dry at gage for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.1	.05	.00	.17	1.6	62	3.7	4.4	.67	2.0	.00
2	1.1	1.2	.00	.00	.14	1.9	61	3.4	3.8	.44	1.8	.00
3	.96	1.2	.00	.00	.11	1.8	58	3.0	3.3	.46	1.6	.18
4	.78	1.1	.00	.04	.09	1.7	55	2.6	2.9	1.2	1.4	1.1
5	.63	.98	.00	.08	.10	1.6	49	2.4	2.7	.93	1.2	1.4
6	.52	.88	.00	.07	.18	1.4	43	2.8	3.1	.67	1.0	1.4
7	.53	.77	.00	.06	.22	3.2	38	2.5	2.7	.45	.84	1.2
8	.56	.69	.00	.05	.91	4.4	34	2.3	2.3	.31	.66	1.1
9	.52	.62	.00	.04	.92	4.4	30	2.2	1.9	.19	.58	1.0
10	2.6	.56	.00	.03	.92	4.5	27	2.2	1.7	.09	1.8	.84
11	3.1	.51	.00	.04	.98	4.4	24	2.1	1.5	.08	1.6	.75
12	3.3	.45	.00	.01	1.0	4.2	21	2.0	1.3	.06	1.5	.88
13	3.3	.39	.00	.00	1.0	3.9	19	1.9	1.1	.05	1.4	1.6
14	3.0	.30	.00	.00	1.0	3.7	18	3.1	.98	.03	1.3	1.4
15	2.9	.27	.00	.00	1.0	3.5	17	11	.76	.00	1.3	1.3
16	2.5	.22	.00	.00	1.1	3.3	16	13	.57	.11	1.2	1.1
17	2.2	.19	.00	.00	1.2	3.1	15	14	.38	.55	1.2	.97
18	1.9	.17	.00	.00	1.4	3.0	13	15	.25	.69	1.0	.82
19	1.6	.13	.00	.00	1.4	3.4	12	15	.19	.74	1.3	.68
20	1.4	.11	.00	.00	1.4	3.3	11	16	.13	1.2	1.7	.57
21	1.2	.07	.00	.13	1.4	3.1	10	15	.15	1.2	2.4	.48
22	1.1	.02	.00	.27	1.4	2.8	9.1	14	.08	1.1	2.4	.40
23	.96	.00	.00	.28	1.5	2.6	8.3	13	.06	.91	1.3	.43
24	.84	.00	.00	.28	1.5	2.4	7.6	12	.05	.68	.70	.39
25	.72	.00	.00	.28	1.5	2.3	7.1	10	.00	.54	.30	.30
26	.63	.00	.00	.28	1.5	5.8	6.4	9.1	.00	.71	.07	.22
27	1.3	.00	.00	.27	1.5	13	5.8	8.2	.06	2.1	.05	.15
28	1.3	.00	.00	.25	1.4	16	5.2	7.4	.12	1.7	.02	.10
29	1.2	.00	.00	.24	---	26	4.7	6.7	.41	1.8	.00	.09
30	1.2	.01	.00	.22	---	41	4.1	5.8	.85	1.6	.00	.15
31	1.1	---	.00	.19	---	60	---	5.0	---	1.7	.00	---
TOTAL	46.25	11.94	.05	3.11	26.94	237.3	691.3	226.4	37.74	22.96	33.62	21.00
MEAN	1.49	.40	.0	.10	.96	7.65	23.0	7.30	1.26	.74	1.08	.70
MAX	3.3	1.2	.05	.28	1.5	60	62	16	4.4	2.1	2.4	1.6
MIN	.52	.00	.00	.00	.09	1.4	4.1	1.9	.00	.00	.00	.00
AC-FT	92	24	.1	6.2	53	471	1370	449	75	46	67	42
CFSM	.12	.0	.0	.0	.08	.62	1.86	.59	.10	.06	.09	.06
IN.	.14	.0	.0	.0	.08	.71	2.07	.68	.11	.07	.10	.06

CAL YR 1986 TOTAL 1478.35 MEAN 4.05 MAX 38 MIN .00 AC-FT 2930 CFSM .33 IN. 4.44
WTR YR 1987 TOTAL 1358.59 MEAN 3.72 MAX 62 MIN .00 AC-FT 2690 CFSM .30 IN. 4.08

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-72, 1974, 1976-80, 1982 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 03...	0956	85	4.2	21.0	480	0.30	2.0	5.1	2.4	6.5
MAR 02...	1007	70	4.3	16.5	400	0.90	2.9	5.0	2.2	7.0
JUN 22...	1205	--	--	--	320	0.10	--	4.4	2.1	5.5
AUG 18...	1045	--	--	--	390	--	--	5.3	2.3	6.3

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 03...	1.3	<1.0	41	16	0.020	0.020	2.2	0.060	0.040	80
MAR 02...	0.60	<1.0	22	17	0.020	0.010	1.7	0.030	0.020	50
JUN 22...	0.70	<0.1	--	15	0.020	0.160	2.2	0.030	0.030	60
AUG 18...	0.90	<1.0	30	14	0.220	0.010	1.6	0.040	0.030	58

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
JUN 22...	200	<1	<10	<1	<10	5	830
AUG 18...	210	<1	<10	<1	<10	3	590

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
JUN 22...	<5	<10	0.10	<1	<1	10
AUG 18...	<5	20	<0.10	2	<1	<10

DATE	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG 18...	<0.1	<1	<0.10	<1.0	<0.010	<0.1	<0.1	<1.0	<0.010	<0.1	<0.010

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266200 WHITTENHORSE CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...	0.2	<0.010	0.4	<0.01	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1
DATE	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	
AUG 18...	<0.01	8.5	<0.010	<0.1	<0.010	<0.1	<0.01	<0.010	<0.1	<0.01	
DATE	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PER- THANE TOTAL (UG/L)	
AUG 18...	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.1	
DATE	PER- THANE IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	
AUG 18...	<1.00	<1	<10	<0.01	<0.1	<0.01	<0.01	1.0	<0.01	<0.01	

SOUTH FLORIDA
KISSIMEE RIVER BASIN

02266294 LATERAL 405 BELOW S-405 NEAR VINELAND, FL

WATER-QUALITY RECORDS

LOCATION.--Lat 28°23'39", long 81°35'07", in SW $\frac{1}{4}$ sec.14, T. 24S., R. 27E., 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, 1972, 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 03...	0802	150	6.4	23.5	320	0.50	4.2	--	--	--
MAR 02...	0845	135	6.7	18.5	280	1.4	5.6	16	4.7	8.7
JUN 22...	0900	--	--	--	400	0.30	--	16	4.9	8.1
AUG 18...	0915	--	--	--	130	--	--	15	4.3	7.3

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 03...	--	--	--	--	0.110	0.680	1.9	0.140	0.090	40
MAR 02...	3.2	29	23	21	0.360	0.090	1.2	0.100	0.050	30
JUN 22...	3.4	29	12	24	0.020	0.130	1.8	0.090	0.050	38
AUG 18...	3.3	27	23	14	<0.020	0.160	1.9	0.130	0.080	37

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
JUN 22...	300	<1	<10	<1	<10	10	820
AUG 18...	260	3	<10	<1	<10	4	520

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
JUN 22...	<5	20	<0.10	<1	<1	10
AUG 18...	<5	20	<0.10	3	<1	<10

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02266294 LATERAL 405 BELOW S-405 NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG 18...	<0.1	<1	<0.10	<1.0	<0.010	<0.1	<0.1	4.0	<0.010	0.1	<0.010

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...	0.1	<0.010	<0.1	<0.01	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1

DATE	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)
AUG 18...	<0.01	0.3	<0.010	<0.1	<0.010	<0.1	<0.01	<0.010	<0.1	0.30

DATE	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PER- THANE TOTAL (UG/L)
AUG 18...	0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.1

DATE	PER- THANE IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)
AUG 18...	<1.00	<1	<10	<0.01	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266300 REEDY CREEK NEAR VINELAND, FL

LOCATION.--Lat 28°19'57", long 81°34'48", in NE¼ sec.11, T.25 S., R.27 E., Osceola County, Hydrologic Unit 03090101, on downstream side of bridge on U.S. Highway 192, about 2.5 mi upstream from bridge on Interstate Highway 4, 6.5 mi southwest of Vineland, and 28 mi upstream from mouth.

DRAINAGE AREA.--75 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Water years 1960, 1962-66 (annual maximum), May 1966 to current year. Results of miscellaneous discharge measurements for some periods prior to May 1966 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is 66.37 ft above National Geodetic Vertical Datum of 1929. Sept. 26, 1962, to January 1966, crest-stage gage at site 100 ft upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--21 years, 32.1 ft³/s, 23,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,910 ft³/s, Sept. 11, 1960, gage height, 14.9 ft, from floodmark; no flow for many days in some years; minimum gage height, 8.18 ft, May 12, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 758 ft³/s, Mar. 31, gage height, 12.57 ft; minimum, 14 ft³/s, Dec. 12, 20, 21, 22, minimum gage height, 9.01 ft, Dec. 12, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	25	27	35	18	25	497	23	19	31	53	16
2	23	26	25	30	18	30	340	22	19	25	55	19
3	22	27	35	27	18	27	217	20	18	24	29	20
4	22	26	28	26	18	24	178	20	18	115	24	e43
5	22	25	20	29	18	22	158	21	18	103	22	e90
6	21	23	18	27	19	20	145	29	29	47	23	65
7	22	22	18	23	20	68	134	30	23	35	23	40
8	20	22	18	21	27	179	125	27	21	30	22	32
9	20	23	18	19	25	98	116	26	19	26	30	26
10	50	22	17	19	23	57	106	25	19	23	35	23
11	99	21	16	19	22	42	98	25	18	21	34	22
12	55	21	15	19	20	34	90	25	18	20	35	24
13	44	21	16	18	20	30	86	26	17	19	41	28
14	37	19	17	19	20	29	79	29	17	17	31	29
15	32	19	17	19	20	27	58	35	17	18	31	26
16	31	19	16	19	23	26	55	35	16	19	28	24
17	29	19	15	19	25	25	93	31	16	23	25	24
18	28	19	15	19	26	24	118	29	16	50	23	56
19	26	19	15	20	34	28	121	27	19	56	21	51
20	25	20	14	20	24	27	109	31	18	48	21	40
21	23	19	15	21	23	25	59	39	17	55	21	36
22	21	18	14	24	23	24	34	66	17	84	20	31
23	21	18	17	23	23	23	31	46	18	52	21	28
24	20	19	21	22	21	22	50	28	17	29	22	30
25	20	18	20	22	20	21	35	25	17	26	19	26
26	21	18	18	22	20	47	25	23	18	26	18	22
27	27	17	18	20	20	261	25	22	26	26	18	22
28	40	17	17	19	20	188	25	21	26	28	18	21
29	35	18	18	19	---	261	25	20	29	42	18	20
30	27	20	18	19	---	579	24	19	35	54	18	26
31	26	---	21	19	---	709	---	19	---	36	17	---
TOTAL	934	620	577	677	608	3002	3256	864	595	1208	816	960
MEAN	30.1	20.7	18.6	21.8	21.7	96.8	109	27.9	19.8	39.0	26.3	32.0
MAX	99	27	35	35	34	709	497	66	35	115	55	90
MIN	20	17	14	18	18	20	24	19	16	17	17	16
AC-FT	1850	1230	1140	1340	1210	5950	6460	1710	1180	2400	1620	1900

CAL YR 1986 TOTAL 15252.8 MEAN 41.8 MAX 411 MIN 9.7 AC-FT 30250
WTR YR 1987 TOTAL 14117 MEAN 38.7 MAX 709 MIN 14 AC-FT 28000

e Estimated

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961-63, 1965-66, 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1977 to current year.

pH: June 1977 to June 1986.

WATER TEMPERATURE: June 1977 to current year.

DISSOLVED OXYGEN: June 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since June 1977.

REMARKS.--Interruptions of record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 391 microsiemens, May 12, 1985; minimum daily mean, 70 microsiemens, Oct. 6, 1985.

pH: Maximum daily mean, 7.4 units, Jan. 5, 1980, June 8, 1986; minimum daily mean, 4.9 units July 21, 1978.

WATER TEMPERATURE: Maximum daily mean, 28.5°C, July 14, 1980; minimum daily mean, 6.5°C, Dec. 26, 1983, Jan. 22, 1985.

DISSOLVED OXYGEN: Maximum daily mean, 9.8 mg/L, Mar. 3, 1980; minimum daily mean, .1 mg/L, Sept. 5, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 321 microsiemens, Dec. 31; minimum daily mean, 94 microsiemens, Mar. 31.

WATER TEMPERATURE: Maximum daily mean, 28.0°C, July 13,14; minimum daily mean, 11.5°C, Jan. 24,28.

DISSOLVED OXYGEN: Maximum daily mean, 6.1 mg/L, Dec. 22; minimum daily mean, 1.3 mg/L, Feb. 28.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	215	207	253	248	254	105	222	222	224	184	245
2	173	221	209	255	251	237	110	210	223	224	174	257
3	181	208	177	245	249	230	112	197	227	205	204	259
4	199	200	186	251	263	226	116	212	---	155	195	205
5	213	200	200	245	256	233	119	222	---	144	205	163
6	216	184	218	225	251	233	120	214	---	167	238	170
7	209	201	226	235	239	181	121	201	---	184	237	191
8	195	210	230	237	230	153	122	198	234	200	235	203
9	217	218	229	225	230	134	125	203	237	227	198	202
10	176	219	226	243	230	152	127	200	233	224	182	213
11	151	213	223	244	237	172	129	211	222	229	193	223
12	151	225	204	234	246	187	133	215	245	246	200	223
13	162	233	223	238	252	192	135	210	236	247	192	211
14	163	236	224	255	256	201	136	205	241	237	208	217
15	166	223	242	251	268	207	138	203	251	258	201	216
16	182	239	244	247	259	215	150	204	239	260	205	222
17	185	236	235	232	246	215	144	208	238	248	210	213
18	194	233	232	259	246	218	133	212	262	212	209	170
19	206	231	232	264	219	215	127	209	261	177	215	191
20	207	226	220	265	242	209	128	201	261	174	218	200
21	204	222	241	262	245	214	137	193	243	170	215	227
22	188	213	229	235	235	221	172	170	254	157	222	232
23	210	232	258	215	252	222	190	168	252	167	223	246
24	205	257	264	220	244	227	169	190	265	197	215	241
25	223	247	258	246	222	231	169	193	258	213	215	248
26	233	244	259	239	246	182	190	206	277	211	229	260
27	219	229	264	235	249	140	205	205	260	209	237	285
28	185	232	280	235	266	123	206	203	251	209	239	276
29	187	264	317	251	---	108	209	191	227	198	239	269
30	198	249	319	249	---	99	208	197	215	173	240	239
31	212	---	321	244	---	94	---	217	---	195	262	---
MEAN	194	225	239	243	246	191	146	203	---	205	214	224
MAX	233	264	321	265	268	254	209	222	---	260	262	285
MIN	151	184	177	215	219	94	105	168	---	144	174	163

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.2	23.4	22.1	16.5	13.5	20.3	---	---	---	26.0	24.8	---
2	26.1	23.0	22.0	13.8	15.2	17.3	---	---	---	26.5	25.0	---
3	25.8	22.4	19.6	12.4	16.3	16.3	---	---	---	26.2	25.4	---
4	25.6	22.3	16.9	13.4	16.2	17.7	---	---	---	25.4	26.1	---
5	25.6	22.6	16.6	14.0	16.6	17.2	---	---	---	25.9	26.5	---
6	25.6	23.0	17.5	13.9	17.5	17.0	---	---	---	25.7	26.9	---
7	25.4	23.4	18.3	15.8	18.0	17.6	---	---	---	26.0	26.8	---
8	25.3	23.4	18.8	16.4	16.1	18.6	---	---	24.3	26.5	27.3	---
9	25.4	23.2	19.6	15.5	14.0	18.5	---	---	24.4	27.2	26.9	---
10	24.3	23.4	20.3	16.8	12.2	17.8	---	---	25.0	27.4	25.7	---
11	24.0	23.4	21.4	16.1	12.8	17.8	---	---	25.5	27.6	---	25.9
12	24.7	23.5	21.5	12.2	13.9	16.7	---	---	26.1	27.9	---	25.8
13	25.1	23.5	19.6	11.9	15.2	15.9	---	---	26.1	28.0	---	25.6
14	25.6	22.4	17.9	12.7	14.6	15.2	---	---	26.0	27.9	---	25.8
15	25.2	21.7	18.6	14.9	15.0	16.3	---	---	26.0	26.9	---	26.1
16	22.9	20.9	19.2	16.7	17.6	17.3	---	---	26.6	26.2	---	26.1
17	21.3	21.4	19.0	18.5	16.8	18.4	---	---	26.6	26.2	---	26.1
18	21.1	22.8	19.1	19.3	16.6	18.7	---	---	26.7	26.4	---	25.4
19	21.6	23.3	19.2	19.9	16.0	19.9	---	---	26.4	25.7	---	25.6
20	21.1	23.3	19.7	18.4	15.9	19.1	---	---	26.5	24.9	---	25.8
21	20.7	22.9	18.8	17.1	16.1	18.7	---	---	26.4	25.1	---	25.9
22	20.8	19.7	17.7	16.6	17.3	18.4	---	---	26.5	25.0	---	26.2
23	21.1	19.7	18.8	13.0	18.7	18.7	---	---	26.9	24.7	---	25.6
24	21.3	21.0	20.1	11.6	16.7	19.3	---	---	27.4	25.7	---	24.9
25	22.2	22.0	19.2	13.8	18.0	20.7	---	---	27.4	25.7	---	24.5
26	22.8	22.4	17.7	15.0	19.2	20.4	---	---	27.0	25.4	---	24.8
27	22.4	22.2	16.9	12.6	20.0	19.9	---	---	25.6	25.6	---	25.0
28	21.3	22.2	17.1	11.6	21.1	21.1	---	---	25.6	25.6	---	25.3
29	21.9	22.7	16.4	14.1	---	---	---	---	25.3	25.4	---	25.4
30	22.7	22.8	16.4	14.9	---	---	---	---	25.1	25.6	---	25.3
31	23.3	---	15.3	15.1	---	---	---	---	---	24.9	---	---
MEAN	23.5	22.5	18.8	15.0	16.3	---	---	---	---	26.1	---	---
MAX	26.2	23.5	22.1	19.9	21.1	---	---	---	---	28.0	---	---
MIN	20.7	19.7	15.3	11.6	12.2	---	---	---	---	24.7	---	---

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	3.4	3.2	3.5	1.7	---	2.6	---	---	4.1	4.1
2	---	---	3.5	3.1	3.2	2.5	---	3.3	---	---	4.1	4.1
3	---	---	4.5	3.0	3.0	2.6	---	3.7	---	---	3.7	4.4
4	---	2.6	5.1	2.9	2.8	2.3	---	3.1	---	---	3.6	4.7
5	---	4.6	5.5	3.3	2.7	2.2	---	2.9	---	---	3.4	4.4
6	---	4.5	5.5	3.7	2.3	2.1	---	3.1	---	---	3.3	4.4
7	---	4.3	5.5	2.9	2.6	3.9	---	3.7	---	---	3.2	4.3
8	---	4.2	5.5	4.6	3.4	4.5	---	3.7	3.4	---	3.2	4.2
9	---	4.1	4.8	3.5	3.8	4.4	---	3.6	3.3	---	3.8	4.1
10	---	4.0	3.9	2.9	4.2	5.0	---	3.7	3.2	---	3.5	4.2
11	---	3.8	4.0	2.9	3.9	4.8	---	3.5	3.4	---	3.6	4.4
12	---	3.4	3.6	4.2	3.2	4.5	---	3.5	2.5	---	3.4	4.3
13	---	3.5	3.8	4.1	2.8	5.6	---	3.8	2.8	---	3.6	4.2
14	---	4.1	4.8	3.7	2.6	---	---	3.7	2.7	---	3.3	4.1
15	---	4.3	4.9	3.4	2.5	---	---	3.9	2.4	---	3.6	4.0
16	---	4.6	4.7	3.0	2.1	---	---	3.9	2.3	---	3.6	4.0
17	---	4.2	5.2	3.2	2.6	---	---	2.9	2.5	---	3.5	4.1
18	---	3.8	5.2	2.3	2.6	---	---	---	1.9	---	3.4	4.2
19	---	3.8	5.4	2.1	3.8	3.3	---	---	1.8	---	3.5	4.0
20	---	3.7	5.4	2.4	2.5	---	---	---	1.7	---	3.5	3.8
21	---	4.0	5.7	2.5	2.2	---	---	---	2.1	---	3.2	3.6
22	---	4.8	6.1	3.4	2.2	---	---	---	1.7	2.4	3.1	3.6
23	---	4.9	4.6	3.9	1.9	---	---	---	1.5	4.1	3.4	3.6
24	---	4.6	2.3	---	2.3	---	---	---	1.4	3.3	3.5	3.6
25	---	4.2	2.4	---	2.5	---	---	---	1.6	3.1	3.6	3.7
26	---	4.1	3.1	---	1.8	---	---	---	1.4	3.3	3.6	3.7
27	---	4.2	2.1	---	1.6	---	---	---	2.2	3.6	3.9	3.5
28	---	4.2	3.4	---	1.3	---	---	---	3.1	3.7	4.0	3.4
29	---	3.8	2.5	---	---	---	1.7	---	---	3.9	4.0	3.4
30	---	3.3	3.3	---	---	---	2.8	---	---	4.1	4.0	3.4
31	---	---	3.9	3.1	---	---	---	---	---	3.8	4.1	---
MEAN	---	---	4.3	---	2.7	---	---	---	---	---	3.6	4.0
MAX	---	---	6.1	---	4.2	---	---	---	---	---	4.1	4.7
MIN	---	---	2.1	---	1.3	---	---	---	---	---	3.1	3.4

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV										
04...	1330	--	--	--	--	--	--	--	--	--
06...	0816	180	6.0	22.5	320	0.30	4.5	15	4.4	17
JAN										
06...	1000	224	6.8	13.5	260	0.70	5.1	--	--	--
20...	0923	224	6.2	18.0	--	--	1.9	17	4.7	25
MAR										
03...	0840	182	6.2	15.5	240	0.80	2.4	15	4.0	22
31...	1250	81	--	--	--	--	--	--	--	--
MAY										
28...	1215	191	6.7	24.0	--	--	4.0	--	--	--
JUN										
22...	0925	--	--	--	240	0.20	--	17	4.6	25
JUL										
29...	0915	--	--	--	320	--	--	17	4.3	20
AUG										
18...	0830	240	6.1	21.5	140	--	3.8	17	4.6	22

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
04...	--	--	--	--	0.770	0.020	1.1	0.190	0.150	--
06...	3.9	38	34	20	0.760	0.030	1.2	0.190	0.150	39
JAN										
06...	--	--	--	--	2.10	1.40	2.8	0.900	0.880	--
20...	5.6	--	31	38	2.30	0.950	2.4	1.20	1.20	34
MAR										
03...	4.9	35	18	32	2.40	1.60	2.6	1.20	1.20	29
31...	--	--	--	--	0.510	0.120	1.6	0.300	0.270	--
MAY										
28...	--	--	--	--	1.60	0.010	1.2	0.220	0.190	--
JUN										
22...	5.2	43	9.6	37	2.20	0.430	1.7	0.390	0.320	25
JUL										
29...	4.1	37	12	26	0.910	0.020	1.5	1.20	1.20	42
AUG										
18...	4.9	48	21	25	1.00	0.030	1.2	0.770	0.720	32

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
NOV							
06...	210	<1	<10	<1	<10	3	280
MAR							
03...	190	<1	<10	<1	<10	6	260
JUN							
22...	200	<1	<10	<1	<10	4	320
AUG							
18...	210	1	<10	<1	<10	4	240

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02266300 REEDY CREEK NEAR VINELAND, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
NOV 06...	<5	<10	0.30	1	<1	30
MAR 03...	<5	10	0.30	1	<1	20
JUN 22...	5	<10	0.10	<1	<1	<10
AUG 18...	<5	20	<0.10	5	<1	<10

DATE	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG 18...	<0.1	<1	<0.10	<1.0	<0.010	5.0	<0.1	7.0	<0.010	<0.1	<0.010

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...	0.8	<0.010	<0.1	<0.01	<0.1	<0.010	0.5	<0.010	<0.1	<0.010	<0.1

DATE	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)
AUG 18...	<0.01	0.1	<0.010	<0.1	<0.010	<0.1	<0.01	<0.010	<0.1	0.30

DATE	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PER- THANE TOTAL (UG/L)
AUG 18...	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.1

DATE	PER- THANE IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)
AUG 18...	<1.00	<1	<10	<0.01	<0.1	<0.01	<0.01	0.1	<0.01	<0.01

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266480 DAVENPORT CREEK NEAR LOUGHMAN, FL

LOCATION.--Lat 28°16'15", long 81°35'28", in NW¼ sec.35, T.25 S., R.27 E. (revised), Osceola County, Hydrologic Unit 03090101, at downstream side of culverts on State Highway 545, 2.0 mi upstream from mouth, and 2.5 mi northwest of Loughman.

DRAINAGE AREA.--23 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 80.49 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records good.

AVERAGE DISCHARGE.--18 years, 10.5 ft³/s, 6.20 in/yr, 7,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 498 ft³/s, Sept. 22, 1969, gage height, 9.76 ft; minimum, 0.32 ft³/s, May 19, 1981; minimum gage height, 4.02 ft, May 7,8, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	0500	*134	*8.10	No other peak greater than base discharge.			

Minimum discharge, 1.7 ft³/s, Oct. 21,22,23, minimum gage height. 4.46 ft, June 19,20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.0	4.4	11	3.7	6.3	115	3.0	3.7	9.5	5.4	2.3
2	3.4	4.5	5.9	9.4	4.3	10	101	2.9	3.6	7.2	4.9	2.5
3	3.3	2.4	4.1	6.6	3.1	11	89	2.6	3.3	5.7	5.2	3.7
4	2.8	2.4	3.7	7.2	3.3	8.6	76	2.3	3.0	6.8	5.4	14
5	2.1	2.5	3.4	7.8	3.2	7.1	61	2.4	2.9	18	4.2	16
6	2.4	2.5	3.2	7.5	3.3	6.9	47	5.8	3.0	20	3.5	15
7	3.4	2.4	2.9	6.7	3.4	13	33	5.7	3.0	14	3.0	12
8	5.4	2.4	2.7	5.3	8.4	20	27	4.8	3.0	9.1	3.4	7.5
9	4.7	2.3	2.3	5.0	7.4	23	23	6.7	3.0	6.7	9.4	4.4
10	5.4	2.3	2.3	3.6	4.4	18	20	14	2.9	5.7	13	6.4
11	4.8	2.3	2.4	3.4	4.4	13	18	16	2.9	5.1	16	5.8
12	4.1	2.3	2.5	4.4	4.4	9.7	16	12	2.9	3.4	35	5.7
13	3.6	2.3	2.6	4.5	4.0	8.7	13	9.3	2.8	3.4	28	8.3
14	3.3	2.3	2.6	4.0	3.1	9.0	12	11	2.8	3.5	19	8.5
15	3.1	2.3	2.5	3.1	3.3	7.0	12	27	2.7	3.6	15	7.2
16	3.0	2.9	2.5	3.1	5.3	4.9	12	32	2.7	3.7	11	5.6
17	2.8	3.6	2.4	3.1	11	5.7	12	25	2.6	4.5	8.7	4.7
18	2.6	2.4	2.4	3.1	9.8	5.7	11	18	2.6	5.4	6.5	7.0
19	2.5	2.3	2.6	3.2	8.5	7.9	9.4	14	2.6	4.9	5.2	6.5
20	2.2	2.3	2.4	3.3	6.8	6.7	7.6	12	2.6	6.0	5.6	5.6
21	1.8	2.3	2.3	3.4	9.0	5.7	6.5	9.4	2.8	7.8	8.8	4.9
22	1.7	2.7	2.3	7.0	8.0	5.5	6.2	7.2	4.0	7.6	7.6	4.3
23	1.8	2.4	2.4	7.3	9.3	6.0	5.4	6.8	10	5.7	6.0	4.4
24	1.9	2.0	3.3	4.5	7.9	5.2	4.2	6.2	5.1	4.2	4.6	4.2
25	2.4	2.0	3.4	4.6	7.2	4.9	4.3	5.8	4.1	3.4	4.0	4.0
26	2.1	2.0	3.6	4.3	7.3	9.2	4.0	5.2	4.2	3.7	3.7	3.7
27	3.2	2.0	3.7	3.8	6.7	29	3.8	4.5	7.0	4.3	3.4	3.1
28	4.7	2.0	2.6	3.8	6.0	39	3.7	4.4	6.0	3.9	3.3	2.5
29	4.1	2.0	2.8	3.8	---	59	3.5	4.2	6.7	3.5	3.1	2.4
30	3.5	2.6	3.0	3.9	---	100	3.2	4.0	9.6	4.8	3.0	4.3
31	2.5	---	4.4	3.7	---	130	---	3.8	---	7.0	2.7	---
TOTAL	98.0	73.7	93.6	155.4	166.5	595.7	759.8	288.0	118.1	202.1	257.6	186.5
MEAN	3.16	2.46	3.02	5.01	5.95	19.2	25.3	9.29	3.94	6.52	8.31	6.22
MAX	5.4	4.5	5.9	11	11	130	115	32	10	20	35	16
MIN	1.7	2.0	2.3	3.1	3.1	4.9	3.2	2.3	2.6	3.4	2.7	2.3
AC-FT	194	146	186	308	330	1180	1510	571	234	401	511	370
CFSM	.14	.11	.13	.22	.26	.84	1.10	.40	.17	.28	.36	.27
IN.	.16	.12	.15	.25	.27	.96	1.23	.47	.19	.33	.42	.30

CAL YR 1986 TOTAL 4039.4 MEAN 11.1 MAX 84 MIN 1.2 AC-FT 8010 CFSM .48 IN. 6.53
WTR YR 1987 TOTAL 2995.0 MEAN 8.21 MAX 130 MIN 1.7 AC-FT 5940 CFSM .36 IN. 4.84

SOUTH FLORIDA
KISSIMEE RIVER BASIN

02266480 DAVENPORT CREEK NEAR LOUGHMAN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV 04...	1345	--	--	--	--	--	--	--	--	--
06...	0922	145	6.4	22.0	160	0.20	6.1	18	6.1	3.9
JAN 06...	1035	141	6.9	14.0	240	0.50	8.4	--	--	--
MAR 03...	0925	--	--	--	320	0.60	--	16	4.4	5.6
31...	1315	69	--	--	--	--	--	--	--	--
MAY 28...	1125	141	7.1	23.0	--	--	6.2	--	--	--
JUN 22...	1020	--	--	--	50	0.20	--	18	6.2	3.5
JUL 29...	1345	157	7.1	25.5	--	--	6.7	--	--	--
AUG 18...	1000	138	6.3	25.5	260	--	5.5	16	4.6	4.8

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 04...	--	--	--	--	2.60	0.020	0.44	0.050	0.030	--
06...	3.4	39	21	11	2.20	0.020	0.63	0.060	0.030	23
JAN 06...	--	--	--	--	0.730	0.040	1.4	0.040	0.020	--
MAR 03...	1.1	31	24	15	0.500	0.020	1.5	0.040	0.030	48
31...	--	--	--	--	0.120	0.020	1.3	0.090	0.060	--
MAY 28...	--	--	--	--	2.00	0.010	1.2	0.060	0.030	--
JUN 22...	3.0	37	--	--	2.60	0.010	0.54	0.030	0.030	--
JUL 29...	--	--	--	--	1.30	0.010	1.2	0.060	0.040	--
AUG 18...	2.0	30	25	12	0.910	0.010	1.4	0.050	0.050	42

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
JUN 22...	90	<1	<10	<1	<10	3	90
AUG 18...	180	<1	<10	1	<10	4	260

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02266480 DAVENPORT CREEK NEAR LOUGHMAN, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
JUN 22...	<5	<10	<0.10	<1	<1	<10
AUG 18...	<5	10	<0.10	7	<1	10

DATE	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG 18...	<0.1	<1	<0.10	<1.0	<0.010	<0.1	<0.1	<1.0	<0.010	<0.1	<0.010

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)
AUG 18...	0.1	<0.010	<0.1	<0.01	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010

DATE	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...	<0.1	<0.01	0.7	<0.010	<0.1	<0.010	<0.1	<0.01	<0.010	<0.1

DATE	MALA- THION, TOTAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PER- THANE TOTAL (UG/L)
AUG 18...	<0.01	<0.1	<0.01	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.1

DATE	PER- THANE IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)
AUG 18...	<1.00	<1	<10	<0.01	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02266500 REEDY CREEK NEAR LOUGHMAN, FL

LOCATION.--Lat 28°15'48", long 81°32'12", in SW¼ sec.32, T.25 S., R.28 E., Osceola County, Hydrologic Unit 03090101, on left bank 20 ft upstream from bridge on U.S. Highways 17 and 92, 1.0 mi downstream from Reedy Creek Improvement District Structure 40. 2.5 mi northeast of Loughman, 3 mi downstream from Davenport Creek, and 21 mi upstream from mouth.

DRAINAGE AREA.--110 mi², approximately, includes an indeterminate portion of the Reedy Creek Swamp watershed.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to September 1959, July 1968 to current year.

REVISED RECORDS.--WRD FL 1968: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 64.49 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 20, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Natural flow of stream affected by several canals, levees, and control structures which divert an undetermined amount of water into Reedy Creek above station or into the Shingle Creek basin. Since May 1970, flow regulated by Reedy Creek Improvement District Structure 40.

AVERAGE DISCHARGE.--39 years (water years 1940-59, 1969-87), 66.5 ft³/s, 48,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 790 ft³/s, Sept. 24, 1969, gage height, 4.25 ft, from rating curve extended above 400 ft³/s; no flow for many days in some years; minimum gage height, -0.25 ft, June 1, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 779 ft³/s, Apr. 2, 3, gage height, 3.95 ft; no flow for many days; minimum gage height, 0.52 ft, June 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	4.1	.36	33	33	35	745	51	8.2	.00	33	14
2	50	4.0	.54	32	33	35	776	50	5.8	.00	33	14
3	45	2.9	.55	33	33	34	760	49	4.0	.00	35	15
4	38	2.0	.35	34	33	34	704	48	2.5	.00	34	17
5	35	1.1	.25	35	33	34	620	47	1.5	.00	33	13
6	34	.51	.14	35	33	36	540	48	1.0	.00	32	11
7	35	.37	.04	35	33	61	470	46	.84	.00	30	8.5
8	34	.70	.00	35	34	67	410	46	.56	.00	24	6.7
9	33	.74	.00	35	33	63	356	47	.36	.00	21	5.4
10	33	.79	.00	35	33	64	311	49	.22	.00	20	5.0
11	34	.70	.00	35	35	65	271	48	.06	.00	22	4.1
12	34	4.8	.00	35	35	65	237	51	.00	.00	26	3.6
13	35	19	.00	35	35	63	207	53	.00	.00	24	3.5
14	36	10	.00	35	35	62	181	53	.00	.00	23	2.9
15	35	6.1	.00	35	34	61	163	52	.00	.00	23	2.3
16	35	3.8	.00	35	35	59	150	53	.00	.00	22	1.8
17	34	2.6	.00	35	36	57	130	53	.00	.00	20	1.4
18	33	2.0	.00	34	36	54	88	53	.00	.00	20	5.4
19	32	1.5	4.2	34	36	56	74	53	.00	.00	21	26
20	31	1.2	21	34	36	53	68	53	.00	.00	24	33
21	31	.96	24	34	36	52	66	51	.00	.00	25	36
22	30	.75	25	35	36	50	66	49	.00	.00	23	38
23	29	.62	25	36	36	50	62	48	.00	.00	21	40
24	26	.54	28	35	36	56	58	48	.00	4.1	20	39
25	17	.46	28	35	36	58	57	48	.00	20	19	38
26	12	.34	28	35	36	64	56	45	.00	28	18	37
27	11	.21	28	35	35	74	55	41	.00	30	17	36
28	9.7	.11	28	35	35	75	54	37	.00	31	17	35
29	7.4	.06	28	34	---	127	53	29	.00	32	16	34
30	5.9	.11	28	34	---	305	52	17	.00	32	15	36
31	4.6	---	29	34	---	595	---	12	---	32	15	---
TOTAL	912.6	73.07	326.43	1071	970	2564	7840	1428	25.04	209.10	726	562.6
MEAN	29.4	2.44	10.5	34.5	34.6	82.7	261	46.1	.83	6.75	23.4	18.8
MAX	53	19	29	36	36	595	776	53	8.2	32	35	40
MIN	4.6	.06	.00	32	33	34	52	12	.00	.00	15	1.4
AC-FT	1810	145	647	2120	1920	5090	15550	2830	50	415	1440	1120

CAL YR 1986 TOTAL 14737.91 MEAN 40.4 MAX 247 MIN .00 AC-FT 29230
WTR YR 1987 TOTAL 16707.84 MEAN 45.8 MAX 776 MIN .00 AC-FT 33140

SOUTH FLORIDA
KISSIMEE RIVER BASIN

02266500 REEDY CREEK NEAR LOUGHMAN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1965, 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV										
04...	1400	--	--	--	--	--	--	--	--	--
06...	0852	215	6.6	22.0	320	0.80	0.5	24	6.4	15
JAN										
06...	1100	205	6.5	13.0	200	0.60	5.1	--	--	--
20...	0956	190	5.8	19.0	--	--	2.1	17	4.9	17
MAR										
03...	0905	145	6.5	16.0	240	0.70	4.0	14	4.1	15
APR										
01...	1245	103	--	--	--	--	--	--	--	--
MAY										
28...	1105	173	6.6	23.0	--	--	3.1	--	--	--
JUN										
22...	0950	--	--	--	160	0.20	--	16	4.8	19
JUL										
29...	1330	--	--	--	340	--	--	17	4.7	14
AUG										
18...	0915	176	6.2	25.5	120	--	2.8	16	4.5	13

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV										
04...	--	--	--	--	0.020	0.510	2.3	0.280	0.230	--
06...	3.2	48	51	24	<0.020	0.580	2.3	0.320	0.260	53
JAN										
06...	--	--	--	--	0.860	0.460	1.7	0.370	0.340	--
20...	4.3	--	32	38	1.10	0.040	1.1	0.450	0.420	31
MAR										
03...	3.7	37	19	26	0.900	0.040	1.1	0.490	0.450	31
APR										
01...	--	--	--	--	0.130	0.030	0.73	0.180	0.150	--
MAY										
28...	--	--	--	--	0.840	0.020	1.2	0.230	0.200	--
JUN										
22...	4.8	30	14	29	1.50	0.080	1.1	0.290	0.260	20
JUL										
29...	2.9	32	15	22	0.270	0.060	1.5	0.190	0.190	42
AUG										
18...	3.4	37	23	27	0.350	0.020	1.3	0.340	0.320	33

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
NOV							
06...	130	<1	<10	<1	<10	2	700
MAR							
03...	160	<1	<10	<1	<10	5	190
JUN							
22...	80	<1	<10	<1	<10	20	160
AUG							
18...	250	<1	<10	1	30	6	280

SOUTH FLORIDA
KISSIMEE RIVER BASIN

02266500 REEDY CREEK NEAR LOUGHMAN, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
NOV 06...	30	50	0.30	1	<1	<10
MAR 03...	<5	<10	0.30	3	<1	<10
JUN 22...	<5	10	0.10	<1	<1	<10
AUG 18...	<5	<10	<0.10	4	<1	<10

DATE	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG 18...	<0.1	<1	<0.10	<1.0	<0.010	<0.1	<0.1	<1.0	<0.010	<0.1	<0.010

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...	<0.1	<0.010	<0.1	<0.01	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1

DATE	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...	<0.01	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1	<0.010	<0.1

DATE	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/L)
AUG 18...	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.1

DATE	PER- THANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	TOX- APHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/L)
AUG 18...	<1.00	<1	<10	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266550 REEDY CREEK AT STATE HIGHWAY 531 NEAR POINSIANNA, FL

LOCATION.--Lat 28°08'59", long 81°26'28", in SE¼ 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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year (discharge measurements only).

EXTREMES FOR PERIOD OF RECORD.--Maximum measured, 956 ft³/s, Apr. 3, 1987; no flow observed at times most years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT 15...	1420	48	APR 03...	1032	956
NOV 19...	1450	3.5	MAY 07...	1010	34
JAN 14...	1450	25	JUL 14...	0845	0.64
MAR 12...	0940	108	AUG 28...	1300	58

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978-83, 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
NOV 03...	0940	150	6.10	22	1.3	0.020	0.020	0.030	2.8	0.060	0.040
JAN 06...	1130	143	6.00	13.5	3.6	0.020	0.040	0.040	2.1	0.040	0.020
MAR 03...	1005	148	6.50	16.5	2.8	0.020	0.030	0.020	2.2	0.040	0.030
APR 01...	1150	96	--	--	--	0.010	<0.020	0.010	<1.0	0.040	0.020
MAY 28...	1015	126	6.30	23	2.1	0.020	0.050	<0.010	2.1	0.070	0.070
JUN 22...	1225	127	--	--	--	0.020	0.110	0.130	1.7	0.120	0.080
JUL 29...	1245	125	6.20	22	1.8	0.010	0.100	0.030	1.1	0.080	0.050

SOUTH FLORIDA

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 National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Estimated daily discharges: Oct. 6-17. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--40 years, 44.0 ft³/s, 10.14 in/yr, 31,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 235 ft³/s, Sept. 17,18, 1960; maximum gage height, 6.02 ft, Sept. 15, 1960, affected by wind; no flow, June 3-10, 1985; minimum gage height, 2.26 ft, June 8, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 78 ft³/s, Mar. 31, gage height, 4.48 ft; minimum discharge, 21 ft³/s, June 18,19,20,26, minimum gage height 3.26 ft, June 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	47	27	51	31	34	70	43	30	41	27	33
2	54	47	27	49	30	32	69	42	29	41	29	33
3	52	46	27	47	31	33	68	41	29	41	30	32
4	51	45	26	49	30	34	70	40	28	40	30	37
5	50	44	28	58	28	36	67	40	28	40	30	44
6	48	43	30	53	29	38	65	39	29	40	29	45
7	46	42	31	52	29	31	64	39	29	39	29	45
8	44	41	31	51	32	27	64	41	28	38	28	45
9	46	40	32	50	29	28	63	40	27	37	28	44
10	48	40	32	50	27	28	61	39	27	36	28	48
11	49	39	31	54	27	29	60	40	26	35	31	47
12	49	38	30	49	28	30	59	40	26	35	41	46
13	48	38	30	46	29	32	58	39	25	34	49	47
14	46	36	32	44	30	34	58	39	24	33	48	47
15	44	35	33	44	32	36	61	39	24	32	48	46
16	45	33	33	44	30	36	61	41	23	32	48	45
17	38	33	34	43	28	37	60	40	23	31	47	45
18	38	32	34	42	28	38	59	39	22	32	46	44
19	37	31	34	43	29	31	57	39	22	31	45	43
20	36	31	34	42	30	32	56	39	22	31	45	42
21	34	30	35	42	30	33	55	38	24	31	43	41
22	32	28	37	44	30	34	54	38	23	31	42	41
23	30	27	38	44	28	36	53	37	23	30	41	40
24	29	27	37	39	31	38	52	36	23	29	40	39
25	28	29	38	38	31	39	51	35	22	28	39	38
26	28	28	38	42	33	35	49	35	22	28	38	37
27	43	28	38	39	33	31	48	34	27	30	37	36
28	45	27	38	36	35	35	47	33	27	30	36	35
29	46	26	38	34	---	52	46	32	29	29	36	35
30	48	26	37	33	---	63	45	31	40	29	34	36
31	47	---	39	34	---	74	---	31	---	28	34	---
TOTAL	1334	1057	1029	1386	838	1126	1750	1179	781	1042	1156	1236
MEAN	43.0	35.2	33.2	44.7	29.9	36.3	58.3	38.0	26.0	33.6	37.3	41.2
MAX	55	47	39	58	35	74	70	43	40	41	49	48
MIN	28	26	26	33	27	27	45	31	22	28	27	32
AC-FT	2650	2100	2040	2750	1660	2230	3470	2340	1550	2070	2290	2450
CFSM	.73	.60	.56	.76	.51	.62	.99	.65	.44	.57	.63	.70
IN.	.84	.67	.65	.88	.53	.71	1.11	.74	.49	.66	.73	.78

CAL YR 1986 TOTAL 10293.4 MEAN 28.2 MAX 55 MIN 4.1 AC-FT 20420 CFSM .48 IN. 6.50
WTR YR 1987 TOTAL 13914 MEAN 38.1 MAX 74 MIN 22 AC-FT 27600 CFSM .65 IN. 8.79

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

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 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 1933 to current year. Prior to October 1969, published as Kissimmee River below Lake Kissimmee.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 21, 1934, nonrecording gage at bridge 0.1 mi upstream at datum 1.25 ft lower. Mar. 21, 1934, to Sept. 30, 1950, water-stage recorder 3.2 mi downstream at datum 1.52 ft lower. Mar. 21, 1934, to Sept. 21, 1966, nonrecording gage at bridge 0.1 mi upstream used as supplementary gage. Oct. 1, 1950 to Sept. 30, 1969, water-stage recorder 3.2 mi downstream at datum 43.48 ft higher. Aug. 17, 1962, to Sept. 30, 1969, auxiliary water-stage recorder 5.1 mi downstream and at downstream side of lock and control structure 65 subsequent to Sept. 30, 1969.

REMARKS.--Records good. Flow regulated by operation of control structure 65 since July 1964 and by storage releases at several structures in headwaters. Discharge computed from relation between discharge, head, and gate openings. Gage heights are published as elevations for Lake Kissimmee (station 02268900) in the section of this report entitled "Lake Elevations."

COOPERATION.--Gate-operation record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--54 years, 1,036 ft³/s, 750,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,970 ft³/s, Oct. 22, 1969; maximum gage height, 13.16 ft, Oct. 9, 1953, from floodmark, site and datum then in use; maximum reverse flow measured, 1,190 ft³/s, Oct. 17, 1956; no flow for many days in most years; minimum gage height, 42.87 ft, May 25, 1977, present site and datum (result of drawdown of Lake Kissimmee).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,040 ft³/s, Jan. 22; maximum gage height, 52.63 ft, Jan. 2; no flow for many days; minimum gage height, 46.28 ft, Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	3220	1220	3080	1880	.00	.00	.00	.00
2	.00	.00	.00	1080	3130	1600	3210	1700	.00	.00	.00	.00
3	.00	.00	.00	2700	3120	1750	3110	1550	.00	.00	.00	.00
4	.00	.00	.00	2710	3100	1690	3600	1480	.00	.00	.00	.00
5	.00	.00	.00	3570	3020	1620	3530	1540	.00	.00	.00	.00
6	131	.00	.00	4010	3000	1430	3460	1540	.00	.00	.00	.00
7	215	.00	.00	3950	2960	1270	3440	1540	.00	.00	.00	.00
8	212	.00	.00	3930	3000	1380	3460	1530	.00	.00	.00	.00
9	213	.00	.00	3910	2960	1460	3450	1450	.00	.00	.00	.00
10	76	.00	.00	3870	2900	1670	3430	1270	.00	.00	.00	.00
11	.00	.00	.00	3900	2830	1780	3490	525	.00	.00	.00	.00
12	.00	.00	.00	3870	2790	1820	3450	.00	.00	.00	.00	.00
13	.00	.00	.00	3820	2730	1830	3490	92	.00	.00	.00	.00
14	.00	.00	.00	3770	2690	1730	3410	134	.00	.00	.00	.00
15	.00	.00	834	3710	2610	1540	3400	212	.00	.00	.00	.00
16	.00	.00	1280	3680	2520	1470	3420	354	.00	.00	.00	.00
17	.00	.00	458	2880	2860	1300	3330	564	.00	701	.00	.00
18	.00	.00	.00	2510	3020	953	3190	728	.00	699	.00	.00
19	.00	.00	.00	2480	2970	840	3150	1020	.00	566	.00	.00
20	.00	.00	.00	4150	2770	871	3340	1180	.00	.00	.00	.00
21	.00	.00	.00	5330	2650	849	3210	1170	.00	.00	.00	.00
22	.00	.00	.00	4210	2430	850	2920	1160	.00	.00	.00	.00
23	.00	.00	.00	.00	2470	842	3220	1150	.00	.00	.00	.00
24	.00	.00	.00	1770	2330	737	3080	909	.00	.00	.00	.00
25	.00	.00	.00	3110	2240	642	2570	518	.00	.00	.00	.00
26	.00	.00	.00	3440	2000	647	2610	392	.00	.00	.00	.00
27	.00	.00	.00	3450	1880	856	2940	156	.00	.00	.00	.00
28	.00	.00	.00	3370	1540	1090	3010	.00	.00	.00	.00	.00
29	.00	.00	.00	3330	---	1690	2940	.00	.00	.00	.00	.00
30	.00	.00	.00	3280	---	2250	2460	.00	.00	.00	.00	.00
31	.00	---	.00	3270	---	3010	---	.00	---	.00	.00	---
TOTAL	847.00	0.00	2572.00	99060.00	75740	42687	96400	25744.00	0.00	1966.00	0.00	0.00
MEAN	27.3	.00	83.0	3195	2705	1377	3213	830	.00	63.4	.00	.00
MAX	215	.00	1280	5330	3220	3010	3600	1880	.00	701	.00	.00
MIN	.00	.00	.00	.00	1540	642	2460	.00	.00	.00	.00	.00
AC-FT	1680	.0	5100	196500	150200	84670	191200	51060	.0	3900	.0	.0

CAL YR 1986 TOTAL 275016.00 MEAN 753 MAX 2850 MIN .00 AC-FT 545500
WTR YR 1987 TOTAL 345016.00 MEAN 945 MAX 5330 MIN .00 AC-FT 684300

02268904 KISSIMMEE RIVER BELOW S-65, NEAR LAKE WALES, FL

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.

REMARKS.--Gage heights partially regulated by operation of structure 65 upstream.

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).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.42	46.54	46.36	46.39	46.35	46.36	46.55	45.90	46.11	46.20	46.35	45.68
2	46.33	46.39	46.35	46.35	46.37	46.41	46.54	45.84	46.07	46.23	46.33	45.73
3	46.39	46.34	46.32	46.57	46.36	46.36	46.50	45.79	46.03	46.25	46.36	45.75
4	46.37	46.34	46.28	46.49	46.34	46.33	46.21	45.91	45.98	46.27	46.35	45.99
5	46.35	46.43	46.29	46.55	46.35	46.33	46.01	45.77	45.94	46.25	46.34	46.18
6	46.33	46.39	46.29	46.52	46.38	46.31	45.96	45.79	45.91	46.25	46.33	46.29
7	46.37	46.38	46.29	46.52	46.38	46.39	46.01	45.74	45.93	46.23	46.32	46.30
8	46.50	46.37	46.31	46.47	46.41	46.38	46.04	45.74	45.89	46.20	46.34	46.34
9	46.39	46.33	46.33	46.45	46.37	46.35	45.98	45.77	45.87	46.17	46.32	46.42
10	46.36	46.31	46.34	46.45	46.32	46.34	45.90	45.74	45.86	46.16	46.31	46.37
11	46.34	46.36	46.36	46.42	46.31	46.33	45.74	45.75	45.85	46.14	46.31	46.37
12	46.35	46.37	46.35	46.41	46.33	46.34	45.71	45.78	45.84	46.10	46.30	46.42
13	46.40	46.30	46.34	46.38	46.36	46.33	45.88	45.94	45.82	46.11	46.29	46.36
14	46.33	46.27	46.28	46.39	46.35	46.29	46.01	46.24	45.92	46.19	46.28	46.16
15	46.31	46.26	46.34	46.43	46.36	46.27	46.02	46.34	45.90	46.24	46.27	46.24
16	46.31	46.31	46.43	46.41	46.38	46.35	45.99	46.37	45.88	46.25	46.24	46.23
17	46.27	46.33	46.33	46.36	46.44	46.32	45.90	46.31	45.86	46.09	46.20	46.29
18	46.25	46.34	46.34	46.35	46.41	46.34	45.81	46.31	45.84	46.34	46.16	46.30
19	46.25	46.33	46.34	46.44	46.39	46.36	45.75	46.33	45.82	46.32	46.14	46.30
20	46.29	46.32	46.35	46.55	46.36	46.30	45.76	46.29	45.79	46.46	46.09	46.35
21	46.31	46.32	46.35	46.78	46.36	46.37	45.82	46.30	45.76	46.69	46.06	46.35
22	46.32	46.34	46.32	46.70	46.36	46.34	45.85	46.31	45.72	46.58	46.02	46.34
23	46.33	46.33	46.33	46.35	46.37	46.36	45.75	46.30	45.68	46.51	46.00	46.44
24	46.35	46.37	46.42	46.33	46.32	46.34	45.78	46.29	45.63	46.40	45.95	46.38
25	46.37	46.39	46.27	46.38	46.35	46.36	45.91	46.29	45.59	46.36	45.90	46.26
26	46.36	46.34	46.33	46.46	46.37	46.37	45.81	46.34	45.59	46.37	45.87	46.27
27	46.36	46.34	46.36	46.42	46.37	46.41	45.73	46.32	45.81	46.35	45.83	46.25
28	46.31	46.35	46.35	46.38	46.40	46.39	45.75	46.28	45.88	46.34	45.80	46.27
29	46.36	46.37	46.31	46.36	---	46.47	45.76	46.23	46.10	46.33	45.77	46.29
30	46.46	46.38	46.28	46.37	---	46.51	45.80	46.19	46.15	46.33	45.74	46.36
31	46.35	---	46.28	46.38	---	46.65	---	46.15	---	46.39	45.70	

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02270500 ARBUCKLE CREEK NEAR DE SOTO CITY, FL

LOCATION.--Lat 27°26'32", long 81°17'51", in SE¼ sec.11, T.35 S., R.30 E., Highlands County, Hydrologic Unit 03090101, on right bank 20 ft downstream from bridge on U.S. Highway 98, 1.3 mi upstream from mouth, and 7 mi east of De Soto City.

DRAINAGE AREA.--379 mi², excludes area drained by Lake Weohyakapka and includes area drained by Lake Sebring.

PERIOD OF RECORD.--June 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 35.51 ft above National Geodetic Vertical Datum of 1929. Since June 7, 1967 auxiliary water-stage recorder at site 1.3 mi upstream. See WDR FL-82-2 for history of changes prior to June 7, 1967.

REMARKS.--Records fair. Records include small diversions into Lake Arbuckle from Lake Weohyakapka through Blue Jordan Swamp.

AVERAGE DISCHARGE.--48 years, 318 ft³/s, 230,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,380 ft³/s, Sept. 23, 1948, gage height, 8.71 ft, from rating curve extended above 5,300 ft³/s; no flow Nov. 23,30, Dec. 28, 1986; minimum gage height, 0.14 ft, May 11, 1962, estimated, result of channel work upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 585 ft³/s, Sept. 13, gage height, 4.53 ft; no flow Nov. 23,30, Dec. 28; minimum gage height, 1.77 ft, June 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	86	2.8	67	107	64	467	88	138	126	198	70
2	147	50	28	68	123	59	449	86	137	134	210	91
3	138	63	22	75	113	56	398	84	129	135	206	131
4	128	69	6.0	84	105	57	354	72	118	114	188	184
5	121	88	32	156	99	55	319	71	110	125	177	280
6	125	90	45	149	114	56	307	69	101	124	168	340
7	111	93	68	133	90	90	270	71	104	124	159	334
8	106	81	69	154	85	88	248	77	93	117	156	365
9	107	83	84	114	95	85	222	72	80	114	142	397
10	90	73	64	113	87	91	194	74	79	109	135	426
11	95	79	32	112	91	78	168	76	91	99	137	454
12	97	84	33	122	88	85	155	85	96	106	141	504
13	94	68	14	137	82	86	146	92	74	133	141	567
14	100	58	29	114	82	84	160	103	97	130	139	555
15	92	73	37	94	71	80	189	107	74	134	139	508
16	83	79	50	87	111	74	144	125	100	138	138	470
17	77	78	60	82	84	71	132	139	69	137	136	440
18	72	75	33	99	87	79	114	164	59	136	130	408
19	63	52	42	153	84	68	108	222	53	143	123	379
20	71	5.0	43	132	62	64	110	216	53	142	116	358
21	73	22	1.2	122	70	60	104	194	49	142	109	333
22	84	8.8	18	142	63	59	99	183	41	142	100	308
23	98	.00	69	135	89	55	96	180	38	143	91	280
24	95	11	52	139	63	54	97	176	38	147	83	256
25	54	21	30	141	73	54	93	171	37	144	76	230
26	71	33	28	169	75	83	95	166	38	150	71	210
27	63	30	10	134	69	147	87	162	39	148	69	189
28	56	25	.00	116	56	176	92	156	45	146	75	174
29	82	19	8.4	132	---	177	90	151	47	149	75	160
30	80	.00	21	124	---	281	88	143	69	146	73	152
31	81	---	40	121	---	423	---	139	---	159	72	---
TOTAL	2919	1596.80	1071.40	3720	2418	3039	5595	3914	2296	4136	3973	9553
MEAN	94.2	53.2	34.6	120	86.4	98.0	186	126	76.5	133	128	318
MAX	165	93	84	169	123	423	467	222	138	159	210	567
MIN	54	.00	.00	67	56	54	87	69	37	99	69	70

CAL YR 1986 TOTAL 47311.60 MEAN 130 MAX 722 MIN .00
WTR YR 1987 TOTAL 44231.20 MEAN 121 MAX 567 MIN .00

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02273000 KISSIMMEE RIVER AT S-65E, NEAR OKEECHOBEE, FL
(National stream-quality accounting network station)

LOCATION.--Lat 27°13'32", long 80°57'46", in NE¼ sec.30, T.37 S., R.34 E., Okeechobee County, Hydrologic Unit 03090101, at upstream side of lock and control structure 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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to September 1962, October 1962 to September 1964 (elevations only), October 1964 to current year. Prior to October 1964, published as Kissimmee River near Okeechobee. Monthly discharges only for some periods, published in WSP 1304.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 28, 1949, nonrecording gage, and Apr. 28, 1949, to Sept. 30, 1964, water-stage recorder, 1.8 mi upstream at datum 1.37 ft lower. Auxiliary gage at downstream side of lock and control structure 65E.

REMARKS.--Records good. Flow regulated by operation of structure 65E beginning in October 1964. Discharge computed from relation between discharge, head, and gate openings. Records do not include diversions from Lake Istokpoga through control structure 68 on Canal 41A, which began July 1962.

COOPERATION.--Gate-opening record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--34 years (water years 1929-62), 2,188 ft³/s, 1,585,000 acre-ft/yr; 23 years (water years 1965-87), 1,320 ft³/s, 956,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,900 ft³/s, Oct. 3, 1969; maximum gage height, 27.00 ft, present datum, Oct. 14, 1953; no flow for many days in most years since 1965; minimum gage height observed, 12.33 ft, present datum, June 3, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1928, resulting from hurricane, reached a stage of 28.9 ft, present datum, discharge, 20,000 ft³/s, from rating curve extended above 14,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,060 ft³/s, Apr. 2; maximum gage height, 21.93 ft, Nov. 1; no flow for many days; minimum gage height, 20.22 ft, Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	271	40	1400	3170	1150	2620	2310	.00	58	525	54
2	194	899	40	1290	3210	1190	2930	1550	.00	215	536	.00
3	113	985	41	2090	3020	1490	4480	1340	.00	162	296	62
4	78	828	30	2870	2910	1580	4480	1380	.00	184	437	297
5	79	639	.00	3500	2890	1580	4240	1470	.00	164	454	425
6	162	427	51	3880	2890	1260	4220	1350	.00	39	284	442
7	194	436	41	4190	2870	1330	4330	1680	.00	155	199	319
8	60	369	66	4150	2920	1810	4390	1930	.00	170	95	471
9	.00	286	81	4290	2820	1370	4460	1420	.00	54	87	668
10	.00	220	27	3870	2720	1760	4600	1420	.00	89	106	508
11	16	119	40	3890	2630	1930	4300	721	.00	129	319	438
12	65	46	40	3800	2620	1800	3720	860	.00	70	116	353
13	21	112	104	3850	2600	1770	3620	633	.00	90	278	775
14	70	324	45	3780	2510	1760	3790	545	.00	42	174	609
15	74	298	316	3680	2480	1550	4240	510	.00	.00	174	503
16	208	137	957	3640	2450	1300	4300	1040	.00	265	174	308
17	243	43	435	2660	2510	1340	4030	913	.00	233	118	169
18	.00	50	.00	2260	2750	1040	3710	714	.00	419	86	231
19	.00	80	27	1900	2780	801	3350	1090	.00	307	26	249
20	.00	115	48	1930	2790	730	3000	1350	.00	280	36	124
21	25	120	42	3990	2800	856	3410	1100	.00	403	74	35
22	30	108	53	5420	2610	762	3350	1070	.00	533	14	612
23	.00	40	13	3930	2420	691	2990	1110	.00	698	.00	636
24	15	77	219	2190	2400	728	2940	743	.00	594	.00	661
25	58	63	264	2550	2230	603	3060	482	.00	450	.00	570
26	40	40	107	3000	2060	529	2560	231	.00	258	.00	662
27	11	102	239	3530	1910	1180	2370	149	.00	328	51	538
28	.00	70	340	3420	1690	1250	2670	71	.00	259	39	664
29	35	54	82	3470	---	1600	3020	.00	.00	198	.00	479
30	210	79	82	3630	---	2730	2860	.00	26	173	.00	357
31	140	---	253	3410	---	3440	---	.00	---	173	9.0	---
TOTAL	2314.00	7437	4123.00	101460	73660	42910	108040	29182.00	26.00	7192.00	4707.00	12219.00
MEAN	74.6	248	133	3273	2631	1384	3601	941	.87	232	152	407
MAX	243	985	957	5420	3210	3440	4600	2310	26	698	536	775
MIN	.00	40	.00	1290	1690	529	2370	.00	.00	.00	.00	.00
AC-FT	4590	14750	8180	201200	146100	85110	214300	57880	52	14270	9340	24240

CAL YR 1986 TOTAL 337692.00 MEAN 925 MAX 3500 MIN .00 AC-FT 669800
WTR YR 1987 TOTAL 393270.00 MEAN 1077 MAX 5420 MIN .00 AC-FT 780100

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.04	21.21	21.01	21.35	20.95	21.04	21.04	20.99	21.03	21.15	21.13	21.05
2	20.92	21.20	21.00	20.89	21.06	21.04	21.13	20.93	21.04	21.16	20.94	20.96
3	20.82	20.95	21.00	21.06	21.00	21.05	20.93	21.05	21.04	21.08	20.99	21.03
4	21.01	20.99	20.98	21.17	21.04	21.10	20.98	21.02	21.06	21.20	21.13	20.99
5	21.10	21.02	21.02	20.98	21.09	20.96	21.01	20.87	21.05	21.01	21.03	20.93
6	21.03	21.02	21.04	21.21	21.11	20.90	21.04	21.05	21.04	21.02	21.05	20.89
7	20.88	21.09	21.00	21.03	21.06	21.14	21.05	21.02	20.94	21.14	21.08	21.00
8	20.79	21.04	21.07	20.96	21.09	21.14	21.00	21.12	20.93	21.04	21.15	21.00
9	20.80	21.02	21.01	21.02	21.06	21.05	21.01	21.05	20.92	21.02	21.15	21.05
10	20.88	21.08	20.96	21.02	21.00	21.10	21.05	21.06	20.94	21.13	21.14	20.92
11	20.94	20.98	21.00	20.92	21.04	20.97	20.93	20.98	20.93	21.14	21.12	21.01
12	20.89	20.99	21.02	20.99	21.07	20.98	21.00	21.11	20.91	21.10	21.05	21.01
13	20.91	21.02	21.01	21.08	21.01	21.12	21.03	21.01	20.90	21.11	21.10	21.13
14	20.96	21.08	20.90	21.00	20.98	21.07	20.91	21.05	20.90	21.07	21.11	20.96
15	21.00	21.03	20.99	21.03	20.97	20.94	21.16	21.12	20.88	21.10	21.14	21.04
16	21.04	21.03	20.91	20.99	21.03	21.03	21.01	21.02	20.96	21.17	21.12	21.02
17	21.08	21.03	21.03	21.07	21.03	21.11	21.03	21.04	21.03	21.11	21.02	21.00
18	20.99	21.04	21.16	20.97	21.01	20.96	20.92	21.06	21.05	21.16	21.00	21.10
19	20.99	21.03	21.14	21.12	21.04	21.02	20.92	21.11	21.11	21.02	20.99	20.95
20	20.99	21.01	21.05	21.12	21.06	21.06	21.04	21.06	21.11	21.19	20.97	21.09
21	21.04	20.98	21.02	21.09	21.08	21.15	21.10	20.96	21.11	21.14	21.06	21.06
22	21.06	20.94	21.01	20.96	21.03	21.04	21.00	21.06	21.10	21.19	20.99	21.20
23	21.01	20.95	21.00	21.05	21.05	21.03	21.00	20.94	21.10	21.03	21.00	21.03
24	21.02	20.97	21.09	21.09	21.04	21.03	21.02	21.04	21.08	20.99	20.95	20.99
25	21.03	20.97	20.98	21.07	21.04	20.90	21.01	21.03	21.07	20.99	20.96	21.03
26	20.98	20.97	20.93	21.17	21.09	20.93	20.89	20.97	21.09	21.07	20.97	21.05
27	20.97	21.03	21.05	21.09	21.07	21.35	20.91	21.03	21.09	21.10	21.03	20.94
28	20.97	20.96	20.99	21.02	21.06	20.99	21.03	21.07	21.10	21.09	20.97	21.05
29	21.00	21.05	21.00	21.18	---	21.12	20.92	21.02	21.11	21.08	20.96	21.10
30	21.08	21.05	20.95	21.17	---	21.10	20.88	21.01	21.16	21.11	20.97	21.14
31	21.12	---	21.13	20.93	---	21.11	---	21.01	---	21.15	21.00	---
MEAN	20.98	21.02	21.01	21.06	21.04	21.05	21.00	21.03	21.03	21.10	21.04	21.02
MAX	21.12	21.21	21.16	21.35	21.11	21.35	21.16	21.12	21.16	21.20	21.15	21.20
MIN	20.79	20.94	20.90	20.89	20.95	20.90	20.88	20.87	20.88	20.99	20.94	20.89
CAL YR 1986	MEAN 21.05	MAX 21.31	MIN 20.69									
WTR YR 1987	MEAN 21.03	MAX 21.35	MIN 20.79									

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02273000 KISSIMMEE RIVER AT S-65E, NEAR OKEECHOBEE, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1940, 1960-62, 1967 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 24...	1650	20.99	119	E185	6.9	26.0	0.60	4.9	--	--
JAN 07...	1154	21.10	4270	175	7.2	18.0	1.8	6.3	--	--
FEB 04...	1205	21.06	2860	170	7.6	17.0	2.5	9.4	--	--
MAY 06...	1423	21.08	1360	187	7.7	29.0	2.0	6.6	E25	E14
JUL 10...	1042	21.04	128	217	7.4	29.5	0.90	5.2	--	--

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 24...	17	3.5	13	6.2	--	18	21	0.10	4.6	122
JAN 07...	14	2.9	12	2.3	33	13	19	0.10	4.4	112
FEB 04...	15	4.0	15	2.5	37	17	18	0.20	0.50	116
MAY 06...	14	3.7	13	2.6	47	19	19	0.20	1.0	120
JUL 10...	18	4.1	14	2.2	--	17	22	0.10	1.1	131

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDEd (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 24...	<0.010	0.250	0.030	0.050	1.3	0.150	0.210	0.180	3	12
JAN 07...	<0.010	<0.100	0.040	0.050	1.1	0.090	0.080	0.060	4	69
FEB 04...	<0.010	<0.100	0.030	0.040	2.3	0.040	0.020	<0.010	17	94
MAY 06...	<0.010	<0.100	0.040	0.050	1.9	0.050	0.020	<0.010	3	67
JUL 10...	<0.010	<0.100	0.080	0.050	1.9	0.090	0.040	0.020	16	88

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02273000 KISSIMMEE RIVER AT S-65E, NEAR OKEECHOBEE, FL--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 24...	1650	<10	<1	13	<0.5	<1	<1	<3	1	190	<5
MAY 06...	1423	70	<1	25	<0.5	<1	<1	<3	1	160	<5
JUL 10...	1042	10	<1	13	<0.5	<1	<1	<9	4	78	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 24...	<4	9	--	<10	3	<1	<1.0	--	<6	11
MAY 06...	5	6	<0.1	<10	<1	<1	<1.0	120	<6	4
JUL 10...	4	7	<0.1	<10	<1	<1	<1.0	170	<6	12

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 65E, 1.8 mi downstream from State Highway 70, 8.2 mi upstream from mouth, and 8.5 mi west of Okeechobee.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 18.18 ft, Feb. 28, 1983; minimum daily, 9.72 ft, July 28, 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.00	14.87	14.69	14.55	14.96	15.27	15.32	15.04	14.50	13.96	13.81	13.31
2	15.00	14.79	14.68	14.46	15.03	15.12	15.46	15.01	14.49	14.02	13.82	13.34
3	14.98	14.74	14.45	14.53	15.00	15.07	15.53	15.02	14.48	14.00	13.85	13.31
4	14.98	14.85	14.39	14.44	14.97	15.04	15.25	14.95	14.44	13.88	13.84	13.29
5	15.00	14.89	14.23	14.01	15.06	14.91	15.37	14.89	14.43	13.96	13.88	13.38
6	14.95	14.85	14.37	14.55	15.05	15.11	15.46	14.87	14.33	13.93	13.84	13.34
7	14.96	14.87	14.49	14.67	15.10	15.33	15.45	14.88	14.30	13.92	13.87	13.36
8	14.94	14.82	14.54	14.77	14.88	15.35	15.40	14.88	14.25	13.89	13.84	13.45
9	14.91	14.82	14.57	14.82	14.86	15.40	15.39	14.83	14.26	13.91	13.69	13.45
10	14.88	14.79	14.57	14.87	14.84	15.25	15.41	14.91	14.22	13.89	13.62	13.41
11	14.88	14.81	14.55	14.66	15.01	15.20	15.42	14.92	14.25	13.88	13.66	13.44
12	14.86	14.83	14.54	14.68	14.99	15.18	15.45	14.93	14.23	13.87	13.65	13.42
13	14.85	14.73	14.29	14.80	15.02	15.06	15.42	14.91	14.23	13.82	13.66	13.37
14	14.83	14.67	14.43	14.86	15.03	15.15	15.47	14.92	14.14	13.79	13.63	13.38
15	14.81	14.68	14.43	14.90	15.09	15.28	15.45	14.91	14.20	13.82	13.69	13.37
16	14.70	14.73	14.38	14.91	15.20	15.30	15.42	14.91	14.18	13.84	13.69	13.36
17	14.58	14.78	14.39	14.91	15.08	15.30	15.39	14.90	14.15	13.77	13.66	13.40
18	14.57	14.78	14.41	14.95	15.05	15.39	15.42	14.90	14.13	13.80	13.64	13.35
19	14.54	14.77	14.38	14.96	15.02	15.32	15.34	14.90	14.14	13.82	13.63	13.30
20	14.59	14.74	14.39	14.92	15.10	15.19	15.33	14.87	14.11	13.75	13.59	13.27
21	14.59	14.67	14.22	14.98	15.12	15.21	15.35	14.83	14.09	13.75	13.51	13.31
22	14.64	14.68	14.30	14.99	15.18	15.20	15.33	14.78	14.06	13.75	13.50	13.31
23	14.72	14.70	14.50	14.81	15.08	15.26	15.30	14.78	14.04	13.79	13.44	13.31
24	14.74	14.72	14.49	14.94	15.14	15.32	15.26	14.74	13.93	13.78	13.48	13.35
25	14.72	14.71	14.36	15.03	15.16	15.32	15.20	14.68	13.85	13.79	13.51	13.34
26	14.73	14.74	14.19	14.89	15.21	15.44	15.01	14.61	14.02	13.78	13.46	13.38
27	14.64	14.68	14.37	14.79	15.24	15.43	14.99	14.56	14.00	13.74	13.42	13.42
28	14.57	14.68	14.30	14.93	15.32	15.47	15.09	14.52	13.91	13.74	13.41	13.39
29	14.65	14.68	14.37	14.97	---	15.40	15.10	14.45	13.90	13.77	13.37	13.40
30	14.74	14.69	14.36	14.99	---	15.48	15.09	14.40	13.95	13.75	13.36	13.47
31	14.83	---	14.47	14.90	---	15.20	---	14.50	---	13.76	13.34	

CAL	YR 1986	MEAN	14.05	MAX	15.07	MIN	12.63
WTR	YR 1987	MEAN	14.51	MAX	15.53	MIN	13.27

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02273200 CANAL 41A AT S-68 AT LAKE ISTOKPOGA, NEAR LAKE PLACID, FL

LOCATION.--Lat 27°19'55", long 81°15'05", in sec.19 or 20, T.36 S., R.31 E., Highlands County, Hydrologic Unit 03090101, 33 ft from right bank, 350 ft upstream from control structure 68 at Lake Istokpoga, and 7.5 mi northeast of town of Lake Placid.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1963 to current year. Prior to October 1968, published as "above S-68."

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 28, 1973, at same site at datum 30.00 ft higher.

REMARKS.--Records good. Flow completely regulated by operation of control structure 68. Records do not include diversions through stoplog control structure on Istokpoga Canal. Gage heights are published as elevations for Lake Istokpoga (station 02271700) in the section of this report entitled "LAKE ELEVATIONS."

COOPERATION.--Gate-operation record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--23 years (water years 1964-87), 250 ft³/s, 181,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft³/s, Sept. 6, 1965; maximum gage height, 40.23 ft, present datum, Dec. 10, 1969, Sept. 3, 1979, affected by wind; no flow for many days each year; minimum gage height, 35.82 ft, present datum, June 17, 1971, affected by wind.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,350 ft³/s, Apr. 1; maximum gage height, 39.54 ft, Mar. 26, affected by wind, no flow for many days; minimum gage height, 36.59 ft, Sept. 1, affected by wind.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	90	.00	90	.00	1350	150	150	.00	.00	.00
2	.00	.00	90	.00	147	.00	934	150	150	.00	.00	.00
3	.00	.00	90	.00	180	.00	450	150	150	.00	.00	.00
4	.00	.00	90	.00	122	.00	450	150	150	.00	.00	.00
5	.00	.00	90	.00	90	.00	450	150	150	.00	.00	.00
6	.00	.00	90	.00	90	.00	450	150	150	.00	.00	.00
7	58	.00	90	.00	90	.00	450	150	150	.00	.00	.00
8	90	.00	90	.00	90	.00	450	150	54	.00	.00	.00
9	90	.00	90	.00	90	.00	450	150	.00	.00	.00	.00
10	90	.00	90	.00	90	.00	450	150	57	.00	.00	.00
11	90	.00	90	.00	90	.00	450	150	90	.00	.00	.00
12	90	.00	90	.00	90	.00	450	150	90	.00	.00	.00
13	90	.00	90	.00	90	.00	450	150	90	.00	.00	.00
14	90	.00	90	.00	90	.00	450	339	90	.00	.00	.00
15	32	.00	90	.00	90	.00	450	450	90	.00	.00	.00
16	.00	.00	32	.00	90	.00	450	450	90	.00	.00	.00
17	58	56	.00	.00	90	.00	450	450	90	.00	.00	.00
18	90	90	.00	.00	90	.00	450	621	90	.00	.00	.00
19	90	206	.00	.00	90	.00	450	720	90	.00	.00	.00
20	90	270	.00	.00	90	.00	450	720	90	.00	.00	.00
21	32	387	.00	.00	90	.00	450	544	90	.00	.00	.00
22	.00	450	.00	.00	90	.00	450	256	90	.00	.00	.00
23	.00	450	.00	.00	90	33	256	150	90	.00	.00	.00
24	.00	336	.00	.00	90	60	150	150	90	.00	.00	.00
25	.00	270	.00	.00	90	60	150	150	90	.00	.00	.00
26	.00	154	.00	57	90	60	150	150	90	.00	.00	.00
27	.00	90	.00	90	50	307	150	150	90	.00	.00	.00
28	58	90	.00	90	.00	450	150	150	90	.00	.00	.00
29	90	90	.00	90	---	450	150	150	90	.00	.00	.00
30	32	90	.00	90	---	737	150	150	32	.00	.00	.00
31	.00	---	.00	90	---	1190	---	150	---	.00	.00	---
TOTAL	1260.00	3029.00	1382.00	507.00	2569.00	3347.00	12590	7850	2903.00	0.00	0.00	0.00
MEAN	40.6	101	44.6	16.4	91.7	108	420	253	96.8	.00	.00	.00
MAX	90	450	90	90	180	1190	1350	720	150	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	150	150	.00	.00	.00	.00
AC-FT	2500	6010	2740	1010	5100	6640	24970	15570	5760	.0	.0	.0

CAL YR 1986 TOTAL 39201.00 MEAN 107 MAX 1060 MIN .00 AC-FT 77760
WTR YR 1987 TOTAL 35437.00 MEAN 97.1 MAX 1350 MIN .00 AC-FT 70290

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02273300 CANAL 41A AT S-84, NEAR OKEECHOBEE, FL

LOCATION.--Lat 27°12'55", long 80°58'55", in SW¼ sec.36, T.37 S., R.33 E., Highlands County, Hydrologic Unit 03090101, 40 ft from left bank, 500 ft upstream from control structure 84, and 9.5 mi west of Okeechobee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1963 to current year. Prior to October 1968, published as "above S-84."

GAGE.--Water-stage and deflection-meter recorder. Datum of gage is 10.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records fair. Flow regulated by operation of structure 84, by storage releases upstream at structure 68 at outlet of Lake Istokpoga and several small diversions above station for irrigation. Flow may be diverted into either Indian Prairie Canal or Harney Pond Canal by combined operation of structures 70, 75, 82, and 83.

COOPERATION.--Gate-operation record provided by South Florida Water Management District.

AVERAGE DISCHARGE.--23 years (water years 1965-87), 182 ft³/s, 131,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,080 ft³/s, Oct. 3, 1969; maximum gage height, 17.39 ft, July 9, 1984; no flow for many days each year; minimum gage height, 6.78 ft, Oct. 16, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge 1,400 ft³/s, Apr. 1; maximum gage height, 15.14 ft, May 19; no flow for many days; minimum gage height, 12.68 ft, May 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	180	.00	177	.00	.00	1400	.00	.00	.00	.00	.00
2	.00	.00	.00	167	.00	.00	744	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	532	.00	.00	.00	.00	.00
4	.00	.00	.00	149	188	.00	410	.00	.00	.00	.00	.00
5	.00	.00	.00	188	.00	.00	553	.00	.00	.00	.00	.00
6	.00	128	.00	117	.00	.00	271	.00	.00	.00	.00	.00
7	.00	.00	.00	143	.00	.00	478	.00	.00	.00	.00	131
8	.00	.00	.00	.00	.00	154	516	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	133	328	.00	.00	.00	.00	.00
10	.00	.00	.00	134	.00	.00	120	.00	.00	.00	107	.00
11	.00	.00	.00	.00	.00	.00	205	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	126	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	172	.00	.00	.00	.00	118
14	.00	.00	.00	.00	.00	.00	258	257	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	110	347	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	273	185	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	273	380	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	135	306	.00	.00	.00	.00
19	.00	206	.00	163	.00	174	196	526	.00	.00	.00	.00
20	.00	161	.00	.00	.00	.00	147	513	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	260	246	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	90	221	.00	.00	.00	.00
23	.00	138	.00	.00	.00	.00	122	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	180
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	209	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	383	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	441	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	670	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	1220	---	.00	---	.00	.00	---
TOTAL	0.00	813.00	0.00	1238.00	188.00	3384.00	7719.00	2981.00	0.00	0.00	107.00	429.00
MEAN	.00	27.1	.00	39.9	6.71	109	257	96.2	.00	.00	3.45	14.3
MAX	.00	206	.00	188	188	1220	1400	526	.00	.00	107	180
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	1610	.0	2460	373	6710	15310	5910	.0	.0	212	851

CAL YR 1986 TOTAL 20602.60 MEAN 56.4 MAX 789 MIN .00 AC-FT 40870
WTR YR 1987 TOTAL 16859.00 MEAN 46.2 MAX 1400 MIN .00 AC-FT 33440

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.84	14.40	14.25	14.59	14.79	14.10	14.40	13.29	14.38	13.60	14.30	14.32
2	14.80	14.41	14.27	14.51	14.80	14.15	14.30	13.13	14.37	13.62	14.54	14.29
3	14.78	14.63	14.26	14.70	14.81	14.17	14.45	13.00	14.37	13.65	14.69	14.38
4	14.75	14.74	14.24	14.48	14.20	14.12	14.54	12.88	14.24	13.65	14.79	14.51
5	14.73	14.79	14.14	14.55	14.18	14.05	14.56	12.78	14.07	13.65	14.85	14.66
6	14.71	14.78	14.13	14.39	14.28	13.94	14.47	12.76	14.05	13.65	14.87	14.81
7	14.68	14.22	14.13	14.62	14.35	14.33	14.51	13.12	14.03	13.65	14.88	14.41
8	14.66	14.37	14.14	14.38	14.42	14.41	14.42	13.50	14.02	13.64	14.88	14.33
9	14.63	14.46	14.15	14.69	14.41	14.58	14.56	13.91	14.02	13.64	14.87	14.48
10	14.62	14.50	14.06	14.84	14.41	14.35	14.46	14.42	14.02	13.65	14.73	14.63
11	14.61	14.53	13.93	14.26	14.42	14.58	14.41	14.59	14.02	13.66	14.15	14.68
12	14.60	14.56	13.86	14.46	14.41	14.71	14.52	14.64	14.02	13.65	14.20	14.78
13	14.59	14.57	13.87	14.59	14.31	14.78	14.44	14.67	14.01	13.64	14.31	14.69
14	14.57	14.57	13.87	14.67	14.29	14.81	14.52	14.48	14.00	13.65	14.37	14.16
15	14.56	14.58	13.87	14.74	14.31	14.83	14.41	14.49	14.02	13.64	14.41	14.25
16	14.56	14.58	13.81	14.79	14.38	14.85	14.47	14.40	14.03	13.64	14.43	14.29
17	14.54	14.58	13.74	14.83	14.41	14.85	14.38	14.40	14.04	13.66	14.44	14.33
18	14.50	14.59	13.67	14.85	14.43	14.84	14.41	14.40	13.89	13.68	14.44	14.36
19	14.45	14.47	13.61	14.69	14.33	14.61	14.46	14.50	13.88	13.70	14.44	14.35
20	14.43	14.25	13.66	14.24	14.24	14.08	14.43	14.50	13.87	13.72	14.44	14.32
21	14.40	14.30	13.67	14.36	14.27	14.16	14.43	14.33	13.87	13.74	14.43	14.32
22	14.37	14.59	13.66	14.48	14.32	14.19	14.36	14.37	13.87	13.78	14.41	14.64
23	14.34	14.45	13.56	14.56	14.34	14.21	14.18	14.33	13.76	13.77	14.39	14.92
24	14.32	14.13	13.67	14.59	14.20	14.23	13.95	14.36	13.67	13.76	14.38	14.65
25	14.31	14.16	13.75	14.67	14.18	14.28	13.90	14.38	13.49	13.76	14.36	14.04
26	14.30	14.20	13.81	14.76	14.14	14.37	13.85	14.38	13.49	13.74	14.33	14.14
27	14.29	14.21	13.94	14.77	14.11	14.55	13.83	14.38	13.52	13.77	14.35	14.22
28	14.28	14.21	14.10	14.76	14.09	14.41	13.72	14.38	13.53	13.83	14.37	14.31
29	14.31	14.22	14.19	14.77	---	14.39	13.56	14.38	13.57	13.88	14.37	14.38
30	14.48	14.24	14.27	14.79	---	14.57	13.44	14.37	13.58	13.93	14.36	14.45
31	14.55	---	14.40	14.81	---	14.52	---	14.37	---	14.10	14.36	---
MEAN	14.53	14.44	13.96	14.62	14.35	14.42	14.28	14.06	13.92	13.71	14.49	14.44
MAX	14.84	14.79	14.40	14.85	14.81	14.85	14.56	14.67	14.38	14.10	14.88	14.92
MIN	14.28	14.13	13.56	14.24	14.09	13.94	13.44	12.76	13.49	13.60	14.15	14.04
CAL YR 1986	MEAN 14.07		MAX 15.02	MIN 11.18								
WTR YR 1987	MEAN 14.27		MAX 14.92	MIN 12.76								

SOUTH FLORIDA

TAYLOR CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTH

02274000 TAYLOR CREEK NEAR BASINGER, FL

LOCATION.--Lat 27°23'39", long 80°53'44", in SE¼ sec.26, T.35 S., R.34 E., Okeechobee County, Hydrologic Unit 03090102, near center of channel on downstream side of bridge on State Highway 68, 800 ft upstream from control structure 3, 0.8 mi downstream from small tributary, 8.5 mi east of Basinger, and 17 mi upstream from mouth.

DRAINAGE AREA.--15.7 mi².

PERIOD OF RECORD.--June 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 25.00 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 13, 1960 at present site, at datum 4.10 ft higher. Apr. 14, 1960, to Sept. 30, 1962, at site about 500 ft downstream, and Oct. 1, 1962, to Sept. 30, 1966, at present site, at datum 4.10 ft higher.

REMARKS.--Estimated daily discharges: Nov. 27 to Dec. 23, Jan. 16 to Mar. 2. Records fair except for estimated daily discharges, which are poor. Some diversion during low flow for irrigation. Flow regulated at station by operation of control structure 3 since February 1965.

AVERAGE DISCHARGE.--32 years, 14.3 ft³/s, 10,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,540 ft³/s, Oct. 15, 1956, gage height, 11.98 ft, present datum, from rating curve extended above 1,100 ft³/s; no flow at times in most years; minimum gage height, 2.64 ft, June 25,26, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 257 ft³/s, Jan. 1, gage height, 6.86 ft; minimum discharge 0.06 ft³/s, June 25,26; gage height, 2.64 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	66	1.0	177	2.6	.82	53	.36	.30	.90	7.7	.36
2	1.4	89	1.1	71	2.4	.76	34	.36	.30	.78	7.7	.30
3	1.4	37	.90	43	2.3	.84	21	.36	.36	1.4	6.8	.18
4	1.3	22	.75	85	2.1	.84	14	.36	.36	8.3	6.8	.36
5	1.3	15	.70	112	2.1	.78	9.1	.24	.18	9.5	6.4	.48
6	1.2	10	.70	64	2.1	.78	6.6	.24	.18	13	5.2	.42
7	1.2	8.1	.66	47	2.3	.42	4.5	.24	.24	12	3.7	.42
8	1.9	6.2	.62	32	2.4	.45	3.5	.36	.30	10	2.5	.36
9	2.1	4.9	.58	26	2.1	.24	2.5	.30	.36	7.7	1.6	.30
10	2.5	4.1	.55	19	1.9	.15	1.7	.36	.36	5.2	1.3	.30
11	2.3	3.4	.51	15	1.7	.10	1.2	.42	.30	3.4	1.0	.48
12	1.7	3.2	.47	15	1.7	.70	.96	.60	.24	3.4	.90	.54
13	1.6	5.5	.42	11	1.6	.49	.84	1.2	.24	13	.84	.60
14	1.4	33	.39	7.3	1.6	3.5	.72	1.9	.18	7.7	.84	.54
15	6.5	17	.36	6.6	1.6	2.5	.72	1.1	.36	9.3	.84	.48
16	19	11	.33	5.2	1.8	1.7	.72	.90	.66	18	.78	.48
17	7.7	7.5	.30	4.7	1.6	1.4	.60	.66	.30	21	.96	.48
18	4.3	5.8	.27	4.3	1.6	1.1	.54	.48	.24	30	.90	.48
19	2.5	4.3	.25	3.8	1.6	1.0	.48	.42	.24	34	.80	.48
20	1.7	3.5	.23	3.4	1.6	.96	.42	.30	.30	36	.66	.42
21	1.7	2.5	.22	3.0	1.4	.90	.30	.24	.24	41	.54	.42
22	1.6	1.9	.20	3.1	1.3	.78	.30	.24	.18	30	.42	.54
23	1.6	1.6	1.0	3.6	1.2	.84	.30	.18	.18	21	.42	.48
24	1.4	1.6	1.7	3.5	1.1	.96	.30	.18	.18	15	.36	.48
25	1.4	1.9	2.1	3.8	1.1	.96	.30	.12	.06	11	.36	.42
26	1.3	1.7	1.6	3.6	1.0	3.8	.24	.12	.06	7.7	.30	.42
27	1.3	1.2	3.5	3.4	.95	50	.30	.12	.36	5.6	.30	.36
28	1.2	1.0	6.4	3.2	.88	38	.36	.12	.48	3.7	.30	.36
29	3.9	.85	4.9	3.0	---	64	.42	.12	1.9	3.2	.30	.30
30	53	.94	3.5	2.9	---	104	.42	.18	1.1	4.0	.30	.42
31	35	---	21	2.7	---	89	---	.24	---	5.6	.24	---
TOTAL	167.8	371.69	57.21	788.1	47.63	518.12	160.34	13.02	10.74	392.38	62.06	12.66
MEAN	5.41	12.4	1.85	25.4	1.70	16.7	5.34	.42	.36	12.7	2.00	.42
MAX	53	89	21	177	2.6	104	53	1.9	1.9	41	7.7	.60
MIN	1.2	.85	.20	2.7	.88	.76	.24	.12	.06	.78	.24	.18
AC-FT	333	737	113	1560	94	1030	318	26	21	778	123	25

CAL YR 1986 TOTAL 3864.84 MEAN 10.6 MAX 562 MIN .00 AC-FT 7670
WTR YR 1987 TOTAL 2601.75 MEAN 7.13 MAX 177 MIN .06 AC-FT 5160

SOUTH FLORIDA

TAYLOR CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTH

02274000 TAYLOR CREEK NEAR BASINGER, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.82	4.73	---	6.14	---	---	4.52	2.73	2.70	2.78	3.14	2.66
2	2.82	5.10	---	4.82	---	---	4.07	2.73	2.70	2.76	3.14	2.65
3	2.82	4.13	---	4.28	---	2.72	3.73	2.73	2.71	2.85	3.09	2.63
4	2.81	3.71	---	4.85	---	2.72	3.44	2.73	2.71	3.18	3.09	2.66
5	2.81	3.44	---	5.43	---	2.71	3.23	2.72	2.68	3.24	3.07	2.69
6	2.80	3.26	---	4.71	---	2.71	3.10	2.72	2.68	3.41	3.01	2.68
7	2.80	3.14	---	4.35	---	4.00	3.00	2.72	2.69	3.38	2.93	2.68
8	2.85	3.04	---	4.10	---	4.35	2.95	2.73	2.70	3.27	2.87	2.67
9	2.86	2.97	---	3.84	---	3.81	2.90	2.73	2.71	3.15	2.82	2.66
10	2.88	2.93	---	3.62	---	3.50	2.86	2.74	2.70	3.02	2.80	2.66
11	2.87	2.89	---	3.44	---	3.27	2.82	2.75	2.69	2.92	2.76	2.69
12	2.84	2.88	---	3.29	---	3.11	2.79	2.77	2.68	2.92	2.74	2.70
13	2.83	2.99	---	3.18	---	3.00	2.77	2.87	2.68	3.40	2.73	2.71
14	2.82	4.03	---	3.10	---	2.93	2.75	2.92	2.67	3.15	2.73	2.70
15	3.07	3.54	---	3.06	---	2.88	2.75	2.86	2.70	3.23	2.73	2.70
16	3.65	3.27	---	---	---	2.84	2.75	2.82	2.75	3.58	2.72	2.70
17	3.15	3.11	---	---	---	2.82	2.74	2.78	2.69	3.71	2.75	2.70
18	2.97	3.02	---	---	---	2.79	2.73	2.75	2.68	3.98	2.74	2.70
19	2.88	2.94	---	---	---	2.77	2.72	2.74	2.68	4.08	2.69	2.70
20	2.84	2.90	---	---	---	2.76	2.71	2.72	2.68	4.12	2.70	2.69
21	2.84	2.85	---	---	---	2.75	2.70	2.71	2.67	4.25	2.68	2.69
22	2.83	2.82	---	---	---	2.73	2.70	2.70	2.66	3.95	2.66	2.71
23	2.83	2.80	---	---	---	2.74	2.70	2.69	2.66	3.70	2.66	2.70
24	2.82	2.80	2.81	---	---	2.76	2.70	2.69	2.66	3.49	2.65	2.70
25	2.82	2.82	2.83	---	---	2.76	2.70	2.68	2.62	3.29	2.65	2.70
26	2.81	2.81	2.80	---	---	2.90	2.70	2.68	2.63	3.14	2.65	2.70
27	2.81	---	2.90	---	---	4.45	2.71	2.68	2.69	3.03	2.65	2.69
28	2.80	---	3.05	---	---	4.17	2.72	2.68	2.71	2.93	2.65	2.69
29	2.95	---	2.97	---	---	4.54	2.73	2.68	2.88	2.90	2.65	2.68
30	4.50	---	2.90	---	---	5.32	2.73	2.69	2.81	2.94	2.65	2.69
31	4.09	---	3.38	---	---	5.12	---	2.70	---	3.03	2.64	---
MEAN	2.98	---	---	---	---	---	2.95	2.74	2.70	3.32	2.79	2.69
MAX	4.50	---	---	---	---	---	4.52	2.92	2.88	4.25	3.14	2.71
MIN	2.80	---	---	---	---	---	2.70	2.68	2.62	2.76	2.64	2.63

SOUTH FLORIDA

TAYLOR CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTH

02274330 TAYLOR CREEK ABOVE S-1, NEAR OKEECHOBEE, FL

LOCATION.--Lat 27°17'47", long 80°49'44", in NE¼ sec.33, T.36 S., R.35 E., Okeechobee County, Hydrologic Unit 03090102, near left bank on upstream side of wingwall of abandoned control structure 1,800 ft upstream from U.S. Highway 441, 0.3 mi upstream from Williamson Ditch, 3.7 mi north of Okeechobee, and 9.7 mi upstream from mouth at control structure 191.

DRAINAGE AREA.--62.2 mi².

PERIOD OF RECORD.--March 1964 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to June 25, 1964, reference point at present site and June 25, 1964 to May 31, 1976 at site 150 ft upstream at same datum.

REMARKS.--Flow regulated by control structure 191 beginning July 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 24.69 ft, June 23, 1973, result of coffer dam; minimum, 12.87 ft, estimated, Sept. 7, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 20.18 ft, Jan. 1; minimum, 18.62 ft, Apr. 16.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.27	19.31	19.34	19.93	19.16	19.14	19.34	19.30	19.28	19.30	19.27	19.20
2	19.25	19.32	19.16	19.64	19.34	19.22	19.27	19.31	19.27	19.21	19.21	19.20
3	19.23	19.28	19.28	19.36	19.10	19.32	19.24	19.32	19.29	19.33	19.34	19.19
4	19.30	19.26	19.20	19.41	19.28	19.07	19.21	19.32	19.33	19.18	19.35	19.19
5	19.25	19.24	19.15	19.56	19.23	19.19	19.17	19.32	19.33	19.25	19.20	19.23
6	19.29	19.28	19.22	19.37	19.20	19.31	19.20	19.32	19.32	19.33	19.29	19.23
7	19.25	19.28	19.22	19.32	19.24	19.39	19.21	19.35	19.35	19.20	19.36	19.27
8	19.30	19.30	19.25	19.28	19.16	19.38	19.20	19.01	19.38	19.29	19.41	19.30
9	19.28	19.25	19.20	19.25	19.17	19.30	19.21	18.96	19.42	19.20	19.28	19.31
10	19.19	19.28	19.38	19.27	19.13	19.21	19.17	19.03	19.33	19.36	19.13	19.32
11	19.28	19.21	19.10	19.25	19.36	19.23	19.28	19.23	18.98	19.30	19.17	19.32
12	19.27	19.25	19.23	19.18	19.05	19.17	19.19	19.33	18.96	19.16	19.21	19.33
13	19.28	19.24	19.34	19.21	19.22	19.18	19.11	19.30	19.01	19.33	19.23	19.33
14	19.25	19.27	19.15	19.22	19.36	19.29	19.12	19.13	19.03	19.19	19.27	19.39
15	19.31	19.28	19.14	19.23	19.13	19.10	19.28	19.26	19.05	19.31	19.32	19.40
16	19.22	19.23	19.24	19.20	19.21	19.30	19.19	19.23	19.14	19.21	19.34	19.40
17	19.22	19.24	19.34	19.24	19.24	19.18	19.12	19.26	19.20	19.27	19.28	19.42
18	19.22	19.24	19.29	19.30	19.21	19.35	19.25	19.15	19.22	19.27	19.15	19.19
19	19.23	19.24	19.09	19.18	19.15	19.13	19.34	19.31	19.25	19.29	19.22	19.09
20	19.19	19.27	19.19	19.21	19.26	19.30	19.18	19.27	19.26	19.25	19.24	19.12
21	19.28	19.31	19.30	19.27	19.19	19.28	19.06	19.03	19.26	19.26	19.25	19.15
22	19.16	19.15	19.38	19.25	19.24	19.12	19.14	19.11	19.26	19.26	19.25	19.28
23	19.22	19.29	19.30	19.17	19.17	19.24	19.21	19.17	19.25	19.29	19.27	19.29
24	19.38	19.21	19.19	19.24	19.15	19.38	19.26	19.21	19.22	19.30	19.27	19.23
25	19.12	19.29	19.36	19.26	19.35	19.15	19.29	19.23	19.21	19.29	19.26	19.17
26	19.21	19.24	19.07	19.25	19.13	19.24	19.31	19.25	19.20	19.16	19.25	19.25
27	19.34	19.30	19.25	19.13	19.25	19.29	19.33	19.25	19.24	19.15	19.24	19.30
28	19.19	19.19	19.20	19.20	19.40	19.31	19.31	19.26	19.26	19.29	19.23	19.32
29	19.19	19.36	19.23	19.26	---	19.28	19.26	19.26	19.25	19.34	19.21	19.34
30	19.24	19.19	19.21	19.14	---	19.41	19.28	19.27	19.26	19.20	19.20	19.36
31	19.27	---	19.32	19.18	---	19.40	---	19.28	---	19.33	19.18	---
MEAN	19.25	19.26	19.24	19.29	19.22	19.25	19.22	19.23	19.23	19.26	19.25	19.27
MAX	19.38	19.36	19.38	19.93	19.40	19.41	19.34	19.35	19.42	19.36	19.41	19.42
MIN	19.12	19.15	19.07	19.13	19.05	19.07	19.06	18.96	18.96	19.15	19.13	19.09

CAL YR 1986 MEAN 19.03 MAX 20.14 MIN 18.10
WTR YR 1987 MEAN 19.25 MAX 19.93 MIN 18.96

SOUTH FLORIDA

TAYLOR CREEK BASIN AND INFLOW TO LAKE OKEECHOBEE FROM NORTH

02274495 WILLIAMSON DITCH AT S-7, NEAR OKEECHOBEE, FL

LOCATION.--Lat 27°17'45", long 80°49'35", in NW¼ sec.34, T.36 S., R.35 E., Okeechobee County, Hydrologic Unit 03090102, near right bank 125 ft upstream from control structure 7, 450 ft upstream from mouth, and 3.6 mi north of Okeechobee.

DRAINAGE AREA.--35.4 mi².

PERIOD OF RECORD.--March 1964 to current year. Prior to October 1968, published as "above S-7."

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to June 23, 1964, nonrecording gage at site 125 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 29-30, Feb. 1, June 3-30. Records good above 30 ft³/s and poor below, except for estimated daily discharges, which are fair. Flow regulated at times by stoplog control 1 mi upstream.

AVERAGE DISCHARGE.--23 years, 29.7 ft³/s, 11.39 in/yr, 21,520 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s, Aug. 28, 1964, gage height, 23.12 ft; maximum gage height, 23.62 ft, July 18, 1974, backwater from Taylor Creek; no flow for several days in 1981, 1985, 1986, 1987; minimum gage height after completion of weir in April 1964, 19.24 ft, June 2, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 228 ft³/s, Jan. 1; maximum gage height, 21.25 ft, Jan. 1, affected by backwater; No flow Mar. 22,23, May 9,24-31, June 1, July 12, Aug. 21-29; minimum gage height, 19.31 ft, July 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	50	6.1	228	3.2	2.4	28	.35	.00	11	3.6	3.6
2	6.9	58	4.6	212	2.7	2.4	28	.35	.11	5.4	2.7	.74
3	5.0	38	3.3	117	1.8	3.0	28	.35	.10	3.9	2.1	.35
4	4.6	36	3.0	94	1.2	1.8	24	.35	.08	2.4	2.1	.54
5	3.3	33	2.4	146	1.6	1.4	13	.17	.06	2.7	.74	.54
6	3.3	27	4.6	93	.94	1.2	8.6	.17	.04	2.7	.54	.94
7	2.7	163	4.3	61	1.4	14	6.1	.21	.13	1.8	.74	3.3
8	3.0	132	4.3	44	2.1	23	4.2	.19	.12	1.6	1.2	3.3
9	2.4	71	3.3	31	1.6	21	3.3	.00	.26	.37	.54	1.8
10	3.0	48	3.6	21	1.2	21	2.1	.48	.22	.19	.17	.74
11	3.0	26	2.4	16	1.6	23	1.2	.35	.31	.44	.17	.54
12	3.3	16	2.4	12	.94	16	.94	.54	.31	.00	.17	.74
13	3.9	17	2.7	9.1	.54	7.7	.35	1.4	.39	.25	.54	.54
14	3.3	48	2.4	7.7	.54	5.0	.56	.35	.23	.18	.54	.94
15	3.6	36	1.8	3.9	.32	3.6	.17	1.2	.45	.35	1.2	.94
16	3.3	25	1.6	1.8	.44	3.3	.54	.54	.52	1.1	1.2	.94
17	3.3	16	1.2	2.4	2.1	2.7	.17	1.2	.25	18	1.2	1.4
18	2.4	12	.94	2.4	2.4	2.7	.17	.17	.19	23	.74	.83
19	2.4	9.1	1.2	2.4	3.3	1.8	.54	.10	.33	14	.35	.35
20	2.4	6.9	.74	3.6	3.0	.74	.54	.74	.30	18	.08	.35
21	2.7	5.0	.94	3.0	3.6	.40	.35	.10	.27	28	.00	.60
22	4.3	5.0	1.4	4.6	2.7	.00	.35	.35	.27	59	.00	16
23	3.6	5.0	2.7	7.7	2.4	.00	.54	.13	.19	40	.00	6.1
24	3.9	3.9	1.2	6.9	1.6	.58	.35	.00	.19	19	.00	2.4
25	3.0	3.9	2.7	6.5	2.1	.35	.17	.00	.10	6.9	.00	.54
26	2.7	3.3	2.7	7.7	2.1	1.4	.35	.00	.09	.94	.00	.94
27	3.0	3.6	5.4	7.3	1.6	15	.74	.00	.09	1.6	.00	.94
28	2.7	2.7	12	8.6	3.0	18	.94	.00	.66	1.8	.00	.74
29	6.7	3.3	11	7.2	---	19	.54	.00	4.8	3.0	.00	.74
30	32	4.3	10	5.8	---	19	.54	.00	18	1.2	.06	1.2
31	44	---	17	4.7	---	21	---	.00	---	1.8	2.2	---
TOTAL	181.9	908.0	123.92	1178.3	52.02	252.47	155.35	9.79	29.06	270.62	22.88	53.62
MEAN	5.87	30.3	4.00	38.0	1.86	8.14	5.18	.32	.97	8.73	.74	1.79
MAX	44	163	17	228	3.6	23	28	1.4	18	59	3.6	16
MIN	2.4	2.7	.74	1.8	.32	.00	.17	.00	.00	.00	.00	.35
AC-FT	361	1800	246	2340	103	501	308	19	58	537	45	106
CFSM	.17	.85	.11	1.07	.05	.23	.15	.01	.03	.25	.02	.05
IN.	.19	.95	.13	1.24	.05	.27	.16	.01	.03	.28	.02	.06

CAL YR 1986 TOTAL 10744.96 MEAN 29.4 MAX 350 MIN .00 AC-FT 21310 CFSM .83 IN. 11.29
WTR YR 1987 TOTAL 3237.93 MEAN 8.87 MAX 228 MIN .00 AC-FT 6420 CFSM .25 IN. 3.40

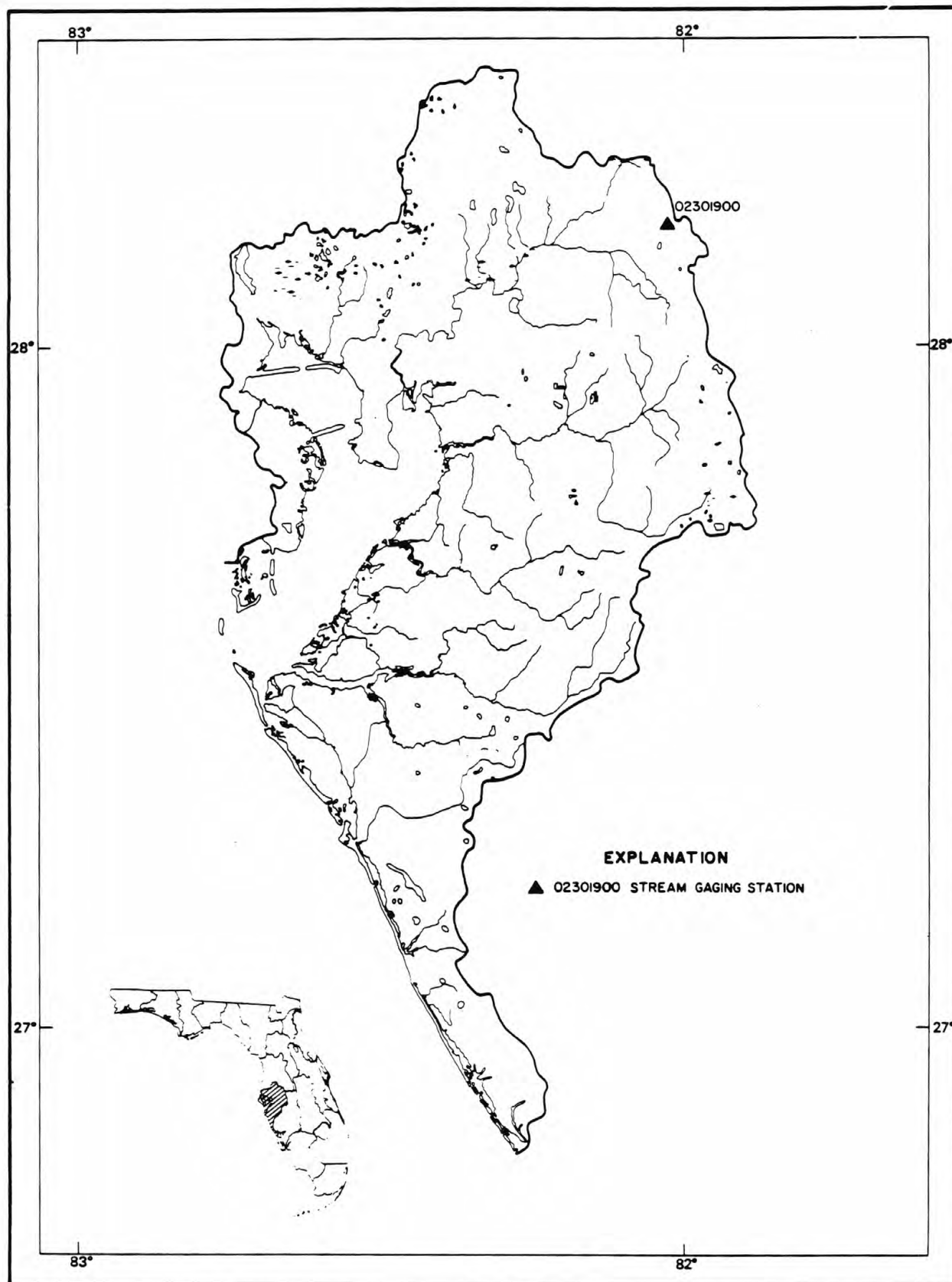


Figure 21.--Location of stream gaging stations in the Manatee, Little Manatee, Alafia, and Hillsborough River basins, and Tampa Bay and coastal areas.

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

HILLSBOROUGH RIVER BASIN

02301900 FOX BRANCH NEAR SOCNUM, FL

LOCATION.--Lat 28°10'55", long 82°00'45", in NE¼ sec.33, T.26 S., R.23 E., Polk County, Hydrologic Unit 03100205, near center of span on downstream side of bridge on Rock Ridge Road, 1.1 mi northeast of Socnum, 8.7 mi upstream from mouth, and 10 mi north of Lakeland.

DRAINAGE AREA.--9.5 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1963 to current year.

REVISED RECORDS.--WRD FL 1969: 1968 (M).

GAGE.--Water-stage recorder. Datum of gage is 110.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1. Records fair above 10 ft³/s and poor below. Some diversion at times by pumpage for irrigation.

AVERAGE DISCHARGE.--23 years (water years 1965-87), 8.09 ft³/s, 11.56 in/yr, 5,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 685 ft³/s, Sept. 11, 1964; maximum gage height, 8.22 ft, July 26, 1978; no flow at times in some years; channel dry at gage for many days in 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 110 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	0630	*305	*6.54	May 16	0025	157	5.87
				Aug. 13	1400	162	5.88

Minimum discharge, 0.81 ft³/s, July 13, minimum gage height, 2.98 ft, Nov. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	4.2	2.6	7.6	3.2	6.0	154	1.7	3.4	6.0	2.0	2.1
2	2.2	3.6	2.8	7.7	3.0	14	52	1.6	2.9	4.5	3.6	2.3
3	2.4	3.2	2.8	5.3	2.9	9.9	24	1.4	2.7	4.4	5.4	2.4
4	2.4	3.3	2.5	5.0	2.9	7.4	17	1.3	3.0	4.5	6.4	2.9
5	2.2	3.2	2.3	6.1	2.8	6.0	14	1.3	3.0	3.6	4.8	3.2
6	2.1	3.2	2.1	5.7	2.9	5.1	13	2.0	2.9	2.8	3.5	3.2
7	2.3	3.0	2.0	4.8	3.1	12	11	2.6	2.7	2.2	2.8	2.9
8	3.3	2.7	1.9	4.1	3.7	25	9.8	2.6	2.4	1.9	2.4	2.7
9	4.5	2.5	1.9	3.7	3.9	15	9.7	2.4	2.2	1.7	2.0	2.7
10	5.5	2.3	1.9	3.3	3.5	10	8.9	2.3	2.0	1.4	1.6	2.7
11	20	2.2	1.8	3.0	3.2	7.7	8.2	3.1	2.1	1.3	7.6	2.6
12	17	2.2	1.9	2.7	3.0	6.2	7.2	13	2.4	1.3	54	4.5
13	9.5	2.2	2.1	2.6	2.8	5.3	5.7	17	2.6	1.2	141	14
14	8.6	2.0	2.1	2.4	2.7	4.8	5.1	10	2.2	1.1	109	13
15	10	2.0	2.0	2.4	2.6	4.4	4.9	78	1.8	1.0	51	8.1
16	9.7	2.1	2.0	2.3	3.3	4.1	4.7	127	1.5	1.1	25	6.5
17	8.3	2.1	1.9	2.4	5.8	3.9	4.4	52	1.3	1.1	14	5.5
18	6.5	2.1	1.9	2.6	5.9	3.6	4.2	18	1.3	2.3	10	5.2
19	4.6	2.6	1.9	2.6	6.3	4.8	4.0	11	1.5	4.5	7.9	4.7
20	3.7	2.6	1.9	2.6	5.7	6.8	3.8	11	1.5	4.0	5.9	4.5
21	3.3	2.5	1.8	3.6	5.2	6.1	3.6	8.2	1.4	3.6	4.7	4.4
22	2.9	2.2	1.7	5.7	5.6	5.3	3.4	6.9	1.3	3.6	3.9	4.8
23	2.7	2.1	1.9	6.9	5.9	4.7	3.2	6.6	1.1	3.1	3.6	5.2
24	2.5	2.0	2.8	6.1	5.8	4.4	3.1	5.9	1.0	2.5	3.1	5.6
25	2.4	2.0	3.5	5.6	5.5	4.3	2.9	5.2	.92	2.0	2.8	5.4
26	2.4	2.1	3.3	5.3	5.5	11	2.7	4.6	.98	1.6	2.5	4.9
27	2.8	2.0	2.8	4.8	5.5	36	2.4	4.1	1.4	1.5	2.3	4.5
28	4.0	2.0	2.6	4.4	4.8	41	2.3	3.8	2.3	1.4	2.2	4.4
29	4.8	2.0	2.4	4.0	---	63	2.1	3.8	2.8	1.4	2.2	4.3
30	4.7	2.2	2.3	3.7	---	212	1.9	4.7	5.2	1.7	2.2	8.5
31	4.6	---	2.7	3.5	---	280	---	4.4	---	2.1	2.0	---
TOTAL	164.0	74.4	70.1	132.5	117.0	829.8	393.2	417.5	63.80	76.4	491.4	147.7
MEAN	5.29	2.48	2.26	4.27	4.18	26.8	13.1	13.5	2.13	2.46	15.9	4.92
MAX	20	4.2	3.5	7.7	6.3	280	154	127	5.2	6.0	141	14
MIN	2.1	2.0	1.7	2.3	2.6	3.6	1.9	1.3	.92	1.0	1.6	2.1
AC-FT	325	148	139	263	232	1650	780	828	127	152	975	293
CFSM	.56	.26	.24	.45	.44	2.82	1.38	1.42	.22	.26	1.67	.52
IN.	.64	.29	.27	.52	.46	3.25	1.54	1.63	.25	.30	1.92	.58

CAL YR 1986 TOTAL 2390.57 MEAN 6.55 MAX 72 MIN .36 AC-FT 4740 CFSM .69 IN. 9.36
WTR YR 1987 TOTAL 2977.80 MEAN 8.16 MAX 280 MIN .92 AC-FT 5910 CFSM .86 IN. 11.66

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

HILLSBOROUGH RIVER BASIN

02301900 FOX BRANCH NEAR SOCRUM, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
NOV 26...	1305	2.94	2.2	250	6.1	17.0	--
JAN 21...	1250	3.07	2.6	280	--	8.0	--
MAR 20...	1155	2.84	1.5	285	7.6	16.0	9.1
MAY 30...	0735	2.19	0.49	300	6.8	--	--
JUL 09...	0850	2.76	1.3	250	7.8	27.5	1.7

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

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT 30...	1000	3.06	2.7	150	6.0	24.5	6.2
JAN 07...	1325	3.14	5.0	285	7.2	16.0	9.4
FEB 24...	1220	3.00	3.7	250	7.5	21.0	8.6
APR 02...	1300	2.91	2.3	281	6.3	22.5	10.0
MAY 27...	1430	2.79	0.86	302	6.9	28.0	--
AUG 04...	1330	3.09	1.8	274	6.2	29.5	4.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT 01...	1240	3.13	2.0	262	5.3	27.0	4.3
MAR 16...	1255	3.45	3.1	254	5.5	17.0	7.5
MAY 04...	1415	3.39	1.2	278	5.6	24.0	4.5
JUL 09...	1315	3.48	1.6	275	5.7	29.0	4.0

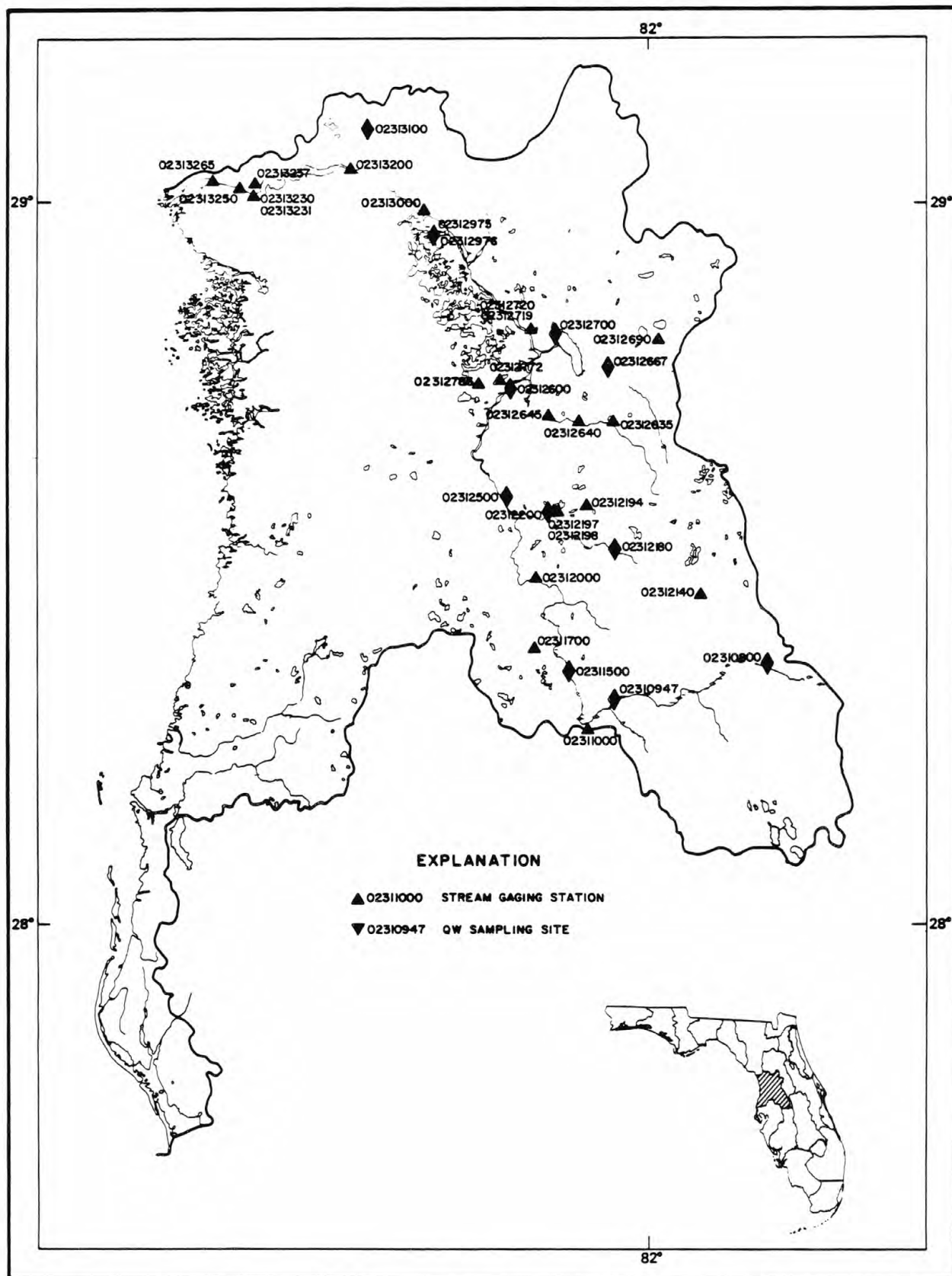


Figure 22.--Location of stream gaging stations in the Withlacoochee River basin and coastal areas.

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02310800 WITHLACOCHEE RIVER NEAR EVA, FL
(National stream-quality accounting network station)

LOCATION.--Lat 28°21'38", long 81°49'08", in NW¼ sec.33, T.24 S., R.25 E., Polk County, Hydrologic Unit 03100208, near center of span on upstream side of bridge on State Highway 33, 2.5 mi north of Eva, 6.5 mi upstream from small tributary, and 138 mi upstream from mouth.

DRAINAGE AREA.--130 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 104.90 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: July 1-13, Aug. 28 to Sept. 23. Records poor.

AVERAGE DISCHARGE.--29 years (water years 1959-87), 48.3 ft³/s, 5.04 in/yr, 34,990 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,160 ft³/s, Mar. 17, 1960, gage height, 6.90 ft; no flow for many days in some years; minimum gage height, 1.18 ft, May 31, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 396 ft³/s, Mar. 31, gage height, 5.95 ft; minimum 0.49 ft³/s, Nov. 29,30; gage height, 2.84 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	8.1	1.4	11	3.8	4.5	379	25	38	9.5	3.7	2.8
2	12	9.6	1.4	9.9	3.1	6.2	349	23	35	8.0	8.0	2.3
3	11	6.4	1.3	8.6	2.3	6.6	312	21	33	6.7	8.3	2.6
4	11	6.1	1.1	7.5	1.9	6.5	272	20	30	5.4	6.0	4.0
5	10	6.0	.96	7.7	1.8	4.9	238	21	27	4.9	4.6	4.3
6	9.7	4.2	.84	6.4	2.8	3.8	212	25	25	4.8	3.6	3.7
7	20	3.1	.75	6.0	3.4	9.5	198	24	23	7.8	4.3	2.9
8	21	2.5	.67	5.5	5.8	13	178	21	21	7.2	3.1	2.4
9	16	2.1	.59	4.8	4.6	11	156	23	19	6.3	2.1	2.1
10	15	1.8	.66	4.0	3.6	10	143	32	16	4.8	1.6	1.7
11	16	1.5	2.0	3.6	3.1	8.2	127	32	14	3.5	6.3	1.6
12	14	1.4	2.2	3.0	2.6	6.5	115	39	12	2.4	32	4.0
13	12	1.4	2.5	2.7	2.6	5.3	106	37	15	1.9	36	4.3
14	12	1.5	1.9	2.6	3.3	5.2	98	43	14	1.6	33	3.7
15	12	1.2	1.5	2.5	2.7	5.0	95	81	13	1.5	29	3.0
16	12	1.1	1.4	2.3	2.9	4.0	94	83	12	1.7	23	2.5
17	11	.95	1.6	2.3	4.0	3.4	87	81	11	2.2	18	2.1
18	9.6	.85	1.4	2.4	5.2	3.0	82	74	9.8	2.0	15	1.8
19	8.6	.78	1.2	2.1	4.1	4.6	74	76	8.8	1.8	11	1.6
20	5.9	.85	1.1	2.0	3.0	4.4	69	76	8.4	2.2	8.3	1.9
21	5.4	.77	1.2	3.1	3.5	3.8	64	74	7.7	2.8	6.6	2.6
22	6.0	.68	1.5	5.9	4.7	3.3	59	69	6.6	3.5	6.1	1.8
23	6.1	.63	1.8	7.3	4.2	3.0	54	66	5.5	2.4	4.9	2.1
24	5.9	.60	3.4	6.4	4.3	2.7	48	61	4.6	1.7	3.8	1.5
25	5.6	.65	2.9	4.8	5.1	2.5	46	56	3.8	1.5	3.9	1.3
26	4.1	.58	2.1	4.4	4.3	18	42	52	3.2	4.9	5.0	1.1
27	4.5	.55	1.6	3.9	3.4	45	37	51	3.2	4.3	5.4	.98
28	5.3	.53	1.4	3.7	3.1	52	33	50	3.5	4.4	5.3	1.1
29	6.7	.51	1.2	3.7	---	152	31	46	5.0	5.4	4.6	.93
30	7.0	.93	1.0	3.9	---	256	28	43	6.0	3.8	4.1	1.1
31	7.0	---	2.8	3.9	---	374	---	41	---	2.7	3.4	---
TOTAL	315.4	67.86	47.37	147.9	99.2	1037.9	3826	1466	434.1	123.6	310.0	69.81
MEAN	10.2	2.26	1.53	4.77	3.54	33.5	128	47.3	14.5	3.99	10.0	2.33
MAX	21	9.6	3.4	11	5.8	374	379	83	38	9.5	36	4.3
MIN	4.1	.51	.59	2.0	1.8	2.5	28	20	3.2	1.5	1.6	.93
AC-FT	626	135	94	293	197	2060	7590	2910	861	245	615	138
CFSM	.08	.02	.01	.04	.03	.26	.98	.36	.11	.03	.08	.02
IN.	.09	.02	.01	.04	.03	.30	1.09	.42	.12	.04	.09	.02

CAL YR 1986 TOTAL 6825.40 MEAN 18.7 MAX 165 MIN .00 AC-FT 13540 CFSM .14 IN. 1.95
WTR YR 1987 TOTAL 7945.14 MEAN 21.8 MAX 379 MIN .51 AC-FT 15760 CFSM .17 IN. 2.27

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02310800 WITHLACOCHEE RIVER NEAR EVA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1958-61, 1963 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to current year.

WATER TEMPERATURE: October 1964 to current year.

INSTRUMENTATION.--Specific conductance and water temperature recorder since Nov. 3, 1976.

REMARKS.--Interruptions of record were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 415 microsiemens, Apr. 14, 1975; minimum observed, 35 microsiemens, June 11, 1977.

WATER TEMPERATURE: Maximum daily mean, 34.0°C, June 24,28, 1977; minimum observed, 5.0°C, Jan. 31, Feb. 1, 1966.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	63	80	63	63	70	54	82	---	---	---	---
2	86	68	79	62	62	71	57	83	---	---	---	---
3	87	71	79	60	64	72	59	83	---	---	---	---
4	87	69	79	62	67	66	61	84	---	---	---	---
5	89	69	77	68	68	68	63	81	---	---	---	---
6	89	72	77	71	66	70	65	80	---	---	---	---
7	80	75	75	71	62	67	66	79	---	---	---	---
8	77	76	75	71	65	68	68	80	---	---	---	---
9	79	77	75	71	68	72	68	76	---	---	---	---
10	82	78	75	73	71	73	69	70	---	---	---	---
11	81	79	77	74	73	74	69	---	---	---	---	---
12	82	79	76	75	74	77	70	---	---	---	---	---
13	84	78	74	76	75	78	70	---	---	---	---	---
14	84	79	72	74	70	78	71	---	---	---	---	---
15	80	79	71	73	67	73	71	---	---	---	---	---
16	77	79	71	72	69	74	72	---	---	---	---	---
17	75	79	69	71	69	76	72	---	---	---	---	---
18	74	79	67	70	63	77	73	---	---	---	---	---
19	73	79	67	69	61	75	73	---	---	---	---	---
20	76	80	67	71	65	76	74	---	---	---	---	---
21	74	79	68	71	67	78	75	---	---	---	---	---
22	70	78	65	72	68	79	76	---	---	---	---	---
23	67	78	62	71	70	80	76	---	---	---	---	---
24	65	79	62	68	71	80	77	---	---	---	---	---
25	63	80	63	69	65	80	78	---	---	---	---	---
26	67	81	64	72	66	66	77	---	---	---	---	---
27	70	79	65	75	69	58	78	---	---	---	---	---
28	69	78	67	74	71	65	79	---	---	---	---	---
29	67	78	68	72	---	53	80	---	---	---	---	---
30	66	84	68	68	---	52	81	---	---	---	---	---
31	65	---	67	67	---	52	---	---	---	---	---	---
MEAN	77	77	71	70	67	71	71	---	---	---	---	---
MAX	107	84	80	76	75	80	81	---	---	---	---	---
MIN	63	63	62	60	61	52	54	---	---	---	---	---

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02310800 WITHLACOOCHEE RIVER NEAR EVA, FL--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.8	23.4	22.6	16.0	13.6	20.6	16.9	22.1	---	---	---	---
2	26.8	22.6	21.8	14.1	14.1	17.9	17.3	22.6	---	---	---	---
3	26.6	22.3	19.4	12.5	15.8	16.8	17.3	23.8	---	---	---	---
4	26.3	22.6	16.8	12.8	16.0	18.0	15.9	24.6	---	---	---	---
5	26.1	23.2	16.2	13.7	16.4	17.4	15.8	24.0	---	---	---	---
6	26.0	23.3	17.0	13.5	17.1	16.8	16.8	24.0	---	---	---	---
7	25.7	23.4	17.9	15.2	17.9	17.9	17.1	24.4	---	---	---	---
8	25.9	23.2	18.6	15.8	17.2	19.5	17.8	24.3	---	---	---	---
9	26.1	23.4	19.4	15.7	15.2	19.2	18.0	23.7	---	---	---	---
10	25.2	23.5	19.8	16.4	12.4	18.5	18.9	23.5	---	---	---	---
11	25.0	23.5	21.1	17.0	12.4	17.8	20.1	---	---	---	---	---
12	25.7	23.6	21.5	12.8	13.4	17.5	21.0	---	---	---	---	---
13	26.1	22.9	20.1	11.5	14.2	16.0	22.3	---	---	---	---	---
14	26.3	22.1	17.7	11.9	14.3	15.4	22.7	---	---	---	---	---
15	25.5	21.3	18.5	13.6	14.5	16.2	21.8	---	---	---	---	---
16	22.9	21.4	19.3	15.3	17.1	17.4	21.3	---	---	---	---	---
17	21.5	22.5	19.1	17.0	17.2	18.5	20.5	---	---	---	---	---
18	21.2	23.2	19.2	18.4	17.1	18.7	20.7	---	---	---	---	---
19	21.2	23.5	19.3	19.5	16.7	20.0	21.3	---	---	---	---	---
20	20.7	23.3	19.6	18.9	16.3	19.3	22.2	---	---	---	---	---
21	20.2	20.1	19.4	17.9	16.4	19.2	23.1	---	---	---	---	---
22	20.3	19.5	17.9	16.8	17.0	18.8	24.0	---	---	---	---	---
23	20.9	20.4	18.2	14.4	18.8	19.5	24.3	---	---	---	---	---
24	21.4	21.5	19.6	11.3	16.7	20.3	24.3	---	---	---	---	---
25	22.4	22.0	19.6	12.2	17.7	21.5	22.9	---	---	---	---	---
26	22.3	22.2	18.1	14.2	19.1	21.0	22.1	---	---	---	---	---
27	21.4	22.4	16.9	13.1	20.3	20.7	21.8	---	---	---	---	---
28	21.3	22.8	16.9	10.8	21.1	22.4	22.4	---	---	---	---	---
29	22.0	23.0	16.0	12.4	---	21.4	22.4	---	---	---	---	---
30	22.6	22.5	15.8	13.7	---	20.3	22.0	---	---	---	---	---
31	23.4	---	15.1	15.0	---	18.4	---	---	---	---	---	---
MEAN	23.7	22.5	18.7	14.6	16.3	18.8	20.5	---	---	---	---	---
MAX	26.8	23.6	22.6	19.5	21.1	22.4	24.3	---	---	---	---	---
MIN	20.2	19.5	15.1	10.8	12.4	15.4	15.8	---	---	---	---	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02310800 WITHLACOCHEE RIVER NEAR EVA, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT 30...	1140	3.73	7.0	82	4.2	22.0	2.4
NOV 20...	1640	2.97	0.85	89	4.6	24.0	2.5
JAN 13...	1500	3.28	2.8	76	4.4	13.0	--
MAR 17...	1450	3.41	3.3	81	6.5	19.5	5.5
APR 07...	1050	5.54	198	78	4.2	16.0	4.6
MAY 11...	1300	4.37	31	90	6.2	26.0	3.2
JUL 13...	1415	3.23	2.0	92	4.2	28.0	2.5
AUG 04...	0840	3.65	6.2	70	4.3	27.5	1.6
25...	1540	3.55	4.2	72	4.4	28.5	2.6
SEP 24...	1035	3.17	1.5	70	4.5	25.0	1.3

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT 30...	0.010	<0.020	0.060	1.1	0.110	0.100
NOV 20...	0.020	0.020	0.100	1.8	0.090	0.060
JAN 13...	0.010	<0.020	0.020	0.42	0.040	0.030
MAR 17...	<0.010	<0.020	0.020	1.1	0.040	0.020
APR 07...	0.010	0.020	0.020	1.3	0.060	0.030
MAY 11...	0.020	0.020	0.010	1.4	0.050	0.040
JUL 13...	0.020	0.020	0.010	1.6	0.040	0.040
AUG 04...	0.010	<0.020	0.020	1.0	0.030	0.030
25...	0.010	<0.020	0.020	1.3	0.120	0.040
SEP 24...	0.010	0.020	0.020	1.2	0.070	0.030

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)
AUG 04...	0840	400	2.8	1.1	5.2	0.20	<0.1

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
AUG 04...	1.3	10	0.30	2.7	117	30

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02310947 WITHLACOCHEE RIVER NEAR CUMPRESCO, FL

LOCATION.--Lat 28°18'42", long 82°03'22", in NE¼ sec.13, T.25 S., R.22 E., Pasco County, Hydrologic Unit 03100208, near left bank on downstream side of bridge on State Highway 471, 0.6 mi upstream from Gator Creek, 3.4 mi south of Cumpresso, 5.8 mi east of Richland, and 120 mi upstream from mouth.

DRAINAGE AREA.--280 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 75.00 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Aug. 3, 1978, at datum 5.00 ft higher.

REMARKS.--Records fair. Records are for flow of main channel only, which normally includes all the flow. Some interconnection with Gator Creek and some diversions to the north probably exist during periods of extreme high water.

AVERAGE DISCHARGE.--20 years (water years 1968-87), 145 ft³/s, 105,050 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft³/s, Apr. 1, 1987, gage height, 14.03 ft; no flow for many days in most years; river dry at gage for many days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,260 ft³/s, Apr. 1; gage height, 14.03 ft; no flow part of each day Aug. 10,11; minimum gage height, 5.13 ft, Aug. 10,11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	6.5	2.9	9.6	26	38	2260	83	63	13	1.3	3.5
2	24	12	3.3	11	25	49	2220	70	56	11	1.1	2.9
3	20	16	3.1	10	24	53	2130	60	49	8.5	.90	3.4
4	17	14	1.7	14	23	54	1990	52	43	6.3	.84	3.9
5	15	12	1.9	21	22	52	1840	45	39	5.1	.68	4.1
6	12	10	1.8	22	e24	52	1670	39	36	4.6	.55	4.2
7	11	9.2	1.7	25	e29	89	1520	36	32	5.4	.44	3.5
8	9.7	8.6	1.5	27	e36	110	1370	35	28	5.1	.32	2.7
9	8.2	8.1	1.5	27	e34	115	1240	36	25	4.1	.18	2.2
10	8.0	7.5	2.2	28	e32	107	1110	42	22	3.5	.08	1.8
11	9.1	7.1	1.6	29	e30	98	1000	49	18	2.8	.28	1.6
12	8.1	7.4	1.8	27	27	94	901	128	16	2.1	2.9	2.2
13	7.0	7.2	1.9	26	26	91	808	291	31	2.0	9.0	5.7
14	8.7	6.4	1.5	25	25	85	719	241	54	2.0	37	5.5
15	9.1	6.4	1.3	23	24	80	650	220	59	1.8	52	3.8
16	8.5	5.8	1.5	23	27	73	586	184	48	1.9	60	3.8
17	9.2	5.2	1.6	23	31	65	524	159	35	2.0	69	3.9
18	9.9	5.3	1.3	21	31	58	472	133	26	2.2	73	3.5
19	9.9	4.9	.90	20	31	59	428	116	18	4.3	70	3.0
20	8.9	4.5	.97	18	30	57	390	137	12	7.6	64	2.8
21	8.3	3.9	1.3	21	29	52	357	179	7.9	7.8	57	2.9
22	7.5	3.4	1.3	29	29	48	327	202	5.4	7.6	50	3.5
23	6.6	3.3	1.2	33	31	43	291	207	3.5	7.3	44	4.7
24	5.9	3.0	2.4	34	31	39	256	199	2.7	6.2	37	5.7
25	4.7	2.9	2.3	35	32	35	224	177	2.2	4.5	29	5.5
26	5.1	2.7	2.0	35	32	137	192	154	1.9	2.9	23	4.6
27	5.9	2.5	1.8	33	32	383	165	133	2.2	2.3	17	4.1
28	6.7	2.3	2.2	30	32	551	141	115	4.5	1.8	13	5.8
29	6.2	1.9	2.5	29	---	1000	119	98	6.0	1.5	10	6.2
30	6.0	2.6	2.7	28	---	1680	100	83	8.2	1.3	7.3	6.9
31	5.8	---	3.9	27	---	2150	---	72	---	1.4	5.3	---
TOTAL	311.0	192.6	59.57	763.6	805	7597	26000	3775	754.5	139.9	736.17	117.9
MEAN	10.0	6.42	1.92	24.6	28.7	245	867	122	25.1	4.51	23.7	3.93
MAX	29	16	3.9	35	36	2150	2260	291	63	13	73	6.9
MIN	4.7	1.9	.90	9.6	22	35	100	35	1.9	1.3	.08	1.6
AC-FT	617	382	118	1510	1600	15070	51570	7490	1500	277	1460	234

CAL YR 1986 TOTAL 34313.71 MEAN 94.0 MAX 828 MIN .00 AC-FT 68060
WTR YR 1987 TOTAL 41252.24 MEAN 113 MAX 2260 MIN .08 AC-FT 81820

e Estimated

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02310947 WITHLACOOCHEE RIVER NEAR CUMPRESCO, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961, 1965, 1967 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987.

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT							
30...	1010	5.80	6.0	172	7.3	22.0	4.4
NOV							
20...	1430	5.68	4.6	169	5.20	25.5	4.7
JAN							
13...	1330	6.46	25	128	4.7	12.0	--
MAR							
17...	1300	7.15	65	147	6.3	19.0	7.3
APR							
07...	1240	12.24	1500	62	4.5	15.0	6.6
MAY							
05...	1335	6.92	44	93	6.9	24.0	3.9
JUL							
13...	1315	5.65	2.0	119	5.1	28.0	4.2
AUG							
04...	1035	5.41	0.90	178	5.4	29.0	4.4
25...	1325	6.67	29	98	4.9	27.5	5.1
SEP							
24...	1200	5.91	5.9	143	--	--	5.1

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT						
30...	0.010	0.030	0.020	1.4	0.060	0.040
NOV						
20...	0.010	0.030	0.040	1.4	0.050	0.030
JAN						
13...	<0.010	<0.020	0.020	0.94	0.030	0.020
MAR						
17...	<0.010	<0.020	0.010	0.95	0.030	0.010
APR						
07...	0.010	0.100	0.020	1.1	0.130	0.100
MAY						
05...	0.020	0.020	<0.010	1.6	0.080	0.060
JUL						
13...	0.010	0.050	0.010	1.4	0.050	0.050
AUG						
04...	<0.010	0.040	0.040	0.97	0.040	0.040
25...	0.010	<0.020	0.010	1.5	0.060	0.030
SEP						
24...	0.010	0.020	0.010	0.88	0.080	0.030

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)
AUG							
04...	1035	280	25	2.9	8.5	0.60	56

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
AUG						
04...	0.80	15	0.30	4.3	167	120

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

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, near left bank, at downstream side of bridge on U.S. Highway 98, 0.6 mi south of channel of Withlacoochee River, 2.9 mi east of Richland, 8.5 mi southeast of Dade City, and 55 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

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 National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to July 17, 1958, nonrecording gage at site about 1 mi downstream at different datum; July 17, 1958, to Apr. 24, 1960, nonrecording gage and crest-stage gage at present site and datum.

REMARKS.--Records fair. Flow is uncontrolled natural diversion from the Withlacoochee River basin to the Hillsborough River basin.

AVERAGE DISCHARGE.--28 years (water years 1931, 1961-87), 21.0 ft³/s, 15,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s, Mar. 19, 1960, gage height, 6.87 ft, from crest-stage gage; no flow for many days each year; channel dry at gage for many days in 1975, 1977, 1979, 1981, 1982, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 777 ft³/s, Apr. 2, gage height, 5.79 ft; no flow for many days; minimum gage height 0.97 ft, Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.47	754	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.60	772	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.37	754	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.01	706	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	634	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	552	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	1.8	466	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	2.6	382	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	2.4	306	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	2.1	244	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	1.6	194	1.3	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	1.0	150	4.2	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.51	110	14	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.18	78	19	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	57	14	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	40	10	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	26	7.3	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	16	5.0	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	9.1	3.2	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	5.1	2.1	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	2.5	1.9	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	1.3	2.9	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.18	4.4	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	5.0	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	4.5	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	2.5	.00	3.3	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	15	.00	2.3	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	39	.00	1.6	.00	.00	.00	.00
29	.00	.00	.00	.00	---	139	.00	1.1	.00	.00	.00	.00
30	.00	.00	.00	.00	---	436	.00	.43	.00	.00	.00	.00
31	.00	---	.00	.00	---	681	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	1326.14	6259.18	107.53	0.00	0.00	0.00	0.00
MEAN	.00	.00	.00	.00	.00	42.8	209	3.47	.00	.00	.00	.00
MAX	.00	.00	.00	.00	.00	681	772	19	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	.0	.0	2630	12420	213	.0	.0	.0	.0

CAL YR 1986 TOTAL 3441.27 MEAN 9.43 MAX 228 MIN .00 AC-FT 6830
WTR YR 1987 TOTAL 7692.85 MEAN 21.1 MAX 772 MIN .00 AC-FT 15260

02311000 WITHLACOOCHEE-HILLSBOROUGH OVERFLOW NEAR RICHLAND, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.71	2.36	1.60	2.27	2.73	2.83	5.75	2.86	2.82	2.53	2.22	1.02
2	2.69	2.36	1.63	2.46	2.73	2.87	5.78	2.84	2.80	2.59	2.36	1.02
3	2.67	2.36	1.63	2.55	2.72	2.86	5.75	2.81	2.78	2.65	2.36	.99
4	2.65	2.35	1.61	2.64	2.72	2.85	5.68	2.79	2.76	2.67	2.34	1.24
5	2.62	2.33	1.57	2.71	2.72	2.83	5.55	2.78	2.77	2.65	2.32	1.85
6	2.61	2.31	1.54	2.70	2.75	2.82	5.40	2.76	2.80	2.61	2.28	1.96
7	2.60	2.29	1.50	2.69	2.75	2.92	5.23	2.75	2.77	2.57	2.22	1.98
8	2.59	2.26	1.46	2.69	2.79	2.95	5.05	2.77	2.74	2.51	2.14	1.95
9	2.57	2.23	1.43	2.68	2.78	2.95	4.85	2.77	2.72	2.46	2.06	1.91
10	2.58	2.20	1.39	2.68	2.77	2.94	4.65	2.80	2.69	2.42	1.97	1.86
11	2.61	2.15	1.36	2.69	2.76	2.91	4.47	2.86	2.66	2.58	1.94	1.83
12	2.60	2.11	1.36	2.68	2.75	2.89	4.28	3.00	2.62	2.56	2.14	1.92
13	2.58	2.07	1.38	2.67	2.74	2.87	4.10	3.16	2.59	2.52	2.19	2.17
14	2.57	2.03	1.34	2.67	2.73	2.86	3.94	3.24	2.54	2.49	2.22	2.26
15	2.55	1.98	1.31	2.67	2.73	2.84	3.81	3.18	2.49	2.47	2.24	2.26
16	2.53	1.95	1.28	2.67	2.79	2.83	3.69	3.12	2.43	2.46	2.22	2.23
17	2.50	1.91	1.25	2.68	2.81	2.82	3.56	3.07	2.42	2.44	2.18	2.18
18	2.47	1.87	1.23	2.68	2.81	2.81	3.45	3.01	2.49	2.39	2.12	2.14
19	2.43	1.84	1.20	2.68	2.80	2.84	3.36	2.97	2.47	2.37	2.06	2.09
20	2.38	1.81	1.20	2.68	2.78	2.83	3.28	2.94	2.43	2.42	2.00	2.04
21	2.33	1.76	1.19	2.75	2.79	2.81	3.21	2.93	2.39	2.42	2.02	2.00
22	2.28	1.71	1.16	2.81	2.80	2.80	3.16	2.96	2.32	2.42	1.99	1.98
23	2.24	1.67	1.22	2.81	2.80	2.79	3.11	3.00	2.25	2.37	1.92	2.06
24	2.19	1.62	1.66	2.80	2.78	2.78	3.07	3.01	2.17	2.31	1.84	2.07
25	2.14	1.59	1.71	2.79	2.79	2.77	3.02	3.00	2.09	2.24	1.75	2.03
26	2.14	1.54	1.73	2.79	2.78	2.90	2.98	2.97	2.03	2.18	1.65	1.98
27	2.25	1.50	1.73	2.78	2.78	3.22	2.95	2.94	2.07	2.22	1.55	1.91
28	2.29	1.46	1.73	2.77	2.77	3.52	2.93	2.92	2.14	2.16	1.45	1.84
29	2.31	1.44	1.72	2.76	---	4.11	2.91	2.89	2.14	2.12	1.34	1.78
30	2.34	1.52	1.71	2.75	---	5.10	2.88	2.87	2.21	2.07	1.23	1.85
31	2.36	---	1.83	2.75	---	5.63	---	2.84	---	2.12	1.10	---
MEAN	2.46	1.95	1.47	2.69	2.77	3.09	4.06	2.93	2.49	2.42	1.98	1.88
MAX	2.71	2.36	1.83	2.81	2.81	5.63	5.78	3.24	2.82	2.67	2.36	2.26
MIN	2.14	1.44	1.16	2.27	2.72	2.77	2.88	2.75	2.03	2.07	1.10	.99
CAL YR 1986	MEAN 2.45	MAX 4.34	MIN .65									
WTR YR 1987	MEAN 2.51	MAX 5.78	MIN .99									

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02311500 WITHLACOCHEE RIVER NEAR DADE CITY, FL

LOCATION.--Lat 28°21'08", long 82°07'34", in SE¼ sec.32, T.24 S., R.22 E., Pasco County, Hydrologic Unit 03100208, near left bank on downstream side of Lanier Bridge on River Road, 4 mi east of Dade City, and 110 mi upstream from mouth.

DRAINAGE AREA.--390 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to March 1933, July 1958 to October 1962 (discharge measurements only), water years 1959-62 (annual maximum), January 1964 to September 1983 (discharge measurements and gage heights only); October 1983 to current year.

REVISED RECORDS.--WRD FL 1962: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Feb. 11, 1930, to Mar. 31, 1933, and July 21 to Nov. 19, 1958, nonrecording gage, and Nov. 20, 1958, to Oct. 3, 1962, nonrecording gage and crest-stage gage at same site at datum 64.29 ft higher.

REMARKS.--Records fair. Discharge computed from graph based on once-daily observer readings. High-water diversion above station into Hillsborough River basin through Withlacoochee-Hillsborough Overflow near Richland (station 02311000).

AVERAGE DISCHARGE.--6 years (water years 1931-32, 1984-87), 178 ft³/s, 129,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft³/s, Mar. 21, 1960, gage height, 78.57 ft, present datum, from rating curve extended above 3,600 ft³/s; no flow at times in some years; minimum gage height observed, 66.39 ft, June 1, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 2,970 ft³/s, Apr. 3, gage height, 77.04 ft; minimum daily discharge, 9.7 ft³/s, Dec. 19; minimum gage height observed, 69.10 ft, Dec. 18, 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	17	17	21	48	71	2270	124	111	29	15	22
2	52	17	18	27	46	76	2770	114	100	35	15	26
3	46	17	17	25	44	78	2940	103	88	38	19	23
4	41	23	15	32	43	78	2850	91	74	38	22	22
5	37	24	13	38	43	80	2620	81	71	38	22	22
6	34	24	12	39	45	82	2330	73	70	36	20	23
7	32	24	12	38	47	105	2080	69	63	35	17	23
8	29	24	11	38	49	128	1760	68	58	22	14	24
9	26	23	11	38	51	147	1550	75	52	16	12	21
10	25	22	11	38	50	163	1380	81	47	22	11	17
11	29	20	11	40	48	165	1160	89	44	27	12	15
12	30	19	11	39	47	163	1020	144	42	25	24	19
13	30	18	11	39	47	153	946	257	40	23	24	33
14	28	17	11	39	46	141	853	333	37	23	22	42
15	26	16	11	38	48	131	783	351	37	22	23	37
16	22	16	11	37	52	123	692	357	43	21	32	31
17	21	15	11	38	54	117	611	345	51	34	45	24
18	19	15	10	39	56	110	548	305	57	45	57	22
19	18	15	9.7	40	57	108	500	265	55	42	70	20
20	16	15	9.9	40	55	102	455	229	50	41	76	19
21	16	14	10	45	55	95	397	197	43	39	77	17
22	16	13	11	52	56	89	351	185	38	35	75	17
23	15	13	13	54	56	86	319	188	32	31	71	25
24	14	12	16	53	55	79	289	192	28	28	65	25
25	14	12	17	53	55	78	261	206	23	26	56	22
26	15	12	17	54	55	146	231	204	21	23	49	20
27	17	12	16	55	55	221	207	192	22	22	42	20
28	19	12	14	54	56	339	185	176	23	21	37	17
29	20	12	13	53	---	734	165	161	24	20	32	16
30	20	13	12	52	---	1370	144	144	26	18	27	20
31	19	---	12	50	---	1780	---	126	---	16	23	---
TOTAL	803	506	394.6	1298	1419	7338	32667	5525	1470	891	1106	684
MEAN	25.9	16.9	12.7	41.9	50.7	237	1089	178	49.0	28.7	35.7	22.8
MAX	57	24	18	55	57	1780	2940	357	111	45	77	42
MIN	14	12	9.7	21	43	71	144	68	21	16	11	15
AC-FT	1590	1000	783	2570	2810	14550	64790	10960	2920	1770	2190	1360

CAL YR 1986 TOTAL 50247.9 MEAN 138 MAX 881 MIN 2.7 AC-FT 99670
WTR YR 1987 TOTAL 54101.6 MEAN 148 MAX 2940 MIN 9.7 AC-FT 107300

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02311500 WITHLACOOCHEE RIVER NEAR DADE CITY, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.52	69.61	69.45	69.58	70.20	70.50	76.47	71.19	71.13	69.87	69.42	69.64
2	70.42	69.60	69.46	69.74	70.16	70.58	76.90	71.09	71.02	70.02	69.39	69.73
3	70.30	69.60	69.42	69.70	70.12	70.60	77.02	70.98	70.87	70.09	69.54	69.67
4	70.20	69.59	69.37	69.86	70.09	70.61	76.96	70.84	70.68	70.10	69.67	69.64
5	70.10	69.60	69.29	70.03	70.08	70.62	76.78	70.70	70.65	70.09	69.65	69.65
6	70.02	69.63	69.24	70.04	70.13	70.65	76.53	70.60	70.63	70.06	69.57	69.66
7	69.98	69.63	69.22	70.03	70.17	70.93	76.28	70.54	70.54	70.03	69.47	69.68
8	69.91	69.62	69.19	70.02	70.21	71.14	75.96	70.53	70.46	69.68	69.35	69.70
9	69.82	69.59	69.17	70.02	70.24	71.27	75.68	70.63	70.36	69.50	69.24	69.60
10	69.81	69.55	69.15	70.03	70.22	71.37	75.35	70.72	70.26	69.68	69.20	69.47
11	69.90	69.51	69.16	70.06	70.18	71.39	74.92	70.83	70.19	69.85	69.27	69.38
12	69.95	69.49	69.17	70.05	70.16	71.36	74.63	71.35	70.14	69.80	69.70	69.55
13	69.93	69.45	69.18	70.04	70.15	71.30	74.44	72.03	70.10	69.75	69.69	69.94
14	69.90	69.41	69.18	70.04	70.13	71.22	74.18	72.41	70.03	69.74	69.62	70.18
15	69.83	69.38	69.17	70.01	70.17	71.15	73.98	72.50	70.02	69.70	69.66	70.04
16	69.75	69.36	69.16	69.98	70.24	71.08	73.72	72.54	70.17	69.67	69.88	69.89
17	69.69	69.35	69.15	70.00	70.29	71.02	73.47	72.48	70.36	70.02	70.21	69.74
18	69.65	69.36	69.12	70.03	70.31	70.96	73.26	72.28	70.46	70.29	70.45	69.66
19	69.60	69.35	69.10	70.04	70.32	70.94	73.08	72.08	70.43	70.21	70.63	69.61
20	69.55	69.35	69.11	70.05	70.29	70.89	72.90	71.91	70.33	70.13	70.71	69.57
21	69.55	69.32	69.13	70.17	70.29	70.83	72.67	71.72	70.19	70.12	70.73	69.52
22	69.53	69.29	69.17	70.32	70.30	70.76	72.48	71.64	70.06	70.02	70.70	69.52
23	69.50	69.26	69.28	70.34	70.30	70.71	72.32	71.66	69.93	69.93	70.64	69.77
24	69.48	69.24	69.38	70.32	70.28	70.63	72.17	71.70	69.82	69.83	70.55	69.76
25	69.45	69.23	69.45	70.32	70.28	70.62	72.03	71.79	69.70	69.80	70.41	69.68
26	69.49	69.22	69.44	70.34	70.27	71.30	71.88	71.78	69.64	69.70	70.27	69.61
27	69.58	69.20	69.39	70.35	70.27	71.80	71.75	71.70	69.66	69.66	70.13	69.61
28	69.65	69.20	69.32	70.34	70.29	72.40	71.60	71.60	69.71	69.64	70.01	69.53
29	69.69	69.21	69.28	70.32	---	73.83	71.47	71.50	69.75	69.61	69.82	69.47
30	69.70	69.26	69.23	70.28	---	75.32	71.33	71.39	69.80	69.53	69.75	69.63
31	69.68	---	69.23	70.24	---	75.98	---	71.27	---	69.47	69.65	---
MEAN	69.81	69.42	69.25	70.09	70.22	71.41	74.07	71.48	70.24	69.86	69.90	69.67
MAX	70.52	69.63	69.46	70.35	70.32	75.98	77.02	72.54	71.13	70.29	70.73	70.18
MIN	69.45	69.20	69.10	69.58	70.08	70.50	71.33	70.53	69.64	69.47	69.20	69.38
CAL YR 1986	MEAN 70.55		MAX 74.25		MIN 68.59							
WTR YR 1987	MEAN 70.45		MAX 77.02		MIN 69.10							

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02311500 WITHLACOCHEE RIVER NEAR DADE CITY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-61, 1963, 1966 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1966 to March 1971, November 1972 to current year.

WATER TEMPERATURE: July 1966 to March 1971, November 1972 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 437 microsiemens, May 1, 1976; minimum observed, 45 microsiemens, Sept. 17, 18, 1968.

WATER TEMPERATURE: Maximum observed, 34.0°C, July 9, 1969, June 17, 18, July 10, 1981; minimum observed, 6.0°C, Jan. 20, 1977.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--A specific conductance of 44 microsiemens was observed on Oct 14, 1959.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 320 microsiemens, Dec. 22; minimum observed, 58 microsiemens, Apr. 4.

WATER TEMPERATURE: Maximum observed, 31.0°C, July 10; minimum observed, 11.5°C, Jan. 13.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	237	276	286	220	219	72	130	136	204	260	184
2	159	---	278	257	224	205	65	135	140	206	---	175
3	159	241	268	271	224	208	61	138	143	213	256	174
4	167	245	273	---	229	211	58	144	146	214	262	171
5	---	249	---	263	235	216	68	149	150	210	265	---
6	174	257	282	252	227	220	60	152	155	223	265	151
7	183	257	282	252	224	203	64	161	---	216	262	154
8	183	255	280	249	---	---	66	162	160	206	264	159
9	187	255	282	249	211	188	66	160	163	205	---	164
10	192	---	285	248	218	199	70	---	169	212	268	167
11	201	260	298	247	223	198	80	162	174	219	266	171
12	196	249	300	239	223	193	80	126	178	219	263	177
13	199	248	296	235	227	---	82	119	184	213	273	---
14	198	250	---	230	224	190	84	112	186	223	243	135
15	218	249	301	230	---	---	87	108	189	227	240	147
16	220	253	310	229	222	189	88	114	192	227	---	157
17	209	255	314	230	207	192	93	---	193	---	264	165
18	218	256	311	---	210	194	---	119	187	202	---	173
19	---	258	314	224	210	195	---	125	175	---	193	180
20	225	259	317	227	214	196	98	128	173	197	176	---
21	231	264	---	225	---	---	100	132	171	195	165	198
22	229	---	320	212	---	---	101	134	174	209	159	208
23	236	266	---	204	222	206	105	130	177	221	---	209
24	237	268	318	210	221	209	108	---	183	231	153	208
25	242	270	---	---	222	213	111	126	201	246	154	202
26	---	273	304	220	222	167	---	124	195	---	156	202
27	243	276	308	216	---	132	116	125	195	257	160	206
28	241	279	306	218	227	139	122	128	---	262	162	209
29	---	281	303	221	---	104	122	129	202	262	167	213
30	244	281	300	217	---	92	126	132	207	264	---	---
31	236	---	---	219	---	86	---	---	---	261	170	---

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02311500 WITHLACOOCHEE RIVER NEAR DADE CITY, FL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.0	23.0	23.0	16.0	16.0	21.0	16.0	23.0	28.0	28.0	28.0	27.0
2	28.0	---	23.0	14.0	15.0	19.0	17.0	23.0	28.0	28.0	---	27.0
3	28.0	23.0	20.0	14.0	16.0	19.0	17.0	---	28.0	28.0	29.0	27.0
4	27.0	23.0	19.0	---	17.0	19.0	16.0	25.0	28.0	27.0	29.0	26.0
5	---	23.0	---	13.0	17.0	19.0	16.0	24.0	27.0	27.0	29.0	---
6	26.0	23.0	19.0	14.0	18.0	18.0	16.0	25.0	27.0	28.0	30.0	27.0
7	27.0	24.0	19.0	15.0	18.0	18.0	16.0	25.0	---	29.0	30.0	28.0
8	26.0	24.0	19.0	16.0	---	---	17.0	24.0	26.0	28.0	30.0	29.0
9	26.0	24.0	21.0	16.0	16.0	20.0	17.0	23.0	29.0	30.0	---	29.0
10	26.0	---	21.0	17.0	14.0	20.0	18.0	---	28.0	31.0	29.0	29.0
11	26.0	24.0	21.0	16.0	14.0	19.0	21.0	24.0	28.0	29.0	29.0	28.0
12	26.0	25.0	21.0	14.0	14.0	18.0	21.0	24.0	28.0	29.0	29.0	27.0
13	27.0	25.0	19.0	13.0	15.0	---	27.0	25.0	27.0	28.0	28.0	---
14	27.0	24.0	---	18.0	14.0	18.0	26.0	25.0	27.0	29.0	27.0	28.0
15	27.0	22.0	20.0	20.0	---	---	---	25.0	28.0	27.0	27.0	28.0
16	26.0	23.0	20.0	21.0	17.0	20.0	21.0	25.0	28.0	28.0	---	28.0
17	22.0	23.0	20.0	18.0	18.0	20.0	20.0	---	27.0	---	29.0	29.0
18	22.0	24.0	20.0	---	18.0	19.0	---	26.0	28.0	27.0	---	28.0
19	---	24.0	20.0	19.0	18.0	21.0	---	25.0	29.0	---	29.0	29.0
20	22.0	24.0	20.0	18.0	17.0	21.0	22.0	26.0	29.0	27.0	30.0	---
21	21.0	23.0	---	17.0	---	---	22.0	26.0	27.0	28.0	28.0	28.0
22	22.0	---	19.0	15.0	---	---	23.0	25.0	28.0	27.0	29.0	28.0
23	22.0	22.0	---	15.0	18.0	20.0	23.0	26.0	28.0	28.0	---	26.0
24	23.0	23.0	20.0	13.0	18.0	21.0	25.0	---	28.0	28.0	29.0	28.0
25	23.0	23.0	---	---	23.0	22.0	22.0	26.0	28.0	28.0	29.0	28.0
26	---	23.0	18.0	14.0	20.0	21.0	---	25.0	28.0	---	29.0	27.0
27	22.0	23.0	18.0	13.0	---	21.0	22.0	26.0	27.0	29.0	29.0	27.0
28	21.0	23.0	18.0	14.0	22.0	23.0	22.0	26.0	---	28.0	29.0	27.0
29	---	23.0	17.0	16.0	---	21.0	22.0	26.0	27.0	29.0	29.0	27.0
30	22.0	23.0	12.0	15.0	---	20.0	23.0	25.0	27.0	29.0	---	---
31	23.0	---	---	15.0	---	18.0	---	---	---	29.0	30.0	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02311500 WITHLACOCHEE RIVER NEAR DADE CITY, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT							
02...	1015	70.32	60	150	5.7	26.0	2.0
NOV							
20...	1010	69.34	14	241	5.6	23.0	5.2
JAN							
13...	0800	70.06	39	220	5.7	11.5	6.4
MAR							
17...	0730	71.00	118	182	5.3	--	5.2
MAY							
05...	0830	70.74	82	144	5.0	22.0	2.7
JUL							
13...	0920	69.72	21	155	5.2	25.5	2.9
AUG							
25...	0900	70.44	56	153	5.2	25.0	2.5

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT						
02...	0.010	0.020	0.030	1.2	0.060	0.060
NOV						
20...	0.010	0.020	0.020	0.43	0.040	0.020
JAN						
13...	<0.010	<0.020	0.020	0.64	0.050	0.020
MAR						
17...	<0.010	<0.020	0.020	0.85	0.020	0.010
MAY						
05...	0.010	<0.020	<0.010	1.2	0.060	0.040
JUL						
13...	<0.010	0.010	0.010	0.68	0.030	0.030
AUG						
25...	0.010	<0.020	0.020	1.4	0.060	0.050

PEACE, WITHLACOOCHIE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHIE RIVER BASIN

02311700 DADE CITY CANAL NEAR DADE CITY, FL

LOCATION.--Lat 28°22'55", long 82°10'48", in SW¼ 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 Packing Company Canal, 1.0 mi downstream from Pasco Packing Plant at Dade City, and 4.0 mi upstream from Withlacoochee River.

DISCHARGE AREA.--35 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1957 to October 1962 (discharge measurements for Pasco Packing 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 not determined. Prior to Aug. 16, 1961, nonrecording gage 150 ft upstream at different datum.

REMARKS.--Discharge measurements made either downstream from or at bridge over Dade City Canal, 30 ft downstream from confluence of Pasco Packing 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.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year. Published with station 02312000 Withlacoochee River at Trilby, water years 1983-85.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT 03...	1010	67.86	7.2	327	6.0	27.0	4.1
NOV 21...	0840	67.84	5.6	401	5.8	23.0	4.9
JAN 14...	1200	68.65	30	354	7.2	24.0	--
MAR 18...	1030	68.49	21	367	6.9	18.5	7.2
MAY 06...	1130	69.38	29	341	5.4	26.0	4.5
JUL 14...	1210	67.98	4.7	324	7.2	29.0	4.5
AUG 26...	1220	67.97	6.6	316	5.5	30.0	5.2

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312000 WITHLACOCHEE RIVER AT TRILBY, FL

LOCATION.--Lat 28°28'47", long 82°10'40", in SE¼ sec.14, T.23 S., R.21 E., Hernando County, Hydrologic Unit 03100208, on right bank at downstream side of bridge on U.S. Highway 301, 1.6 mi northeast of Trilby, 10 mi upstream from Little Withlacoochee River, and 93 mi upstream from mouth.

DRAINAGE AREA.--570 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to February 1929, February 1930 to current year.

REVISED RECORDS.--WDR FL-72-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 49.27 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Oct. 1, 1938, nonrecording gage at site 1.5 mi downstream at datum 0.12 ft lower.

REMARKS.--Records good. High-water diversion above station into Hillsborough River basin through Withlacoochee-Hillsborough Overflow near Richland (station 02311000). Records include water diverted from ground-water supplies through Dade City Canal (station 02311700) by citrus processing plants, in SW¼ sec.23, T.24 S., R.21 E., 5 mi upstream from Withlacoochee River.

AVERAGE DISCHARGE.--57 years (water years 1931-87), 350 ft³/s, 253,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,840 ft³/s June 21, 1934, gage height, 20.5 ft, site and datum then in use; minimum daily discharge, 6.2 ft³/s, June 6, 1985; minimum gage height observed, 0.54 ft, June 27, 1977, June 5,6,7,9,12, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,290, ft³/s, Apr. 6,7, gage height, 15.52 ft; minimum discharge, 46 ft³/s, Nov. 29,30; gage height, 1.15 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	68	51	70	102	139	2290	416	244	65	52	63
2	215	94	51	73	95	150	2570	374	224	64	54	59
3	184	91	53	71	87	156	2810	337	204	66	53	58
4	159	77	54	75	90	167	3030	297	188	71	51	61
5	138	71	52	85	92	172	3190	260	172	72	62	64
6	124	69	52	82	102	170	3270	237	158	72	61	69
7	114	66	51	85	111	213	3280	222	145	73	59	77
8	105	64	49	88	142	273	3210	205	126	75	57	81
9	98	65	49	87	135	291	3100	187	115	73	54	79
10	94	63	54	86	122	287	2960	174	112	71	52	74
11	99	60	57	86	118	277	2810	171	107	65	62	68
12	107	59	59	79	115	269	2650	207	132	59	126	72
13	102	59	61	72	110	267	2480	238	130	58	118	84
14	94	56	62	76	108	265	2320	256	142	60	105	99
15	89	55	56	80	106	260	2170	276	122	61	102	104
16	84	54	51	83	103	249	2010	314	100	62	100	105
17	79	53	53	83	120	234	1860	356	88	59	90	102
18	76	52	57	83	130	221	1700	386	81	56	82	96
19	72	52	59	78	134	219	1530	406	80	63	80	83
20	68	52	59	73	132	217	1370	417	82	75	83	72
21	66	51	61	94	130	210	1200	415	83	85	89	64
22	64	50	60	128	133	203	1070	408	83	88	104	58
23	62	49	58	131	127	193	965	406	81	81	113	57
24	60	48	61	124	121	179	868	388	76	74	112	63
25	60	48	61	117	127	174	774	358	69	68	107	65
26	62	47	54	110	132	249	695	327	64	63	104	64
27	62	47	50	101	132	439	627	304	62	58	99	60
28	62	47	49	103	131	572	565	292	63	54	91	56
29	62	46	47	106	---	705	512	280	62	51	84	53
30	64	49	47	104	---	1110	463	270	62	49	76	57
31	65	---	55	103	---	1800	---	259	---	49	68	---
TOTAL	3037	1762	1693	2816	3287	10330	58349	9443	3457	2040	2550	2167
MEAN	98.0	58.7	54.6	90.8	117	333	1945	305	115	65.8	82.3	72.2
MAX	247	94	62	131	142	1800	3280	417	244	88	126	105
MIN	60	46	47	70	87	139	463	171	62	49	51	53
AC-FT	6020	3490	3360	5590	6520	20490	115700	18730	6860	4050	5060	4300

CAL YR 1986 TOTAL 87740 MEAN 240 MAX 1240 MIN 34 AC-FT 174000
WTR YR 1987 TOTAL 100931 MEAN 277 MAX 3280 MIN 46 AC-FT 200200

PEACE, WITHLACOOCHIE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHIE RIVER BASIN

02312000 WITHLACOOCHIE RIVER AT TRILBY, FL--(Continued)

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.56	1.24	1.79	2.34	2.90	13.54	5.89	4.15	1.60	1.34	2.06
2	3.61	1.99	1.24	1.86	2.23	3.06	14.17	5.49	3.93	1.59	1.39	1.99
3	3.27	1.94	1.28	1.83	2.11	3.14	14.64	5.12	3.71	1.63	1.36	1.99
4	2.95	1.72	1.31	1.90	2.15	3.27	15.05	4.72	3.53	1.71	1.33	2.04
5	2.67	1.61	---	2.07	2.18	3.34	15.35	4.34	3.33	1.73	1.53	2.10
6	2.47	1.58	1.26	2.02	2.35	3.31	15.49	---	3.16	1.73	1.52	2.19
7	2.31	1.53	1.24	2.07	2.47	3.80	15.50	3.91	2.98	1.75	1.48	2.34
8	2.17	1.49	1.21	2.11	2.94	4.47	15.38	3.72	2.71	1.79	1.44	2.40
9	2.06	1.50	1.20	2.09	2.85	4.66	15.19	3.52	2.51	1.77	1.39	2.39
10	1.99	1.47	1.32	2.08	2.66	4.64	14.93	3.36	2.46	1.72	1.36	2.29
11	2.08	1.42	1.41	2.08	2.58	4.58	14.63	3.32	2.38	1.61	1.59	2.19
12	2.20	1.40	1.46	1.97	2.53	4.52	14.32	3.75	2.78	1.48	2.73	2.27
13	2.11	1.39	1.51	1.85	2.47	4.52	13.98	4.09	2.76	1.46	2.63	2.47
14	2.00	1.34	1.54	1.92	2.43	4.53	13.61	4.29	2.94	1.51	2.46	2.72
15	1.91	1.32	1.38	1.99	2.40	4.51	13.26	4.51	2.63	1.52	2.43	2.80
16	1.82	1.30	1.25	2.03	2.36	4.42	12.87	4.89	2.25	1.53	2.42	2.82
17	1.75	1.27	1.34	2.03	2.61	4.28	12.47	5.31	2.05	1.48	2.28	2.78
18	1.69	1.26	1.46	2.03	2.77	4.17	12.03	5.61	1.92	1.43	2.18	2.68
19	1.62	1.27	1.50	1.94	2.83	4.15	11.53	5.80	1.90	1.57	2.18	2.49
20	1.56	1.26	1.52	1.87	2.79	4.13	11.00	5.90	1.92	1.80	2.24	2.30
21	1.52	1.24	1.57	2.21	2.77	4.05	10.43	5.88	1.95	1.99	2.38	2.15
22	1.48	1.22	1.54	2.74	2.82	3.97	9.87	5.82	1.94	2.03	2.63	2.06
23	1.44	1.20	1.52	2.79	2.72	3.86	9.34	5.80	1.92	1.92	2.80	2.04
24	1.42	1.18	1.59	2.68	2.64	3.70	8.85	5.63	1.82	1.77	2.80	2.16
25	1.41	1.17	1.60	2.58	2.73	3.63	8.39	5.33	1.68	1.65	2.76	2.20
26	1.44	1.17	1.45	2.46	2.80	4.42	7.97	5.02	1.58	1.56	2.72	2.18
27	1.44	1.17	1.35	2.33	2.80	6.29	7.55	4.79	1.53	1.46	2.65	2.11
28	1.45	1.17	1.33	2.36	2.79	7.32	7.12	4.67	1.56	1.39	2.54	2.04
29	1.46	1.15	1.31	2.41	---	8.12	6.71	4.55	1.54	1.33	2.41	1.99
30	1.49	1.20	1.32	2.38	---	10.06	6.30	4.44	1.55	1.29	2.30	2.06
31	1.50	---	1.48	2.35	---	12.32	---	4.33	---	1.30	2.16	---
MEAN	---	1.38	---	2.16	2.58	4.78	12.05	---	2.44	1.62	2.11	2.28
MAX	---	1.99	---	2.79	2.94	12.32	15.50	---	4.15	2.03	2.80	2.82
MIN	---	1.15	---	1.79	2.11	2.90	6.30	---	1.53	1.29	1.33	1.99

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312000 WITHLACOCHEE RIVER AT TRILBY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1958-61, 1963, 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
MAR 18...	0920	4.18	223	181	5.4	19.5	6.3
MAY 06...	0920	4.10	234	182	5.0	24.0	4.8
JUL 14...	1100	1.51	61	285	5.7	28.0	5.2

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312140 BAYROOT SLOUGH HEADWATERS NEAR BAY LAKE, FL

LOCATION.--Lat 28°27'23", long 81°55'14", in NW¼ sec.28, T.23 S., R.24 E., Lake County, Hydrologic Unit 03100208, at bridge on State Highway 565, 0.1 mi upstream from Seaboard Coast Line Railroad bridge, and 1.5 mi southwest of town of Bay Lake.

DRAINAGE AREA.--18 mi², approximately.

PERIOD OF RECORD.--1960-61 (one or two discharge measurements each water year), October 1963 to current year (discharge measurements only).

REVISED RECORDS.--WDR FL-72-3: Drainage area.

REMARKS.--Discharge measurements made along railroad fill 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 most years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT			MAY		
07...	1050	0.0	05...	--	0.0
NOV			JUL		
20...	1605	0.0	10...	--	0.0
JAN			AUG		
13...	1420	0.0	25...	--	0.0
MAR					
19...	1120	4.6			

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

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 National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records fair. Above bankfull stage, discharge measurements are made along State Highway 471 and include all flow from 2.3 mi north to 2.8 mi south of gaging station.

AVERAGE DISCHARGE.--21 years, 43.1 ft³/s, 6.89 in/yr, 31,230 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,210 ft³/s, Mar. 31, 1987, maximum gage height, 6.58 ft Sept. 28, 1979; no flow for many days most years; river dry at gage for many days in 1967, 1968, 1971, 1977, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,210 ft³/s, Mar. 31, gage height, 6.51 ft; no flow Oct. 17 to Jan. 20, June 18 to Sept. 8, Sept. 23-30; minimum gage height, 1.64 ft, Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	.00	.00	.00	.09	23	1120	37	13	.00	.00	.00
2	4.9	.00	.00	.00	.09	27	931	31	9.2	.00	.00	.00
3	3.9	.00	.00	.00	.10	25	795	26	7.1	.00	.00	.00
4	3.0	.00	.00	.00	.09	23	707	22	5.6	.00	.00	.00
5	2.2	.00	.00	.00	.20	21	625	22	4.5	.00	.00	.00
6	2.0	.00	.00	.00	1.5	19	564	26	3.8	.00	.00	.00
7	2.1	.00	.00	.00	2.4	42	508	20	3.1	.00	.00	.00
8	1.5	.00	.00	.00	6.9	56	460	16	2.2	.00	.00	.00
9	1.0	.00	.00	.00	7.1	55	418	13	1.5	.00	.00	.05
10	.72	.00	.00	.00	8.8	56	380	14	1.1	.00	.00	.54
11	.67	.00	.00	.00	12	54	345	26	.70	.00	.00	.48
12	.36	.00	.00	.00	13	50	312	91	1.1	.00	.00	.77
13	.14	.00	.00	.00	12	45	284	104	.67	.00	.00	1.4
14	.08	.00	.00	.00	10	39	257	210	.50	.00	.00	1.4
15	.05	.00	.00	.00	9.3	34	243	182	.15	.00	.00	1.0
16	.03	.00	.00	.00	15	29	236	160	.07	.00	.00	.69
17	.00	.00	.00	.00	17	26	213	141	.03	.00	.00	.39
18	.00	.00	.00	.00	18	23	194	123	.00	.00	.00	.17
19	.00	.00	.00	.00	19	27	178	111	.00	.00	.00	.09
20	.00	.00	.00	.00	20	25	161	101	.00	.00	.00	.07
21	.00	.00	.00	.07	26	23	148	87	.00	.00	.00	.04
22	.00	.00	.00	.38	29	20	135	82	.00	.00	.00	.01
23	.00	.00	.00	.11	27	19	122	110	.00	.00	.00	.00
24	.00	.00	.00	.05	24	17	111	92	.00	.00	.00	.00
25	.00	.00	.00	.05	24	17	98	72	.00	.00	.00	.00
26	.00	.00	.00	.09	22	56	86	57	.00	.00	.00	.00
27	.00	.00	.00	.08	20	136	74	46	.00	.00	.00	.00
28	.00	.00	.00	.08	18	210	64	37	.00	.00	.00	.00
29	.00	.00	.00	.08	---	346	54	29	.00	.00	.00	.00
30	.00	.00	.00	.09	---	681	44	23	.00	.00	.00	.00
31	.00	---	.00	.09	---	1180	---	17	---	.00	.00	---
TOTAL	28.85	0.00	0.00	1.17	362.57	3404	9867	2128	54.32	0.00	0.00	7.10
MEAN	.93	.00	.00	.038	12.9	110	329	68.6	1.81	.00	.00	.24
MAX	6.2	.00	.00	.38	29	1180	1120	210	13	.00	.00	1.4
MIN	.00	.00	.00	.00	.09	17	44	13	.00	.00	.00	.00
AC-FT	57	.0	.0	2.3	719	6750	19570	4220	108	.0	.0	14
CFSM	.01	.00	.00	.00	.15	1.29	3.87	.81	.02	.00	.00	.00
IN.	.01	.00	.00	.00	.16	1.49	4.32	.93	.02	.00	.00	.00

CAL YR 1986 TOTAL 14147.48 MEAN 38.8 MAX 283 MIN .00 AC-FT 28060 CFSM .46 IN. 6.19
WTR YR 1987 TOTAL 15853.01 MEAN 43.4 MAX 1180 MIN .00 AC-FT 31440 CFSM .51 IN. 6.94

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312180 LITTLE WITHLACOCHEE RIVER NEAR TARRYTOWN, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-71, 1973, 1984, 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT 02...	1350	3.88	5.0	63	5.0	26.0	3.5
MAR 17...	1235	4.33	26	84	6.9	19.5	6.3
MAY 05...	1300	4.21	17	75	6.8	24.0	3.3

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT 02...	0.020	0.040	0.030	1.6	0.040	0.040
MAR 17...	<0.010	<0.020	0.010	1.4	0.030	0.010
MAY 05...	0.020	0.020	<0.010	1.7	0.040	0.030

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312194 BIG GANT CANAL AT STRUCTURE S-11, NEAR WEBSTER, FL

LOCATION.--Lat 28°34'47", long 82°05'45", in NW¼ sec.15, T.22 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on left bank 10 ft downstream from bridge on State Highway 478A, 400 ft upstream from structure S-11, 0.5 mi downstream from Big Gant Lake, 3.2 mi southwest of Webster, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--18 mi², approximately.

PERIOD OF RECORD--June 1970 to September 1984 (discharge measurements and thrice-weekly gage heights only), incomplete, October 1984 to current year (discharge measurements only).

REVISED RECORDS.--WDR FL-72-3: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Elevation of Big Gant Lake and flow at station regulated by manipulation of stoplogs in structure S-11; crest of weir is at elevation 72.6 ft with all stoplogs out and 75.8 ft with all stoplogs in place.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 42 ft³/s, Mar. 8, 1983; maximum gage height observed, 76.80 ft, Sept. 26, 1982; no flow observed at times many years; minimum gage height observed, 69.13 ft, May 29, 1981.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT 06...	1135	75.94	<1.0	MAY 07...	1330	76.00	4.6
NOV 24...	0850	75.75	e0.2	JULY 10...	1020	75.80	--
JAN 15...	0800	75.96	e2.0	AUG 26...	1415	75.80	e2.0
MAR 24...	1145	76.00	6.5				

e Estimated

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312197 BIG GANT CANAL AT STRUCTURE WC-2, AT RERDELL, FL

LOCATION.--Lat 28°34'16", long 82°08'52", in SW¼ sec.18, T.22 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on left bank 75 ft upstream from structure WC-2, 0.1 mi upstream from mouth, and 0.5 mi east of Rerdell.

DRAINAGE AREA.--30 mi², approximately.

PERIOD OF RECORD.--June 1970 to September 1984 (discharge measurements and thrice-weekly gage heights only), incomplete, October 1984 to current year (discharge measurements only).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service bench mark). Auxiliary gage at downstream side of structure.

REMARKS.--Flow at station regulated by manipulation of gates in spillway; flow over closed gates occurs at elevation 65.55 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 83 ft³/s, July 8, 1974; maximum gage height observed, 70.00 ft, Sept. 30, 1979; no flow observed at times in 1981; minimum gage height observed, 64.48 ft, May 30, 1985.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT				MAY			
06...	1420	65.74	17	07...	1045	65.90	23
NOV				JUL			
24...	1025	65.70	e4.0	10...	0840	65.68	e2.6
JAN				AUG			
15...	0930	65.74	9.7	27...	1145	65.69	e9.6
MAR							
24...	0925	65.76	17				

e Estimated

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312198 BIG GANT CANAL BELOW STRUCTURE WC-2, AT RERDELL, FL

LOCATION.--Lat 28°34'16", long 82°08'54", in SW¼ sec.18, T.22 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on left bank 75 ft downstream from structure WC-2, 0.1 mi upstream from mouth, and 0.5 mi east of Rerdell.

DRAINAGE AREA.--30 mi², approximately.

PERIOD OF RECORD.--June 1970 to September 1984 (thrice-weekly gage heights only), incomplete, October 1984 to current year (periodic gage heights only).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service bench mark).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 70.00 ft, Sept. 30, 1979; minimum observed, 61.05 ft, May 30, 1985.

GAGE HEIGHT, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET ABOVE DATUM)	DATE	TIME	GAGE HEIGHT (FEET ABOVE DATUM)
OCT 06...	1420	63.76	MAY 07...	1045	64.30
NOV 24...	1015	63.38	JUL 10...	0840	63.40
JAN 15...	0930	63.85	AUG 27...	1145	63.36
MAR 24...	0925	64.20			

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

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 downstream 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Above bankfull stage, discharge measurements are made along U.S. Highway 301 and include all flow from 3.4 mi north to 1.8 mi south of gaging station.

AVERAGE DISCHARGE.--29 years, 83.5 ft³/s, 7.82 in/yr, 60,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft³/s, Mar. 19, 1960, gage height, 12.32 ft; no flow for many days in 1961, 1962, 1977, 1981, 1985; river dry at gage for many days in 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,080 ft³/s, Apr. 2,3, gage height, 9.55 ft; minimum, 3.5 ft³/s, July 29,30, Aug. 9, gage height, 1.61 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	11	6.2	7.5	13	42	993	78	35	5.2	4.0	5.9
2	27	9.5	5.9	6.7	12	45	1070	69	29	5.8	4.1	5.7
3	24	8.7	5.8	6.4	12	45	1080	62	24	4.9	4.1	7.0
4	21	8.2	5.2	9.4	12	44	1040	55	20	6.0	4.8	8.9
5	19	8.0	4.9	12	12	42	963	50	18	7.3	5.2	9.6
6	18	7.4	4.9	11	17	40	877	46	17	6.9	4.6	8.2
7	17	6.8	4.9	11	19	63	798	44	14	6.1	5.1	7.5
8	16	6.4	4.7	10	27	80	721	42	12	5.6	4.2	7.0
9	14	5.7	4.5	9.9	28	83	646	43	10	5.1	3.8	6.7
10	14	5.2	4.4	9.0	28	86	576	46	9.5	4.8	4.4	6.7
11	14	5.2	4.4	8.9	28	84	516	43	8.5	4.4	8.6	7.5
12	13	5.0	5.0	8.2	27	78	462	38	7.7	4.6	9.3	9.7
13	12	4.8	5.7	8.0	26	73	416	35	8.0	5.6	8.0	12
14	12	4.7	5.2	8.0	26	70	382	65	8.9	5.5	7.9	11
15	11	4.5	5.0	8.1	26	65	356	116	7.7	6.0	8.7	10
16	10	4.5	4.9	7.9	29	61	358	185	7.0	5.4	9.0	10
17	9.6	4.4	4.6	7.6	31	57	382	207	6.4	5.3	8.4	9.6
18	8.9	4.5	4.5	7.3	31	52	341	197	5.9	7.7	8.0	9.2
19	8.4	4.7	4.5	7.3	30	53	292	179	5.5	8.0	8.4	8.8
20	8.0	6.0	4.8	7.7	32	50	265	159	5.5	7.1	8.6	9.5
21	7.6	4.8	4.8	13	33	46	241	141	5.5	6.9	9.6	8.9
22	7.2	4.3	4.5	20	34	43	218	124	4.9	6.9	10	8.5
23	7.1	4.2	4.9	21	38	40	195	110	4.8	6.2	8.5	9.2
24	7.1	4.2	5.8	19	41	37	172	103	4.5	5.6	7.5	9.7
25	6.7	4.2	5.3	18	44	37	151	105	4.2	5.1	6.9	8.8
26	6.8	4.1	4.9	18	43	58	133	99	4.1	4.6	6.4	8.3
27	7.9	4.7	4.6	17	41	93	123	85	4.6	4.3	5.9	8.5
28	7.6	4.4	4.5	16	39	161	111	72	4.8	3.9	5.4	12
29	7.7	4.2	4.3	15	---	273	98	60	4.5	3.7	5.2	9.6
30	8.6	6.6	4.2	15	---	497	87	50	4.9	3.9	5.0	11
31	9.1	---	6.2	14	---	807	---	42	---	4.1	4.8	---
TOTAL	391.3	170.9	154.0	357.9	779	3305	14063	2750	306.4	172.5	204.4	265.0
MEAN	12.6	5.70	4.97	11.5	27.8	107	469	88.7	10.2	5.56	6.59	8.83
MAX	31	11	6.2	21	44	807	1080	207	35	8.0	10	12
MIN	6.7	4.1	4.2	6.4	12	37	87	35	4.1	3.7	3.8	5.7
AC-FT	776	339	305	710	1550	6560	27890	5450	608	342	405	526
CFSM	.09	.04	.03	.08	.19	.74	3.23	.61	.07	.04	.05	.06
IN.	.10	.04	.04	.09	.20	.85	3.61	.71	.08	.04	.05	.07

CAL YR 1986 TOTAL 21566.35 MEAN 59.1 MAX 327 MIN .75 AC-FT 42780 CFSM .41 IN. 5.53
WTR YR 1987 TOTAL 22919.4 MEAN 62.8 MAX 1080 MIN 3.7 AC-FT 45460 CFSM .43 IN. 5.88

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312200 LITTLE WITHLACOCHEE RIVER AT RERDELL, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to December 1967.

WATER TEMPERATURE: October 1964 to December 1967.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 490 microsiemens, Dec. 26, 1967; minimum observed, 45 microsiemens Aug. 30, 1965.

WATER TEMPERATURE: Maximum observed, 30.5°C, June 30, 1965; minimum observed, 9.0°C, Jan. 30, 31, 1966.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT							
02...	1115	2.84	31	201	5.7	26.5	2.2
NOV							
20...	1130	1.98	6.1	313	6.2	23.5	4.1
JAN							
13...	1200	2.09	7.9	320	5.4	14.0	--
MAR							
17...	1020	3.44	57	162	5.4	17.5	4.6
MAY							
05...	1210	3.32	50	175	6.7	23.5	3.0
JUL							
13...	1200	1.82	5.7	245	7.2	28.5	4.1
AUG							
25...	1200	1.95	7.0	296	5.7	27.0	3.3

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT						
02...	0.010	0.040	0.080	1.2	0.060	0.040
NOV						
20...	0.010	0.040	0.060	0.38	0.040	0.020
JAN						
13...	<0.010	<0.020	0.020	0.42	0.040	0.010
MAR						
17...	<0.010	0.020	0.020	1.2	0.030	0.020
MAY						
05...	0.010	0.030	0.020	1.4	0.060	0.040
JUL						
13...	<0.010	0.090	0.020	0.51	0.020	0.020
AUG						
25...	<0.010	0.050	0.040	0.40	0.020	0.010

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312200 LITTLE WITHLACOCHEE RIVER AT RERDELL, FL--Continued

WATER-QUALITY RECORDS

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)
OCT							
02...	1115	200	37	1.7	4.9	0.30	97
NOV							
20...	1130	15	61	2.3	5.6	0.40	161
JAN							
13...	1200	20	64	2.3	6.0	0.50	155
MAR							
17...	1020	280	27	1.7	6.9	0.20	56
MAY							
05...	1210	400	30	1.6	5.6	0.40	68
JUL							
13...	1200	320	44	1.9	4.5	0.10	112
AUG							
25...	1200	10	58	2.0	4.4	0.20	149

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
OCT						
02...	<0.10	9.7	0.60	5.3	167	70
NOV						
20...	0.40	11	0.10	7.3	199	80
JAN						
13...	2.9	13	0.20	4.9	208	80
MAR						
17...	0.20	15	0.40	2.1	152	70
MAY						
05...	<0.10	12	0.30	2.6	155	100
JUL						
13...	0.20	9.4	0.10	6.1	154	120
AUG						
25...	0.60	11	0.20	8.8	191	80

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

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 National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Feb. 2, 1940, nonrecording gage at railroad bridge 500 ft upstream at same datum.

REMARKS.--Records good. Records include water diverted from ground-water supplies (see station 02311700). High-water diversion in headwaters (station 02311000).

AVERAGE DISCHARGE.--48 years, 459 ft³/s, 332,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,650 ft³/s, Mar. 23, 1960, gage height, 13.78 ft; minimum, 4.4 ft³/s, July 7,8, 1981, gage height, 1.06 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1934 reached a stage of 15.2 ft, from floodmark, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,780 ft³/s, Apr. 7, gage height, 10.82 ft; maximum gage height, 10.83 ft, Apr. 8; minimum discharge, 63 ft³/s, Dec. 30,31, minimum gage height, 2.55 ft, Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	412	124	97	83	147	186	1910	652	379	123	79	124
2	380	126	95	94	144	196	2250	605	357	117	81	116
3	350	135	93	100	137	201	2560	563	334	113	81	113
4	321	135	90	111	130	205	3010	524	311	113	80	118
5	294	128	89	124	129	210	3430	487	293	118	83	134
6	271	121	86	130	138	212	3700	455	280	122	86	131
7	257	116	84	129	144	246	3770	426	259	121	85	127
8	241	121	83	129	161	294	3720	402	237	123	82	126
9	226	124	80	130	180	330	3640	384	212	123	78	126
10	215	126	79	129	182	353	3500	373	193	120	76	124
11	206	125	81	127	175	363	3310	360	180	116	84	126
12	204	124	88	124	170	363	3100	354	188	110	110	134
13	202	122	93	118	165	358	2870	363	194	113	143	140
14	197	119	94	112	160	354	2650	381	206	118	150	142
15	191	116	95	110	156	351	2480	415	203	114	148	148
16	182	114	88	111	158	347	2300	470	189	113	150	151
17	173	111	81	112	159	338	2140	532	171	110	145	153
18	164	109	79	112	166	326	2000	575	155	112	136	151
19	157	109	81	110	172	321	1820	603	156	110	129	148
20	150	114	83	107	176	312	1660	615	140	110	125	141
21	142	110	83	114	180	304	1500	612	132	117	125	133
22	136	106	83	139	182	294	1350	600	129	124	134	127
23	131	103	83	168	185	285	1220	587	128	124	141	124
24	126	98	84	177	181	275	1090	571	126	118	146	123
25	122	91	83	177	180	263	991	552	118	111	146	123
26	120	91	81	174	183	282	914	527	109	103	143	123
27	123	91	76	165	185	369	855	498	109	96	139	121
28	122	89	70	157	183	508	803	468	111	89	134	121
29	121	86	67	153	---	678	751	441	107	82	127	121
30	123	92	64	153	---	943	701	418	112	79	121	124
31	123	---	68	150	---	1430	---	398	---	78	114	---
TOTAL	6182	3376	2581	4029	4608	11497	65995	15211	5818	3440	3601	3913
MEAN	199	113	83.3	130	165	371	2200	491	194	111	116	130
MAX	412	135	97	177	185	1430	3770	652	379	124	150	153
MIN	120	86	64	83	129	186	701	354	107	78	76	113
AC-FT	12260	6700	5120	7990	9140	22800	130900	30170	11540	6820	7140	7760

CAL YR 1986 TOTAL 122140 MEAN 335 MAX 1310 MIN 64 AC-FT 242300
WTR YR 1987 TOTAL 130251 MEAN 357 MAX 3770 MIN 64 AC-FT 258400

PEACE, WITHLACOOCHE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02312500 WITHLACOOCHEE RIVER AT CROOM, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.05	3.13	3.00	2.82	3.21	3.54	8.90	6.24	4.86	3.06	2.60	3.07
2	4.87	3.16	2.98	2.89	3.18	3.62	9.31	6.04	4.73	3.00	2.63	2.99
3	4.68	3.25	2.96	2.92	3.12	3.66	9.63	5.84	4.58	2.95	2.62	2.95
4	4.50	3.26	2.93	2.99	3.05	3.69	10.06	5.65	4.44	2.95	2.61	3.01
5	4.33	3.20	2.92	3.08	3.04	3.73	10.41	5.46	4.33	3.01	2.64	3.16
6	4.18	3.14	2.89	3.12	3.12	3.75	10.64	5.29	4.24	3.05	2.68	3.14
7	4.07	3.10	2.87	3.11	3.18	4.00	10.78	5.13	4.09	3.04	2.67	3.09
8	3.96	3.14	2.85	3.11	3.33	4.33	10.82	5.00	3.93	3.06	2.64	3.09
9	3.86	3.18	2.83	3.12	3.49	4.56	10.77	4.89	3.76	3.06	2.59	3.08
10	3.78	3.21	2.81	3.11	3.51	4.70	10.65	4.82	3.63	3.02	2.57	3.07
11	3.72	3.21	2.84	3.09	3.45	4.76	10.48	4.75	3.53	2.99	2.65	3.08
12	3.71	3.20	2.91	3.06	3.41	4.76	10.29	4.71	3.59	2.93	2.92	3.16
13	3.70	3.18	2.96	3.00	3.37	4.74	10.07	4.76	3.63	2.95	3.24	3.22
14	3.66	3.16	2.97	2.94	3.32	4.71	9.85	4.87	3.72	3.01	3.29	3.23
15	3.62	3.14	2.98	2.93	3.29	4.69	9.66	5.07	3.70	2.97	3.28	3.27
16	3.55	3.12	2.92	2.94	3.30	4.66	9.46	5.37	3.60	2.96	3.29	3.31
17	3.48	3.10	2.83	2.95	3.32	4.61	9.28	5.69	3.46	2.93	3.25	3.32
18	3.42	3.09	2.81	2.95	3.37	4.54	9.10	5.90	3.34	2.94	3.18	3.31
19	3.36	3.09	2.83	2.93	3.43	4.50	8.86	6.03	3.34	2.92	3.11	3.27
20	3.30	3.15	2.85	2.89	3.46	4.45	8.63	6.08	3.21	2.93	3.07	3.22
21	3.25	3.12	2.86	2.96	3.49	4.39	8.38	6.07	3.14	3.00	3.08	3.15
22	3.19	3.08	2.86	3.18	3.51	4.33	8.15	6.01	3.11	3.07	3.16	3.09
23	3.15	3.05	2.86	3.40	3.53	4.27	7.92	5.95	3.10	3.06	3.22	3.07
24	3.11	3.00	2.87	3.47	3.50	4.20	7.69	5.88	3.08	3.01	3.26	3.06
25	3.08	2.94	2.86	3.46	3.49	4.12	7.47	5.78	3.00	2.94	3.26	3.06
26	3.06	2.94	2.84	3.44	3.51	4.24	7.26	5.66	2.92	2.86	3.23	3.06
27	3.10	2.94	2.77	3.37	3.53	4.80	7.06	5.51	2.92	2.79	3.21	3.04
28	3.10	2.92	2.70	3.29	3.51	5.56	6.86	5.36	2.94	2.71	3.16	3.03
29	3.09	2.89	2.66	3.26	---	6.35	6.66	5.21	2.90	2.64	3.10	3.03
30	3.12	2.95	2.62	3.26	---	7.27	6.45	5.09	2.95	2.59	3.03	3.06
31	3.12	---	2.67	3.24	---	8.21	---	4.97	---	2.59	2.97	---
MEAN	3.65	3.10	2.86	3.11	3.36	4.64	9.05	5.45	3.59	2.94	2.97	3.12
MAX	5.05	3.26	3.00	3.47	3.53	8.21	10.82	6.24	4.86	3.07	3.29	3.32
MIN	3.06	2.89	2.62	2.82	3.04	3.54	6.45	4.71	2.90	2.59	2.57	2

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02312500 WITHLACOOCHEE RIVER AT CROOM, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1960-61, 1963, 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT							
02...	1230	4.86	379	182	5.8	28.0	3.2
NOV							
20...	1245	3.15	114	268	6.4	26.0	6.8
JAN							
13...	1030	3.00	118	275	6.2	15.5	8.8
MAR							
17...	1140	4.61	338	182	6.4	19.0	7.2
MAY							
05...	1100	5.46	487	177	5.4	25.0	3.8
JUL							
13...	1043	2.93	110	261	6.1	29.0	5.4
AUG							
25...	1050	3.27	147	259	5.4	29.0	7.7

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT						
02...	0.010	0.050	0.030	1.0	0.070	0.060
NOV						
20...	<0.010	0.070	0.030	0.26	0.080	0.060
JAN						
13...	<0.010	0.040	0.030	0.52	0.090	0.070
MAR						
17...	<0.010	0.030	0.020	0.97	0.060	0.040
MAY						
05...	0.010	0.080	0.020	1.0	0.110	0.080
JUL						
13...	<0.010	0.030	0.020	0.53	0.060	0.060
AUG						
25...	<0.010	0.020	0.030	0.53	0.090	0.070

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)
OCT							
02...	1230	200	30	2.2	5.9	0.70	71
NOV							
20...	1245	30	52	3.5	6.0	0.50	--
JAN							
13...	1030	40	50	3.7	9.1	1.5	--
MAR							
17...	1140	160	29	2.5	7.9	0.50	67
MAY							
05...	1100	240	29	2.4	6.5	1.0	70
JUL							
13...	1043	40	46	3.2	5.9	0.60	122
AUG							
25...	1050	40	45	3.1	6.0	0.40	118

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312500 WITHLACOCHEE RIVER AT CROOM, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
OCT 02...	2.0	10	0.50	6.4	156	110
NOV 20...	6.4	10	0.10	5.8	181	170
JAN 13...	8.3	14	0.20	4.3	191	170
MAR 17...	1.0	15	0.30	2.1	156	80
MAY 05...	1.6	11	0.30	4.5	146	150
JUL 13...	6.8	11	0.20	5.7	176	210
AUG 25...	5.2	13	0.20	5.8	173	150

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

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. Records of gage heights prior to October 1962 are unpublished and are available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1983, nonrecording gage at same site and datum.

REMARKS.--Records fair above 100 ft³/s and poor below. 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).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,480 ft³/s, Apr. 11,12, 1987; maximum gage height observed, 45.24 ft, Mar. 25, 1960; maximum reverse flow measured, 5.0 ft³/s, July 24, 1981; minimum gage height observed, 37.48 ft, July 8, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,480 ft³/s, Apr. 11,12, gage height, 44.13 ft; minimum daily discharge, 107 ft³/s, Dec. 22,30; minimum gage height, 40.37 ft, June 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	152	136	124	142	170	1490	1430	488	222	140	160
2	460	152	136	122	141	179	1860	1300	479	220	142	162
3	429	150	137	120	137	178	2260	1200	470	217	142	163
4	393	148	134	126	133	178	2590	1120	461	216	143	163
5	361	147	131	135	133	176	2930	1050	458	213	144	164
6	337	145	127	135	150	176	3290	995	461	210	144	168
7	315	144	124	135	151	234	3800	933	460	211	143	169
8	294	142	123	135	150	273	4130	878	457	212	142	169
9	275	139	120	135	148	288	4330	825	449	208	142	168
10	263	136	118	135	147	302	4420	781	416	203	141	167
11	255	133	117	132	147	310	4440	769	380	197	143	167
12	245	131	117	130	147	331	4440	781	360	192	146	169
13	238	128	117	126	145	345	4360	735	340	188	147	175
14	231	123	114	123	142	355	4260	701	343	184	151	180
15	229	121	113	120	139	366	4200	675	339	181	156	180
16	221	119	112	118	148	369	4100	647	328	179	159	180
17	212	117	111	114	149	363	3930	632	313	176	160	179
18	202	114	110	113	146	367	3760	631	297	174	161	178
19	195	115	109	112	143	388	3590	652	293	171	161	179
20	187	134	109	111	141	374	3410	681	280	169	160	179
21	181	129	108	123	144	361	3210	678	266	166	160	178
22	173	125	107	139	150	350	3020	656	252	162	160	177
23	168	122	108	142	154	335	2820	642	243	159	160	183
24	162	119	112	142	152	322	2630	620	235	156	160	185
25	157	117	112	147	152	317	2430	599	228	152	160	180
26	154	115	110	156	151	411	2240	582	222	149	161	177
27	155	114	110	155	153	526	2070	563	225	145	161	176
28	152	112	109	154	152	634	1920	545	229	141	161	177
29	151	112	108	152	---	763	1740	527	225	137	160	177
30	154	127	107	149	---	956	1580	512	222	135	160	185
31	152	---	112	146	---	1230	---	497	---	136	159	---
TOTAL	7588	3882	3618	4106	4087	11927	95250	23837	10219	5581	4729	5214
MEAN	245	129	117	132	146	385	3175	769	341	180	153	174
MAX	487	152	137	156	154	1230	4440	1430	488	222	161	185
MIN	151	112	107	111	133	170	1490	497	222	135	140	160

CAL YR 1986 TOTAL 135041 MEAN 370 MAX 1430 MIN 70
WTR YR 1987 TOTAL 180038 MEAN 493 MAX 4440 MIN 107

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.71	40.91	40.82	40.76	40.84	40.94	42.53	42.48	41.09	40.54	40.49	40.79
2	41.66	40.91	40.82	40.75	40.83	40.98	42.82	42.36	41.04	40.56	40.53	40.82
3	41.62	40.90	40.83	40.74	40.82	40.97	43.08	42.26	40.99	40.55	40.54	40.83
4	41.58	40.89	40.81	40.77	40.79	40.97	43.28	42.17	40.93	40.58	40.55	40.83
5	41.54	40.88	40.79	40.81	40.80	40.96	43.46	42.09	40.89	40.58	40.56	40.85
6	41.50	40.88	40.77	40.81	40.87	40.96	43.64	42.03	40.87	40.58	40.56	40.90
7	41.47	40.87	40.76	40.81	40.87	41.13	43.86	41.95	40.83	40.62	40.55	40.91
8	41.44	40.85	40.75	40.81	40.87	41.21	44.00	41.87	40.78	40.67	40.54	40.90
9	41.40	40.84	40.74	40.81	40.86	41.23	44.07	41.80	40.73	40.66	40.53	40.89
10	41.37	40.82	40.73	40.81	40.86	41.24	44.11	41.73	40.67	40.64	40.51	40.88
11	41.35	40.81	40.72	40.80	40.86	41.25	44.12	41.71	40.61	40.61	40.54	40.88
12	41.32	40.79	40.72	40.78	40.86	41.27	44.11	41.73	40.59	40.59	40.59	40.91
13	41.29	40.78	40.72	40.76	40.85	41.28	44.09	41.66	40.57	40.57	40.61	40.98
14	41.26	40.76	40.71	40.75	40.84	41.29	44.04	41.60	40.61	40.57	40.66	41.02
15	41.25	40.75	40.70	40.73	40.82	41.30	44.02	41.56	40.63	40.57	40.73	41.02
16	41.22	40.73	40.70	40.72	40.86	41.30	43.98	41.53	40.63	40.58	40.77	41.02
17	41.18	40.72	40.69	40.71	40.86	41.29	43.92	41.51	40.61	40.57	40.80	41.02
18	41.14	40.71	40.68	40.70	40.85	41.29	43.85	41.50	40.59	40.58	40.80	41.02
19	41.11	40.71	40.67	40.69	40.84	41.31	43.77	41.53	40.61	40.58	40.80	41.02
20	41.08	40.81	40.66	40.68	40.83	41.30	43.69	41.57	40.59	40.58	40.79	41.02
21	41.05	40.79	40.65	40.75	40.84	41.29	43.60	41.56	40.55	40.57	40.79	41.01
22	41.02	40.77	40.63	40.83	40.87	41.28	43.50	41.53	40.50	40.56	40.78	41.00
23	40.99	40.75	40.64	40.84	40.88	41.26	43.41	41.50	40.47	40.55	40.79	41.02
24	40.96	40.73	40.70	40.84	40.87	41.25	43.30	41.46	40.44	40.53	40.79	41.04
25	40.94	40.72	40.69	40.86	40.87	41.24	43.18	41.43	40.41	40.52	40.80	41.02
26	40.92	40.71	40.68	40.90	40.87	41.32	43.07	41.39	40.38	40.50	40.80	41.01
27	40.93	40.70	40.67	40.90	40.88	41.42	42.96	41.34	40.44	40.48	40.80	40.99
28	40.91	40.69	40.66	40.89	40.87	41.49	42.85	41.29	40.52	40.45	40.80	41.00
29	40.91	40.70	40.65	40.88	---	41.70	42.73	41.24	40.51	40.43	40.79	41.01
30	40.92	40.78	40.63	40.87	---	41.97	42.61	41.18	40.51	40.41	40.78	41.04
31	40.91	---	40.67	40.86	---	42.29	---	41.14	---	40.43	40.78	---
MEAN	41.22	40.79	40.71	40.79	40.85	41.29	43.52	41.67	40.65	40.56	40.68	40.95
MAX	41.71	40.91	40.83	40.90	40.88	42.29	44.12	42.48	41.09	40.67	40.80	41.04
MIN	40.91	40.69	40.63	40.68	40.79	40.94	42.53	41.14	40.38	40.41	40.49	40.79
CAL YR 1986	MEAN 40.94		MAX 42.09	MIN 39.94								
WTR YR 1987	MEAN 41.14		MAX 44.12	MIN 40.38								

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02312600 WITHLACOOCHEE RIVER NEAR FLORAL CITY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
OCT							
21...	1205	41.05	192	225	6.6	22.5	5.1
DEC							
17...	1000	40.69	111	283	7.5	18.0	1.7
MAR							
10...	1445	41.25	290	261	7.6	18.0	4.2
APR							
08...	1125	44.00	4200	86	6.5	17.0	2.9
JUN							
08...	1205	40.74	464	215	--	27.0	1.7
JUL							
29...	0949	40.44	139	292	7.6	30.0	3.1
SEP							
28...	1445	41.02	173	200	7.7	26.0	8.5

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT							
21...	<0.010	<0.020	0.040	1.3	0.060	0.020	--
DEC							
17...	<0.010	<0.020	0.020	0.52	0.050	0.010	--
MAR							
10...	<0.010	<0.020	0.020	0.57	0.030	0.010	--
APR							
08...	0.010	0.020	0.020	1.0	0.060	0.030	--
JUN							
08...	<0.010	0.050	0.030	1.1	0.100	0.070	23
JUL							
29...	<0.010	<0.020	0.030	0.52	0.030	0.020	7.2
SEP							
28...	<0.010	0.020	0.010	0.58	0.050	0.010	--

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CAO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT									
21...	1205	200	36	2.6	5.9	0.30	90	1.5	12
DEC									
17...	1000	40	46	3.4	6.1	0.50	121	3.2	9.2
MAR									
10...	1445	70	40	2.8	7.9	1.0	101	3.2	15
APR									
08...	1125	210	12	1.2	4.5	0.60	20	<0.10	9.3
JUN									
08...	1205	160	33	2.4	5.8	0.70	82	0.30	10
JUL									
29...	0949	35	48	3.0	5.1	0.50	125	4.8	9.4
SEP									
28...	1445	30	42	2.6	4.9	0.10	108	3.5	9.2

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312600 WITHLACOCHEE RIVER NEAR FLORAL CITY, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)
OCT 21...	0.30	7.5	172	130	--	--	--	--	--
DEC 17...	0.10	5.1	150	210	--	--	--	--	--
MAR 10...	0.20	1.5	163	160	--	--	--	--	--
APR 08...	0.50	1.9	107	80	--	--	--	--	--
JUN 08...	0.20	4.3	152	130	23	50	<1	2	8
JUL 29...	0.10	6.0	176	200	7.2	--	--	--	--
SEP 28...	0.10	4.7	153	170	--	--	--	--	--

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUN 08...	670	400	8	<5	20	20	<0.10	1	20

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312635 JUMPER CREEK CANAL NEAR SUMTERVILLE, FL

LOCATION.--Lat 28°41'46", long 82°03'18", in NE¼ sec.1, T.21 S., R.22 E., Sumter County, Hydrologic Unit 03100208, near left bank on downstream side of bridge on State Highway 471, 3.4 mi south of Sumterville, 4.2 mi northeast of Bushnell, and 12.9 mi upstream from mouth.

DRAINAGE AREA.--28.6 mi².

PERIOD OF RECORD.--October 1976 to September 1977, March 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 68.04 ft above National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service bench mark).

REMARKS.--Records poor. Flow affected by pumpage into and out of canal upstream and downstream from station.

AVERAGE DISCHARGE.--9 years (water years 1977, 1980-87), 23.4 ft³/s, 16,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 145 ft³/s, Apr. 2, 1987; maximum gage height, 8.55 ft, Apr. 2, 1987; no flow many days in most years; canal dry at gage for many days in 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 145 ft³/s, Apr. 2; maximum gage height, 8.55 ft, Apr. 2; minimum daily discharge, 5.1 ft³/s, Apr. 16; minimum gage height, 4.56 ft, Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	32	16	19	16	15	139	13	29	21	17	12
2	15	33	15	18	16	17	145	12	27	20	16	14
3	28	31	19	19	16	20	129	11	22	22	17	15
4	30	18	15	17	16	19	105	8.0	13	22	20	17
5	29	16	21	19	17	16	86	11	24	22	18	10
6	29	18	23	21	33	21	67	13	26	21	18	8.3
7	28	11	22	19	33	20	56	12	25	18	18	13
8	26	15	20	19	28	19	41	11	26	17	15	13
9	14	15	22	18	21	21	43	19	25	18	16	14
10	13	15	18	19	12	17	31	15	25	18	16	13
11	23	11	12	18	7.4	16	24	17	26	15	13	14
12	28	10	17	15	14	16	23	25	27	18	15	14
13	28	12	21	16	14	16	26	27	25	17	15	15
14	27	12	7.7	21	5.6	16	19	25	19	18	18	15
15	26	13	7.4	20	14	16	14	23	27	31	17	16
16	15	14	14	16	10	16	5.1	30	29	33	18	16
17	17	13	16	19	13	16	18	33	30	32	17	14
18	21	15	15	18	15	16	30	33	28	30	14	14
19	20	13	16	19	15	18	32	33	28	32	14	15
20	33	16	15	16	17	16	31	33	30	30	14	14
21	15	13	14	16	17	15	20	32	30	25	15	14
22	16	16	11	18	17	15	19	31	30	27	14	14
23	30	15	6.8	19	16	11	14	30	33	26	10	15
24	17	14	12	19	14	16	19	28	37	24	12	15
25	13	15	10	20	16	14	19	27	34	23	12	13
26	16	13	10	16	16	17	19	26	29	23	15	14
27	15	14	19	16	19	20	17	27	29	21	14	15
28	12	16	25	15	15	18	19	26	29	19	14	10
29	14	16	23	14	---	24	19	25	25	19	14	12
30	19	16	16	18	---	64	14	25	28	20	15	13
31	33	---	19	19	---	128	---	26	---	20	11	---
TOTAL	674	481	497.9	556	463.0	689	1243.1	707.0	815	702	472	411.3
MEAN	21.7	16.0	16.1	17.9	16.5	22.2	41.4	22.8	27.2	22.6	15.2	13.7
MAX	33	33	25	21	33	128	145	33	37	33	20	17
MIN	12	10	6.8	14	5.6	11	5.1	8.0	13	15	10	8.3
AC-FT	1340	954	988	1100	918	1370	2470	1400	1620	1390	936	816

CAL YR 1986 TOTAL 6112.8 MEAN 16.7 MAX 45 MIN 6.0 AC-FT 12120
WTR YR 1987 TOTAL 7711.3 MEAN 21.1 MAX 145 MIN 5.1 AC-FT 15300

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312640 JUMPER CREEK CANAL NEAR BUSHNELL, FL

LOCATION.--Lat 28°41'45", long 82°06'34", in NE¼ sec.4, T.21 S., R.22 E., Sumter County, Hydrologic Unit 03100208, near center of span on downstream side of bridge on State Highway 475, 2.2 mi north of Bushnell, and 10 mi upstream from mouth.

DRAINAGE AREA.--40 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1963 to current year.

REVISED RECORDS.--WDR FL-81-3: 1980 (m).

GAGE.--Water-stage recorder. Datum of gage is 55.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Diurnal fluctuation caused by mining operations upstream; daily flows are not affected appreciably.

AVERAGE DISCHARGE.--24 years, 27.6 ft³/s, 20,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 227 ft³/s, Feb. 3, 1970, gage height, 6.06 ft; maximum gage height, 6.66 ft, Apr. 2, 1987; minimum daily discharge, 0.06 ft³/s, Dec. 25, 1981; minimum gage height, 0.76 ft, Dec. 25, 26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 163 ft³/s, Apr. 2, gage height, 6.66 ft; minimum, 6.8 ft³/s, Dec. 25, gage height, 2.38 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	33	21	21	19	24	156	37	34	28	30	26
2	16	34	20	19	19	25	162	36	34	23	24	30
3	25	34	22	20	19	28	159	35	32	26	26	28
4	30	28	21	20	18	27	147	31	21	26	23	28
5	31	18	18	20	18	26	127	32	28	26	22	31
6	30	25	23	22	29	29	109	33	31	26	21	30
7	30	11	23	21	33	32	91	32	31	25	21	26
8	30	14	20	21	30	31	76	31	31	27	20	25
9	18	18	24	20	27	32	73	36	31	24	20	24
10	13	18	19	21	20	31	63	31	29	24	20	24
11	19	12	15	20	13	29	56	32	30	22	24	26
12	29	7.7	18	18	18	29	53	36	30	24	23	30
13	30	8.3	23	18	19	29	54	40	31	22	22	33
14	30	12	12	20	12	30	50	41	23	22	22	30
15	30	13	11	22	16	30	50	38	27	29	23	27
16	22	14	15	20	17	30	33	42	31	35	24	26
17	16	13	16	20	17	31	42	43	32	35	23	25
18	27	16	17	21	20	32	54	43	32	35	20	24
19	18	17	16	20	20	34	58	43	31	36	22	23
20	30	18	17	20	21	33	57	43	33	35	22	23
21	21	13	16	18	23	32	50	42	33	33	23	23
22	14	20	16	21	22	32	46	41	35	33	24	23
23	28	18	10	21	22	28	42	39	34	33	23	23
24	23	17	12	21	21	32	43	35	38	32	22	23
25	14	17	15	22	23	32	45	33	38	31	22	23
26	16	15	10	20	23	39	44	32	33	32	22	21
27	19	15	17	19	24	41	42	31	32	32	22	24
28	11	19	23	18	24	45	42	32	34	30	22	26
29	11	21	23	18	---	63	43	31	31	28	22	24
30	20	21	18	20	---	93	39	33	29	28	22	26
31	30	---	20	22	---	142	---	30	---	30	24	---
TOTAL	710	540.0	551	624	587	1171	2106	1114	939	892	700	775
MEAN	22.9	18.0	17.8	20.1	21.0	37.8	70.2	35.9	31.3	28.8	22.6	25.8
MAX	31	34	24	22	33	142	162	43	38	36	30	33
MIN	11	7.7	10	18	12	24	33	30	21	22	20	21
AC-FT	1410	1070	1090	1240	1160	2320	4180	2210	1860	1770	1390	1540

CAL YR 1986 TOTAL 8455.0 MEAN 23.2 MAX 48 MIN 7.7 AC-FT 16770
WTR YR 1987 TOTAL 10709.0 MEAN 29.3 MAX 162 MIN 7.7 AC-FT 21240

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02312640 JUMPER CREEK CANAL NEAR BUSHNELL, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD --Water years 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 14...	1445	3.56	29	419	8.1	27.0	7.6	--
DEC 02...	1600	3.02	16	420	8.2	26.0	8.5	--
FEB 11...	1530	2.87	12	420	8.3	18.0	9.8	--
APR 09...	1509	5.29	74	402	7.9	21.0	8.1	--
MAY 28...	1723	4.86	31	430	8.2	26.0	11.0	4.0
JUL 28...	1156	3.72	29	416	8.1	26.0	6.4	2.8
SEP 21...	1815	3.83	24	--	8.1	27.0	7.0	--

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312645 JUMPER CREEK CANAL NEAR WAHOO, FL

LOCATION.--Lat 28°42'15", long 82°09'26", in SE¼ sec.36, T.20 S., R.21 E, Sumter County, Hydrologic Unit 03100208, on right bank 15 ft downstream from Bevilles Bridge, 2.5 mi northeast of Wahoo, 3.9 mi northwest of Bushnell, and 5.7 mi upstream from mouth.

DRAINAGE AREA.--50.6 mi².

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

REVISED RECORDS.--WDR FL-81-3: 1980 (m).

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

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 39.6 ft³/s, 28,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 265 ft³/s, May 8, 1979; maximum gage height, 48.47 ft, Mar. 31, 1987; minimum daily discharge, 2.8 ft³/s, Dec. 22-25, 1981; minimum gage height, 45.77 ft, Dec. 22-25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 235 ft³/s, Mar. 31, gage height, 48.47 ft; minimum, 18 ft³/s, Nov. 13,14; minimum gage height, 46.57 ft, Nov. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	40	34	36	30	36	179	46	39	44	40	35
2	33	42	32	31	29	39	182	44	39	36	39	42
3	28	43	30	29	29	37	184	42	39	33	41	39
4	32	42	29	32	28	36	173	41	36	40	37	39
5	35	35	25	34	28	35	146	40	33	38	38	45
6	35	31	27	31	33	34	121	43	36	37	36	42
7	35	30	29	31	39	49	101	41	36	43	34	35
8	35	23	28	30	44	56	85	39	36	56	33	34
9	33	26	28	30	41	46	78	39	35	47	32	33
10	25	27	28	30	36	43	75	42	35	38	32	33
11	24	26	26	30	28	39	70	41	34	36	38	34
12	29	20	25	29	26	37	64	44	34	34	37	43
13	33	18	27	27	28	37	61	45	34	34	35	50
14	34	21	26	28	27	36	61	56	35	34	35	43
15	34	22	21	30	23	36	65	53	31	33	37	38
16	34	23	21	30	31	36	65	49	33	39	38	37
17	27	23	24	28	31	35	52	49	34	42	36	36
18	27	24	24	29	30	35	54	49	33	41	34	34
19	29	26	24	29	30	38	61	49	34	43	32	33
20	29	28	24	30	30	38	65	50	34	41	31	33
21	34	28	24	32	32	36	64	49	33	40	31	32
22	28	26	23	36	35	35	60	48	33	39	35	33
23	27	29	21	35	34	34	55	47	34	38	34	36
24	33	27	22	33	33	31	52	46	34	37	30	34
25	30	26	24	33	32	34	51	43	34	36	29	33
26	24	26	20	35	32	39	52	41	35	35	29	31
27	27	24	22	32	32	52	52	41	35	36	30	31
28	26	26	26	30	33	57	50	40	39	35	30	39
29	22	29	29	29	---	106	49	41	38	34	30	36
30	28	33	28	28	---	143	49	40	36	33	30	35
31	31	---	29	30	---	205	---	40	---	35	31	---
TOTAL	935	844	800	957	884	1550	2476	1378	1051	1187	1054	1098
MEAN	30.2	28.1	25.8	30.9	31.6	50.0	82.5	44.5	35.0	38.3	34.0	36.6
MAX	35	43	34	36	44	205	184	56	39	56	41	50
MIN	22	18	20	27	23	31	49	39	31	33	29	31
AC-FT	1850	1670	1590	1900	1750	3070	4910	2730	2080	2350	2090	2180

CAL YR 1986 TOTAL 11950 MEAN 32.7 MAX 101 MIN 15 AC-FT 23700
WTR YR 1987 TOTAL 14214 MEAN 38.9 MAX 205 MIN 18 AC-FT 28190

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312667 SHADY BROOK NEAR SUMTERVILLE, FL

LOCATION.--Lat 28°46'12", long 82°03'50", in NW¼ sec.12, T.20 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on right bank in Thompkins Park, 400 ft upstream from bridge on U.S. Highway 301, and 1.7 mi north of Sumterville.

DRAINAGE AREA.--8.0 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1932-33, 1946, 1956, 1961, 1965-67, 1980-81 (miscellaneous discharge measurements), March 1982 to current year. Prior to November 1980, published as Panasoffkee River near Sumterville.

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

REMARKS.--Records good. Records include wastewater of ground-water origin from mining operations upstream.

AVERAGE DISCHARGE.--5 years, 55.3 ft³/s, 4,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340 ft³/s, Apr. 23, 1983, gage height, 50.76 ft; minimum discharge, 1.4 ft³/s, May 7, 8, 1985; minimum gage height, 46.66 ft, May 8, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 179 ft³/s, Mar. 30, gage height, 50.09 ft; minimum, 12.0 ft³/s, Aug. 31, Sept. 1, gage height, 47.52 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	28	29	34	43	76	160	81	41	22	18	14
2	34	25	29	35	41	81	156	76	38	21	17	14
3	32	25	28	35	41	77	156	72	36	25	16	13
4	30	24	26	37	41	76	156	69	34	28	16	15
5	28	22	24	40	42	76	156	68	34	28	16	18
6	28	21	23	41	46	77	157	66	35	24	15	16
7	27	20	23	41	53	95	157	65	33	27	14	15
8	25	20	23	41	60	102	159	63	30	26	14	14
9	22	21	23	41	58	100	159	62	28	25	13	13
10	20	23	20	41	57	97	159	61	27	23	14	13
11	20	23	20	41	56	97	158	60	27	22	19	15
12	19	22	19	41	57	97	157	60	26	21	25	20
13	20	21	20	40	57	97	156	71	26	22	20	24
14	20	20	20	40	57	97	154	93	26	23	20	25
15	19	19	21	39	56	95	154	92	25	23	20	25
16	19	20	22	38	62	94	150	86	25	23	20	25
17	17	21	20	36	65	90	144	81	24	23	20	26
18	17	21	19	35	63	84	139	77	23	23	19	26
19	16	24	18	34	63	83	134	74	23	25	18	27
20	16	37	18	33	63	82	130	72	23	24	18	26
21	16	38	17	38	66	80	127	70	22	23	17	25
22	15	37	18	43	69	79	122	69	21	22	17	25
23	15	34	20	45	70	77	118	68	21	20	17	25
24	15	33	26	45	69	74	114	65	21	19	16	24
25	15	32	28	45	68	72	107	63	20	18	15	23
26	16	29	28	46	68	77	103	60	20	18	15	21
27	20	24	28	45	68	88	99	58	22	18	14	21
28	22	21	26	45	68	94	96	55	26	17	14	28
29	21	21	24	45	---	122	91	50	24	17	13	24
30	22	25	23	45	---	152	86	47	22	16	13	24
31	22	---	27	44	---	172	---	44	---	18	13	---
TOTAL	664	751	710	1249	1627	2860	4114	2098	803	684	516	624
MEAN	21.4	25.0	22.9	40.3	58.1	92.3	137	67.7	26.8	22.1	16.6	20.8
MAX	36	38	29	46	70	172	160	93	41	28	25	28
MIN	15	19	17	33	41	72	86	44	20	16	13	13
AC-FT	1320	1490	1410	2480	3230	5670	8160	4160	1590	1360	1020	1240

CAL YR 1986 , TOTAL 10666.7 MEAN 29.2 MAX 81 MIN 7.3 AC-FT 21160
WTR YR 1987 TOTAL 16700 MEAN 45.8 MAX 172 MIN 13 AC-FT 33120

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312667 SHADY BROOK NEAR SUMTERVILLE, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

		DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)			
		JUN 03...		1314	48.25	36	331	7.2	25.0	4.4		
		JUL 22...		1345	47.89	22	308	7.8	25.5	4.8		
		DATE		NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)		
		JUN 03...		<0.010	0.080	0.040	0.60	0.100	0.080	12		
		JUL 22...		<0.010	0.110	0.050	0.85	0.120	0.110	14		
		DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	
		JUN 03...	1314	60	52	3.1	5.9	0.70	138	0.80	10	
		JUL 22...	1345	60	48	2.9	5.8	1.3	129	1.5	12	
		DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)
		JUN 03...	0.20	8.8	198	170	12	30	<1	2	2	
		JUL 22...	0.30	14	192	120	14	40	<1	1	38	
		DATE	TIME	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
		JUN 03...	380	210	<5	<5	20	10	<0.10	3	10	
		JUL 22...	420	600	<5	<5	<10	<10	<0.10	3	10	

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02312690 CHITTY CHATTY CREEK NEAR WILDWOOD, FL

LOCATION.--Lat 28°48'33", long 81°58'59", in NW¼ sec.26, T.19 S., R.23 E., Sumter County, Hydrologic Unit 03100208, near center of span on downstream side of box culverts on county road 468, 2.0 mi upstream from Lake Okahumpka, and 5.0 mi southeast of Wildwood.

DRAINAGE AREA.--38 mi², approximately.

PERIOD OF RECORD.--July 1959 to March 1960 (discharge measurements only), September 1963 to July 1966, December 1978 to current year. Prior to December 1978 records not equivalent because of channelization.

REVISED RECORDS.--WDR FL-79-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 52.70 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 15, 1978, at datum 3.30 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years (water years 1980-87), 13.2 ft³/s, 4.72 in/yr, 9,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 220 ft³/s, Mar. 31, 1987, gage height, 7.91 ft; no flow for many days most years; minimum gage height, 3.13 ft, Oct. 23,24, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1960 reached a stage of 6.55 ft datum then in use, from floodmarks, discharge, 260 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 220 ft³/s, Mar. 31, gage height, 7.91 ft; no flow for many days; minimum gage height, 4.36 ft, June 12,13, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	6.1	15	28	24	42	177	13	1.6	20	2.1	.00
2	3.7	5.7	13	25	19	58	151	12	.64	14	1.7	.00
3	3.3	5.3	12	19	16	46	132	11	.00	13	1.9	.00
4	3.0	5.0	9.9	18	15	38	119	10	.00	11	1.2	.00
5	2.6	4.7	7.9	24	16	34	107	11	.00	8.3	1.4	.00
6	2.4	4.3	6.6	22	32	37	97	13	.00	8.0	.90	.00
7	5.5	4.0	5.7	19	36	57	89	12	.00	5.6	.15	.00
8	5.9	3.7	5.4	16	48	82	82	10	.00	8.8	.00	.00
9	4.8	3.1	5.2	14	44	72	75	9.2	.00	7.4	.00	.00
10	5.0	2.6	5.2	13	34	58	69	9.0	.00	4.7	.00	.00
11	6.1	2.1	10	11	28	48	62	15	.00	4.4	1.3	5.8
12	4.9	1.8	8.8	10	29	42	56	32	.00	3.5	15	30
13	4.0	1.7	8.7	9.5	31	38	50	26	.00	2.5	13	37
14	3.8	1.3	7.3	9.1	26	34	45	24	.00	2.5	8.2	32
15	7.6	.82	6.4	8.4	25	31	42	25	.87	1.7	7.2	20
16	7.0	.55	6.4	8.1	34	29	41	21	1.1	1.3	6.7	14
17	5.4	.34	6.8	8.4	50	27	39	19	.56	.61	5.1	11
18	4.1	.34	6.8	8.7	45	25	36	16	.00	1.8	4.0	9.0
19	3.0	3.0	6.7	8.8	36	26	33	15	.00	8.6	3.3	8.5
20	2.1	22	6.6	8.9	31	25	31	24	.00	5.0	2.4	9.9
21	1.4	16	6.0	18	35	23	31	17	.00	3.0	2.3	6.4
22	.77	9.7	5.4	30	43	21	28	13	.00	2.7	3.0	4.7
23	.33	7.3	6.7	31	41	20	26	11	.00	1.5	1.6	4.8
24	.00	6.3	13	24	37	18	25	9.4	.00	.41	.28	4.7
25	.00	6.2	10	26	34	17	22	8.4	.00	.00	.00	3.7
26	.00	6.7	7.8	34	32	27	19	7.3	.00	.00	.00	2.7
27	1.7	7.0	6.7	25	30	53	17	6.3	.00	2.3	.00	2.1
28	5.9	7.7	6.6	19	29	70	16	5.3	2.8	1.9	.00	2.3
29	5.4	7.4	7.1	17	---	95	15	4.3	27	.78	.00	2.0
30	9.1	10	6.9	18	---	163	14	3.3	26	.0	.00	4.1
31	7.7	---	11	28	---	209	---	2.5	---	.31	.00	---
TOTAL	120.90	162.75	247.6	558.9	900	1565	1746	415.0	60.57	145.61	82.73	214.70
MEAN	3.90	5.42	7.99	18.0	32.1	50.5	58.2	13.4	2.02	4.70	2.67	7.16
MAX	9.1	22	15	34	50	209	177	32	27	20	15	37
MIN	.00	.34	5.2	8.1	15	17	14	2.5	.00	.00	.00	.00
AC-FT	240	323	491	1110	1790	3100	3460	823	120	289	164	426
CFSM	.10	.14	.21	.47	.85	1.33	1.53	.35	.05	.12	.07	.19
IN.	.12	.16	.24	.55	.88	1.53	1.71	.41	.06	.14	.08	.21

CAL YR 1986 TOTAL 3624.81 MEAN 9.93 MAX 116 MIN .00 AC-FT 7190 CFSM .26 IN. 3.55
WTR YR 1987 TOTAL 6219.76 MEAN 17.0 MAX 209 MIN .00 AC-FT 12340 CFSM .45 IN. 6.09

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312700 OUTLET RIVER AT PANACOCHEE RETREATS, FL

LOCATION.--Lat 28°49'01", long 82°08'40", in SE¼ sec.19, T.19 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on west shore of Lake Panasoffkee, 0.8 mi north of outlet, 1.3 mi north of Panacoochee Retreats, 2.0 mi upstream from mouth, and 5.1 mi northwest of town of Lake Panasoffkee.

DRAINAGE AREA.--420 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 National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Dec. 18, 1962, nonrecording gage and Dec. 18, 1962, to Oct. 7, 1975, water-stage recorder at sites within 0.8 mi south at same datum.

REMARKS.--Records 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. Gage heights are published as elevations for Lake Panasoffkee (station 02312698) in the section of this report entitled LAKE ELEVATIONS.

AVERAGE DISCHARGE.--25 years, 195 ft³/s, 6.30 in/yr, 141,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 784 ft³/s, Oct. 6, 1982; maximum gage height, 42.49 ft, Feb. 9, 1970; no flow June 27 to July 15, 1963, temporary dam in place; minimum gage height observed, 37.81 ft, July 16, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 658 ft³/s, Apr. 18, 19; gage height, 42.47 ft; minimum daily discharge, 104 ft³/s, Nov. 18; minimum gage height, 39.80 ft, Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	145	142	137	148	170	402	446	229	234	147	168
2	189	143	144	137	146	183	413	437	221	231	145	171
3	187	140	141	138	144	186	422	424	220	230	141	174
4	186	140	138	147	141	186	425	408	222	241	139	183
5	184	138	136	141	144	185	438	397	221	240	137	205
6	182	135	135	148	159	181	453	386	233	238	133	208
7	182	134	134	148	161	210	466	376	233	236	131	209
8	181	131	135	146	160	232	482	397	230	233	128	211
9	178	127	135	144	158	236	507	390	228	226	125	211
10	177	125	134	142	161	238	533	392	225	219	125	215
11	175	122	134	135	160	243	558	386	222	211	158	226
12	173	120	135	133	156	242	581	379	218	205	178	236
13	170	116	135	133	156	242	602	370	214	200	180	257
14	168	110	134	132	155	244	618	359	213	194	189	257
15	165	108	132	130	156	243	630	348	211	191	193	253
16	159	108	131	128	158	242	642	339	207	192	195	250
17	154	106	129	126	163	243	648	336	202	189	193	245
18	148	104	127	125	160	243	653	330	202	187	191	239
19	142	107	127	121	158	243	654	322	206	185	186	234
20	137	125	122	120	155	241	654	319	203	182	183	228
21	131	125	119	131	155	238	651	313	201	176	179	224
22	126	124	117	137	160	237	646	305	195	172	181	226
23	122	123	123	138	159	238	639	296	192	168	177	239
24	120	122	129	144	160	238	631	287	192	162	174	236
25	117	122	130	149	160	232	597	279	190	156	171	232
26	116	121	129	147	159	246	515	272	191	150	167	225
27	121	119	126	148	158	265	499	264	199	144	163	218
28	119	120	123	152	159	276	484	255	210	137	160	214
29	120	123	120	153	---	311	470	250	211	132	157	210
30	125	136	117	151	---	352	455	241	218	128	154	219
31	126	---	128	146	---	381	---	234	---	140	151	---
TOTAL	4769	3719	4041	4307	4369	7447	16368	10537	6359	5929	5031	6623
MEAN	154	124	130	139	156	240	546	340	212	191	162	221
MAX	189	145	144	153	163	381	654	446	233	241	195	257
MIN	116	104	117	120	141	170	402	234	190	128	125	168
AC-FT	9460	7380	8020	8540	8670	14770	32470	20900	12610	11760	9980	13140
CFSM	.37	.30	.31	.33	.37	.57	1.30	.81	.50	.46	.39	.53
IN.	.42	.33	.36	.38	.39	.66	1.45	.93	.56	.53	.45	.59

CAL YR 1986 TOTAL 52726 MEAN 144 MAX 317 MIN 82 AC-FT 104600 CFSM .34 IN. 4.67
WTR YR 1987 TOTAL 79499 MEAN 218 MAX 654 MIN 104 AC-FT 157700 CFSM .52 IN. 7.04

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

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 1986 TO SEPTEMBER 1987

		DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)			
		OCT 23...	1730	39.96	114	295	7.2	29.5	9.8			
		DEC 16...	1210	39.94	131	268	8.2	18.5	9.2			
		MAR 09...	1018	40.48	241	312	8.4	17.5	7.6			
		APR 10...	0745	41.87	524	402	6.8	15.5	1.7			
		JUN 03...	1145	39.91	230	320	8.2	29.0	6.7			
		JUL 22...	1115	40.07	174	270	7.8	30.0	7.9			
		DATE		NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)		
		JUN 03...		<0.010	0.020	0.040	0.85	0.040	0.020	14		
		JUL 22...		<0.010	0.020	0.040	0.74	0.020	0.010	10		
		DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	
		JUN 03...	1145	60	52	3.9	5.6	0.50	127	14	9.2	
		JUL 22...	1115	30	39	4.1	5.2	0.70	102	15	9.6	
		DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)
		JUN 03...	0.20	6.0	202	300	14	40	<1	3	2	
		JUL 22...	0.30	13	167	280	10	30	<1	<1	5	
		DATE	TIME	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
		JUN 03...	50	40	7	<5	<10	<10	<0.10	7	<10	
		JUL 22...	40	<10	<5	<5	10	<10	<0.10	1	<10	

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312719 WITHLACOCHEE RIVER ABOVE WYSONG DAM, AT CARLSON, FL

LOCATION.--Lat 28°49'22", long 82°10'58", in NW¼ sec.23, T.19 S., R.21 E., Sumter County, Hydrologic Unit 03100208, near right bank at upstream end 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.--April 1957 to November 1962 (gage heights only, about weekly), December 1962 to February 1963 (gage heights only), March 1963 to July 1965 (discharge measurements and gage heights only), August 1965 to current year (gage heights only). Records of gage heights prior to October 1962 are unpublished and available in files of the Orlando Subdistrict Office. Prior to October 1967, published as "at Carlson's Landing, near Lake Panasoffkee (auxiliary)."

REVISED RECORDS.--WDR FL-72-3: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). April 1957 to May 23, 1970, at site 200 feet upstream at datum 34.2 ft higher prior to Dec. 17, 1962, and at present datum thereafter.

REMARKS.--Since August 1965, stage affected by manipulation of inflatable fabri-dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 43.6 ft in April 1960, from floodmark; minimum observed, about 35.2 ft, Apr. 14, May 5, 1962.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.22	39.19	39.19	39.00	39.10	39.07	38.90	39.83	38.07	39.37	39.23	39.28
2	39.25	39.22	39.21	38.99	39.04	39.15	39.00	39.71	38.02	39.33	39.26	39.27
3	39.24	39.21	39.20	38.98	39.02	39.14	39.12	39.59	37.98	39.24	39.26	39.29
4	39.26	39.20	39.20	39.04	39.08	39.15	39.25	39.47	38.52	39.22	39.24	39.29
5	39.38	39.18	39.19	39.05	39.04	39.15	39.38	39.37	39.24	39.19	39.25	39.29
6	39.33	39.18	39.19	39.04	39.06	39.15	39.52	39.28	39.33	39.20	39.22	39.34
7	39.26	39.18	39.19	39.02	39.05	39.28	39.71	39.17	39.31	39.18	39.22	39.36
8	39.28	39.18	39.17	39.01	39.06	39.30	39.88	39.07	39.30	39.24	39.22	39.36
9	39.27	39.20	39.18	39.06	39.07	39.32	40.06	38.98	39.36	39.15	39.21	39.36
10	39.28	39.16	39.15	39.04	39.08	39.33	40.28	38.91	39.33	39.12	39.21	39.37
11	39.27	39.14	39.14	39.01	39.07	39.32	40.42	38.92	39.28	39.18	39.24	39.39
12	39.28	39.15	39.14	39.00	39.07	39.34	40.54	38.92	39.26	39.23	39.24	39.39
13	39.28	39.14	39.11	39.00	39.05	39.31	40.68	38.86	39.24	39.20	39.25	38.83
14	39.31	39.12	39.11	38.98	39.03	39.33	40.78	38.81	39.29	39.15	39.27	38.75
15	39.30	39.13	39.09	38.99	39.08	39.33	40.85	38.76	39.26	39.18	39.28	38.71
16	39.29	39.11	39.07	38.99	39.05	39.31	40.93	38.68	39.24	39.25	39.34	38.69
17	39.26	39.10	39.07	38.98	39.04	39.31	40.94	38.61	39.23	39.25	39.30	38.66
18	39.24	39.10	39.05	38.99	39.04	39.32	40.94	38.57	39.23	39.22	39.31	38.64
19	39.21	39.09	38.98	39.00	39.04	39.31	40.91	38.54	39.26	39.24	39.29	38.61
20	39.21	39.14	39.01	38.98	39.03	39.32	40.85	38.53	39.25	39.24	39.29	38.59
21	39.21	39.13	38.99	39.02	39.00	39.30	40.82	38.51	39.20	39.26	39.27	38.58
22	39.20	39.13	38.96	39.04	39.05	39.28	40.76	38.47	39.23	39.24	39.29	38.57
23	39.19	39.12	38.98	39.04	38.98	39.30	40.70	38.45	39.20	39.23	39.28	38.60
24	39.14	39.12	39.00	39.03	38.93	39.28	40.62	38.42	39.23	39.26	39.28	38.62
25	39.13	39.13	39.00	39.04	39.09	39.27	40.51	38.38	39.20	39.28	39.27	38.62
26	39.13	39.13	38.98	39.07	39.06	39.12	40.40	38.34	39.22	39.21	39.26	38.61
27	39.13	39.14	38.98	39.08	39.03	37.89	40.29	38.29	39.28	39.19	39.25	38.57
28	39.12	39.13	38.95	39.09	39.03	37.91	40.18	38.26	39.24	39.17	39.25	38.58
29	39.12	39.12	38.96	39.07	---	38.14	40.07	38.19	39.28	39.18	39.24	38.57
30	39.14	39.16	38.97	39.08	---	38.43	39.95	38.14	39.32	39.20	39.23	38.64
31	39.17	---	39.01	39.06	---	38.78	---	38.11	---	39.22	39.21	---
MEAN	39.23	39.15	39.08	39.02	39.05	39.09	40.24	38.78	39.11	39.22	39.26	38.91
MAX	39.38	39.22	39.21	39.09	39.10	39.34	40.94	39.83	39.36	39.37	39.34	39.39
MIN	39.12	39.09	38.95	38.98	38.93	37.89	38.90	38.11	37.98	39.12	39.21	38.57

CAL YR 1986 MEAN 38.75 MAX 39.43 MIN 37.97

WTR YR 1987 MEAN 39.18 MAX 40.94 MIN 37.89

02312720 WITHLACOOCHEE RIVER AT WYSONG DAM. AT CARLSON, FL

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."

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Auxiliary nonrecording gage at upstream side of lock and dam (station 02312719).

AVERAGE DISCHARGE.--22 years, 668 ft³/s, 484,000 acre-ft/yr.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,120 ft³/s, Apr. 17; maximum gage height, 40.77 ft, Apr. 17; minimum daily discharge, 300 ft³/s, Aug. 31; minimum gage height, 36.81 ft, Jan. 20.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	447	410	404	340	335	358	1420	2020	748	465	431	327
2	441	410	401	335	335	375	1540	1930	726	462	434	327
3	444	410	401	332	332	378	1610	1820	704	472	434	330
4	441	410	390	342	327	375	1680	1730	568	485	425	337
5	422	407	387	342	340	375	1770	1640	472	488	419	372
6	428	404	381	342	361	369	1840	1570	499	488	413	387
7	438	398	378	345	361	428	1960	1500	495	506	407	393
8	438	390	372	342	358	465	2110	1420	482	516	390	393
9	434	387	375	335	348	472	2270	1340	469	527	375	390
10	438	390	375	337	348	472	2430	1300	465	516	361	393
11	438	384	369	332	348	469	2570	1270	462	485	398	413
12	434	378	372	330	345	465	2730	1280	459	472	419	441
13	428	372	367	325	342	469	2850	1230	450	482	422	590
14	425	369	358	322	340	465	2950	1200	447	482	450	582
15	428	361	356	320	337	462	3020	1160	438	469	447	562
16	422	361	348	320	345	462	3090	1100	431	472	422	550
17	419	358	342	320	350	459	3120	1070	419	485	434	539
18	413	356	345	317	348	456	3110	1030	416	495	428	527
19	410	356	337	315	345	465	3080	1010	431	492	413	516
20	401	369	327	310	345	459	3040	993	425	488	401	506
21	393	378	320	325	348	459	2980	982	425	482	390	495
22	384	375	317	337	353	456	2930	964	413	482	384	488
23	387	375	322	337	356	447	2830	947	413	465	369	502
24	396	372	327	337	345	444	2750	930	396	441	364	502
25	387	369	320	342	345	441	2650	905	390	428	348	495
26	384	367	320	345	348	658	2550	884	384	425	337	485
27	387	364	312	345	348	691	2450	860	407	413	332	475
28	387	367	315	342	345	743	2350	835	431	413	322	469
29	390	375	310	342	---	860	2250	816	441	398	312	462
30	398	404	305	340	---	1030	2140	789	438	390	305	488
31	390	---	315	340	---	1320	---	766	---	422	300	---
TOTAL	12872	11426	10868	10335	9678	16247	74070	37291	14144	14506	12086	13736
MEAN	415	381	351	333	346	524	2469	1203	471	468	390	458
MAX	447	410	404	345	361	1320	3120	2020	748	527	450	590
MIN	384	356	305	310	327	358	1420	766	384	390	300	327
AC-FT	25530	22660	21560	20500	19200	32230	146900	73970	28050	28770	23970	27250
CAL YR 1986	TOTAL 183851			MEAN 504	MAX 1340	MIN 227						

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312720 WITHLACOCHEE RIVER AT WYSONG DAM AT CARLSON, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.23	37.25	37.23	36.97	36.88	36.92	38.72	39.71	37.97	37.54	37.75	37.71
2	37.22	37.25	37.22	36.94	36.88	36.97	38.83	39.60	37.93	37.54	37.77	37.72
3	37.23	37.25	37.22	36.93	36.87	36.98	38.95	39.47	37.88	37.58	37.78	37.75
4	37.23	37.25	37.18	36.97	36.85	36.97	39.07	39.36	37.48	37.63	37.76	37.79
5	37.18	37.24	37.17	36.97	36.89	36.97	39.20	39.25	37.31	37.65	37.75	37.93
6	37.20	37.23	37.15	36.97	36.97	36.95	39.31	39.17	37.39	37.66	37.74	37.99
7	37.24	37.21	37.14	36.97	36.97	37.14	39.48	39.07	37.39	37.72	37.73	38.02
8	37.24	37.18	37.12	36.96	36.96	37.26	39.70	38.97	37.35	37.76	37.68	38.03
9	37.24	37.17	37.13	36.93	36.92	37.28	39.89	38.86	37.32	37.80	37.64	38.03
10	37.26	37.18	37.13	36.94	36.91	37.28	40.08	38.80	37.32	37.78	37.60	38.05
11	37.26	37.16	37.11	36.92	36.91	37.27	40.22	38.78	37.32	37.70	37.74	38.13
12	37.26	37.14	37.12	36.90	36.90	37.26	40.38	38.79	37.32	37.67	37.83	38.23
13	37.25	37.12	37.10	36.88	36.89	37.27	40.50	38.73	37.30	37.71	37.85	38.66
14	37.24	37.11	37.07	36.87	36.88	37.26	40.60	38.69	37.30	37.72	37.95	38.66
15	37.26	37.08	37.06	36.86	36.86	37.25	40.67	38.64	37.28	37.69	37.95	38.62
16	37.25	37.08	37.03	36.86	36.89	37.25	40.74	38.54	37.27	37.71	37.88	38.60
17	37.24	37.07	37.01	36.85	36.91	37.24	40.77	38.50	37.24	37.76	37.93	38.58
18	37.23	37.06	37.01	36.84	36.90	37.23	40.76	38.44	37.24	37.80	37.92	38.56
19	37.22	37.06	36.98	36.83	36.89	37.26	40.73	38.40	37.30	37.80	37.88	38.54
20	37.20	37.11	36.94	36.81	36.88	37.24	40.69	38.39	37.29	37.80	37.85	38.52
21	37.18	37.14	36.91	36.87	36.89	37.24	40.65	38.38	37.30	37.79	37.82	38.50
22	37.15	37.13	36.90	36.91	36.91	37.23	40.60	38.35	37.27	37.80	37.81	38.49
23	37.17	37.13	36.91	36.91	36.92	37.20	40.52	38.33	37.28	37.77	37.78	38.54
24	37.20	37.12	36.93	36.91	36.88	37.19	40.44	38.30	37.24	37.70	37.77	38.55
25	37.17	37.11	36.90	36.93	36.87	37.18	40.35	38.26	37.23	37.67	37.72	38.55
26	37.16	37.10	36.90	36.94	36.88	37.39	40.26	38.23	37.22	37.67	37.69	38.53
27	37.17	37.09	36.87	36.93	36.88	37.73	40.15	38.18	37.31	37.64	37.68	38.51
28	37.17	37.10	36.87	36.92	36.87	37.79	40.06	38.14	37.40	37.65	37.65	38.50
29	37.18	37.13	36.85	36.92	---	37.99	39.95	38.10	37.44	37.61	37.62	38.49
30	37.21	37.23	36.83	36.91	---	38.25	39.84	38.05	37.44	37.59	37.60	38.58
31	37.18	---	36.87	36.90	---	38.63	---	38.01	---	37.71	37.59	---
MEAN	37.21	37.15	37.03	36.91	36.90	37.32	40.07	38.66	37.38	37.70	37.76	38.31
MAX	37.26	37.25	37.23	36.97	36.97	38.63	40.77	39.71	37.97	37.80	37.95	38.66
MIN	37.15	37.06	36.83	36.81	36.85	36.92	38.72	38.01	37.22	37.54	37.59	37.71

CAL YR 1986 MEAN 36.94 MAX 38.32 MIN 35.84
WTR YR 1987 MEAN 37.70 MAX 40.77 MIN 36.81

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312720 WITHLACOCHEE RIVER AT WYSONG DAM, AT CARLSON, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT								
23...	1300	37.20	367	272	6.6	20.0	4.1	--
DEC								
15...	1310	37.10	361	300	7.4	18.0	4.4	--
MAR								
09...	1230	37.28	466	332	7.8	18.0	6.3	--
APR								
10...	1120	40.07	2380	98	6.5	17.0	3.3	--
20...	1130	40.70	2970	117	--	20.0	1.5	--
JUN								
09...	1725	37.31	454	252	--	28.0	2.5	19
AUG								
06...	1115	37.72	341	280	7.5	29.0	7.5	11

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREAS

WITHLACOCHEE RIVER BASIN

02312772 LESLIE-HEIFNER CANAL NEAR FLORAL CITY, FL

LOCATION.--Lat 28°45'12", long 82°13'49", in NW¼ sec.17, T.20 S., R.21 E., Citrus County, Hydrologic Unit 03100208, at upstream side of control structure, 50 ft upstream from bridge on Trail's End Road, 1.4 mi downstream from Withlacoochee River, and 4.1 mi east of Floral City.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1964-72, 1982; October 1982 to September 1983 (discharge measurements only); October 1983 to current year (discharge measurements and gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Nov. 21, 1983, nonrecording gage at site 50 ft downstream at same datum. June 2, 1984 to Dec. 24, 1985, auxiliary water-stage recorder at downstream side of control structure.

REMARKS.--Control structure is usually closed or full open. Discharge at station is a diversion from Withlacoochee River to Tsala Apopka Lake; flow occasionally reversed.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 227 ft³/s, Apr. 2, 1987; maximum gage height recorded, 44.37 ft, Apr. 9, 10, 1987; maximum reverse flow measured, 20 ft³/s, Apr. 30, 1969; minimum gage height recorded, 37.54 ft, June 10, 1985.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT			JUN		
22...	1000	17	08...	1516	0.0
DEC			JUL		
12...	1115	12	29...	1410	4.0
MAR			SEP		
10...	1835	36	29...	1035	29
APR					
02...	1915	227			
10...	1630	224			

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.78	40.97	40.86	40.81	40.88	40.99	42.58	42.56	41.15	40.59	40.53	40.77
2	41.75	40.96	40.87	40.79	40.87	41.03	42.89	42.45	41.11	40.60	40.56	40.79
3	41.71	40.95	40.87	40.78	40.86	41.02	43.17	42.35	41.06	40.60	40.56	40.80
4	41.67	40.95	40.85	40.82	40.84	41.02	43.39	42.27	41.00	40.62	40.57	40.81
5	41.63	40.94	40.83	40.85	40.85	41.02	43.59	42.20	40.95	40.62	40.57	40.85
6	41.59	40.93	40.81	40.85	40.92	41.01	43.86	42.13	40.94	40.62	40.56	40.87
7	41.55	40.92	40.80	40.86	40.92	41.18	44.18	42.06	40.90	40.67	40.54	40.88
8	41.52	40.91	40.79	40.85	40.92	41.26	44.30	41.98	40.85	40.70	40.53	40.88
9	41.48	40.89	40.78	40.85	40.91	41.27	44.35	41.91	40.79	40.68	40.51	40.87
10	41.45	40.88	40.77	40.85	40.90	41.28	44.36	41.84	40.73	40.66	40.50	40.87
11	41.42	40.86	40.76	40.84	40.90	41.28	44.35	41.82	40.67	40.64	40.52	40.89
12	41.39	40.85	40.76	40.82	40.90	41.30	44.33	41.85	40.65	40.61	40.56	40.95
13	41.36	40.83	40.76	40.81	40.89	41.31	44.29	41.75	40.62	40.60	40.57	41.01
14	41.33	40.81	40.74	40.80	40.88	41.32	44.22	41.70	40.66	40.61	40.63	41.01
15	41.32	40.79	40.74	40.78	40.87	41.33	44.18	41.66	40.68	40.60	40.70	41.01
16	41.29	40.78	40.73	40.77	40.90	41.33	44.14	41.62	40.68	40.62	40.75	41.01
17	41.25	40.77	40.72	40.76	40.91	41.33	44.06	41.60	40.66	40.62	40.77	41.01
18	41.21	40.76	40.72	40.75	40.90	41.32	43.99	41.59	40.64	40.62	40.77	41.01
19	41.18	40.76	40.70	40.74	40.88	41.35	43.91	41.61	40.66	40.62	40.77	41.01
20	41.14	40.85	40.69	40.74	40.87	41.34	43.82	41.65	40.63	40.60	40.77	41.01
21	41.11	40.83	40.68	40.80	40.88	41.33	43.71	41.63	40.59	40.59	40.76	41.00
22	41.08	40.81	40.67	40.87	40.91	41.32	43.61	41.58	40.54	40.58	40.75	41.01
23	41.05	40.79	40.68	40.88	40.94	41.30	43.51	41.56	40.51	40.56	40.75	41.04
24	41.03	40.78	40.75	40.88	40.93	41.29	43.38	41.52	40.48	40.54	40.75	41.02
25	41.00	40.76	40.74	40.90	40.93	41.28	43.25	41.48	40.44	40.52	40.76	41.01
26	40.99	40.75	40.73	40.94	40.93	41.37	43.14	41.44	40.43	40.50	40.76	40.99
27	40.98	40.75	40.72	40.93	40.93	41.47	43.03	41.39	40.49	40.48	40.76	40.99
28	40.97	40.74	40.70	40.93	40.93	41.55	42.92	41.35	40.56	40.46	40.76	41.02
29	40.97	40.74	40.69	40.92	---	41.75	42.80	41.30	40.55	40.43	40.76	---
30	40.98	40.83	40.68	40.91	---	42.03	42.68	41.25	40.55	40.43	40.75	---
31	40.97	---	40.72	40.90	---	42.33	---	41.20	---	40.48	40.75	---
MEAN	41.30	40.84	40.75	40.84	40.90	41.33	43.67	41.75	40.71	40.58	40.66	---
MAX	41.78	40.97	40.87	40.94	40.94	42.33	44.36	42.56	41.15	40.70	40.77	---
MIN	40.97	40.74	40.67	40.74	40.84	40.99	42.58	41.20	40.43	40.43	40.50	---

CAL YR 1986 MEAN 40.96 MAX 42.08 MIN 39.92

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREAS

WITHLACOOCHEE RIVER BASIN

02312786 THE CANAL (ORANGE STATE CANAL) NEAR FLORAL CITY, FL

LOCATION.--Lat 28°44'48", long 82°15'49", in SW¼ sec.13, T.20 S., R.20 E., Citrus County, Hydrologic Unit 03100208, at upstream side of control structure, 150 ft upstream from bridge on Trail's End Road, 1.1 mi upstream from Tsala Apopka Lake, 2.0 mi east of Floral City, and 2.4 mi downstream from Withlacoochee River.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1964-72, 1982; October 1982 to September 1983 (discharge measurements only); October 1983 to September 1985 (discharge measurements and gage heights only). October 1985 to current year (discharge measurements only).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929, levels by Southwest Florida Water Management District. Prior to Nov. 21, 1983, nonrecording gage at site 150 ft downstream, and Nov. 21, 1983 to Nov. 18, 1985 water-stage recorder at present site. Prior to Oct. 1, 1984, at datum 0.09 ft higher. Since June 2, 1984, auxiliary water-stage recorder at downstream side of control structure.

REMARKS.--Control structure is usually closed or full open. Discharge at station is a diversion from Withlacoochee River to Tsala Apopka Lake; flow occasionally reversed. Flow occasionally diverted through culvert 800 ft upstream. Periodic measurements of diversion are unpublished and available in files of the Orlando Subdistrict Office.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured 235 ft³/s, Aug. 8, 1985; maximum daily gage height recorded, 43.04 ft, Sept. 1, 1985; maximum reverse flow measured, 12 ft³/s, Apr. 30, 1969; minimum gage height recorded, 37.41 ft, May 26, 1985.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)
OCT			JUN		
17...	1320	23	08...	1604	0.0
DEC			JUL		
16...	1555	15	29...	1656	6.9
FEB			SEP		
20...	1140	19	29...	1325	32
APR					
02...	1800	229			
10...	1338	67			

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312975 TSALA APOKA OUTFALL CANAL AT S-353, NEAR HERNANDO, FL

LOCATION.--Lat 28°57'19", long 82°20'13", in NE¼ sec.6, T.18 S., R.20 E., Citrus County, Hydrologic Unit 03100208, on left bank at control structure 353, on graded road 2.3 mi northeast of Hernando, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

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

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

REMARKS.--Estimated daily discharges: Oct. 1 to Mar. 29, Apr. 7-9, June 5 to July 7, July 31 to Sept. 30, leakage through gates. Records good except for estimated daily discharges, which are poor. Flow regulated by manipulation of gates in spillway.

COOPERATION.--Gate-opening record provided by Southwest Florida Water Management District.

AVERAGE DISCHARGE.--19 years, 21.4 ft³/s, 15,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 410 ft³/s, Sept. 4, 1968; maximum gage height, 39.49 ft, Mar. 17, 1986; no flow for many days in some years; minimum gage height, 34.95 ft, June 12, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 360 ft³/s, Apr. 2-5; maximum gage height, 38.91 ft, Apr. 1; minimum daily discharge, 0.10 ft³/s, Oct. 1 to Mar. 29, Sept. 22-30; minimum gage height, 37.57 ft, Nov. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.10	.10	.10	.10	.10	229	72	118	.20	.20	.14
2	.10	.10	.10	.10	.10	.10	360	72	118	.20	.20	.14
3	.10	.10	.10	.10	.10	.10	360	72	118	.20	.19	.14
4	.10	.10	.10	.10	.10	.10	360	72	64	.20	.19	.14
5	.10	.10	.10	.10	.10	.10	360	72	.20	.20	.19	.13
6	.10	.10	.10	.10	.10	.10	202	72	.20	.20	.19	.13
7	.10	.10	.10	.10	.10	.10	.20	72	.20	.20	.19	.13
8	.10	.10	.10	.10	.10	.10	.20	72	.20	24	.18	.13
9	.10	.10	.10	.10	.10	.10	.20	72	.20	72	.18	.13
10	.10	.10	.10	.10	.10	.10	79	72	.20	72	.18	.13
11	.10	.10	.10	.10	.10	.10	180	72	.20	72	.18	.12
12	.10	.10	.10	.10	.10	.10	180	72	.20	72	.18	.12
13	.10	.10	.10	.10	.10	.10	160	72	.20	72	.18	.12
14	.10	.10	.10	.10	.10	.10	118	72	.20	72	.17	.12
15	.10	.10	.10	.10	.10	.10	90	72	.20	72	.17	.12
16	.10	.10	.10	.10	.10	.10	72	72	.20	72	.17	.11
17	.10	.10	.10	.10	.10	.10	72	72	.20	72	.17	.11
18	.10	.10	.10	.10	.10	.10	72	72	.20	72	.17	.11
19	.10	.10	.10	.10	.10	.10	72	72	.20	72	.16	.11
20	.10	.10	.10	.10	.10	.10	72	72	.20	72	.16	.11
21	.10	.10	.10	.10	.10	.10	72	92	.20	72	.16	.11
22	.10	.10	.10	.10	.10	.10	72	118	.20	72	.16	.10
23	.10	.10	.10	.10	.10	.10	72	118	.20	72	.16	.10
24	.10	.10	.10	.10	.10	.10	72	118	.20	72	.16	.10
25	.10	.10	.10	.10	.10	.10	72	118	.20	72	.15	.10
26	.10	.10	.10	.10	.10	.10	72	118	.20	72	.15	.10
27	.10	.10	.10	.10	.10	.10	72	118	.20	72	.15	.10
28	.10	.10	.10	.10	.10	.10	72	118	.20	72	.15	.10
29	.10	.10	.10	.10	---	.10	72	118	.20	72	.15	.10
30	.10	.10	.10	.10	---	64	72	118	.20	34	.14	.10
31	.10	---	.10	.10	---	118	---	118	---	.20	.14	---
TOTAL	3.10	3.00	3.10	3.10	2.80	184.90	3758.60	2712	423.20	1571.60	5.27	3.50
MEAN	.10	.10	.10	.10	.10	5.96	125	87.5	14.1	50.7	.17	.12
MAX	.10	.10	.10	.10	.10	118	360	118	118	72	.20	.14
MIN	.10	.10	.10	.10	.10	.10	.20	72	.20	.20	.14	.10
AC-FT	6.1	6.0	6.1	6.1	5.6	367	7460	5380	839	3120	10	6.9

CAL YR 1986 TOTAL 6622.37 MEAN 18.1 MAX 232 MIN .00 AC-FT 13140
WTR YR 1987 TOTAL 8674.17 MEAN 23.8 MAX 360 MIN .10 AC-FT 17210

02312975 TSALA APOPKA OUTFALL CANAL AT S-353, NEAR HERNANDO, FL--Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.18	37.82	37.83	37.77	37.79	38.04	38.75	38.70	38.42	38.28	38.26	38.09
2	38.16	37.82	37.84	37.75	37.82	38.06	38.51	38.68	38.39	38.31	38.33	38.08
3	38.15	37.81	37.82	37.72	37.79	38.05	38.42	38.67	38.36	38.34	38.42	38.07
4	38.14	37.80	37.79	37.77	37.76	38.04	38.33	38.66	38.37	38.40	38.44	38.06
5	38.12	37.79	37.78	37.76	37.78	38.01	38.25	38.65	38.46	38.42	38.41	38.05
6	38.10	37.79	37.75	37.77	37.89	37.98	38.30	38.63	38.54	38.44	38.37	38.05
7	38.08	37.78	37.75	37.78	37.90	38.16	38.51	38.63	38.53	38.44	38.35	38.04
8	38.07	37.76	37.75	37.77	37.92	38.28	38.62	38.63	38.51	38.42	38.32	38.01
9	38.05	37.75	37.75	37.77	37.88	38.28	38.69	38.60	38.50	38.39	38.30	37.99
10	38.08	37.73	37.75	37.79	37.87	38.27	38.68	38.60	38.48	38.43	38.30	37.98
11	38.08	37.72	37.76	37.76	37.87	38.24	38.59	38.62	38.45	38.40	38.33	37.98
12	38.07	37.70	37.76	37.74	37.87	38.25	38.54	38.65	38.43	38.42	38.31	38.04
13	38.05	37.68	37.71	37.73	37.86	38.25	38.52	38.69	38.41	38.39	38.34	38.08
14	38.05	37.64	37.69	37.73	37.85	38.26	38.55	38.71	38.41	38.37	38.35	38.07
15	38.02	37.63	37.70	37.73	37.85	38.27	38.61	38.75	38.39	38.35	38.37	38.04
16	38.00	37.63	37.69	37.72	37.90	38.27	38.68	38.75	38.37	38.34	38.38	38.02
17	37.97	37.63	37.68	37.71	37.88	38.27	38.69	38.74	38.34	38.32	38.38	38.00
18	37.94	37.63	37.68	37.71	37.87	38.28	38.70	38.73	38.31	38.32	38.37	37.98
19	37.91	37.64	37.67	37.72	37.84	38.32	38.69	38.74	38.29	38.34	38.36	37.96
20	37.89	37.66	37.66	37.70	37.83	38.33	38.69	38.75	38.27	38.36	38.33	37.94
21	37.88	37.64	37.64	37.73	37.88	38.32	38.71	38.73	38.25	38.39	38.31	37.92
22	37.86	37.63	37.61	37.82	37.96	38.32	38.71	38.68	38.24	38.40	38.29	37.92
23	37.85	37.62	37.66	37.80	37.95	38.30	38.72	38.64	38.26	38.38	38.27	37.94
24	37.84	37.61	37.74	37.78	37.93	38.31	38.73	38.62	38.24	38.36	38.26	37.92
25	37.83	37.60	37.70	37.81	37.94	38.32	38.72	38.58	38.21	38.33	38.23	37.90
26	37.82	37.60	37.69	37.83	37.93	38.41	38.70	38.55	38.20	38.33	38.21	37.87
27	37.82	37.60	37.67	37.82	37.94	38.52	38.70	38.53	38.24	38.34	38.18	37.84
28	37.80	37.64	37.66	37.82	37.95	38.60	38.72	38.50	38.25	38.31	38.16	37.82
29	37.81	37.65	37.65	37.81	---	38.70	38.70	38.48	38.26	38.28	38.17	37.81
30	37.82	37.76	37.64	37.84	---	38.82	38.69	38.45	38.27	38.26	38.15	37.91
31	37.82	---	37.67	37.80	---	38.88	---	38.43	---	38.26	38.12	

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312976 TSALA APOPKA OUTFALL CANAL BELOW S-353, NEAR HERNANDO, FL

LOCATION.--Lat 28°57'19", long 82°20'13", in NE¼ sec.6, T.18 S., R.20 E., Citrus County, Hydrologic Unit 03100208, on left bank at control structure 353, on graded road 2.3 mi northeast of Hernando, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1968 to current year (gage heights only).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 37.02 ft, Oct. 14, 1979; minimum, 27.68 ft, June 5, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 35.97 ft. Apr. 20; minimum, 28.38 ft, Dec. 19.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.08	28.72	29.08	29.06	29.12	29.67	33.18	35.05	31.55	29.25	28.88	28.48
2	29.06	28.69	28.91	29.02	29.11	29.86	33.63	34.88	31.45	29.33	29.05	28.47
3	29.00	28.68	28.74	28.94	29.12	29.77	33.77	34.70	31.33	29.48	29.06	28.47
4	28.98	28.68	28.55	28.99	29.07	29.67	33.83	34.51	31.14	29.69	29.02	28.50
5	28.97	28.67	28.42	29.15	29.14	29.56	33.87	34.32	30.80	29.62	28.94	28.51
6	28.97	28.67	28.42	29.06	29.62	29.48	33.80	34.16	30.63	29.60	28.85	28.60
7	29.01	28.69	28.48	29.01	29.65	30.00	33.49	34.01	30.26	29.55	28.76	28.69
8	29.03	28.61	28.57	28.98	29.61	30.13	33.55	33.85	30.02	29.60	28.74	28.74
9	29.05	28.60	28.64	28.91	29.49	30.64	33.72	33.67	29.85	29.80	28.70	28.74
10	29.12	28.57	28.69	28.87	29.37	30.55	34.01	33.55	29.71	29.84	28.72	28.69
11	29.10	28.56	28.77	28.89	29.28	30.35	34.50	33.55	29.62	29.81	28.78	28.66
12	29.01	28.56	28.84	28.87	29.24	30.18	34.83	33.45	29.59	29.84	28.89	28.84
13	28.93	28.56	28.72	28.87	29.17	30.06	35.08	33.37	29.58	29.79	28.98	29.05
14	28.85	28.52	28.54	28.86	29.14	29.99	35.77	33.32	29.61	29.69	29.14	29.21
15	28.78	28.50	28.43	28.86	29.12	29.97	35.51	33.22	29.61	29.67	29.17	29.34
16	28.73	28.48	28.42	28.87	29.18	29.97	35.65	33.08	29.54	29.68	29.17	29.37
17	28.67	28.48	28.41	28.89	29.26	29.97	35.77	32.91	29.45	29.59	29.10	29.36
18	28.63	28.47	28.39	28.86	29.27	29.97	35.85	32.75	29.35	29.59	28.99	29.30
19	28.63	28.50	28.42	28.85	29.23	30.08	35.93	32.63	29.33	29.67	28.90	29.24
20	28.65	28.55	28.48	28.83	29.20	30.04	35.96	32.57	29.33	29.71	28.82	29.20
21	28.66	28.53	28.51	28.89	29.43	29.94	35.95	32.54	29.27	29.28	28.75	29.18
22	28.66	28.50	28.52	29.18	29.74	29.87	35.96	32.55	29.31	29.27	28.80	29.14
23	28.66	28.50	28.59	29.21	29.76	29.83	35.96	32.46	29.31	29.62	28.78	29.16
24	28.66	28.50	28.83	29.13	29.66	29.80	35.90	32.35	29.24	29.47	28.69	29.15
25	28.67	28.49	28.80	29.16	29.54	29.80	35.83	32.24	29.18	29.32	28.61	29.10
26	28.70	28.48	28.79	29.34	29.42	29.98	35.73	32.13	29.13	29.22	28.57	29.05
27	28.74	28.48	28.80	29.32	29.38	30.52	35.63	32.03	29.26	29.21	28.55	29.04
28	28.72	28.48	28.77	29.25	29.38	31.00	35.50	31.93	29.35	29.20	28.53	29.13
29	28.74	28.55	28.73	29.22	---	31.20	35.33	31.82	29.27	29.15	28.52	29.08
30	28.82	28.83	28.68	29.20	---	31.73	35.22	31.73	29.26	28.98	28.50	29.48
31	28.78	---	28.72	29.18	---	32.66	---	31.64	---	28.82	28.51	---
MEAN	28.84	28.57	28.63	29.02	29.35	30.20	34.96	33.13	29.81	29.49	28.82	28.97
MAX	29.12	28.83	29.08	29.34	29.76	32.66	35.96	35.05	31.55	29.84	29.17	29.48
MIN	28.63	28.47	28.39	28.83	29.07	29.48	33.18	31.64	29.13	28.82	28.50	28.47

WTR YR 1987 MEAN 29.98 MAX 35.96 MIN 28.39

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313000 WITHLACOCHEE RIVER NEAR HOLDER, FL
(National stream-quality accounting network station)

LOCATION.--Lat 28°59'19", long 82°20'59", in NW¼ sec.30, T.17 S., R.20 E., Marion County, Hydrologic Unit 03100208, near right bank on downstream side of bridge on State Highway 200, 4.5 mi northeast of Holder, and 38 mi upstream from mouth.

DRAINAGE AREA.--1,825 mi², approximately.

WATER-DISCHARGE RECORDS

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. Datum of gage is 27.52 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Aug. 14, 1928, to Feb. 15, 1929, nonrecording gage at present site at datum 2.00 ft higher. Aug. 29, 1931, to May 19, 1961, water-stage recorder at site 100 ft downstream at present datum.

REMARKS.--Records good. High-water diversion in headwaters (station 02311000).

AVERAGE DISCHARGE.--56 years (water years 1932-87), 1,080 ft³/s, 8.04 in/yr, 782,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,660 ft³/s, Apr. 5, 1960, gage height, 13.28 ft; minimum, 95 ft³/s, June 4, 5, 1985; minimum gage height, -0.41 ft, June 19, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,100 ft³/s, Apr. 21, 22, 23; maximum gage height, 8.55 ft, Apr. 22; minimum discharge 321 ft³/s, Dec. 5; minimum gage height, 0.96 ft, Dec. 5, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	541	443	524	525	563	745	1850	2660	1300	616	501	393
2	533	433	467	513	562	803	2030	2600	1260	643	552	389
3	519	430	417	491	563	775	2080	2530	1230	690	556	391
4	511	427	365	501	552	743	2110	2460	1170	745	547	395
5	512	426	330	553	e620	710	2140	2400	1080	727	523	405
6	512	426	329	529	726	687	2140	2340	1030	724	492	428
7	524	416	348	515	727	840	2060	2280	918	707	471	451
8	533	409	373	505	715	1040	2090	2220	845	732	461	464
9	537	401	390	487	679	1040	2150	2140	794	771	452	464
10	564	394	406	481	643	1010	2270	2080	753	786	463	448
11	555	392	428	481	619	949	2440	2090	728	778	480	446
12	531	392	452	477	604	898	2560	2050	721	787	513	501
13	508	386	413	475	588	860	2650	2020	717	773	539	558
14	486	375	362	477	577	842	2730	2000	731	745	586	608
15	465	372	337	479	571	837	2830	1960	728	737	592	640
16	453	367	333	482	589	837	2900	1900	705	737	591	e650
17	440	366	331	488	616	838	2950	1830	678	709	568	e660
18	425	366	328	480	614	838	3000	1770	647	707	539	e650
19	423	369	337	478	604	868	3030	1720	644	730	514	e640
20	429	382	354	470	600	855	3060	1700	639	743	489	e620
21	434	373	360	491	671	827	3080	1680	623	760	473	e610
22	434	367	364	573	764	805	3080	1680	634	760	485	e590
23	436	365	385	582	768	792	3060	1640	632	717	475	e580
24	436	366	453	563	740	786	3030	1600	612	672	450	e570
25	438	363	445	570	706	783	2990	1550	596	624	428	565
26	444	360	442	623	669	842	2940	1510	580	596	418	552
27	453	356	445	614	662	992	2890	1470	621	592	411	547
28	447	354	438	597	662	1150	2840	1430	648	590	406	573
29	448	373	427	592	---	1210	2780	1390	622	576	402	562
30	468	464	415	587	---	1390	2720	1350	618	534	401	675
31	458	---	424	579	---	1700	---	1320	---	484	400	---
TOTAL	14897	11713	12222	16258	17974	28292	78480	59370	23504	21492	15178	16025
MEAN	481	390	394	524	642	913	2616	1915	783	693	490	534
MAX	564	464	524	623	768	1700	3080	2660	1300	787	592	675
MIN	423	354	328	470	552	687	1850	1320	580	484	400	389
AC-FT	29550	23230	24240	32250	35650	56120	155700	117800	46620	42630	30110	31790
CFSM	.26	.21	.22	.29	.35	.50	1.43	1.05	.43	.38	.27	.29
IN.	.30	.24	.25	.33	.37	.58	1.60	1.21	.48	.44	.31	.33

CAL YR 1986 TOTAL 257303 MEAN 705 MAX 1850 MIN 261 AC-FT 510400 CFMS .39 IN. 5.24
WTR YR 1987 TOTAL 315405 MEAN 864 MAX 3080 MIN 328 AC-FT 625600 CFMS .47 IN. 6.43

e Estimated

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313000 WITHLACOCHEE RIVER NEAR HOLDER, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.66	1.30	1.67	1.65	1.71	2.28	5.55	7.61	4.12	1.85	1.46	1.08
2	1.63	1.28	1.47	1.61	1.71	2.48	5.99	7.44	4.02	1.94	1.64	1.07
3	1.58	1.26	1.30	1.53	1.70	2.39	6.13	7.27	3.90	2.10	1.65	1.07
4	1.55	1.25	1.12	1.56	1.67	2.28	6.20	7.09	3.71	2.29	1.62	1.09
5	1.54	1.26	.99	1.73	---	2.17	6.26	6.91	3.40	2.23	1.54	1.12
6	1.54	1.26	.99	1.65	2.25	2.09	6.27	6.75	3.22	2.22	1.43	1.21
7	1.58	1.22	1.06	1.60	2.25	2.60	6.08	6.60	2.86	2.16	1.36	1.29
8	1.60	1.20	1.16	1.56	2.21	3.26	6.14	6.44	2.62	2.24	1.32	1.33
9	1.62	1.18	1.22	1.50	2.08	3.27	6.30	6.26	2.45	2.38	1.29	1.33
10	1.70	1.15	1.28	1.47	1.96	3.15	6.58	6.13	2.32	2.42	1.33	1.28
11	1.67	1.15	1.35	1.48	1.88	2.97	7.02	6.15	2.23	2.40	1.39	1.27
12	1.58	1.15	1.43	1.46	1.83	2.79	7.34	6.05	2.21	2.43	1.50	1.46
13	1.50	1.14	1.29	1.45	1.77	2.67	7.59	5.98	2.19	2.38	1.59	1.66
14	1.42	1.09	1.11	1.45	1.73	2.61	7.79	5.92	2.24	2.29	1.75	1.83
15	1.34	1.08	1.02	1.46	1.71	2.60	8.03	5.83	2.23	2.26	1.77	1.93
16	1.30	1.08	.99	1.47	1.77	2.60	8.19	5.68	2.15	2.26	1.77	---
17	1.25	1.07	.99	1.49	1.85	2.60	8.30	5.51	2.06	2.17	1.69	---
18	1.20	1.07	.98	1.46	1.85	2.60	8.40	5.35	1.96	2.16	1.59	---
19	1.20	1.09	1.01	1.44	1.81	2.70	8.46	5.22	1.95	2.24	1.51	---
20	1.22	1.14	1.07	1.42	1.80	2.66	8.50	5.17	1.93	2.28	1.42	---
21	1.24	1.11	1.09	1.49	2.04	2.56	8.52	5.12	1.88	2.34	1.37	---
22	1.25	1.09	1.09	1.77	2.35	2.49	8.53	5.12	1.91	2.34	1.41	---
23	1.25	1.09	1.17	1.80	2.36	2.44	8.50	5.02	1.91	2.19	1.37	---
24	1.25	1.09	1.42	1.73	2.27	2.42	8.45	4.91	1.84	2.04	1.28	---
25	1.27	1.08	1.39	1.75	2.16	2.41	8.38	4.81	1.79	1.88	1.21	1.68
26	1.29	1.07	1.37	1.93	2.03	2.61	8.27	4.70	1.73	1.79	1.17	1.64
27	1.33	1.07	1.38	1.90	2.01	3.11	8.17	4.60	1.87	1.77	1.14	1.62
28	1.31	1.06	1.35	1.84	2.01	3.65	8.06	4.49	1.96	1.77	1.13	1.71
29	1.32	1.13	1.31	1.81	---	3.84	7.92	4.39	1.87	1.72	1.11	1.67
30	1.39	1.46	1.27	1.80	---	4.37	7.77	4.29	1.86	1.58	1.11	2.05
31	1.35	---	1.29	1.77	---	5.19	---	4.21	---	1.40	1.11	---
MEAN	1.42	1.16	1.21	1.61	---	2.83	7.46	5.71	2.41	2.11	1.42	---
MAX	1.70	1.46	1.67	1.93	---	5.19	8.53	7.61	4.12	2.43	1.77	---
MIN	1.20	1.06	.98	1.42	---	2.09	5.55	4.21	1.73	1.40	1.11	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313000 WITHLACOCHEE RIVER NEAR HOLDER, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-52, 1954 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1950 to December 1951, October 1962 to September 1983, March to September 1987.

WATER TEMPERATURE: January 1950 to December 1951, October 1962 to September 1983, March to September 1987.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum observed, 770 microsiemens, Sept. 12, 1979; minimum observed, 114 microsiemens Oct. 10, 1979.

WATER TEMPERATURE: Maximum observed, 33.0°C, July 17, 1950; minimum observed, 5.0°C, Jan. 10, 1970, Jan. 19, 1977.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--A specific conductance of 102 microsiemens was observed on Apr. 6, 1960.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 350 microsiemens, Mar. 9; minimum daily mean, 144 microsiemens, Apr. 16.

WATER TEMPERATURE: Maximum daily mean, 30.5°C, Aug. 8-10.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	264	197	260	---	---	289
2	---	---	---	---	---	---	265	203	262	284	---	288
3	---	---	---	---	---	---	268	209	264	281	---	287
4	---	---	---	---	---	---	266	216	265	285	---	286
5	---	---	---	---	---	---	261	222	264	288	---	285
6	---	---	---	---	---	---	253	227	268	287	300	284
7	---	---	---	---	---	339	240	232	274	290	314	281
8	---	---	---	---	---	349	223	236	271	289	303	279
9	---	---	---	---	---	350	203	239	270	---	309	278
10	---	---	---	---	---	345	185	239	272	---	294	277
11	---	---	---	---	---	341	170	235	274	---	299	276
12	---	---	---	---	---	337	160	241	273	---	300	277
13	---	---	---	---	---	334	154	244	273	---	304	283
14	---	---	---	---	---	332	149	245	272	---	292	285
15	---	---	---	---	---	330	145	248	273	---	288	284
16	---	---	---	---	---	328	144	252	278	---	291	284
17	---	---	---	---	---	326	145	257	279	---	297	285
18	---	---	---	---	---	323	145	261	281	---	292	287
19	---	---	---	---	---	319	145	264	281	---	293	288
20	---	---	---	---	---	318	146	264	281	---	297	290
21	---	---	---	---	---	317	149	266	283	---	303	292
22	---	---	---	---	---	316	151	268	---	---	299	292
23	---	---	---	---	---	313	155	270	---	---	295	289
24	---	---	---	---	---	311	159	269	---	---	288	286
25	---	---	---	---	---	312	164	267	---	---	290	283
26	---	---	---	---	---	307	169	266	---	---	290	281
27	---	---	---	---	---	305	175	263	---	---	289	277
28	---	---	---	---	---	304	180	262	---	---	289	272
29	---	---	---	---	---	303	186	261	---	---	289	280
30	---	---	---	---	---	288	192	260	---	---	289	274
31	---	---	---	---	---	265	---	259	---	---	289	---
MEAN	---	---	---	---	---	---	187	247	---	---	---	283
MAX	---	---	---	---	---	---	268	270	---	---	---	292
MIN	---	---	---	---	---	---	144	197	---	---	---	272

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02313000 WITHLACOOCHEE RIVER NEAR HOLDER, FL--Continued

TEMPERATURE, (DEG C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	17.5	22.5	27.1	---	---	29.7
2	---	---	---	---	---	---	17.0	22.5	27.9	29.4	---	28.5
3	---	---	---	---	---	---	17.0	23.0	28.5	28.6	---	27.5
4	---	---	---	---	---	---	16.5	23.5	28.6	28.3	---	27.1
5	---	---	---	---	---	---	15.5	24.0	27.8	28.6	---	27.2
6	---	---	---	---	---	---	16.0	24.0	27.3	28.5	29.9	27.3
7	---	---	---	---	---	19.0	16.5	24.0	27.4	29.1	30.2	27.5
8	---	---	---	---	---	19.5	17.0	24.0	27.2	29.5	30.5	28.2
9	---	---	---	---	---	19.5	17.5	24.0	27.4	---	30.7	28.5
10	---	---	---	---	---	20.0	18.5	23.5	28.2	---	30.4	28.5
11	---	---	---	---	---	20.0	19.0	23.5	28.6	---	29.3	28.2
12	---	---	---	---	---	19.5	19.5	24.0	28.6	---	29.3	27.2
13	---	---	---	---	---	19.0	20.0	24.5	28.4	---	28.8	27.2
14	---	---	---	---	---	18.5	20.5	24.5	28.0	---	27.8	27.9
15	---	---	---	---	---	19.0	21.0	25.0	27.8	---	26.8	28.3
16	---	---	---	---	---	20.0	21.0	25.0	28.3	---	27.0	28.5
17	---	---	---	---	---	20.5	21.0	25.5	28.9	---	28.0	28.6
18	---	---	---	---	---	21.0	20.5	25.6	29.3	---	28.9	28.5
19	---	---	---	---	---	21.5	21.0	25.6	29.2	---	29.3	28.7
20	---	---	---	---	---	21.5	21.0	25.4	29.5	---	29.4	28.8
21	---	---	---	---	---	21.5	21.5	25.7	29.8	---	29.2	28.6
22	---	---	---	---	---	21.5	22.5	25.9	---	---	29.0	28.1
23	---	---	---	---	---	21.5	23.0	26.1	---	---	29.0	27.5
24	---	---	---	---	---	22.0	23.5	26.3	---	---	29.1	26.8
25	---	---	---	---	---	22.5	23.5	26.3	---	---	29.3	26.6
26	---	---	---	---	---	23.0	23.0	26.2	---	---	29.6	26.6
27	---	---	---	---	---	22.0	22.5	25.9	---	---	29.7	26.5
28	---	---	---	---	---	22.0	22.5	26.1	---	---	29.9	26.3
29	---	---	---	---	---	22.5	22.5	26.2	---	---	29.9	26.6
30	---	---	---	---	---	21.5	22.5	26.1	---	---	30.0	26.4
31	---	---	---	---	---	19.5	---	26.4	---	---	29.7	---
MEAN	---	---	---	---	---	---	20.0	24.9	---	---	---	27.7
MAX	---	---	---	---	---	---	23.5	26.4	---	---	---	29.7
MIN	---	---	---	---	---	---	15.5	22.5	---	---	---	26.3

PEACE, WITHLACOOCHIEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHIEE RIVER BASIN

02313000 WITHLACOOCHIEE RIVER NEAR HOLDER, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 25...	1015	1.08	363	292	7.6	22.5	0.60	6.5	--	--
FEB 18...	1250	1.85	615	365	7.8	18.0	--	7.8	--	--
MAY 05...	1245	6.91	2400	250	7.7	23.5	1.1	2.5	62	80
JUL 01...	1350	1.85	615	300	--	28.5	1.2	6.2	E2	E430
AUG 05...	1905	1.51	515	320	7.9	30.5	--	7.1	--	--
SEP 02...	1200	1.06	388	308	7.6	28.0	0.40	--	--	--

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 25...	51	4.9	5.4	0.70	120	22	9.5	0.20	7.8	175
MAY 05...	38	3.1	5.8	8.5	89	17	13	0.10	5.3	174
JUL 01...	47	4.3	5.2	0.70	115	18	8.9	0.10	7.1	173
SEP 02...	49	4.8	4.8	0.40	--	21	7.3	0.20	8.8	170

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 25...	<0.010	0.190	0.020	0.040	0.40	0.030	0.010	0.010	4	45
MAY 05...	0.010	0.130	0.040	0.060	1.3	0.080	0.080	0.030	5	80
JUL 01...	<0.010	0.180	0.050	0.030	1.0	0.030	0.060	0.030	17	94
SEP 02...	<0.010	0.150	0.050	0.040	0.40	0.030	0.030	0.020	24	67

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 25...	1015	<10	<1	7	<0.5	<1	<1	<3	<1	42	<5
MAY 05...	1245	40	<1	18	<0.5	<1	<1	<3	1	580	<5
JUL 01...	1350	30	<1	7	<0.5	<1	3	<3	<1	77	<5
SEP 02...	1200	<10	1	6	<0.5	<1	1	<3	1	25	<5

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313000 WITHLACOCHEE RIVER NEAR HOLDER, FL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 25...	5	2	--	<10	<1	<1	<1.0	260	<6	13
MAY 05...	<4	16	<0.1	<10	1	<1	<1.0	170	<6	13
JUL 01...	5	7	0.1	<10	2	<1	<1.0	230	<6	<3
SEP 02...	<4	4	--	<10	1	<1	<1.0	270	<6	<3

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02313100 RAINBOW SPRINGS NEAR DUNNELLO, FL

LOCATION.--Lat 29°06'08", long 82°26'16", in SE¼ sec.12, T.16 S., R.18 E., Marion County, Hydrologic Unit 03100208, at head of springs, 3.9 mi north of Dunnellon, and 5.7 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

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), December 1964 to current year. Prior to October 1940, published as Blue Springs near Dunnellon.

GAGE.--Nonrecording gage. Datum of gage is 28.34 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 19, 1948, at datum 1.63 ft higher. No gage prior to Oct. 8, 1930. July 22, 1931 to Apr. 1, 1933, water-stage recorder at present site. (April 1933 to March 1969, and since April 1971, nonrecording gage read at time of discharge measurements only.)

REMARKS.--Records good. Discharge measurements made at bridge on State Highway 484, 5 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 WDR FL-85-3B.

AVERAGE DISCHARGE.--22 years (water years 1966-87), 727 ft³/s, 470 mgd.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 1,230 ft³/s, Oct. 12, 1964; maximum gage height observed, 5.90 ft, Apr. 5, 1960; minimum discharge measured, 487 ft³/s, Oct. 3, 1932, Apr. 4, 1957; minimum gage height observed, 1.50 ft, July 20, Sept. 14, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 879 ft³/s, Apr. 25; maximum gage height observed, 2.75 ft, Apr. 7; minimum discharge, 702 ft³/s, Feb. 19, 20, 21; minimum gage height observed, 2.29 ft, Dec. 5, Feb. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	757	752	730	718	709	715	785	869	830	784	767	746
2	756	751	730	718	709	717	792	869	828	783	767	747
3	756	750	728	718	709	717	799	868	826	784	767	748
4	756	747	725	718	707	717	804	864	824	784	767	748
5	756	747	721	718	707	716	811	863	824	785	767	748
6	756	745	720	717	707	716	819	865	824	785	764	747
7	757	743	720	716	708	718	824	867	822	786	762	747
8	759	742	720	715	709	722	828	867	816	785	761	746
9	761	742	720	714	709	729	832	863	812	784	761	746
10	765	741	720	713	708	730	836	860	809	784	760	744
11	765	741	722	712	708	730	840	860	805	784	761	743
12	764	740	724	712	708	730	846	861	804	784	762	742
13	762	739	725	712	706	729	854	862	804	784	762	742
14	761	738	725	711	705	729	860	862	804	783	762	743
15	758	737	723	711	705	729	868	862	803	781	762	744
16	757	737	720	711	705	731	876	862	801	782	762	743
17	756	736	718	711	704	735	877	858	798	782	761	743
18	754	735	718	711	703	739	875	854	796	779	760	742
19	753	735	717	710	703	744	873	851	794	778	758	742
20	752	735	716	710	702	744	873	853	792	777	755	741
21	751	733	715	709	702	745	876	852	792	777	753	741
22	751	733	715	709	706	745	876	851	792	778	753	740
23	751	732	715	709	709	745	876	850	791	779	753	739
24	751	730	717	709	710	747	877	847	791	777	753	739
25	751	728	717	709	711	749	877	844	791	774	752	738
26	751	727	717	709	711	750	875	840	790	773	750	736
27	751	726	717	709	711	757	875	837	789	773	749	735
28	751	726	717	709	711	763	874	835	789	773	749	733
29	751	726	717	709	---	768	872	834	788	772	748	733
30	752	728	717	709	---	772	870	832	787	771	747	736
31	753	---	717	709	---	778	---	831	---	768	746	---
TOTAL	23425	22122	22323	22075	19802	22856	25520	26493	24116	24173	23501	22262
MEAN	756	737	720	712	707	737	851	855	804	780	758	742
MAX	765	752	730	718	711	778	877	869	830	786	767	748
MIN	751	726	715	709	702	715	785	831	787	768	746	733
AC-FT	46460	43880	44280	43790	39280	45330	50620	52550	47830	47950	46610	44160

CAL YR 1986 TOTAL 270932 MEAN 742 MAX 791 MIN 691 AC-FT 537400
WTR YR 1987 TOTAL 278668 MEAN 763 MAX 877 MIN 702 AC-FT 552700

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313100 RAINBOW SPRINGS NEAR DUNNELLON, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1961, 1963 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)					
OCT 16...	1645	754	130	8.5	23.5	7.0					
DEC 05...	0915	731	124	8.4	23.5	7.4					
FEB 13...	1025	699	127	8.4	23.5	7.0					
APR 07...	1005	794	129	8.3	23.5	7.2					
JUN 11...	0745	803	130	8.1	23.5	7.2					
JUL 31...	0910	770	131	8.5	23.5	7.9					
DATE	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
JUN 11...	<5	0.10	17	3.0	1.9	0.20	51	4.2	3.0	0.10	7.3
JUL 31...	<5	0.30	18	3.0	1.7	0.10	50	4.8	3.3	0.10	7.0
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)
JUN 11...	75	0.020	0.350	0.020	<0.20	0.040	0.030	30	<1	1	4
JUL 31...	79	<0.010	0.320	0.040	<0.20	0.030	0.030	20	<1	<1	2
DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 11...	50	<10	7	<5	<10	<10	<0.10	<1	80	<10	<0.1
JUL 31...	<10	<10	<5	<5	<10	<10	<0.10	<1	80	<10	<0.1

02313200 WITHLACOOCHEE RIVER AT DUNNELLON, FL

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.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Stage regulated by Lake Rousseau.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 29.64 ft, Sept. 12, 1964; 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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.88	27.74	27.98	27.78	27.62	28.06	28.56	28.66	28.30	27.60	27.80	27.84
2	27.88	27.76	27.90	27.78	27.60	28.08	28.52	28.66	28.30	27.36	27.80	27.80
3	27.90	27.76	27.80	27.74	27.60	27.98	28.52	28.62	28.30	27.62	27.86	27.76
4	27.94	27.78	27.49	27.76	27.62	27.88	28.56	28.56	28.20	27.80	27.90	27.74
5	27.94	27.78	27.34	27.76	27.62	27.90	28.52	28.58	28.18	27.92	27.84	27.76
6	27.96	27.76	27.40	27.74	27.62	28.00	28.56	28.80	28.00	27.88	27.78	27.82
7	27.96	27.76	27.62	27.76	27.60	28.06	28.52	28.88	27.90	27.86	27.76	27.90
8	27.96	27.78	27.70	27.74	27.62	28.10	28.48	28.74	27.80	27.82	27.76	27.96
9	27.98	27.78	27.76	27.72	27.62	28.34	28.48	28.60	27.76	27.80	27.74	27.96
10	28.00	27.78	27.80	27.74	27.62	28.26	28.52	28.52	27.72	27.80	27.82	27.76
11	27.90	27.78	27.88	27.76	27.62	28.00	28.64	28.60	27.78	27.90	27.86	27.80
12	27.90	27.80	27.92	27.76	27.63	27.78	28.80	28.70	27.82	27.90	27.94	27.90
13	27.90	27.78	27.90	27.78	27.63	27.68	28.92	28.74	27.96	27.96	27.90	28.00
14	27.68	27.78	27.86	27.78	27.64	27.72	29.04	28.72	28.00	28.00	27.90	27.96
15	27.50	27.80	27.66	27.72	27.66	27.80	29.10	28.66	28.00	28.04	27.88	28.00
16	27.52	27.78	27.54	27.70	27.66	27.88	29.02	28.52	27.88	28.00	27.88	28.02
17	27.51	27.76	27.54	27.68	27.66	27.96	28.84	28.46	27.90	28.00	27.80	27.80
18	27.44	27.78	27.58	27.66	27.66	28.00	28.74	28.40	27.80	27.80	27.86	27.74
19	27.50	27.78	27.56	27.66	27.66	28.12	28.68	28.44	27.90	27.84	27.70	27.80
20	27.58	27.76	27.58	27.66	27.68	28.14	28.78	28.50	27.90	28.00	27.68	27.94
21	27.64	27.78	27.58	27.66	27.68	28.06	28.86	28.50	27.88	28.12	27.50	27.92
22	27.70	27.80	27.60	27.64	27.72	27.84	28.78	28.54	27.88	28.08	27.58	27.94
23	27.70	27.78	27.58	27.64	28.16	27.84	28.78	28.46	27.90	27.98	27.64	27.96
24	27.72	27.78	27.60	27.66	28.20	27.90	28.80	28.32	27.90	27.88	27.70	28.00
25	27.74	27.80	27.62	27.60	28.18	27.98	28.80	28.30	27.88	27.88	27.70	27.90
26	27.74	27.78	27.64	27.62	28.12	28.06	28.80	28.26	27.88	27.90	27.70	27.90
27	27.72	27.78	27.64	27.64	28.14	28.14	28.72	28.20	27.90	27.90	27.72	27.88
28	27.74	27.80	27.68	27.64	28.10	28.40	28.68	28.22	27.90	27.91	27.76	27.88
29	27.72	27.82	27.72	27.64	---	28.32	28.68	28.24	27.72	27.92	27.78	27.90
30	27.74	27.84	27.74	27.64	---	28.30	28.66	28.22	27.64	27.88	27.82	27.90
31	27.74	---	27.78	27.64	---	28.58	---	28.30	---	27.80	27.82	

CAL YR 1986	MEAN 27.93	MAX 28.80	MIN 27.02
WTR YR 1987	MEAN 27.95	MAX 29.10	MIN 27.34

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02313200 WITHLACOOCHEE RIVER AT DUNNELLO, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	GAGE HEIGHT (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT							
17...	0635	27.51	250	7.7	23.5	5.4	--
DEC							
04...	0740	27.49	260	7.9	21.0	5.6	--
FEB							
13...	0750	27.63	312	7.9	19.0	7.2	--
APR							
09...	1755	28.49	260	7.6	18.0	6.7	--
JUN							
05...	0730	28.18	260	7.3	26.0	4.3	10
JUL							
23...	0936	27.98	272	8.0	26.0	5.2	2.5

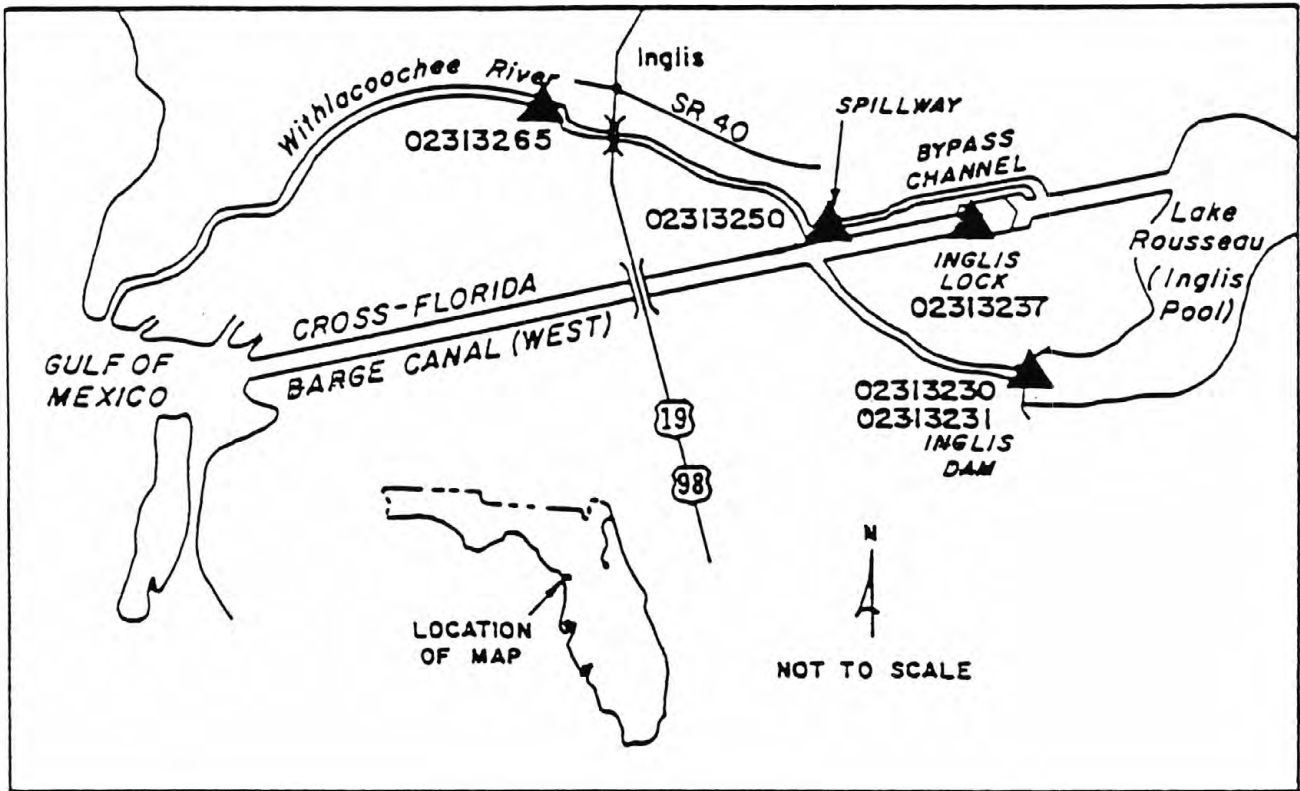


Figure 23.--Location of stream gaging stations in the lower Withlacoochee River basin.

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313230 WITHLACOCHEE RIVER AT INGLIS DAM, NEAR DUNNELLO, FL

LOCATION.--Lat 29°00'35", long 82°37'01", in SW¼ sec.8, T.17 S., R.17 E., Levy County, Hydrologic Unit 03100208, on left bank at upstream side of control structure of Inglis Dam, 3.5 mi southeast of Inglis, 9.8 mi west of Dunnellon, and 11 mi upstream from mouth.

DRAINAGE AREA.--2,020 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.--Dual water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 20, 1971, water-stage recorder at site in forebay of powerhouse of the old Inglis Dam and July 20, 1971, to Aug. 23, 1972, at site in private boat basin on south shore of Lake Rousseau at same datum. Auxiliary gage at downstream side of control structure.

REMARKS.--Records good. Records include flow of springs, approximately 70 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. 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). Records of gage height are published as elevations for Lake Rousseau (station 02313229) in the section of this report entitled LAKE ELEVATIONS.

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

AVERAGE DISCHARGE.--18 years, 421 ft³/s, 305,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,500 ft³/s, Oct. 12, 1979; maximum gage height, 28.28 ft, June 19, 1982; gates closed and flow consists of leakage, about 70 ft³/s for all or part of some days in most years; minimum gage height, 21.67 ft, Oct. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,420 ft³/s, Apr. 21; maximum gage height, 27.92 ft, Sept. 30; gates closed and flow consists of leakage, about 70 ft³/s for many days; minimum gage height, 25.61 ft, Apr. 18, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	70	70	70	70	70	1670	2060	460	70	70	70
2	310	70	70	70	70	70	1330	2060	460	70	70	70
3	220	70	70	70	70	70	1330	2060	973	70	70	304
4	70	70	310	70	70	70	1330	1830	460	70	70	216
5	70	70	216	70	70	70	1330	1620	482	70	70	70
6	70	312	70	70	70	70	1330	1620	612	70	317	70
7	70	220	70	70	70	70	1330	1800	413	70	208	70
8	70	70	70	314	70	70	1330	1720	142	70	70	70
9	314	70	70	215	70	281	1330	1360	70	319	70	70
10	221	70	70	70	70	620	1330	1020	70	215	70	310
11	70	70	70	70	70	756	1330	900	70	70	70	221
12	70	70	70	70	70	467	1510	900	70	70	70	70
13	70	70	70	70	70	150	1710	1050	70	70	314	70
14	70	70	70	70	70	70	2020	1310	70	70	226	70
15	70	70	70	70	70	70	2920	1390	70	70	70	70
16	70	70	70	70	70	70	3390	1330	70	312	70	70
17	70	70	70	70	70	70	3300	1060	70	213	70	324
18	70	70	70	70	70	70	3150	809	70	70	70	215
19	70	70	70	70	70	207	2400	756	70	70	70	70
20	70	315	70	70	70	290	2720	756	70	70	306	70
21	70	213	70	70	70	156	3420	658	70	70	213	70
22	70	70	70	310	70	70	2960	1040	70	70	70	70
23	302	70	70	220	70	70	2790	1040	70	70	70	70
24	220	70	70	70	70	70	2790	868	70	70	70	310
25	70	70	70	70	70	70	2790	756	70	70	70	223
26	70	70	70	70	70	312	2790	756	70	70	70	70
27	70	70	70	70	70	223	2610	756	375	70	307	70
28	70	70	70	70	70	592	2500	561	512	70	200	70
29	70	70	70	309	---	900	2330	352	211	70	70	70
30	70	70	70	224	---	900	2120	290	70	70	70	276
31	70	---	70	70	---	1510	---	397	---	70	70	---
TOTAL	3337	2880	2556	3342	1960	8554	65190	34885	6430	2949	3701	3869
MEAN	108	96.0	82.5	108	70.0	276	2173	1125	214	95.1	119	129
MAX	314	315	310	314	70	1510	3420	2060	973	319	317	324
MIN	70	70	70	70	70	70	1330	290	70	70	70	70
AC-FT	6620	5710	5070	6630	3890	16970	129300	69190	12750	5850	7340	7670

CAL YR 1986 TOTAL 83571 MEAN 229 MAX 1190 MIN 70 AC-FT 165800
WTR YR 1987 TOTAL 139653 MEAN 383 MAX 3420 MIN 70 AC-FT 277000

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313231 WITHLACOCHEE RIVER BELOW INGLIS DAM, NEAR DUNNELLON, FL

LOCATION.--Lat 29°00'35", long 82°37'01", in SW¼ sec.8, T.17 S., R.17 E., Levy County, Hydrologic Unit 03100208, at downstream side of control structure of Inglis Dam, 3.5 mi southeast of Inglis, 9.8 mi west of Dunnellon, and 11 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1964 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to June 21, 1971, at downstream end of lock chamber of former Inglis Dam at same datum. June 21, 1971, to Aug. 23, 1972, near left bank 1,500 ft downstream at same datum. This is the auxiliary gage for station 02313230 located at upstream side of control structure.

REMARKS.--Stage affected by tide and manipulation of gates immediately above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.73 ft, Sept. 13, 1964; minimum, 3.72 ft, below NGVD, Jan. 16, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.36 ft, Apr. 15; minimum, 2.12 ft below NGVD, Dec. 5.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.14	.72	1.12	1.67	.42	1.47	3.87	4.44	1.22	.98	1.02	.86
2	1.48	.78	1.32	.43	1.35	.63	3.16	4.48	1.23	.96	1.10	.84
3	1.50	.90	.69	.37	.76	.48	3.42	4.44	2.24	1.11	1.10	1.21
4	1.19	.94	.72	1.51	.63	.09	3.04	3.48	1.16	.94	1.13	.79
5	1.28	1.06	.03	-.57	.17	-.31	3.11	1.57	1.09	.86	1.12	1.09
6	1.20	1.44	-.44	-.24	.81	-.71	3.07	2.60	1.29	.83	1.32	1.09
7	1.22	1.19	-.05	.61	.69	.35	3.12	3.99	.88	.90	1.01	1.03
8	1.32	1.04	.75	1.01	.26	1.23	3.13	3.91	.75	.93	1.00	1.06
9	1.76	.95	1.14	1.07	-.41	1.57	3.09	3.11	.71	1.25	1.08	.99
10	1.41	.84	1.13	1.18	-.37	1.34	3.16	2.44	.88	1.18	.80	1.28
11	1.21	1.17	1.28	.35	.11	1.30	3.20	2.32	.99	1.20	.95	1.00
12	.80	1.04	1.07	.03	.40	.92	3.60	2.41	1.28	1.24	1.11	1.09
13	1.16	.44	-.56	.26	.39	.05	4.01	2.74	1.45	1.29	1.13	.91
14	1.30	-.40	-.34	.51	.64	.30	4.58	3.25	1.55	1.07	.89	.89
15	.94	.52	.26	.84	.79	.88	6.09	3.45	1.33	1.13	.94	.69
16	.60	.86	.40	.90	1.62	1.13	6.73	3.35	1.10	1.18	1.08	.89
17	.33	1.05	.59	.77	.78	1.09	6.53	2.91	.88	.71	.70	1.38
18	.06	1.15	.73	1.08	.43	1.56	6.22	2.29	.62	.41	.57	1.27
19	-.27	1.08	.63	1.18	-.17	1.85	5.06	2.08	.77	.39	.70	1.22
20	.20	1.56	.89	.47	-.27	1.22	5.29	1.98	.97	.86	1.11	1.18
21	.68	.99	.36	.26	.15	1.08	6.54	1.95	.99	.78	.74	.92
22	.85	.73	-.16	2.11	1.03	.89	5.82	2.32	.96	.79	.60	.82
23	1.47	.91	1.46	.31	.09	.60	5.58	2.41	1.00	1.01	.69	.84
24	1.69	1.04	1.56	.24	-.18	1.25	5.60	2.21	1.05	.86	.86	1.27
25	1.87	1.10	.84	1.11	.11	1.20	5.62	2.02	1.08	.83	.91	1.17
26	1.72	1.34	.41	.70	.34	1.44	5.53	2.03	1.46	.92	.86	.81
27	1.36	.94	.56	-.01	.67	1.83	5.25	1.96	1.92	.97	1.26	.70
28	.62	.75	.25	.24	1.04	2.35	5.19	1.45	1.35	1.09	1.18	.75
29	.60	.99	.45	.76	---	2.52	4.88	1.02	1.00	1.06	1.05	.82
30	.72	1.40	.44	1.16	---	2.71	4.52	.84	.86	1.08	1.01	1.41
31	.85	---	.26	.55	---	3.85	---	1.00	---	.91	.99	---
MEAN	1.04	.95	.57	.67	.44	1.17	4.60	2.60	1.14	.96	.97	1.01
MAX	1.87	1.56	1.56	2.11	1.62	3.85	6.73	4.48	2.24	1.29	1.32	1.41
MIN	-.27	-.40	-.56	-.57	-.41	-.71	3.04	.84	.62	.39	.57	.69

CAL YR 1986 MEAN 1.04 MAX 2.88 MIN -.56
WTR YR 1987 MEAN 1.34 MAX 6.73 MIN -.71

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313237 CROSS-FLORIDA BARGE CANAL AT INGLIS LOCK, NEAR INGLIS, FL

LOCATION.--Lat 29°01'30", long 82°37'00", in SW¼ sec .5, T.17 S., R.17 E., Levy County, Hydrologic Unit 03100208, at downstream side of Inglis Lock, 0.8 mi downstream from Lake Rousseau, and 3.2 mi east of Inglis.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1970 to current year.

GAGE.--Nonrecording gage.

REMARKS.--Records good. Discharge at station is a diversion of flow, for boat lockages, from Lake Rousseau and Withlacoochee River into Gulf of Mexico, and is computed using daily volume of water used for lockage.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 138 ft³/s, Jan. 11, 1970; no flow for many days each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	33	16	.00	.00	.00	.00	17	17	.00	17	.00
2	16	16	.00	.00	16	.00	.00	.00	.00	.00	16	.00
3	.00	16	.00	.00	.00	.00	17	.00	.00	.00	17	17
4	16	.00	19	.00	17	.00	34	.00	17	.00	.00	33
5	16	.00	16	.00	17	.00	16	.00	18	.00	.00	18
6	17	19	18	.00	.00	.00	17	.00	17	.00	.00	23
7	.00	19	.00	.00	.00	.00	.00	17	16	.00	17	.00
8	.00	17	18	17	17	.00	.00	18	.00	.00	16	.00
9	4.9	57	.00	17	18	.00	16	34	.00	.00	26	.00
10	17	16	.00	17	.00	.00	16	30	.00	.00	.00	17
11	44	.00	.00	16	.00	.00	16	18	.00	15	.00	17
12	51	.00	18	17	.00	.00	35	.00	16	15	.00	18
13	.00	.00	19	17	.00	.00	12	.00	15	25	.00	17
14	.00	18	17	.00	.00	21	.00	18	15	.00	17	.00
15	.00	.00	17	.00	.00	33	.00	16	16	.00	18	.00
16	.00	4.8	.00	16	.00	.00	17	.00	.00	15	18	.00
17	.00	.00	.00	.00	.00	.00	17	15	.00	19	18	17
18	.00	.00	16	17	.00	.00	15	17	.00	18	.00	16
19	.00	.00	.00	.00	.00	.00	29	.00	.00	18	.00	16
20	.00	15	16	.00	.00	15	.00	.00	17	.00	.00	34
21	.00	33	18	.00	.00	31	.00	18	33	.00	.00	16
22	.00	.00	19	15	.00	31	.00	17	16	.00	.00	.00
23	16	.00	.00	16	.00	17	15	18	.00	.00	.00	.00
24	35	.00	.00	.00	.00	.00	15	17	.00	17	.00	19
25	16	.00	.00	.00	.00	.00	14	34	.00	45	.00	.00
26	21	.00	.00	16	.00	18	17	.00	.00	23	.00	33
27	.00	.00	.00	.00	.00	18	17	.00	16	17	16	44
28	.00	.00	.00	.00	.00	17	.00	16	16	17	18	.00
29	.00	.00	.00	.00	---	16	.00	16	.00	.00	17	.00
30	18	.00	.00	.00	---	17	17	37	.00	.00	18	.00
31	19	---	.00	.00	---	16	---	29	---	.00	18	---
TOTAL	306.90	263.80	227.00	181.00	85.00	250.00	352.00	402.00	245.00	244.00	267.00	355.00
MEAN	9.90	8.79	7.32	5.84	3.04	8.06	11.7	13.0	8.17	7.87	8.61	11.8
MAX	51	57	19	17	18	33	35	37	33	45	26	44
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	609	523	450	359	169	496	698	797	486	484	530	704

CAL YR 1986 TOTAL 3663.90 MEAN 10.0 MAX 83 MIN .00 AC-FT 7270
WTR YR 1987 TOTAL 3178.70 MEAN 8.71 MAX 57 MIN .00 AC-FT 6300

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313250 WITHLACOCHEE RIVER BYPASS CHANNEL NEAR INGLIS, FL

LOCATION.--Lat 29°01'15", long 82°38'17", in NE¼ sec.12, T.17 S., R.16 E., Levy County, Hydrologic Unit 03100208, on right bank 90 ft upstream from control structure, 0.1 mi upstream from mouth, and 2.0 mi east of Inglis.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1970 to current year.

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

REMARKS.--Records good. Flow regulated by manipulation of gates in spillway; channel completed and flow through spillway began December 17, 1969. Discharge at station is the diversion from Lake Rousseau to maintain flow in the old river channel.

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

AVERAGE DISCHARGE.--17 years, 1,132 ft³/s, 820,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,800 ft³/s, June 19, 1982; maximum gage height, 28.31 ft, May 19, 1977; minimum daily discharge, 53 ft³/s, Oct. 11, 1972; minimum gage height, 21.35 ft, Oct. 8, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,580 ft³/s, Mar. 9, 28; maximum gage height, 28.20 ft, June 3; minimum daily discharge, 560 ft³/s, Dec. 7; minimum gage height, 25.20 ft, Apr. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	1100	1530	1010	1100	1350	1080	1180	1490	1420	1120	1070
2	978	1040	1480	1010	1100	1540	1450	1200	1500	1490	1100	1080
3	1000	952	1420	1090	1100	1520	1420	1220	1040	1480	1170	834
4	1010	920	1070	1160	1100	1500	1400	1230	1510	1340	1220	807
5	980	920	755	1160	1100	1320	1400	1380	1510	1350	1220	832
6	1020	767	604	1160	1100	1190	1400	1490	1490	1480	1100	800
7	1040	813	560	1160	1230	1190	1400	1470	1440	1470	1040	800
8	1040	890	636	1010	1310	1430	1390	1400	1430	1450	926	914
9	1040	890	680	998	1310	1580	1390	1400	1430	1160	860	1110
10	1190	890	680	984	1310	1550	1400	1400	1310	1090	902	962
11	1280	890	680	950	1310	1480	1410	1440	1080	1130	980	906
12	1280	890	1280	950	1310	1420	1430	1480	1040	1190	980	951
13	1280	890	1540	950	1220	1400	1440	1510	1120	1260	980	1050
14	1280	890	1280	950	1160	1190	1420	1500	1200	1280	1130	1070
15	1280	890	1050	950	1160	1070	1320	1460	1280	1280	1410	1070
16	1280	890	980	950	1160	1130	1130	1440	1310	1280	1380	1130
17	1280	890	980	1010	1160	1160	1000	1420	1310	1410	1250	1000
18	1050	890	826	1040	1160	1200	941	1440	1310	1300	1220	1020
19	860	890	740	1040	1080	1420	955	1480	1270	1150	1220	1070
20	860	735	740	1040	1010	1510	1060	1500	1170	1150	922	1070
21	860	807	740	1040	1010	1460	958	1520	1130	1420	792	1070
22	860	890	798	888	1090	1270	938	1510	1130	1540	991	1070
23	712	890	830	952	1240	1160	976	1480	1130	1510	1160	1070
24	773	890	904	1040	1440	1160	1000	1460	1130	1480	1090	918
25	860	890	860	1040	1540	1160	1010	1460	1130	1250	919	961
26	917	890	860	1080	1240	1160	1020	1450	1130	1060	860	1040
27	988	890	941	1100	1010	1420	1030	1440	1400	1010	689	1040
28	1010	890	1010	1100	1010	1580	1050	1440	1520	1070	734	1040
29	1010	890	1010	949	---	1520	1080	1460	1460	1100	800	1040
30	1070	1250	1010	1010	---	1500	1130	1490	1440	1140	800	1320
31	1100	---	1010	1100	---	966	---	1500	---	1160	876	---
TOTAL	32318	27104	29484	31871	33070	41506	36028	44250	38840	39900	31841	30115
MEAN	1043	903	951	1028	1181	1339	1201	1427	1295	1287	1027	1004
MAX	1280	1250	1540	1160	1540	1580	1450	1520	1520	1540	1410	1320
MIN	712	735	560	888	1010	966	938	1180	1040	1010	689	800
AC-FT	64100	53760	58480	63220	65590	82330	71460	87770	77040	79140	63160	59730

CAL YR 1986 TOTAL 415446 MEAN 1138 MAX 1670 MIN 442 AC-FT 824000
WTR YR 1987 TOTAL 416327 MEAN 1141 MAX 1580 MIN 560 AC-FT 825800

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313265 WITHLACOCHEE RIVER AT CRACKERTOWN, FL

LOCATION.--Lat 29°01'49", long 82°40'41", in NW¼ sec.3, T.17 S., R.16 E., Levy County, Hydrologic Unit 03100208, near right bank at end of Florida Power Corporation powerplant bulkhead and pump outlet, 0.5 mi west of Inglis, 0.7 mi southeast of Crackertown, and 6.6 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1967 to current year (gage heights only).

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

REMARKS.--Stage affected by tide and by manipulation of gates in control structure upstream. The stage record published is the maximum and minimum tide event for each calendar day.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 6.57 ft, Aug. 31, 1985; minimum, 3.96 ft below NGVD, Dec. 17, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.57 ft, Jan. 1; minimum, 2.67 ft below NGVD, Dec. 5.

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.47	3.02	4.09	5.57	---	3.97	2.55	3.14	3.14	2.94	2.98	2.55
2	3.68	3.14	3.79	2.61	---	3.10	2.89	3.22	2.65	2.75	3.17	2.81
3	3.79	3.42	4.09	2.77	---	2.77	3.94	2.90	2.56	3.02	2.92	2.88
4	3.50	3.64	2.87	3.07	---	2.37	2.11	2.71	2.27	2.66	3.13	2.69
5	3.67	3.69	1.79	1.07	---	2.25	2.35	1.75	2.49	2.84	3.20	3.54
6	3.71	3.63	1.29	1.56	---	1.11	2.08	1.83	2.12	2.97	3.24	3.74
7	3.68	3.25	1.48	2.38	---	3.41	2.05	2.40	2.44	3.45	3.51	3.85
8	3.59	2.72	2.27	2.57	---	2.56	2.08	2.50	3.25	3.64	3.74	3.78
9	3.58	2.24	2.57	2.55	---	3.06	2.04	2.00	3.46	3.65	3.88	3.44
10	2.89	2.28	2.79	3.08	---	2.40	2.64	2.84	3.69	3.97	3.13	3.20
11	2.79	2.94	2.83	1.16	---	1.76	2.82	3.17	4.01	4.30	3.51	3.17
12	2.41	2.80	2.94	.87	---	1.99	3.14	3.39	4.21	4.05	3.80	2.87
13	3.07	3.15	.85	2.51	---	1.66	3.25	3.51	4.42	3.92	2.63	3.27
14	3.48	.88	1.03	2.37	---	2.20	3.42	3.67	4.44	3.32	2.80	2.81
15	3.09	2.27	2.09	3.36	---	3.24	3.59	3.80	3.82	3.05	2.79	2.17
16	2.62	2.91	2.74	3.22	---	3.55	3.40	3.77	3.47	2.75	3.10	2.04
17	2.28	3.46	2.97	3.67	---	3.65	3.30	3.78	2.84	2.38	2.33	2.42
18	2.00	3.56	3.18	3.28	2.28	3.66	3.10	3.50	2.28	2.74	2.00	2.62
19	1.32	3.61	3.00	3.31	1.99	3.99	2.74	3.04	2.57	2.82	2.22	3.01
20	1.99	3.30	3.19	2.11	1.71	3.77	2.34	2.79	2.78	2.96	2.45	3.19
21	2.42	3.35	2.28	1.74	2.28	3.26	2.28	2.54	2.86	2.57	2.59	3.17
22	2.68	2.38	1.64	4.41	3.62	2.93	2.56	2.60	3.04	2.95	3.00	3.17
23	2.65	2.39	3.45	1.26	1.68	2.40	2.69	3.04	3.14	3.43	3.19	3.12
24	2.89	2.38	2.78	---	2.35	3.47	2.96	3.21	3.36	3.26	3.35	3.03
25	3.25	2.72	2.41	---	1.92	3.33	3.30	3.33	3.52	3.46	3.29	3.14
26	2.77	3.12	2.01	---	2.81	3.49	2.35	3.36	3.65	3.36	3.13	2.98
27	2.67	2.42	2.47	---	3.38	3.88	2.50	3.33	3.66	3.43	2.97	2.83
28	1.97	2.31	2.28	---	3.52	4.14	3.39	3.09	3.45	3.36	3.15	2.84
29	2.70	2.89	1.86	---	---	3.43	3.16	3.23	3.36	3.06	3.16	2.64
30	2.41	3.48	3.03	---	---	3.69	3.28	3.10	3.13	3.04	3.17	2.94
31	3.11	---	3.31	---	---	4.23	---	3.01	---	2.93	2.96	---
MEAN	2.91	2.91	2.56	---	---	3.06	2.81	3.02	3.20	3.19	3.05	3.00
MAX	3.79	3.69	4.09	---	---	4.23	3.94	3.80	4.44	4.30	3.88	3.85
MIN	1.32	.88	.85	---	---	1.11	2.04	1.75	2.12	2.38	2.00	2.04

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313265 WITHLACOCHEE RIVER AT CRACKERTOWN, FL--Continued

GAGE HEIGHT, IN FEET ABOVE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-.68	-1.27	-.77	-.22	---	-.24	-2.61	-1.38	-1.10	-.71	-.48	-.71
2	-.87	-1.54	-.80	-1.68	---	-.82	-1.05	-1.17	-.80	-.44	-.60	-1.20
3	-.66	-1.69	-1.36	-1.50	---	-.50	-.80	-1.14	-.64	.01	-.32	-1.46
4	-.91	-1.76	-2.17	-.12	---	-1.04	-.65	-1.07	-.34	.02	-.59	-1.64
5	-1.06	-1.48	-2.67	-1.70	---	-1.38	-1.04	-.79	-.35	-.25	-.83	-1.38
6	-1.18	-1.68	-2.65	-1.36	---	-1.83	-.47	-1.06	-.43	-.45	-1.47	-1.48
7	-1.11	-1.17	-2.06	-.43	---	-1.97	-.50	-.97	-.73	-.78	-1.60	-1.34
8	-.91	-.82	-.95	-.53	---	.00	-.27	-.78	-.75	-1.03	-2.00	-1.08
9	-.64	-.72	-.16	-1.03	---	.46	-.78	-1.02	-1.06	-1.63	-1.53	-.88
10	-.43	-.68	-.50	-.76	---	-.29	-.65	-1.04	-1.41	-1.50	-.66	-1.37
11	-.44	-.23	-.88	-1.20	---	-1.16	-.67	-1.05	-1.60	-1.38	-1.50	-1.31
12	-.51	-.63	-.94	-2.03	---	-1.06	-.84	-1.10	-1.38	.41	-1.02	-.78
13	-.33	-1.38	-1.35	-1.71	---	-1.49	-1.02	-1.36	.62	-1.12	-.84	-.81
14	-.29	-2.26	-1.57	-1.79	---	-1.16	-1.13	-1.32	-1.13	-.85	-.67	-1.00
15	-.77	-1.59	-1.74	-1.44	---	-1.05	.17	.17	-.86	-.77	.00	-.54
16	-.98	-1.37	-1.66	-1.23	---	-.78	-.76	-1.24	-.83	-.53	-.25	-.35
17	-1.35	-1.40	-1.57	-1.27	---	-.82	-.89	-1.18	-.64	-.56	-.49	-.69
18	-1.65	-1.32	-1.63	-.84	-.93	.47	-1.17	-1.05	-.58	-.72	-.81	-.53
19	-2.17	-1.26	-1.78	-.45	-1.44	-.36	-1.68	-.81	-.43	-1.07	-.80	-.65
20	-1.85	-1.01	-1.12	-1.05	-1.86	-.43	-1.63	-.63	-.51	-.53	-1.52	-.87
21	-1.51	-1.54	-1.70	-.97	-1.50	-.68	-1.51	-.44	-.77	-.60	-1.86	-1.00
22	-1.20	-1.08	-1.94	.57	-1.21	-.75	-1.43	-.57	-.96	-.67	-1.29	-1.01
23	-.69	-.74	-.68	-.47	-.86	-1.11	-1.25	-.69	-1.13	-.67	-1.20	-.96
24	-.06	-.34	.41	---	-1.58	-.74	-.88	-.86	-1.18	-.91	-1.22	-1.36
25	.43	-.22	-.21	---	-1.33	-.60	-1.11	-1.12	-1.06	-1.27	-1.23	-1.24
26	.20	-.26	-1.10	---	-1.33	-.71	-1.71	-1.16	-.79	-1.28	-1.24	-1.32
27	-.27	-.28	-1.51	---	-1.48	.03	-1.79	-1.25	1.57	-1.10	-1.08	-1.24
28	-.85	-1.01	-1.60	---	-1.17	-.14	-1.32	-1.32	-.64	.03	-.82	-1.12
29	-.87	-1.26	-1.90	---	---	-.52	-1.61	.40	-.87	-1.00	-1.00	-.97
30	-.62	-1.15	-1.80	---	---	-.31	-.40	-1.18	-.75	-.20	-.90	-.06
31	-.96	---	-2.11	---	---	.94	---	-1.09	---	-.59	-.87	---
MEAN	-.81	-1.10	-1.37	---	---	-.65	-1.05	-.94	-.72	-.71	-.99	-1.01
MAX	.43	-.22	.41	---	---	.94	.17	.40	1.57	.41	.00	-.06
MIN	-2.17	-2.26	-2.67	---	---	-1.97	-2.61	-1.38	-1.60	-1.63	-2.00	-1.64

MISCELLANEOUS SURFACE WATER QUALITY RECORDS
OCTOBER 1986 TO SEPTEMBER 1987

281240081405900 - APOPKA-BEAUCLAIR CANAL 1 MI ABOVE LOCK NEAR ASTATULA, FL

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH LAB (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
APR 02...	1304	297	7.2	19.5	280	2.3	6.2	32	7.9
DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
APR 02...	6.2	13	56	27	21	0.040	0.040	3.00	2.90
DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
APR 02...	0.090	0.090	2.4	2.0	0.860	0.840	0.780	0.770	38

MISCELLANEOUS SURFACE WATER QUALITY RECORDS
OCTOBER 1986 TO SEPTEMBER 1987

The following data were collected in conjunction with an investigative project in Reedy Creek Improvement District.

02264140 - BONNET CREEK NEAR KISSIMMEE, FL

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
NOV 03...	1120	173	6.8	23.0	3.3	0.010	0.370	0.100	1.0	0.110	0.080
JAN 06...	1330	127	7.0	15.5	7.0	0.010	0.080	0.050	1.2	0.070	0.040
MAR 03...	1120	150	6.8	19.0	5.1	0.010	0.050	0.070	0.72	0.110	0.080
APR 01...	1020	77	5.8	18.0	6.8	0.020	0.260	0.110	1.7	0.090	0.050
MAY 28...	1315	122	6.4	26.0	2.4	0.010	0.030	0.030	1.1	0.070	0.050
JUN 22...	1345	170	--	--	--	0.020	0.460	0.040	1.1	0.140	0.110
JUL 29...	1130	133	6.4	27.5	2.6	0.010	<0.020	0.010	1.2	0.080	0.060

022662947 - CANAL 405 AT FORCE MAIN NEAR VINELAND, FL

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
JAN 06...	0915	160	6.6	14.0	7.1	0.040	1.10	0.200	1.7	0.130	0.110
MAR 31...	1200	123	5.4	19.0	4.2	0.020	1.80	0.280	2.4	0.800	0.760
MAY 28...	1415	150	6.3	25.0	2.2	0.010	0.550	0.100	1.6	0.090	0.040
JUL 29...	1030	140	6.25	26.0	1.4	0.020	0.080	0.040	2.5	0.720	0.640

02266298 - REEDY CREEK ABOVE HIGHWAY 192 NEAR VINELAND, FL

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
NOV 03...	1300	218	6.8	23.0	5.0	0.010	0.620	0.030	1.0	0.170	0.140

02266320 - REEDY CREEK AT INTERSTATE HIGHWAY 4 NEAR LOUGHMAN, FL

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)
NOV 03...	1050	210	6.9	21.5	4.6	0.010	0.300	0.030	0.97	0.180	0.150

MISCELLANEOUS SURFACE WATER QUALITY RECORDS
OCTOBER 1986 TO SEPTEMBER 1987

282135081345500 - LATERAL 405 BELOW L-410 NEAR VINELAND, FL

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV 03...	0844	185	6.5	22.5	320	0.30	2.8	--	--	--
MAR 02...	1220	192	6.5	19.0	280	1.1	4.2	16	4.4	17
JUN 22...	0830	--	--	--	320	0.20	--	16	4.7	19
AUG 18...	0830	240	6.6	27.0	130	--	2.1	18	4.9	22

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 03...	--	--	--	--	0.600	0.190	1.5	0.160	0.120	39
MAR 02...	4.1	32	22	30	0.710	2.70	4.0	0.960	0.900	33
JUN 22...	4.6	34	--	32	0.410	2.10	4.0	0.230	0.150	32
AUG 18...	5.3	49	25	26	0.750	0.280	1.6	0.640	0.580	32

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
JUN 22...	200	<1	<10	<1	<10	7	380
AUG 18...	230	1	<10	17	<10	8	260

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL RECOVERABLE (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
JUN 22...	<5	20	0.70	<1	<1	10
AUG 18...	<5	10	0.30	2	<1	20

DATE	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)
AUG 18...	<0.1	<1	<0.10	<1.0	<0.010	<0.1	<0.1	7.0	<0.010	<0.1	<0.010

MISCELLANEOUS SURFACE WATER QUALITY RECORDS
OCTOBER 1986 TO SEPTEMBER 1987

282135081345500 - LATERAL 405 BELOW L-410 NEAR VINELAND, FL--Continued

DATE	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDO- SULFAN, TOTAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
AUG 18...	0.7	<0.010	<0.1	<0.01	<0.1	<0.010	0.1	<0.010	<0.1	<0.010	<0.1
DATE	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	
AUG 18...	<0.01	0.3	<0.010	<0.1	<0.010	<0.1	<0.01	<0.010	<0.1	0.08	
DATE	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PER- THANE TOTAL (UG/L)	
AUG 18...	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.1	
DATE	PER- THANE IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	
AUG 18...	<1.00	<1	<10	<0.01	<0.1	<0.01	<0.01	0.2	<0.01	<0.01	

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

284950082082001 LITTLE JONES CREEK AT MOUTH

WATER-QUALITY RECORDS

LOCATION.--Lat 28°49'50", long 82°08'20", in SE¼ sec.18, T.19 S., R.22 E., Sumter County, Hydrologic Unit 03100208, samples collected from boat, at mouth of Jones Creek, 1.6 mi north of Outlet River, 2.0 mi north of Panacoochee Retreats.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Water years 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 03...	0900	323	8.7	24.0	5.4	<0.010	0.800	0.030	0.38	0.070	0.060	5.0
JUL 22...	0900	330	7.6	24.0	5.1	<0.010	0.780	0.040	0.38	0.080	0.080	6.5

DATE	TIME	COLOR (PLATINUM-COBALT UNITS)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)
JUN 03...	0900	30	51	5.2	4.7	0.70	132	18	8.7
JUL 22...	0900	40	52	5.2	5.0	0.50	131	17	8.8

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)
JUN 03...	0.20	10	192	330	5.0	40	<1	20	2
JUL 22...	0.30	11	198	320	6.5	20	<1	<1	1

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 03...	100	40	5	<5	<10	<10	<0.10	2	<10
JUL 22...	90	50	<5	<5	<10	<10	<0.10	<1	<10

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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

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

Crest-stage partial-record stations

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

Annual maximum discharge at crest-stage partial-record stations during water year 1987

Annual maximum discharge at these stage partial record stations during water year 1987						
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual Maximum	
					Date	Gage height (ft)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER						
02232505	Savage Creek	Lat 28°32'22", long 81°01'10", in NE¼ sec.33, T.22 S., R.33 E., Orange County, Hydrologic Unit 03080101, on downstream side at bridge on Highway 420, 3.1 mi upstream from mouth, and 0.2 mi north of Christmas and Highway 50. Datum of gage is 28.95 ft above National Geodetic Vertical Datum of 1929.	3.69	1985-87	3-31-87	5.85 142
COASTAL AREA BETWEEN ST. JOHNS RIVER AND PONCE DE LEON INLET						
02247200	Fish Swamp Outlet near Summer Haven	Lat 29°39'20", long 81°19'43", in SE¼ sec.27, T.10 S., R.29 E., St. Johns County, Hydrologic Unit 03080201 at culvert on State Highway 204, 0.2 mi upstream from mouth and 7.7 mi southwest of Summer Haven. Datum of gage is 19.14 ft National Geodetic Vertical Datum of 1929.	4.62	1962-87	3-30-87	3.73 80.0
02246360	Cedar River near Marietta	Lat 30°17'55", long 81°45'20", in land grant 39, T.2.S., R.25 E., Duval County, Hydrologic Unit 03080103, at bridge on State Highway 213, and 2.5 mi southeast of Marietta.		1964 1985-87	03-30-87	1.55 385
02245850	Long Branch at Maxville	Lat 30°12'13", long 82°01'06", in SE¼ sec.29, T.3 S., R.23 E., Duval County, Hydrologic Unit 03080103, at culvert on State Highway 228, 5.5 mi upstream from mouth, and 0.3 mi west of Maxville, FL.	2.98	1965-67 1985-87	10-07-86	85.54 165
KISSIMMEE RIVER BASIN						
02269700	Morgan Hole Creek	Lat 27°37'52", long 81°17'47", in NW¼ sec.11, T.33 S., R.30 E., Highlands County, Hydrologic Unit 03090101, at bridge on perimeter road on Avon Park bombing range, 5.4 mi upstream from mouth and 12.5 mi east of Avon Park. Datum of gage is 53.15 ft above National Geodetic Vertical Datum of 1929.	13.9	1971-87	9-13-87	6.96 1110

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1987						
Station No.	Station name	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER						
02231396	Blue Cypress Creek	Lat 27°43'40", long 81°48'49", in NW¼ sec.2, T.32 S., R.35 E., Indian River County, Hydrologic Unit 03080101, at culvert on private road, 2.0 mi upstream from Blue Cypress Lake, and 12.8 mi west of Fellsmere.	105	1969-70 1985	5-05-87 6-23-87 8-25-87	1.5 .52 .66
02231475	Bull Creek near Holopaw	Lat 28°01'53", long 81°02'21", in SE¼ sec.20, T.28 S., R.33 E., Osceola County, Hydrologic Unit 03080101, at bridge on U.S. Highway 441, 7.7 mi south of Holopaw.	31.7	1957 1965-67 1972 1986	8-25-87	.46
*02234150	Cow Creek near Maytown	Lat 28°50'13", long 81°01'32", in SE¼ sec.16, T.19 S., R.33 E., Volusia County, Hydrologic Unit 03080101, at bridge on county road, 2.7 mi upstream from mouth, 4.2 mi northwest of Maytown, and 8.2 mi east of Osteen.	23	1964-66 1985-86	10-21-86 12-15-86 6-03-87 9-22-87 9-27-87 9-22-87	<.01 1.0 .00 .07 .00 .07
OKLAWAHA RIVER BASIN						
02240105	Daisy Creek near Fort McCoy	Lat 29°18'54", long 81°58'23", in SW¼ sec.35, T.13 S., R.23 E., Marion County, Hydrologic Unit, 03080102, at culverts on State Highway 315, 3.4 mi upstream from mouth.	11.4	1981 1985-87	8-04-87	a/ .45
02240440	Eaton Creek near Eureka	Lat 29°20'15", long 81°53'00", in NE¼ sec. 27, T.13 S., R. 24 E., Marion County, Hydrologic Unit 03080102, 0.2 mi upstream from mouth, and 2.9 mi south of Eureka.	84.6	1968, 1984-87	8-05-87	110
COASTAL AREA BETWEEN PONCE DE-LEON INLET AND SEBASTIAN INLET						
02248300	Little Cow Creek near Edgewater	Lat 28°56'29", long 81°56'30", in SE¼ sec.8, T.18 S., R.34 E., Volusia County, Hydrologic Unit 03080202, at bridge on county road, 4.0 mi southwest of Edgewater.		1965 1984-86	10-21-86 12-15-86 2-09-87 4-17-87 6-04-87 7-28-87 9-23-87	.24 1.1 12. 7.6 .10 .03 3.2

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

a/ Discharge is an estimate.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1987

Discharge measurements made at miscellaneous sites during water year 1987						
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis- charge (ft ³ /s)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER						
02234600 Wekiva Springs	Wekiva River	Lat 28°42'43", long 81°27'36", in NE¼ sec.36, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080101, at head of Wekiva River, 4.1 mi northeast of Apopka.		1932-33 1936 1945-46 1956 1960-62 1969-80‡ 1981-86	4-29-87 8-26-87	71 64
02234610 Rock Springs	Rock Springs Run	Lat 28°45'20", long 81°29'58", in NE¼ sec.15, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080101, at head of Rock Springs Run, 5.7 mi north of Apopka.		1931-33 1935-36 1945-46 1956 1960-62 1965-67 1969-86	4-29-87 8-26-87	62 60
02234650 Miami Springs	Unnamed Creek	Lat 28°42'36", long 81°26'34", in NE¼ sec.31, T.20 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, 1,100 ft upstream from Wekiva River, and 5.9 mi west of Longwood.		1945,1960 1973-86	4-29-87 8-26-87	5.3 5.4
02234991 Sanlando Springs	Little Wekiva River	Lat 28°41'19", long 81°23'45", in SE¼ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at north outlet of spring pool, 0.2 mi upstream from Little Wekiva River, and 3.0 mi west of Longwood.		1942,1946 1954,1956 1958,1961 1972-86	4-28-87 8-25-87	25 21
02234992 Little Wekiva River	Wekiva River	Lat 28°41'28", long 81°23'42", in SE¼NE¼ sec.3, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, immediately downstream from Sanlando Springs, and 3.0 mi west of Longwood.		1978-80 1982 1984-86	4-28-87 8-25-87	41 47
02234996 Palm Springs	Little Wekiva River	Lat 28°41'27", long 81°23'34", in NW¼ sec.2, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, 200 ft upstream from Little Wekiva River, and 2.9 mi west of Longwood.		1942,1954 1956,1961 1972-86	4-28-87 8-25-87	6.9 5.6
02234997 Starbuck Spring	Little Wekiva River	Lat 28°41'48", long 81°23'28", in NW¼ sec.2, T.21 S., R.29 E., Seminole County, Hydrologic Unit 03080101, at outlet of spring pool, at edge of Little Wekiva River, and 2.7 mi west of Longwood.		1944,1961 1972-86	4-28-87 8-25-87	13 12
02235020 Wekiva River	St. Johns River	Lat 28°50'59", long 81°23'09", in land grant 38, T.19 S., R.29 E., Seminole County, Hydrologic Unit 03080101, 1.7 mi upstream from Black Water Creek, 2.8 mi upstream from mouth, and 5.5 mi southwest of De Bary	198		4-27-87 6-30-87	236 240
02235250 Seminole Springs	Seminole Creek	Lat 28°50'44", long 81°31'22", in SW¼ sec.9, T.19 S., R.28 E., Lake County, Hydrologic Unit 03080101, 0.2 mi below head of Seminole Springs, and 3.5 mi northeast of Sorrento.		1931-33 1946,1974 1981-83 1985-86	4-30-87	43
02235255 Messant Springs ^{a/}	Seminole Creek	Lat 28°51'21", long 81°29'56", in Theresa Rodriguez Grant, T.19 S., R.28 E., Lake County, Hydrologic Unit 03080101, at head of Messant Spring Run, 5.1 mi northeast of Sorrento.		1946,1961 1972 1981-83 1985-86	4-30-87	17

‡ Operated as a periodic station

^a Published as Messinger Springs in 1961 water year

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1987--Continued

Discharge measurements made at miscellaneous sites during water year 1987--Continued				Measured previously (water years)	Measurements	
Stream	Tributary to	Location	Drainage area (mi ²)		Date	Dis-charge (ft ³ /s)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER--Continued						
02235300 Black Water Creek	Wekiva River	Lat 28°51'48", long 81°23'33", in land grant 37, T.19 S., R.29 E., Lake County, Hydrologic Unit 03080101, 1.6 mi upstream from mouth, and 5.5 mi southwest of De Bary.	195		4-27-87	140
					6-30-87	74
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 1981-86	6-12-87	113
					8-27-87	110
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‡ 1981-86	4-30-87	26
					8-27-87	24
02236130 Juniper Springs	Lake George	Lat 29°11'01", long 81°42'45", in SE¼ sec.17, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, at head of Juniper Creek, 4.3 mi west of the intersection of State Highways 19 and 40, 9.3 mi upstream from Lake George, and 26.1 mi east of Ocala.		1929 1935-37 1946,1956 1961,1972 1981-86	5-01-87	9.7
					8-27-87	11
02236132 Fern Hammock, b/ Springs	Juniper Creek	Lat 29°11'00", long 81°42'29", in SE¼ sec.17, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, 0.4 mi downstream from Juniper Springs, 9.0 mi upstream from Lake George, and 26.3 mi east of Ocala.		1935-37 1946,1956 1961,1972 1981-86	5-01-87	14
					8-28-87	14
02236147 Sweetwater Springs	Juniper Creek	Lat 29°13'07" long 81°39'36", in NE¼ of F. M. Arredondo Grant, T.15 S., R.26 E., Marion County, Hydrologic Unit 03080101, near left bank of Juniper Creek, 0.5 mi upstream from State Highway 19, and 7.2 mi north-west of Astor Park.		1981-86	5-01-87	13
					8-28-87	14
02236160 Silver Glen Springs	Lake George	Lat 29°14'40", long 81°38'34", in SE¼ sec.25, T.14 S., R.26 E., Marion County, Hydrologic Unit 03080101, 0.5 mi upstream from Lake George, and 9.1 mi north-west of Astor.		1931-33 1935-36 1946,1956 1961,1972 1981-82 1984-86	6-11-87	102
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 1981-86	6-12-87	91

‡ Operated as a periodic station

b Also known as "The Aquarium"

ANNUAL MAXIMUM FLOOD-PROFILE DATA

The following table contains the annual maximum stream elevation at selected gaging stations in the St. Johns River basin during the calendar year 1987.

These stations are equipped with a crest-stage gage which records the peak stage occurring between inspections of the gage.

Miles above mouth was measured along low-water channel on topographic maps.

The years given in the period of record represent calendar years.

Annual maximum flood-profile data during calendar year 1987							
Station No.	Station name	Location	Miles above mouth	Drainage area (mi ²)	Period of record (calendar years)	Date	Annual Maximum Elevation (ft)
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER							
02231460	St. Johns River crest-stage gage No. 1 near Micco, FL	Lat 27°54'42", long 80°46'13", in SW¼ sec.31, T.29 S., R.35 E., Brevard County, Hydrologic Unit 03080101 on right bank at cabbage palm tree, 10 ft west of centerline of dike, at Sotille Ranch, 400 ft north of 90° turn in dike, and 16.6 mi west of Micco. Datum of gage is National Geodetic Vertical Datum of 1929.	276	616	1954-87	1986 1987	21.53 (corrected) <21.37
02231470	St. Johns River crest-stage gage No. 2 near Malabar	Lat 28°0'47", long 80°46'13", in NE¼ sec.36, T.28 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on right bank at palm tree 250 ft west of dike near residence of A. T. Anderson, 12.5 mi west of Malabar. Datum of gage is National Geodetic Vertical Datum of 1929.	269	674	1953-87	1987	<18.21
02231800	St. Johns River crest-stage gage No. 3 near Melbourne	Lat 28°03'27", long 80°46'51", in SW¼ sec.12, T.28 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on right bank at palm tree west of Melbourne-Tillman Drainage District dike, 75 ft south of old road fill, 10.9 mi southwest of Melbourne. Datum of gage is National Geodetic Vertical Datum of 1929.	265	953	1953-87	1987	<19.46
02232160	St. Johns River crest-stage gage No. 5 near Deer Park	Lat 28°12'35", long 80°51'25", in NE¼ sec.19, T.26 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on left bank, on east side of dike at Deseret Farms of Florida, Inc., 8.6 mi north of Deer Park, Osceola County. Datum of gage is National Geodetic Vertical Datum of 1929.	248	1,100	1953-87	1987	<14.35

< Actual value is known to be less than the value shown

ANNUAL MAXIMUM FLOOD-PROFILE DATA

Annual maximum flood-profile data during calendar year 1987

Annual Maximum Flood Stage Data during calendar year 1987						Period of	Annual Maximum	
Station No.	Station name	Location	Miles above mouth	Drainage area (mi ²)	record (calendar) years	Date	Elevation (ft)	
ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER--Continued								
02232240 (corrected)	St. Johns River crest-stage gage No. 6A at Lake Winder, near Cocoa	Lat 28°16'02", long 80°51'28", in NE¼ sec.31, T.25 S., R.35 E., Brevard County, Hydrologic Unit 03080101, at palm tree, on north side of drainage ditch near northwest shore of Lake Winder, 9.8 mi southwest of Cocoa. Datum of gage is National Geodetic Vertical Datum of 1929.	$\frac{d}{246}$ 244	1,180	1961-87	1986	16.26	
			$\frac{e}{243}$			1987	<15.60	
02232260	St. Johns River crest-stage gage No. 7 near Cocoa	Lat 28°17'20", long 80°49'12", in SW¼ sec.22, T.25 S., R.35 E., Brevard County, Hydrologic Unit 03080101, on left bank at palm tree between Lake Winder and Lake Poinsett, 7.2 mi southwest of Cocoa. Datum of gage is unknown.	241	1,209	1953-87	1987	<14.60	
02232430	St. Johns River crest-stage gage No. 8 near Christmas	Lat 28°29'21", long 80°52'55", in NW¼ sec.13, T.23 S., R.34 E., Orange County, Hydrologic Unit 03080101, on left bank at cabbage palm tree, south of power line, at Tootoosahatchee Game Preserve 8.8 mi southeast of Christmas. Datum of gage is National Geodetic Vertical Datum of 1929.	217	1,385	1953-87	1987	<11.36	
02232700	St. Johns River crest-stage gage No. 9 near Christmas	Lat 28°36'36", long 80°57'54", in NE¼ sec.1, T.22 S., R.33 E., Brevard County, Hydrologic Unit 03080101, on right bank on west side of cabbage palm tree, 15 ft west of centerline of sand road on Kyzer Ranch, 6.0 mi northeast of Christmas. Datum of gage is National Geodetic Vertical Datum of 1929.	201	1,635	1953-87	1987	<8.19	

 $\frac{d}{e}$ /Inlet of lake $\frac{e}{e}$ /Outlet of lake

< Actual value is known to be less than the value shown

ELEVATION AND WATER QUALITY OF LAKES

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

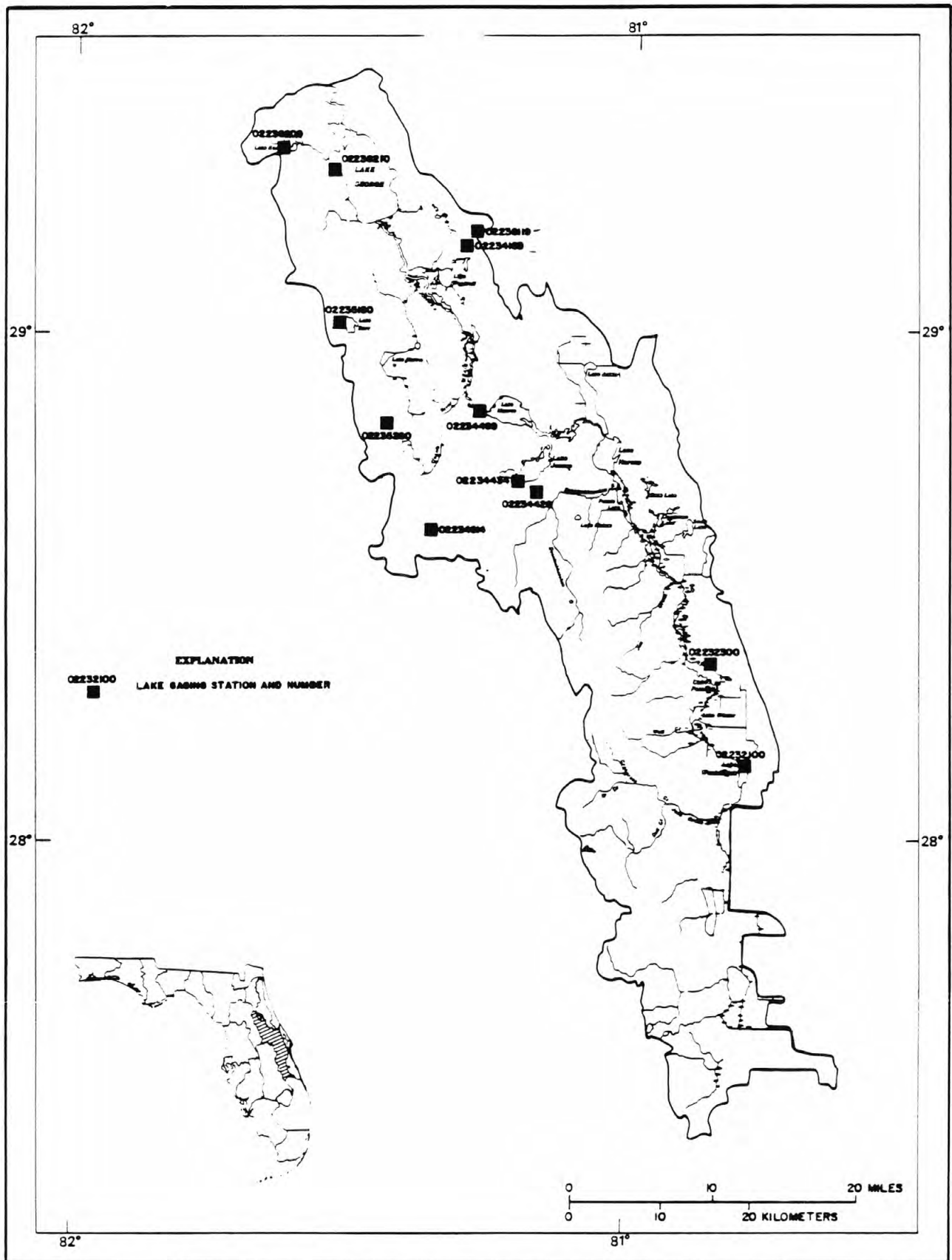


Figure 24.--Location of lake gaging stations in the St. Johns River basin above the Oklawaha River.

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232100 LAKE WASHINGTON NEAR EAU GALLIE, FL

LOCATION.--Lat 28°09'00", long 80°44'21", in NW¼ sec.9, T.27 S., R.36 E., Brevard County, Hydrologic Unit 03080101, on east shore of lake, at Melbourne Waterworks intake crib, 6.5 mi west of Eau Gallie.

SURFACE AREA.--2,665 acres (4.16 mi²).

DRAINAGE AREA.--1,025 mi².

PERIOD OF RECORD.--July 1942 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WRD FL 1966: Drainage area. WDR FL-81-1: Surface area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 30, 1975, at several sites within 1,100 ft southeast at following datums: July 24, 1942, to May 13, 1956, 12.39 ft higher; and May 14, 1956, to May 29, 1975, 10.39 ft higher.

REMARKS.--During November 1961, a semipermanent dam was built across the low-water channel of the St. Johns River about 0.5 mi downstream from the lake outlet. The crest of the dam was observed to be about 12.0 ft in 1961, about 13.4 ft in 1968, and about 9.5 ft in 1975. Washouts occurred at times and repairs to the dam were made by the addition of concrete bags. A steel piling dam at the lake outlet was completed on Feb. 1, 1976, with a permanent crest at 13.5 ft, and partially regulates lake elevation. Diversions are made from lake by City of Melbourne for municipal water supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 20.39 ft, Oct. 1, 1960; minimum daily, 9.88 ft, May 28, 1975.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.25	14.72	14.22	14.42	14.35	14.01	14.23	14.22	13.66	13.32	13.59	13.59
2	15.23	14.72	14.20	14.43	14.36	13.96	14.33	14.15	13.64	13.32	13.60	13.59
3	15.21	14.71	14.16	14.42	14.34	13.93	14.37	14.08	13.62	13.31	13.60	13.62
4	15.19	14.70	14.12	14.46	14.31	13.90	14.42	14.02	13.60	13.31	13.62	13.79
5	15.17	14.69	14.10	14.47	14.29	13.87	14.49	13.96	13.57	13.33	13.65	13.96
6	15.14	14.68	14.07	14.49	14.28	13.85	14.56	13.90	13.53	13.32	13.65	14.13
7	15.12	14.65	14.08	14.51	14.27	13.95	14.63	13.91	13.50	13.30	13.65	14.22
8	15.11	14.63	14.07	14.52	14.27	14.05	14.70	13.87	13.50	13.28	13.63	14.25
9	15.10	14.61	14.06	14.52	14.24	14.06	14.75	13.82	13.48	13.26	13.61	14.30
10	15.07	14.59	14.07	14.55	14.21	14.05	14.79	13.86	13.47	13.23	13.61	14.36
11	15.03	14.57	14.09	14.54	14.19	14.02	14.82	14.11	13.47	13.20	13.60	14.46
12	14.99	14.56	14.08	14.53	14.18	14.02	14.83	14.19	13.47	13.21	13.59	14.58
13	14.96	14.53	14.04	14.53	14.16	14.02	14.83	14.18	13.45	13.29	13.67	14.71
14	14.93	14.47	14.02	14.53	14.13	14.03	14.82	14.14	13.44	13.29	13.85	14.81
15	14.93	14.49	14.03	14.54	14.11	14.04	14.81	14.17	13.42	13.36	13.88	14.91
16	14.93	14.49	14.02	14.54	14.13	14.04	14.81	14.17	13.41	13.42	13.88	14.99
17	14.89	14.48	14.02	14.54	14.11	14.03	14.82	14.14	13.39	13.54	13.88	15.07
18	14.84	14.47	14.03	14.54	14.10	14.02	14.79	14.13	13.37	13.55	13.87	15.13
19	14.80	14.46	14.02	14.55	14.08	14.03	14.76	14.14	13.35	13.57	13.85	15.17
20	14.80	14.45	14.01	14.52	14.07	14.01	14.72	14.15	13.33	13.59	13.84	15.19
21	14.77	14.42	13.99	14.50	14.06	14.01	14.69	14.13	13.30	13.59	13.81	15.18
22	14.73	14.39	13.99	14.53	14.08	14.00	14.65	14.08	13.28	13.58	13.79	15.17
23	14.70	14.36	14.10	14.50	14.07	13.96	14.60	14.00	13.27	13.58	13.78	15.15
24	14.67	14.33	14.25	14.48	14.04	13.95	14.57	13.94	13.25	13.56	13.78	15.13
25	14.63	14.32	14.24	14.50	14.03	13.94	14.53	13.91	13.22	13.54	13.75	15.10
26	14.60	14.30	14.20	14.49	14.03	13.95	14.48	13.86	13.21	13.53	13.73	15.07
27	14.55	14.27	14.20	14.46	14.02	14.02	14.40	13.81	13.22	13.51	13.71	15.04
28	14.48	14.25	14.18	14.44	14.02	14.03	14.35	13.76	13.23	13.49	13.69	15.00
29	14.52	14.24	14.17	14.42	---	14.09	14.33	13.72	13.33	13.49	13.66	14.97
30	14.71	14.24	14.17	14.41	---	14.10	14.26	13.69	13.32	13.52	13.64	14.96
31	14.71	---	14.20	14.39	---	14.15	---	13.68	---	13.55	13.61	---
MEAN	14.90	14.49	14.10	14.49	14.16	14.00	14.60	14.00	13.41	13.42	13.71	14.65
MAX	15.25	14.72	14.25	14.55	14.36	14.15	14.83	14.22	13.66	13.59	13.88	15.19
MIN	14.48	14.24	13.99	14.39	14.02	13.85	14.23	13.68	13.21	13.20	13.59	13.59

CAL YR 1986 MEAN 13.99 MAX 15.27 MIN 12.20
WTR YR 1987 MEAN 14.16 MAX 15.25 MIN 13.20

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02232300 LAKE POINSETT NEAR COCOA, FL

LOCATION.--Lat 28°22'10", long 80°52'22", in SE¼ sec.25, T.24 S., R.34 E., Brevard County, Hydrologic Unit 03080101, near right bank of St. Johns River on downstream side of bridge on State Highway 520, 0.7 mi downstream from outlet of Lake Poinsett, and 8.8 mi west of Cocoa.

SURFACE AREA.--4,293 acres (6.71 mi²).

DRAINAGE AREA.--1,272 mi².

PERIOD OF RECORD.--November 1941 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office. Since October 1963, records for St. Johns River near Cocoa (station 02232400).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 23, 1943, nonrecording gage on northeast side of lake at Poinsett Lodge at datum 9.34 ft higher and Feb. 23, 1943, to Sept. 30, 1963, at datum 5.06 ft higher.

REMARKS.--Lake is one of the St. Johns River chain of lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 17.55 ft, Oct. 11, 1953, at site then in use; minimum daily, 7.99 ft, June 18, 1945, at site then in use.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.01	13.46	12.68	12.28	12.62	12.44	13.20	13.03	12.72	11.79	11.51	11.15
2	13.99	13.48	12.65	12.36	12.61	12.41	13.36	13.01	12.69	11.76	11.51	11.14
3	13.98	13.45	12.61	12.41	12.58	12.39	13.43	13.00	12.64	11.70	11.50	11.25
4	13.96	13.41	12.53	12.50	12.55	12.34	13.37	12.96	12.60	11.64	11.53	11.54
5	13.94	13.42	12.49	12.40	12.58	12.33	13.42	12.91	12.55	11.60	11.54	11.79
6	13.91	13.41	12.50	12.56	12.54	12.37	13.44	12.89	12.54	11.57	11.57	11.97
7	13.94	13.39	12.48	12.64	12.52	12.49	13.45	12.93	12.53	11.53	11.55	12.11
8	13.96	13.36	12.47	12.69	12.47	12.49	13.42	12.91	12.48	11.50	11.51	12.19
9	13.96	13.33	12.44	12.72	12.50	12.48	13.41	12.90	12.44	11.46	11.47	12.27
10	13.94	13.30	12.42	12.72	12.49	12.47	13.41	12.92	12.39	11.41	11.45	12.45
11	13.93	13.27	12.40	12.66	12.51	12.44	13.41	12.98	12.34	11.38	11.40	12.51
12	13.91	13.24	12.36	12.68	12.49	12.42	13.40	12.96	12.30	11.31	11.41	12.65
13	13.91	13.18	12.28	12.70	12.49	12.40	13.40	12.94	12.25	11.28	11.37	12.83
14	13.87	13.15	12.27	12.73	12.49	12.41	13.40	12.97	12.21	11.31	11.38	12.91
15	13.83	13.09	12.23	12.74	12.50	12.43	13.38	12.97	12.16	11.54	11.39	12.96
16	13.78	13.09	12.18	12.75	12.51	12.43	13.36	13.01	12.10	11.58	11.40	12.99
17	13.73	13.07	12.15	12.74	12.50	12.41	13.34	13.01	12.05	11.63	11.40	13.00
18	13.71	13.04	12.12	12.76	12.50	12.45	13.34	13.00	12.01	11.66	11.38	13.02
19	13.68	13.01	12.10	12.75	12.46	12.38	13.33	12.98	11.97	11.67	11.36	13.02
20	13.63	12.99	12.05	12.72	12.48	12.34	13.32	12.98	11.91	11.71	11.32	13.04
21	13.61	12.95	11.98	12.71	12.48	12.32	13.32	12.97	11.86	11.72	11.33	13.07
22	13.59	12.92	11.99	12.70	12.51	12.29	13.29	12.95	11.82	11.70	11.31	13.09
23	13.59	12.90	12.09	12.66	12.47	12.30	13.28	12.95	11.79	11.70	11.32	13.12
24	13.56	12.89	12.15	12.71	12.49	12.34	13.23	12.92	11.72	11.70	11.31	13.13
25	13.53	12.86	12.16	12.74	12.47	12.27	13.20	12.89	11.69	11.67	11.29	13.16
26	13.51	12.82	12.14	12.66	12.48	12.27	13.15	12.86	11.68	11.65	11.28	13.18
27	13.44	12.79	12.15	12.63	12.47	12.40	13.11	12.83	11.70	11.62	11.25	13.20
28	13.41	12.75	12.11	12.67	12.47	12.49	13.10	12.81	11.72	11.58	11.24	13.20
29	13.42	12.72	12.14	12.68	---	12.64	13.09	12.78	11.81	11.55	11.21	13.21
30	13.41	12.71	12.15	12.65	---	12.84	13.07	12.75	11.80	11.52	11.23	13.22
31	13.44	---	12.24	12.60	---	12.95	---	12.74	---	11.52	11.19	---
MEAN	13.74	13.11	12.28	12.64	12.51	12.43	13.31	12.93	12.15	11.58	11.38	12.61
MAX	14.01	13.48	12.68	12.76	12.62	12.95	13.45	13.03	12.72	11.79	11.57	13.22
MIN	13.41	12.71	11.98	12.28	12.46	12.27	13.07	12.74	11.68	11.28	11.19	11.14

CAL YR 1986 MEAN 11.95 MAX 14.16 MIN 8.83
WTR YR 1987 MEAN 12.56 MAX 14.01 MIN 11.14

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234160 LAKE WINNEMISSETT NEAR DE LAND, FL

LOCATION.--Lat 29°01'10", long 81°15'06", in SW¼ sec.13, T.17 S., R.30 E., Volusia County, Hydrologic Unit 03080101, on southwest shore of lake, on private pier, 2.9 mi east of De Land.

SURFACE AREA.---169 acres (0.26 mi²).

DRAINAGE AREA.--1.10 mi².

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

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

REMARKS.--Lake is landlocked except possibly at high elevations.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 61.01 ft, Feb. 23, 1984; minimum daily, 53.93 ft, Dec. 25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 60.93 ft, Mar. 31; minimum daily, 59.49 ft, Aug. 31.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.20	60.11	60.06	59.91	59.82	60.36	60.91	60.41	60.04	59.76	59.78	59.50
2	60.18	60.14	60.06	59.89	59.81	60.40	60.90	60.39	60.02	59.74	59.81	59.55
3	60.16	60.13	60.05	59.88	59.80	60.40	60.89	60.37	60.00	59.74	59.93	59.59
4	60.15	60.12	60.03	59.90	59.80	60.39	60.87	60.35	59.98	59.77	59.91	59.70
5	60.13	60.11	60.00	59.93	59.84	60.37	60.85	60.34	59.96	59.79	59.90	59.95
6	60.13	60.11	59.98	59.91	60.09	60.36	60.83	60.33	59.95	59.84	59.88	60.14
7	60.38	60.10	59.99	59.90	60.11	60.45	60.81	60.31	59.93	59.85	59.86	60.14
8	60.37	60.09	59.98	59.90	60.15	60.53	60.79	60.30	59.89	59.87	59.83	60.13
9	60.36	60.08	59.97	59.89	60.14	60.53	60.78	60.31	59.87	59.85	59.81	60.12
10	60.36	60.07	59.97	59.88	60.12	60.52	60.76	60.29	59.84	59.83	59.79	60.13
11	60.35	60.06	59.96	59.87	60.11	60.51	60.74	60.29	59.82	59.81	59.76	60.13
12	60.34	60.06	59.96	59.85	60.11	60.49	60.73	60.32	59.80	59.80	59.74	60.15
13	60.32	60.06	59.94	59.83	60.10	60.48	60.72	60.36	59.77	59.78	59.76	60.21
14	60.31	60.03	59.92	59.82	60.09	60.46	60.70	60.36	59.75	59.76	59.82	60.28
15	60.29	60.02	59.91	59.82	60.09	60.45	60.69	60.37	59.73	59.76	59.83	60.27
16	60.26	60.00	59.90	59.81	60.20	60.44	60.67	60.36	59.71	59.75	59.81	60.26
17	60.23	59.99	59.89	59.81	60.23	60.44	60.65	60.34	59.70	59.72	59.79	60.25
18	60.19	59.98	59.88	59.80	60.23	60.43	60.64	60.32	59.69	59.72	59.77	60.24
19	60.16	60.00	59.87	59.80	60.23	60.44	60.65	60.31	59.71	59.68	59.75	60.28
20	60.14	60.04	59.86	59.80	60.22	60.43	60.63	60.29	59.72	59.65	59.73	60.38
21	60.11	60.03	59.85	59.85	60.25	60.42	60.62	60.28	59.72	59.68	59.71	60.40
22	60.09	60.01	59.83	59.89	60.29	60.41	60.60	60.26	59.70	59.71	59.68	60.39
23	60.07	60.00	59.86	59.89	60.32	60.40	60.58	60.24	59.69	---	59.66	60.38
24	60.06	59.99	59.90	59.87	60.31	60.40	60.56	60.22	59.68	---	59.64	60.37
25	60.05	59.98	59.90	59.88	60.31	60.39	60.54	60.20	59.68	---	59.61	60.35
26	60.05	59.97	59.88	59.90	60.31	60.42	60.52	60.17	59.69	---	59.59	60.32
27	60.08	59.96	59.87	59.88	60.31	60.49	60.49	60.15	59.71	---	59.56	60.31
28	60.07	59.95	59.86	59.86	60.30	60.60	60.47	60.13	59.70	---	59.55	60.29
29	60.08	59.96	59.84	59.85	---	60.65	60.45	60.10	59.72	59.71	59.52	60.27
30	60.08	60.01	59.82	59.85	---	60.80	60.43	60.08	59.76	59.69	59.51	60.29
31	60.08	---	59.85	59.83	---	60.93	---	60.05	---	59.72	59.49	---
MEAN	60.19	60.04	59.92	59.86	60.13	60.48	60.68	60.28	59.80	---	59.73	60.16
MAX	60.38	60.14	60.06	59.93	60.32	60.93	60.91	60.41	60.04	---	59.93	60.40
MIN	60.05	59.95	59.82	59.80	59.80	60.36	60.43	60.05	59.68	---	59.49	59.50

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234428 LAKE CHARM AT OVIEDO, FL

LOCATION.--Lat 28°40'42", long 81°11'55", in NE¼ sec.10, T.21 S., R.31 E., Seminole County, Hydrologic Unit 03080101, near west shore, 0.8 mi northeast of intersection of State Highways 419 and 426 in Oviedo.

SURFACE AREA.--20.3 acres (0.03 mi²).

DRAINAGE AREA.--0.11 mi².

PERIOD OF RECORD.--November 1975 to September 1979 (weekly), incomplete, May 1983 to current year (weekly), incomplete.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Heath and Associates Land Surveyors bench mark). Prior to Apr. 30, 1976, at same site at datum 41.29 ft higher.

REMARKS.--Lake is landlocked.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 47.28 ft, Jan. 12, 1986; minimum observed, 40.24 ft, July 14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 46.18 ft, Oct. 5, occurred on general recession; minimum observed, 44.92 ft, Aug. 30.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	45.48	45.46	---	---	---	---	---	---
2	---	45.90	---	---	---	---	---	---	---	45.20	45.30	---
3	---	---	---	---	---	---	---	45.76	---	---	---	---
4	---	---	---	45.50	---	---	---	---	---	---	---	---
5	46.18	---	---	---	---	---	46.16	---	---	45.36	---	---
6	---	---	---	---	---	---	---	---	---	---	---	45.32
7	---	---	45.62	---	---	---	---	---	45.30	---	---	---
8	---	---	---	---	45.58	45.62	---	---	---	---	---	---
9	---	45.84	---	---	---	---	---	---	---	---	45.26	---
10	---	---	---	---	---	---	---	45.66	---	---	---	---
11	---	---	---	45.55	---	---	---	---	---	---	---	---
12	46.06	---	---	---	---	---	46.08	---	---	45.30	---	---
13	---	---	---	---	---	---	---	---	---	---	---	45.66
14	---	---	45.54	---	---	---	---	---	45.26	---	---	---
15	---	---	---	---	45.48	45.52	---	---	---	---	---	---
16	---	45.74	---	---	---	---	---	---	---	---	45.18	---
17	---	---	---	---	---	---	---	45.64	---	---	---	---
18	---	---	---	45.54	---	---	---	---	---	---	---	---
19	46.02	---	---	---	---	---	46.04	---	---	45.34	---	---
20	---	---	---	---	---	---	---	---	---	---	---	45.64
21	---	---	45.47	---	---	---	---	---	45.26	---	45.09	---
22	---	---	---	---	45.48	45.44	---	---	---	---	---	---
23	---	45.64	45.60	---	---	---	---	---	---	---	45.06	---
24	---	---	---	---	---	---	---	45.50	---	---	---	---
25	---	---	---	45.52	---	---	---	---	---	---	---	---
26	45.96	---	---	---	---	---	45.92	---	---	45.44	---	---
27	---	---	---	---	---	45.50	---	---	---	---	---	45.54
28	---	---	45.55	---	---	---	---	---	45.20	---	---	---
29	45.95	---	---	---	---	45.98	---	---	---	---	---	---
30	---	45.65	---	---	---	---	---	---	---	---	44.92	---
31	---	---	---	---	---	---	---	45.42	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234434 LAKE JESSUP NEAR SANFORD, FL

LOCATION.--Lat 28°42'04", long 81°14'17", in SE¼ sec.37, T.20 S., R.31 E., Seminole County, Hydrologic Unit 03080101, in boat canal on south shore, 5.4 mi east of the intersection of State Highway 434 and U.S. Highways 17 and 92, and 8 mi southeast of the courthouse in Sanford.

SURFACE AREA.--7,792 acres (12.2 mi²).

DRAINAGE AREA.--156 mi².

PERIOD OF RECORD.--August 1941 to April 1943, September 1943 to July 1948, October 1977 to current year (weekly), incomplete.

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

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Apr. 30, 1943, nonrecording gage, and Sept. 1, 1943 to July 14, 1948, water-stage recorder at bridge 7.2 mi northeast at lake outlet at same datum (U.S. Army Corps of Engineers bench mark).

REMARKS.--Lake is one of St. Johns River chain of lakes. Elevation at gage subject to seiches caused by wind action and backwater at times from St. Johns River.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 7.75 ft, Sept. 26, 1945, site and datum then in use; minimum daily, -0.63 ft, Apr. 6, 1945, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation since at least 1871, 13.28 ft NGVD in fall of 1880 at Lake Monroe near Sanford (station 02234499), from information by Fred T. Williams, former Sanford City Engineer. Lake Monroe, about 5 mi downstream and the next lake in the St. Johns River chain of lakes, reached an elevation of 8.50 ft, Oct. 15-17, 1953. Lake Jessup would have been at these elevations and probably higher on these dates.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 4.38 ft, Apr. 8; minimum observed, 0.60 ft, June 24.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.80	---	---	---	---	---	3.80	---	---	---	.75	---
2	---	---	---	---	---	---	---	---	1.30	---	---	---
3	---	---	1.96	---	1.78	---	---	---	---	.80	.81	---
4	---	---	---	---	---	---	---	---	---	---	---	1.18
5	---	---	---	---	---	---	---	2.20	---	---	---	---
6	---	2.08	---	---	---	2.40	---	---	---	---	---	---
7	1.62	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	2.02	---	---	4.38	---	---	---	.68	---
9	---	---	---	---	2.20	---	---	---	.80	---	---	---
10	---	---	2.02	---	---	---	---	---	---	.75	---	---
11	---	---	---	---	---	---	---	---	---	---	---	1.22
12	---	---	---	---	---	2.60	---	---	.93	---	---	---
13	---	1.98	---	---	---	---	---	1.60	---	---	---	---
14	1.96	---	---	2.00	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	1.20	---
16	---	---	---	---	---	---	3.70	---	---	---	---	---
17	---	---	1.79	---	---	---	3.66	---	.72	.90	---	---
18	---	---	---	---	2.05	---	---	---	---	---	---	1.40
19	---	1.96	---	---	2.09	---	---	---	---	---	---	---
20	---	---	---	---	---	2.38	---	1.55	---	---	---	---
21	2.37	---	---	1.82	---	---	3.30	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	.90	---
23	---	---	1.89	---	---	---	---	---	---	---	---	---
24	---	---	1.90	---	---	---	---	---	.60	1.10	---	---
25	---	1.90	---	---	2.20	2.48	---	---	---	---	---	1.58
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	1.66	---	---	2.70	1.30	---	---	1.12	---
29	2.12	---	---	---	---	---	---	---	---	---	---	---
30	---	---	2.06	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	.75	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234499 LAKE MONROE NEAR SANFORD, FL

LOCATION.--Lat 28°50'13", long 81°19'28", in SW¼ sec.16, T.19 S., R.30 E., Seminole County, Hydrologic Unit 03080101, on south bank of St. Johns River, at west side of bridge on U.S. Highways 17 and 92, at lake outlet, 4 mi northwest of Sanford.

SURFACE AREA.--8,840 acres (13.8 mi²).

DRAINAGE AREA.--2,582 mi².

PERIOD OF RECORD.--July 1920 to January 1940 (weekly), July 1941 to current year. Since July 1941, records for St. Johns River near Sanford (station 02234500). Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

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

GAGE.--Water-stage recorder. Datum of gage is 0.09 ft below National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to July 29, 1941, nonrecording gage on south shore of lake at Sanford at datum 0.09 ft higher.

REMARKS.--Lake is one of the St. Johns River chain of lakes. Elevation at gage subject to fluctuations caused by wind seiches and tide.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 8.50 ft, Oct. 15-17, 1953; minimum daily, -0.52, Apr. 5, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation since at least 1871, 13.28 ft in fall of 1880, from information by Fred T. Williams, former city engineer for Sanford.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation recorded, 3.76 ft, Apr. 7, 8; minimum recorded, 0.31 ft, June 26.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.57	1.81	1.71	---	---	2.12	3.15	2.24	---	.57	.74	.49
2	1.54	1.84	1.76	---	---	2.13	3.33	2.19	---	.56	.70	.54
3	1.51	1.86	1.77	---	---	2.13	3.46	2.14	1.06	.53	.64	.64
4	1.49	1.87	1.81	---	---	2.12	3.52	2.07	.92	.68	.58	.85
5	1.45	1.89	1.82	---	---	2.10	3.62	1.97	.83	.79	.52	1.02
6	1.41	1.91	1.86	---	---	2.11	3.71	1.89	.83	.66	.46	1.14
7	1.46	1.92	1.91	---	---	2.22	3.76	1.84	.89	.58	.40	1.20
8	1.44	1.90	1.96	---	---	2.28	3.76	1.82	.94	.51	.34	1.26
9	1.44	1.87	1.94	---	---	2.27	3.75	1.80	.93	.47	.33	1.29
10	1.55	1.83	1.90	---	---	2.24	3.74	1.83	.88	.48	.39	1.28
11	1.55	1.79	1.84	---	2.01	2.23	3.71	1.82	.82	.49	.49	1.28
12	1.57	1.76	1.77	---	1.99	2.21	3.68	1.78	.76	.52	.59	1.30
13	1.62	1.73	1.68	---	1.95	2.20	3.64	1.77	.70	.56	.69	1.35
14	1.64	1.72	1.66	---	1.91	2.21	3.58	1.75	.66	.62	.87	1.35
15	1.65	1.79	1.68	---	1.87	2.22	3.51	1.73	.61	.68	1.03	1.33
16	1.65	1.84	1.70	---	1.89	2.22	3.38	1.71	.56	.72	1.09	1.30
17	1.69	1.84	1.70	---	1.86	2.20	3.26	1.69	.51	.77	1.07	1.27
18	1.75	1.80	1.70	---	1.85	2.19	3.15	1.63	.47	.85	.99	1.26
19	1.82	1.78	1.67	---	1.85	2.17	3.07	1.58	.47	.96	.91	1.25
20	1.90	1.77	1.66	---	1.85	2.13	2.99	1.54	.48	1.02	.84	1.23
21	1.97	1.75	1.64	---	1.91	2.11	2.91	1.50	.70	1.09	.82	1.20
22	1.99	1.74	---	---	1.97	2.10	2.83	1.46	.59	1.06	.80	1.20
23	2.00	1.73	---	---	2.02	2.10	2.75	1.42	.38	1.01	.83	1.22
24	1.99	1.72	---	---	2.05	2.09	2.65	1.41	.32	.98	.81	1.27
25	1.95	1.69	---	---	2.07	2.08	2.55	1.40	.32	.99	.76	1.32
26	1.90	1.64	---	---	2.07	2.07	2.49	1.37	.31	1.03	.73	1.35
27	1.86	1.59	---	---	2.07	2.10	2.43	1.34	.32	1.02	.72	1.36
28	1.82	1.55	---	---	2.09	2.16	2.38	1.32	.35	.98	.71	1.35
29	1.80	1.56	---	---	---	2.33	2.32	1.31	.40	.89	.66	1.34
30	1.79	1.69	---	---	---	2.61	2.28	1.32	.50	.81	.60	1.35
31	1.79	---	---	---	---	2.89	---	1.35	---	.76	.53	---
MEAN	1.70	1.77	---	---	---	2.20	3.18	1.68	---	.76	.70	1.19
MAX	2.00	1.92	---	---	---	2.89	3.76	2.24	---	1.09	1.09	1.36
MIN	1.41	1.55	---	---	---	2.07	2.28	1.31	---	.47	.33	.49

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02234814 LAKE WEKIVA NEAR MAITLAND, FL

LOCATION.--Lat 28°36'09", long 81°25'38", in SW¼ sec.4, T.22 S., R.29 E., Orange County, Hydrologic Unit 03080101, near right bank on downstream side of bridge at Lake Wekiva outlet, 110 ft upstream from concrete control structure, 0.4 mi upstream from culvert on U.S. Highway 441, and 4.2 mi southwest of Maitland.

SURFACE AREA.--190 acres (0.30 mi²).

DRAINAGE AREA.--13.4 mi².

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Dec. 10, 1975, at datum 81.93 ft higher.

REMARKS.--Lake level controlled by concrete control structure with removable boards. Since Aug. 11, 1972, undetermined amount of water diverted through drop culvert and underground pipe line to Horseshoe Lake, 2 mi west, for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 87.04 ft, June 30, 1974; minimum daily, 82.09 ft, July 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 85.58 ft, Apr. 1, but may have been higher during period of missing record Mar. 29 to Apr. 1; minimum daily elevation recorded, 83.17 ft, Dec. 22.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.51	83.64	83.39	83.56	83.37	83.63	---	83.42	83.63	83.84	83.91	83.58
2	83.56	83.71	83.55	83.61	83.36	83.77	84.47	83.39	83.62	83.80	83.85	83.53
3	83.57	83.73	83.59	83.60	83.34	83.77	84.29	83.36	83.61	83.79	83.81	83.57
4	83.57	83.72	83.56	83.64	83.32	83.74	84.17	83.34	83.59	84.01	83.79	84.21
5	83.56	83.69	83.52	83.72	83.31	83.70	84.04	83.32	83.59	83.92	83.78	84.43
6	83.55	83.66	83.48	83.72	83.36	83.66	83.95	83.30	83.60	83.89	83.76	84.32
7	83.74	83.63	83.46	83.70	83.43	83.93	83.90	83.28	83.60	83.98	83.77	84.17
8	83.84	83.59	83.44	83.67	83.82	84.21	83.87	83.27	83.59	83.90	83.72	84.06
9	83.85	83.55	83.43	83.64	83.84	84.12	83.84	83.27	83.57	83.84	83.65	84.04
10	84.33	83.52	83.41	83.62	83.80	83.99	83.82	83.33	83.56	83.78	83.66	83.98
11	84.28	83.49	83.39	83.58	83.76	83.88	83.80	83.36	---	83.74	83.82	83.93
12	84.13	83.47	83.37	83.53	83.72	83.80	83.77	83.38	---	83.82	83.83	84.06
13	84.00	83.44	83.34	83.48	83.68	83.74	83.76	83.50	---	83.76	83.80	84.08
14	83.92	83.40	83.31	83.45	83.64	83.70	83.74	83.68	---	83.72	83.76	84.03
15	83.84	83.37	83.29	83.43	83.60	83.67	83.82	83.88	83.32	83.73	83.74	83.96
16	83.77	83.36	83.27	83.40	83.67	83.65	83.95	83.89	83.29	83.77	83.69	83.90
17	83.71	83.34	83.25	83.38	83.70	83.63	83.91	83.87	83.25	83.84	83.64	83.85
18	83.66	83.33	83.24	83.37	83.69	83.61	83.84	83.87	83.22	83.83	83.59	83.88
19	83.62	83.32	83.22	83.36	83.66	83.64	83.79	83.89	83.22	83.84	83.55	83.84
20	83.59	83.31	83.22	83.35	83.62	83.63	83.75	83.86	83.24	83.99	83.55	83.84
21	83.55	83.28	83.20	83.40	83.62	83.62	83.72	83.83	83.26	84.26	84.08	83.81
22	83.53	83.26	83.17	83.53	83.64	83.61	83.70	83.80	83.29	84.21	84.14	83.79
23	83.51	83.24	83.19	83.60	83.64	83.58	83.67	83.78	83.83	84.09	84.06	83.76
24	83.49	83.22	83.23	83.59	83.62	83.57	83.65	83.76	83.97	83.97	83.95	83.73
25	83.48	83.23	83.24	83.59	83.61	83.56	83.61	83.74	83.90	83.93	83.87	83.70
26	83.47	83.23	83.24	83.60	83.59	83.70	83.56	83.72	83.81	84.36	83.81	83.66
27	83.56	83.22	83.23	83.57	83.57	84.15	83.52	83.70	83.77	84.26	83.76	83.62
28	83.61	83.21	83.21	83.53	83.55	84.37	83.49	83.69	83.72	84.24	83.72	83.59
29	83.61	83.21	83.20	83.50	---	---	83.49	83.67	83.75	84.15	83.68	83.55
30	83.61	83.28	83.18	83.48	---	---	83.46	83.65	83.77	84.08	83.66	83.54
31	83.61	---	83.24	83.45	---	---	---	83.64	---	83.97	83.62	---
MEAN	83.7	83.4	83.3	83.5	83.6	---	83.9	83.6	---	83.9	83.8	83.9
MAX	84.33	83.73	83.59	83.72	83.84	---	85.58	83.89	---	84.36	84.14	84.43
MIN	83.47	83.21	83.17	83.35	83.31	---	83.46	83.27	---	83.72	83.55	83.53

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

LOCATION.--Lat 28°48'39", long 81°31'23", in NW¼ sec.28, T.19 S., R.28 E., Lake County, Hydrologic Unit 03080101, on west shore of northeast bay of lake, 0.7 mi east of Mount Plymouth.

DRAINAGE AREA, --1.30 mi².

GAGE.--Nonrecording gage. Datum of gage is 50.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 53.92 ft, May 18; minimum observed, 52.20 ft, Aug. 31.

[illegible]

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN ABOVE OKLAWAHA RIVER

02236119 LAKE ODOM NEAR DE LEON SPRINGS, FL

LOCATION.--Lat 29°09'25", long 81°21'22", in NW¼ sec.36, T.15 S., R.29 E., Volusia County, Hydrologic Unit 03080101, on southwest shore of lake, 1.2 mi north of intersection of Lake Winona Road and State Highway 17, and 2.5 mi north of De Leon Springs.

SURFACE AREA.--66.0 acres (0.10 mi²).

DRAINAGE AREA.--1.33 mi².

PERIOD OF RECORD.--November 1980 to September 1981, incomplete; October 1981 to current year (fragmentary).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 30.47 ft, Mar. 23, 1983; minimum observed, 22.01 ft, June 26, 1981.

ELEVATION, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			JUN		
23...	1430	24.92	08...	1350	24.89
FEB			JUL		
13...	1335	24.59	31...	1030	25.30
MAR			AUG		
04...	1600	24.85	06...	1215	25.48
APR			SEP		
15...	1110	25.47	25...	1440	25.86

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02236200 LAKE KERR NEAR EUREKA, FL

LOCATION.--Lat 29°20'10", long 81°46'00", in NE¼ sec.26, T.13 S., R.25 E., Marion County, Hydrologic Unit 03080101, on south shore of lake, 2.5 mi southwest of Salt Springs, and 9 mi southeast of Eureka.

SURFACE AREA.--4,484 acres (7.01 mi²).

DRAINAGE AREA.--102 mi².

PERIOD OF RECORD.--April 1936 to April 1950 (monthly); July 1950 to June 1952, October 1955 to March 1960; April 1960 to September 1961 (weekly), incomplete; October 1961 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-75-1: Surface area, drainage area.

GAGE.--Water-state recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to July 1, 1950, nonrecording gage at site approximately 3 mi northwest on north shore of lake at datum 21.09 ft higher. July 1, 1950 to Dec. 1, 1955, nonrecording gage at present site at datum 21.50 ft higher and Dec. 2, 1955, to Oct. 10, 1961, at present datum.

REMARKS.--Lake is interconnected with Little Lake Kerr (formerly Lake Warner) during high-water periods.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 27.00 ft, Oct. 11, 1966; minimum daily, 19.92 ft, May 10, 1957.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.68	22.51	22.46	22.51	22.47	22.87	23.66	23.32	23.06	22.82	22.59	22.42
2	22.66	22.50	22.47	22.50	22.46	22.89	23.66	23.31	23.05	22.81	22.59	22.42
3	22.64	22.49	22.47	22.48	22.47	22.88	23.65	23.29	23.03	22.84	22.58	22.42
4	22.63	22.48	22.44	22.50	22.46	22.87	23.63	23.28	23.04	22.83	22.57	22.46
5	22.61	22.47	22.42	22.52	22.54	22.85	23.61	23.28	23.05	22.83	22.56	22.50
6	22.60	22.47	22.40	22.50	22.74	22.84	23.60	23.28	23.04	22.82	22.55	22.62
7	22.61	22.46	22.39	22.50	22.75	22.90	23.59	23.26	23.00	22.82	22.53	22.62
8	22.60	22.45	22.39	22.50	22.74	22.96	23.58	23.25	22.98	22.81	22.52	22.61
9	22.60	22.45	22.39	22.49	22.73	22.95	23.57	23.26	22.96	22.79	22.51	22.60
10	22.59	22.44	22.39	22.49	22.71	22.94	23.56	23.25	22.95	22.78	22.51	22.59
11	22.58	22.43	22.47	22.48	22.70	22.92	23.55	23.24	22.93	22.77	22.51	22.59
12	22.57	22.43	22.48	22.46	22.70	22.91	23.54	23.25	22.91	22.75	22.51	22.62
13	22.56	22.42	22.48	22.44	22.70	22.89	23.54	23.24	22.96	22.74	22.52	22.69
14	22.57	22.39	22.46	22.44	22.69	22.88	23.53	23.24	22.95	22.72	22.54	22.71
15	22.63	22.37	22.45	22.44	22.69	22.87	23.53	23.26	22.94	22.70	22.55	22.70
16	22.61	22.36	22.46	22.44	22.71	22.87	23.53	23.25	22.92	22.69	22.54	22.69
17	22.58	22.35	22.45	22.44	22.71	22.86	23.51	23.23	22.91	22.68	22.53	22.68
18	22.55	22.35	22.45	22.44	22.70	22.86	23.50	23.23	22.89	22.67	22.53	22.66
19	22.52	22.35	22.44	22.44	22.69	22.87	23.49	23.25	22.88	22.65	22.52	22.68
20	22.49	22.37	22.44	22.45	22.68	22.86	23.48	23.26	22.86	22.66	22.50	22.71
21	22.47	22.36	22.42	22.47	22.76	22.85	23.47	23.25	22.85	22.70	22.49	22.73
22	22.45	22.34	22.41	22.53	22.82	22.84	23.46	23.24	22.83	22.69	22.47	22.71
23	22.44	22.33	22.43	22.52	22.84	22.82	23.45	23.23	22.82	22.68	22.45	22.70
24	22.43	22.33	22.48	22.50	22.84	22.81	23.44	23.21	22.83	22.67	22.43	22.68
25	22.42	22.32	22.48	22.51	22.84	22.83	23.42	23.19	22.81	22.65	22.41	22.66
26	22.43	22.31	22.46	22.52	22.84	22.89	23.40	23.17	22.78	22.63	22.39	22.64
27	22.46	22.31	22.45	22.50	22.83	22.97	23.38	23.15	22.79	22.63	22.37	22.62
28	22.45	22.30	22.44	22.48	22.83	23.35	23.36	23.13	22.83	22.61	22.36	22.60
29	22.46	22.30	22.43	22.48	---	23.45	23.35	23.11	22.83	22.59	22.34	22.59
30	22.49	22.38	22.42	22.48	---	23.60	23.33	23.09	22.83	22.57	22.33	22.61
31	22.49	---	22.44	22.48	---	23.69	---	23.07	---	22.58	22.32	---
MEAN	22.54	22.39	22.44	22.48	22.70	22.96	23.51	23.23	22.92	22.72	22.49	22.62
MAX	22.68	22.51	22.48	22.53	22.84	23.69	23.66	23.32	23.06	22.84	22.59	22.73
MIN	22.42	22.30	22.39	22.44	22.46	22.81	23.33	23.07	22.78	22.57	22.32	22.42

WTR YR 1987 MEAN 22.75 MAX 23.69 MIN 22.30

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02236210 LAKE GEORGE NEAR SALT SPRINGS, FL

LOCATION.--Lat 29°17'41", long 81°39'05", in NW¼ sec.12, T.14 S., R.26 E., Marion County, Hydrologic Unit 03080101, on west shore of lake, on private pier, 6.5 mi southeast of Salt Springs.

SURFACE AREA.--46,780 acres (73.1 mi²).

DRAINAGE AREA.--3,721 mi².

PERIOD OF RECORD.--May 1936 to April 1950 (monthly); August 1972 to current year (incomplete). Records of elevations prior to August 1972 are unpublished and available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-75-1: Surface area, drainage area.

GAGE.--Water-state recorder. Datum of gage is National Geodetic Vertical Datum of 1929. May 1936 to April 1950, nonrecording gage on east side of lake at datum 2.91 ft lower. Aug. 1972, to Feb. 1981, at site 300 ft north at present datum.

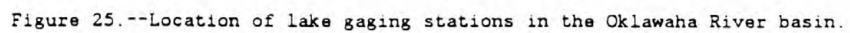
REMARKS.--Elevation at gage subject to fluctuations caused by wind action and tide.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 4.3 ft, occurred sometime during October 1948; minimum daily, -0.49 ft, Feb. 7, 1976.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.71	1.39	1.36	1.41	.52	1.56	1.98	1.16	.83	.26	.32	.25
2	.69	1.40	1.44	1.43	.46	1.49	1.94	.97	.68	.19	.25	.33
3	.66	1.39	1.39	1.38	.43	1.43	1.81	.87	.52	.07	.19	.42
4	.62	1.45	1.32	1.30	.44	1.40	1.63	.77	.39	.00	.17	.56
5	.57	1.47	1.29	1.48	.73	1.41	1.45	.73	.40	.00	.08	.71
6	.57	1.41	1.43	1.79	1.26	1.50	1.30	1.02	.55	-.01	.01	.79
7	.67	1.31	1.50	1.81	1.43	1.68	1.20	1.12	.73	.02	-.04	.91
8	.77	1.23	1.45	1.64	1.53	1.66	1.11	1.08	.75	.12	-.03	.95
9	.81	1.16	1.31	1.47	1.46	1.42	1.04	1.09	.69	.15	.06	.93
10	.82	1.10	1.14	1.31	1.37	1.22	.99	1.15	.57	.19	.17	.84
11	.86	1.10	.99	1.08	1.24	1.34	.97	1.11	.44	.24	.23	.76
12	1.09	1.09	.87	.86	1.05	1.49	.96	1.04	.39	.26	.33	.71
13	1.21	1.14	.87	.65	.88	1.55	.90	1.01	.37	.35	.52	.66
14	1.15	1.35	1.11	.60	.83	1.56	.84	1.01	.30	.40	.76	.59
15	1.10	1.44	1.25	.62	.84	1.56	.79	1.01	.24	.43	.89	.56
16	1.13	1.39	1.28	.61	.90	1.50	.79	.97	.18	.45	.83	.56
17	1.20	1.23	1.25	.67	1.12	1.47	.84	.93	.15	.53	.70	.58
18	1.30	1.08	1.19	.85	1.24	1.53	.96	.88	.15	.68	.58	.54
19	1.46	1.09	1.16	.89	1.27	1.50	1.08	.81	.15	.82	.47	.46
20	1.54	1.15	1.13	.82	1.31	1.55	1.16	.72	.15	.83	.43	.40
21	1.54	1.20	1.17	.79	1.43	1.56	1.17	.63	.13	.83	.45	.47
22	1.48	1.16	1.38	.82	1.55	1.49	1.16	.72	.06	.72	.54	.61
23	1.41	1.15	1.58	.82	1.58	1.52	1.17	.86	.04	.64	.58	.73
24	1.29	1.11	1.57	.68	1.52	1.51	1.14	.89	.04	.68	.50	.83
25	1.12	1.00	1.42	.54	1.48	1.45	1.14	.85	.04	.75	.45	.90
26	.98	.85	1.28	.44	1.53	1.42	1.24	.80	.06	.78	.48	.91
27	.99	.79	1.20	.49	1.61	1.49	1.31	.77	.07	.73	.49	.88
28	1.02	.82	1.29	.57	1.62	1.72	1.29	.85	.08	.55	.43	.87
29	1.06	1.01	1.36	.61	---	1.78	1.29	.94	.18	.39	.32	.87
30	1.13	1.23	1.39	.59	---	1.89	1.32	.97	.26	.31	.20	.82
31	1.28	---	1.43	.50	---	1.96	---	.94	---	.34	.16	---
MEAN	1.04	1.19	1.28	.95	1.17	1.54	1.20	.92	.32	.41	.37	.68
MAX	1.54	1.47	1.58	1.81	1.62	1.96	1.98	1.16	.83	.83	.89	.95
MIN	.57	.79	.87	.44	.43	1.22	.79	.63	.04	-.01	-.04	.25

CAL YR 1986 MEAN .83 MAX 1.87 MIN -.03
WTR YR 1987 MEAN .92 MAX 1.98 MIN -.04



ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236250 LAKE LOWERY NEAR HAINES CITY, FL

LOCATION.--Lat 28°06'51" long 81°40'17", in SW¼ sec.24, T.27 S., R.26 E., Polk County, Hydrologic Unit 03080102, at southeast end of stub canal on south side of lake, at Fletcher's Fish Camp, 2.5 mi northwest of Haines City.

SURFACE AREA.--897 acres (1.40 mi²).

DRAINAGE AREA.--5.4 mi², approximately.

PERIOD OF RECORD.--June 1960 to September 1975, October 1975 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is 122.86 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Aug. 28, 1974, at site 50 ft northeast at same datum.

REMARKS.--Lake is one of a group of lakes in the southern part of an extensive area of swampy flatlands and sandy ridges at relatively high elevation, called the Green Swamp. Streams that flow into five major drainage systems originate in or near the Green Swamp area.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 133.32 ft, Sept. 11, 1960, from floodmark; minimum observed, 125.12 ft, May 27, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 128.68 ft, Oct. 1, occurred on general recession; minimum observed, 127.26 ft, Aug. 28.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128.68	---	---	---	127.96	127.98	---	---	127.76	---	---	---
2	---	128.26	---	---	---	---	---	---	---	---	127.96	---
3	---	---	---	---	---	---	---	128.36	---	---	---	---
4	---	---	---	128.04	---	---	---	128.24	---	---	---	---
5	128.66	---	---	---	---	---	128.58	---	---	127.76	---	---
6	---	---	---	---	---	---	---	---	---	---	---	128.06
7	---	---	128.06	---	---	---	---	---	127.66	---	---	---
8	---	---	---	---	127.96	127.98	---	---	---	---	---	---
9	---	128.26	---	---	---	---	---	---	---	127.74	127.86	---
10	---	---	---	---	---	---	---	128.26	---	---	---	---
11	---	---	---	128.12	---	---	---	---	---	---	---	---
12	128.56	---	---	128.08	---	---	128.56	---	---	127.56	---	---
13	---	---	---	---	---	---	---	---	---	---	---	128.12
14	---	---	128.04	---	---	---	---	---	127.56	---	---	---
15	---	---	---	---	127.92	127.94	---	---	---	---	---	---
16	---	128.20	---	---	---	127.94	---	---	---	---	127.94	---
17	---	---	---	---	---	---	---	128.16	---	---	---	---
18	---	---	---	128.06	---	---	---	---	---	---	---	---
19	128.36	128.24	---	---	---	---	128.51	---	---	127.66	---	---
20	---	---	---	---	---	---	---	---	---	---	---	128.06
21	---	---	127.94	---	---	---	---	---	127.46	---	127.66	---
22	---	---	---	---	127.96	127.96	---	---	---	---	---	---
23	---	128.16	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	127.96	---	---	---	---
25	---	---	---	128.04	---	---	---	---	---	---	---	---
26	128.26	---	---	---	---	---	128.36	---	---	127.96	---	---
27	---	---	---	---	---	---	---	---	---	---	---	127.96
28	---	---	127.96	---	---	---	---	---	127.36	---	127.26	---
29	---	---	---	---	---	128.06	---	---	---	---	---	---
30	---	128.14	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	127.86	---	---	---	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236808 LAKE NELLIE NEAR CLERMONT, FL

LOCATION.--Lat 28°27'53", long 81°45'57", in SW¼ sec.24, T.23 S., R.25 E., Lake County, Hydrologic Unit 03080102, on private pier on southeast shore of lake, 1.8 mi east of State Highway 561, and 5.6 mi south of Clermont.

SURFACE AREA.--704 acres (1.1 mi²).

DRAINAGE AREA.--13.3 mi².

PERIOD OF RECORD.--July 1979 to September 1985 (weekly), incomplete; October 1985 to current year (fragmentary).

REVISED RECORDS.--WDR FL-81-1: 1979,1980.

GAGE.--Nonrecording gage. Datum of gage is 90.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. July 18, 1979, to Dec. 3, 1980, at site 0.4 mi north at datum 5.00 ft higher, and Dec. 3, 1980 to July 16, 1981, at present site at datum 5.00 ft higher.

REMARKS.--Lake is one of the Palatlakaha River headwaters chain of lakes. Lake is landlocked except above an elevation of about 98.5 ft, when there is flow through Lake Nellie Outlet into Lake Louisa. There is some pumpage from the lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 100.82 ft, Mar. 28,31, Apr. 2, 1983, Feb. 5, 1986; minimum observed, 95.72 ft, June 20, 1981.

ELEVATION, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
NOV			APR		
05...	1520	99.56	23...	0830	100.72
DEC			JUN		
22...	1435	99.30	15...	1105	99.96
FEB			AUG		
18...	1230	99.48	11...	1400	99.47
MAR					
31...	1435	100.42			

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02236840 LAKE MINNEHAHA AT CLERMONT, FL

LOCATION.--Lat 28°32'38", long 81°47'05", in NW¼ sec.26, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, on northwest side of lake in cypress cove, on southeast side of bridge on State Highway 561, at lake outlet, 1 mi southwest of Clermont.

SURFACE AREA.--2,410 acres (3.77 mi²).

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--May 1945 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to June 5, 1946, nonrecording gage, and June 5, 1946, to Dec. 8, 1969, water-stage recorder, at site 1.8 mi east on north shore of lake. Gage at datum 91.32 ft higher May 31, 1945 to Aug. 20, 1955.

REMARKS.--Lake is one of the Palatkatka River headwaters chain of lakes. Since 1956, lake level partly controlled by earthen dam and concrete spillway with radial lift gates at outlet of Cherry Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 99.04 ft, Apr. 5, 1960; minimum daily, 92.49 ft, Dec. 20-25, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96.41	96.04	95.88	95.82	95.84	96.08	96.93	96.64	96.58	96.41	96.17	95.81
2	96.40	96.03	95.87	95.81	95.83	96.12	96.96	96.63	96.57	96.40	96.15	95.79
3	96.38	96.02	95.85	95.81	95.83	96.11	97.01	96.63	96.55	96.42	96.15	95.81
4	96.36	96.01	95.82	95.83	95.82	96.11	97.03	96.62	96.54	96.42	96.15	95.90
5	96.34	96.00	95.79	95.83	95.82	96.09	97.04	96.61	96.52	96.40	96.13	95.91
6	96.33	96.00	95.78	95.83	95.86	96.08	97.06	96.61	96.52	96.40	96.12	95.92
7	96.34	95.99	95.77	95.83	95.89	96.16	97.07	96.59	96.50	96.42	96.10	95.94
8	96.33	95.98	95.77	95.83	95.98	96.20	97.08	96.58	96.47	96.42	96.08	95.92
9	96.31	95.97	95.76	95.83	95.96	96.20	97.07	96.58	96.45	96.40	96.06	95.92
10	96.30	95.96	95.76	95.83	95.95	96.19	97.06	96.58	96.43	96.38	96.04	95.90
11	96.30	95.95	95.83	95.81	95.95	96.18	97.05	96.59	96.42	96.37	96.06	95.89
12	96.29	95.94	95.82	95.79	95.93	96.17	97.03	96.63	96.40	96.35	96.11	95.90
13	96.27	95.93	95.81	95.78	95.93	96.15	97.02	96.62	96.45	96.34	96.09	95.98
14	96.26	95.90	95.80	95.78	95.93	96.14	97.00	96.62	96.47	96.33	96.09	95.98
15	96.26	95.88	95.79	95.78	95.93	96.14	97.00	96.68	96.45	96.31	96.10	95.98
16	96.22	95.87	95.78	95.78	95.98	96.13	97.00	96.70	96.44	96.30	96.10	95.97
17	96.19	95.87	95.77	95.78	96.00	96.13	96.96	96.71	96.42	96.29	96.09	95.95
18	96.16	95.88	95.76	95.78	96.01	96.12	96.92	96.70	96.41	96.27	96.07	95.93
19	96.13	95.89	95.76	95.78	96.01	96.14	96.89	96.72	96.41	96.26	96.05	95.92
20	96.10	95.89	95.75	95.78	96.00	96.14	96.85	96.76	96.39	96.28	96.04	95.90
21	96.08	95.87	95.74	95.83	96.01	96.13	96.82	96.75	96.39	96.29	96.04	95.90
22	96.06	95.86	95.72	95.88	96.02	96.12	96.79	96.74	96.37	96.27	96.02	95.89
23	96.05	95.84	95.74	95.88	96.03	96.11	96.76	96.73	96.34	96.25	96.00	95.87
24	96.04	95.84	95.78	95.87	96.03	96.11	96.73	96.72	96.32	96.23	95.98	95.85
25	96.02	95.84	95.78	95.88	96.04	96.10	96.71	96.71	96.30	96.22	95.95	95.84
26	96.01	95.83	95.77	95.88	96.04	96.22	96.69	96.69	96.30	96.27	95.93	95.82
27	96.02	95.82	95.75	95.86	96.04	96.37	96.69	96.67	96.31	96.25	95.91	95.79
28	96.02	95.81	95.74	95.85	96.04	96.45	96.67	96.65	96.34	96.23	95.89	95.78
29	96.02	95.81	95.73	95.86	---	96.57	96.67	96.63	96.39	96.22	95.87	95.77
30	96.02	95.86	95.71	95.85	---	96.77	96.66	96.61	96.38	96.20	95.85	95.78
31	96.02	---	95.75	95.84	---	96.90	---	96.60	---	96.18	95.83	---
MEAN	96.19	95.91	95.78	95.82	95.95	96.21	96.91	96.65	96.43	96.32	96.04	95.88
MAX	96.41	96.04	95.88	95.88	96.04	96.90	97.08	96.76	96.58	96.42	96.17	95.98
MIN	96.01	95.81	95.71	95.78	95.82	96.08	96.66	96.58	96.30	96.18	95.83	95.77

CAL YR 1986 MEAN 96.20 MAX 96.97 MIN 95.56
WTR YR 1987 MEAN 96.18 MAX 97.08 MIN 95.71

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02236860 LAKE APSHAWA NEAR MINNEOLA, FL

LOCATION.--Lat 28°36'13", long 81°46'36", in NE¼ sec.2, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, on northwest shore of south portion of lake, 2.8 mi northwest of Minneola.

SURFACE AREA.--110 acres (0.17 mi²).

DRAINAGE AREA.--1.48 mi².

PERIOD OF RECORD.--April 1953 to December 1984 (weekly) incomplete, January 1985 to current year (once-daily). Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Surface area, drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1968, nonrecording gage at site 1,500 ft northwest at datum 86.16 ft higher. Feb. 9, 1968 to Jan. 19, 1985, nonrecording gage at site 800 ft east at present datum.

REMARKS.--Lake has no surface outlet. There is some pumpage from the lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 92.68 ft, Oct. 8, 15, 1960; minimum observed, 82.10 ft, Nov. 17, 1977.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85.30	85.09	85.04	85.11	85.11	85.34	86.16	86.10	85.93	85.91	85.78	85.49
2	85.29	85.09	85.04	85.10	85.10	85.41	86.16	86.10	85.92	85.90	85.76	85.47
3	85.27	85.08	85.03	85.09	85.09	85.40	86.16	86.09	85.91	85.94	85.75	85.45
4	85.26	85.08	85.00	85.08	85.08	85.40	86.17	86.08	85.90	85.94	85.74	85.59
5	85.25	85.07	84.97	85.13	85.08	85.38	86.16	86.08	85.88	85.93	85.73	85.61
6	85.23	85.07	84.96	85.12	85.15	85.36	86.15	86.07	85.88	85.90	85.71	85.61
7	85.23	85.07	84.95	85.11	85.17	85.41	86.15	86.07	85.86	85.97	85.70	85.60
8	85.21	85.06	84.94	85.12	85.28	85.54	86.16	86.06	85.83	85.97	85.68	85.59
9	85.20	85.05	84.94	85.11	85.27	85.53	86.16	86.05	85.81	85.96	85.66	85.59
10	85.19	85.05	84.94	85.11	85.26	85.52	86.16	86.04	85.80	85.95	85.64	85.58
11	85.19	85.03	85.03	85.11	85.25	85.51	86.16	86.05	85.78	85.93	85.64	85.56
12	85.18	85.02	85.04	85.09	85.24	85.49	86.16	86.11	85.76	85.91	85.68	85.56
13	85.17	85.02	85.04	85.07	85.23	85.48	86.17	86.11	85.85	85.89	85.66	85.76
14	85.16	85.00	85.01	85.07	85.23	85.47	86.17	86.10	85.96	85.87	85.67	85.76
15	85.17	84.98	85.01	85.06	85.22	85.46	86.20	86.16	85.95	85.85	85.78	85.75
16	85.14	84.97	85.01	85.06	85.28	85.46	86.23	86.16	85.94	85.85	85.70	85.74
17	85.11	84.97	85.00	85.06	85.30	85.46	86.20	86.16	85.92	85.83	85.79	85.73
18	85.09	84.96	84.99	85.06	85.31	85.44	86.22	86.15	85.94	85.82	85.68	85.72
19	85.06	84.98	84.99	85.06	85.30	85.46	86.21	86.14	85.93	85.80	85.76	85.70
20	85.03	84.98	84.99	85.05	85.29	85.45	86.20	86.15	85.91	85.82	85.73	85.68
21	85.01	84.97	84.98	85.08	85.29	85.45	86.20	86.14	85.92	85.81	85.79	85.67
22	85.00	84.95	84.96	85.10	85.33	85.44	86.20	86.13	85.89	85.80	85.77	85.65
23	84.99	84.94	84.96	85.16	85.35	85.44	86.20	86.12	85.88	85.79	85.65	85.63
24	84.98	84.94	85.04	85.15	85.33	85.42	86.19	86.10	85.86	85.77	85.63	85.61
25	84.97	85.02	85.04	85.14	85.34	85.41	86.18	86.08	85.85	85.75	85.61	85.59
26	84.97	85.01	85.03	85.16	85.34	85.51	86.16	86.00	85.82	85.88	85.59	85.57
27	84.97	85.01	85.01	85.15	85.34	85.66	86.15	86.04	85.83	85.87	85.57	85.55
28	84.98	85.01	85.00	85.13	85.34	85.75	86.14	86.03	85.82	85.86	85.55	85.52
29	84.98	85.00	84.99	85.12	---	85.86	86.12	85.99	85.89	85.83	85.53	85.51
30	84.99	85.01	84.98	85.12	---	86.05	86.11	85.97	85.88	85.82	85.51	85.49
31	84.99	---	84.97	85.12	---	86.17	---	85.95	---	85.80	85.50	---
MEAN	85.11	85.02	85.00	85.10	85.25	85.52	86.17	86.08	85.88	85.87	85.68	85.61
MAX	85.30	85.09	85.04	85.16	85.35	86.17	86.23	86.16	85.96	85.97	85.79	85.76
MIN	84.97	84.94	84.94	85.05	85.08	85.34	86.11	85.95	85.76	85.75	85.50	85.45

CAL YR 1986 MEAN 84.88 MAX 85.48 MIN 84.01
WTR YR 1987 MEAN 85.52 MAX 86.23 MIN 84.94

LOCATION.--Lat 28°35'33", long 81°49'21", in NE¼ sec.8, T.22 S., R.25 E., Lake County, Hydrologic Unit 03080102, on southwest shore of lake, 21 ft upstream from spillway at outlet, and 3 mi northeast of Groveland.

DRAINAGE AREA.--165 mi².

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

REMARKS.--Lake is one of the Palatlahkaha River headwaters chain of lakes. Since 1956, lake level controlled by earthen dam and concrete spillway with radial lift gates at outlet. An undetermined amount of water is diverted at times through a gated culvert in dam for irrigation.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96.33	95.95	95.77	95.75	95.75	95.99	96.62	96.56	96.51	96.31	96.10	95.76
2	96.32	95.95	95.77	95.74	95.75	96.02	96.60	96.56	96.50	96.33	96.08	95.74
3	96.30	95.93	95.76	95.73	95.75	96.01	96.54	96.55	96.49	96.34	96.07	95.76
4	96.28	95.92	95.73	95.75	95.74	96.01	96.44	96.55	96.48	96.34	96.07	95.84
5	96.26	95.92	95.70	95.75	95.74	95.99	96.39	96.54	96.46	96.32	96.06	95.84
6	96.25	95.91	95.68	95.74	95.78	95.98	96.33	96.53	96.45	96.32	96.05	95.84
7	96.26	95.91	95.66	95.73	95.80	96.06	96.07	96.51	96.43	96.34	96.05	95.83
8	96.25	95.90	95.66	95.74	95.87	96.11	95.82	96.51	96.40	96.35	96.02	95.85
9	96.24	95.89	95.67	95.74	95.85	96.09	95.76	96.50	96.38	96.34	95.99	95.85
10	96.23	95.89	95.67	95.74	95.85	96.07	95.71	96.50	96.36	96.31	95.96	95.84
11	96.22	95.87	95.75	95.73	95.85	96.07	95.67	96.52	96.35	96.30	95.97	95.83
12	96.20	95.86	95.75	95.70	95.84	96.06	95.65	96.56	96.36	96.27	96.03	95.88
13	96.19	95.85	95.73	95.69	95.83	96.04	95.63	96.56	96.39	96.26	96.02	96.00
14	96.18	95.81	95.70	95.69	95.83	96.03	95.62	96.57	96.41	96.25	96.01	95.95
15	96.17	95.78	95.70	95.70	95.83	96.03	95.66	96.60	96.39	96.24	96.02	95.92
16	96.13	95.77	95.69	95.70	95.90	96.03	95.67	96.61	96.37	96.23	96.04	95.91
17	96.10	95.77	95.68	95.70	95.92	96.03	95.64	96.63	96.36	96.22	96.03	95.89
18	96.07	95.78	95.68	95.70	95.92	96.04	95.61	96.62	96.35	96.20	96.01	95.87
19	96.03	95.80	95.67	95.70	95.91	96.05	95.54	96.64	96.35	96.18	96.00	95.85
20	96.00	95.80	95.67	95.70	95.90	96.04	95.56	96.65	96.34	96.20	95.98	95.83
21	95.98	95.78	95.65	95.73	95.91	96.03	95.79	96.66	96.34	96.20	95.97	95.82
22	95.97	95.76	95.64	95.78	95.92	96.02	95.97	96.66	96.32	96.19	95.96	95.81
23	95.95	95.75	95.65	95.77	95.93	96.03	96.26	96.65	96.28	96.18	95.94	95.80
24	95.95	95.75	95.71	95.76	95.93	96.02	96.43	96.65	96.26	96.15	95.92	95.78
25	95.95	95.75	95.71	95.78	95.93	96.06	96.51	96.64	96.23	96.15	95.90	95.77
26	95.94	95.75	95.70	95.79	95.94	96.25	96.55	96.61	96.23	96.18	95.88	95.75
27	95.94	95.74	95.68	95.76	95.94	96.29	96.57	96.60	96.24	96.19	95.85	95.74
28	95.94	95.73	95.67	95.75	95.94	96.35	96.57	96.58	96.25	96.16	95.84	95.72
29	95.93	95.72	95.65	95.76	---	96.46	96.58	96.56	96.30	96.15	95.81	95.70
30	95.93	95.73	95.64	95.76	---	96.62	96.57	96.54	96.30	96.14	95.80	95.71
31	95.94	---	95.68	95.75	---	96.66	---	96.52	---	96.12	95.78	---
MEAN	96.11	95.82	95.69	95.74	95.86	96.11	96.08	96.58	96.36	96.24	95.97	95.82
MAX	96.33	95.95	95.77	95.79	95.94	96.66	96.62	96.66	96.51	96.35	96.10	96.00
MIN	95.93	95.72	95.64	95.69	95.74	95.98	95.54	96.50	96.23	96.12	95.78	95.70
CAL YR 1986	MEAN 96.10		MAX 96.82	MIN 95.44								
WTR YR 1987	MEAN 96.03		MAX 96.66	MIN 95.54								

LOCATION.--Lat 28°48'14", long 81°52'24", in SE¼ sec.26, T.19 S., R.24 E., Lake County, Hydrologic Unit 03080102, on northwest shore of lake, at north side of concrete pier, 500 ft southeast of Leesburg Boat Club building in public park at Leesburg.

DRAINAGE AREA.--357 mi², includes Little Lake Harris.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Mar. 27, 1968, nonrecording gage at several sites within 700 ft northwest at following datums: June 1936, to April 1950, 61.09 ft higher; Aug. 9, 1956, to Aug. 21, 1961, 0.13 ft lower; Aug. 22, 1961, to Mar. 26, 1968, at present datum.

REMARKS.--Lake is one of the Oklawaha River headwaters chain of lakes. Since 1956, lake levels have been partially controlled by lock and dam structure with gated spillway on Haines Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 64.81 ft, Apr. 22,24,26,27, 1960; minimum observed, 58.87 ft. Sept. 17.19-21.25-29. Oct. 3. 1956.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.96	62.64	62.60	62.68	62.90	63.30	63.64	63.20	62.82	62.52	62.22	62.44
2	62.94	62.64	62.60	62.70	62.90	63.30	63.64	63.16	62.80	62.50	62.24	62.44
3	62.94	62.62	62.60	62.72	62.92	63.28	63.66	63.14	62.80	62.50	62.26	62.46
4	62.94	62.62	62.62	62.72	62.94	63.28	63.68	63.12	62.78	62.50	62.28	62.46
5	62.92	62.62	62.62	62.74	62.96	63.28	63.70	63.10	62.76	62.50	62.28	62.48
6	62.92	62.60	62.62	62.74	62.98	63.26	63.66	63.08	62.74	62.50	62.30	62.48
7	62.90	62.60	62.64	62.76	62.98	63.26	63.60	63.06	62.72	62.50	62.32	62.48
8	62.88	62.60	62.64	62.76	62.90	63.26	63.58	63.04	62.72	62.50	62.34	62.50
9	62.86	62.60	62.64	62.78	62.92	63.24	63.50	63.02	62.70	62.50	62.36	62.52
10	62.84	62.60	62.62	62.80	62.94	63.24	63.46	62.90	62.70	62.50	62.38	62.56
11	62.82	62.60	62.62	62.80	62.96	63.24	63.40	62.90	62.70	62.50	62.40	62.58
12	62.80	62.58	62.62	62.80	62.98	63.22	63.38	62.90	62.68	62.48	62.44	62.60
13	62.80	62.58	62.62	62.80	63.00	63.22	63.38	62.90	62.68	62.48	62.48	62.60
14	62.80	62.58	62.62	62.80	63.00	63.22	63.36	62.88	62.66	62.48	62.50	62.58
15	62.78	62.58	62.62	62.80	63.02	63.20	63.36	62.88	62.66	62.48	62.54	62.56
16	62.78	62.56	62.62	62.80	63.04	63.20	63.34	62.88	62.64	62.50	62.56	62.56
17	62.78	62.56	62.64	62.80	63.08	63.20	63.32	62.88	62.64	62.50	62.56	62.54
18	62.76	62.56	62.64	62.82	63.12	63.20	63.30	62.88	62.62	62.50	62.54	62.54
19	62.76	62.56	62.64	62.82	63.16	63.20	63.30	62.90	62.60	62.48	62.54	62.54
20	62.76	62.56	62.64	62.84	63.20	63.20	63.30	62.90	62.58	62.46	62.52	62.52
21	62.74	62.56	62.64	62.84	63.24	63.20	63.30	62.90	62.58	62.44	62.52	62.52
22	62.74	62.56	62.64	62.86	63.26	63.22	63.30	62.88	62.56	62.42	62.52	62.52
23	62.74	62.58	62.66	62.86	63.26	63.22	63.28	62.88	62.56	62.40	62.50	62.50
24	62.72	62.58	62.66	62.88	63.28	63.24	63.28	62.88	62.54	62.38	62.48	62.50
25	62.72	62.58	62.66	62.88	63.28	63.24	63.28	62.86	62.54	62.36	62.48	62.50
26	62.70	62.58	62.66	62.90	63.28	63.26	63.28	62.86	62.52	62.34	62.46	62.50
27	62.70	62.58	62.66	62.90	63.28	63.26	63.26	62.86	62.52	62.32	62.46	62.50
28	62.68	62.58	62.68	62.88	63.28	63.28	63.24	62.84	62.52	62.30	62.44	62.50
29	62.68	62.58	62.68	62.88	---	63.38	63.24	62.84	62.52	62.28	62.44	62.50
30	62.66	62.60	62.68	62.88	---	63.48	63.22	62.84	62.52	62.26	62.42	62.52
31	62.66	---	62.68	62.88	---	63.52	---	62.82	---	62.24	62.42	

CAL	YR	1986	MEAN	62.79	MAX	63.30	MIN	62.34
WTR	YR	1987	MEAN	62.79	MAX	63.70	MIN	62.22

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237540 JOHNS LAKE AT OAKLAND, FL

LOCATION.--Lat 28°32'28", long 81°38'32", in SE¼ sec.30, T.22 S., R.27 E., Orange County, Hydrologic Unit 03080102, on north shore of lake, 0.4 mi south of State Highway 50, and 1.0 mi southwest of Oakland.

SURFACE AREA.--2,411 acres (3.77 mi²).

DRAINAGE AREA.--40.1 mi².

PERIOD OF RECORD.--September 1959 to current year (twice weekly), incomplete. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is 81.93 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to Oct. 15, 1980, at several sites within 0.8 mi at datum 6.15 ft higher. Oct. 15, 1980 to May 20, 1981, at present site at datum 4.00 ft higher.

REMARKS.--Lake level partially controlled by culvert with lift gate on outlet canal to Lake Apopka. Outlet canal opened Sept. 30, 1959 and control installed in June or July 1960; culvert invert at about elevation 95.4 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 99.32 ft, Apr. 6, 1960; minimum observed, 85.57 ft, July 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 92.93 ft, Apr. 17; minimum observed, 90.77 ft, Dec. 22.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	91.14	---	---	---	---	92.38	---	---	---	92.12	91.76
2	---	---	90.97	---	---	---	---	92.73	92.69	---	---	---
3	---	---	---	90.83	90.81	91.28	---	---	---	---	---	---
4	91.46	91.10	---	---	---	---	92.70	---	---	92.40	92.06	---
5	---	91.11	---	---	---	---	---	92.69	---	---	---	91.84
6	---	---	90.93	90.83	---	---	---	---	92.71	---	---	---
7	---	---	---	---	90.84	91.34	92.80	---	---	92.28	---	---
8	91.40	91.08	---	---	---	---	---	---	---	---	92.02	91.81
9	---	---	90.93	---	---	---	---	92.77	92.67	---	---	---
10	---	---	---	90.83	91.02	91.38	---	---	---	---	---	---
11	91.38	90.98	---	---	---	---	92.84	---	---	92.28	92.02	---
12	---	---	---	---	---	---	---	92.79	---	---	---	91.79
13	---	---	90.89	90.85	---	---	---	---	92.63	---	---	---
14	91.40	---	---	---	90.98	91.34	92.90	---	---	92.26	---	---
15	---	90.92	---	---	---	---	---	---	92.50	---	92.04	91.81
16	---	---	90.85	---	---	---	---	92.73	92.49	---	---	---
17	---	---	---	90.83	90.98	91.36	92.93	---	---	---	---	---
18	91.26	90.98	---	---	90.94	---	---	---	---	92.26	92.02	---
19	---	---	---	---	---	---	---	92.77	---	---	---	91.79
20	---	---	90.81	90.83	---	---	---	---	92.43	---	---	---
21	91.20	---	---	---	91.06	91.36	92.89	---	---	92.20	---	---
22	---	90.96	90.77	---	---	---	---	---	92.41	---	91.98	91.67
23	---	---	90.79	---	---	---	---	92.81	---	---	---	---
24	---	---	---	90.83	91.06	91.38	---	---	---	---	---	---
25	91.14	90.91	---	---	---	---	92.81	---	---	92.16	91.88	---
26	---	---	---	---	---	---	---	92.73	---	---	---	91.61
27	---	---	90.81	90.81	---	---	---	---	92.41	---	---	---
28	91.10	---	---	---	91.06	91.70	92.79	---	---	92.16	---	---
29	---	91.01	---	---	---	---	---	---	---	---	91.76	---
30	---	---	90.81	---	---	---	---	92.69	92.40	---	---	91.61
31	---	---	---	90.79	---	92.54	---	---	---	---	---	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237600 LAKE APOPKA AT WINTER GARDEN, FL

LOCATION.--Lat 28°34'36", long 81°35'13", in NW¼ sec.14, T.22 S., R.27 E., Orange County, Hydrologic Unit 03080102, in southeast corner of west boat basin in public park at Winter Garden.

SURFACE AREA.--30,630 acres (47.9 mi²).

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--December 1935 to August 1942 (monthly), September 1942 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WRD FL 1965: Surface area, drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1942, nonrecording gage near present site on public pier at datum 66.25 ft higher. Sept. 18, 1942, to June 26, 1956, water-stage recorder at present site at datum 62.57 ft higher.

REMARKS.--Lake level partly regulated by lock and dam structure on Apopka-Beauclair Canal, 2.5 mi east of Astatula. Gate sills are at elevation 63.0 ft and fixed sheet piling weir at elevation 69.0 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 69.3 ft, Oct. 12, 1936; minimum daily, 64.04 ft, Aug. 13, 1956.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.56	66.38	66.35	66.50	66.56	67.02	68.02	67.01	66.67	66.37	66.42	66.37
2	66.55	66.37	66.36	66.50	66.53	67.10	67.98	66.98	66.65	66.36	66.39	66.36
3	66.54	66.37	66.43	66.43	66.57	67.08	67.97	66.94	66.63	66.40	66.45	66.38
4	66.52	66.36	66.40	66.41	66.57	67.09	68.07	66.93	66.61	66.43	66.53	66.46
5	66.52	66.33	66.40	66.67	66.57	67.08	67.95	66.93	66.60	66.42	66.54	66.50
6	66.49	66.33	66.36	66.51	66.64	67.03	67.87	66.94	66.58	66.39	66.53	66.51
7	66.51	66.31	66.33	66.47	66.70	67.10	67.84	66.90	66.54	66.43	66.51	66.52
8	66.49	66.29	66.29	66.48	66.94	67.23	67.83	66.89	66.50	66.51	66.49	66.53
9	66.47	66.30	66.28	66.48	66.96	67.27	67.78	66.88	66.48	66.48	66.50	66.51
10	66.52	66.29	66.29	66.47	66.85	67.29	67.73	66.84	66.46	66.47	66.50	66.51
11	66.53	66.27	66.29	66.61	66.83	67.25	67.69	66.84	66.46	66.44	66.56	66.48
12	66.52	66.28	66.33	66.53	66.85	67.24	67.65	66.86	66.48	66.42	66.58	66.53
13	66.49	66.34	66.41	66.47	66.85	67.25	67.59	66.85	66.47	66.40	66.60	66.66
14	66.48	66.30	66.33	66.43	66.83	67.18	67.55	66.86	66.47	66.38	66.58	66.68
15	66.52	66.27	66.32	66.42	66.80	67.16	67.59	66.90	66.46	66.34	66.57	66.65
16	66.52	66.22	66.32	66.43	66.89	67.16	67.58	66.92	66.44	66.33	66.56	66.65
17	66.47	66.22	66.31	66.44	66.93	67.13	67.55	66.90	66.41	66.33	66.56	66.64
18	66.45	66.21	66.31	66.43	66.95	67.09	67.50	66.89	66.45	66.31	66.56	66.65
19	66.41	66.24	66.30	66.44	66.97	67.16	67.43	66.90	66.51	66.31	66.55	66.64
20	66.39	66.24	66.32	66.47	66.96	67.16	67.38	66.96	66.50	66.35	66.53	66.62
21	66.35	66.25	66.35	66.52	66.97	67.15	67.33	66.95	66.46	66.35	66.54	66.61
22	66.32	66.20	66.30	66.64	66.98	67.13	67.31	66.93	66.45	66.35	66.52	66.59
23	66.28	66.18	66.24	66.69	67.04	67.09	67.27	66.90	66.45	66.34	66.51	66.60
24	66.26	66.19	66.33	66.56	66.98	67.02	67.26	66.87	66.44	66.30	66.48	66.59
25	66.25	66.20	66.35	66.53	67.00	67.04	67.24	66.85	66.41	66.29	66.45	66.54
26	66.27	66.19	66.34	66.69	66.99	67.15	67.18	66.84	66.34	66.29	66.45	66.51
27	66.30	66.21	66.35	66.68	67.00	67.27	67.13	66.80	66.35	66.35	66.42	66.50
28	66.32	66.22	66.36	66.57	66.95	67.40	67.11	66.79	66.37	66.34	66.41	66.49
29	66.30	66.22	66.34	66.57	---	67.57	67.06	66.76	66.39	66.33	66.40	66.49
30	66.33	66.30	66.35	66.58	---	67.82	67.04	66.73	66.38	66.31	66.38	66.49
31	66.32	---	66.33	66.64	---	68.14	---	66.70	---	66.42	66.36	---
MEAN	66.43	66.27	66.33	66.52	66.84	67.22	67.55	66.88	66.48	66.37	66.50	66.54
MAX	66.56	66.38	66.43	66.69	67.04	68.14	68.07	67.01	66.67	66.51	66.60	66.68
MIN	66.25	66.18	66.24	66.41	66.53	67.02	67.04	66.70	66.34	66.29	66.36	66.36

CAL YR 1986 MEAN 66.55 MAX 67.53 MIN 65.89
WTR YR 1987 MEAN 66.66 MAX 68.14 MIN 66.18

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02237660 LAKE FRANCIS NEAR PLYMOUTH, FL

LOCATION.--Lat 28°40'20", long 81°32'23", in NW¼ sec.32, T.20 S., R.28 E., Orange County, Hydrologic Unit 03080102, on north shore of lake at Errol Estate, 1.3 mi northeast of Plymouth.

SURFACE AREA.--33.0 acres (0.05 mi²).

DRAINAGE AREA.--0.67 mi².

PERIOD OF RECORD.--September 1959 to July 1963 (twice weekly), incomplete; August 1963 to August 1964 (fragmentary); September 1964 to June 1967 (weekly), incomplete; July 1967 to current year (fragmentary). Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office. Prior to January 1961, published as Lake Wenonah near Plymouth.

REVISED RECORDS.--WRD FL 1965: Surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 8, 1971, at site 1,400 ft south at datum 54.40 ft higher and Oct. 8, 1971, to Feb. 23, 1982 at present site at datum 54.40 ft higher.

REMARKS.--Lake is landlocked. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 66.22 ft, Oct. 15,17,24,29, 1960, present datum; minimum observed, 53.30 ft, June 24, 1981, present datum.

ELEVATION, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
NOV			APR		
12...	1705	57.66	22...	1200	58.78
DEC			JUN		
23...	1340	58.53	16...	1320	58.05
FEB			AUG		
19...	1520	58.29	14...	1550	58.04

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02237753 WEST CROOKED LAKE NEAR EUSTIS, FL

LOCATION.--Lat 28°49'49", long 81°40'20", in SW¼ sec.13, T.19 S., R.26 E., Lake County, Hydrologic Unit 03080102, on east shore of southeast bay of lake, 1.7 mi southeast of Eustis.

SURFACE AREA.--107 acres (0.17 mi²).

DRAINAGE AREA.--0.67 mi², includes East Crooked Lake.

PERIOD OF RECORD.--February 1970 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

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

REMARKS.--Lake is interconnected with East Crooked Lake above an elevation of about 69 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 71.48 ft, Apr. 11, 1970; minimum observed, 60.30 ft, Dec 4, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 74.74 ft was reached in 1960 from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 63.85 ft, Apr. 15; minimum observed, 62.55 ft, Nov. 24.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	62.76	---	---	---	---	---	---	---	---
2	---	---	---	---	62.80	---	---	---	---	---	---	---
3	63.09	---	62.60	---	---	---	---	63.68	---	---	---	---
4	---	---	---	---	---	---	---	---	63.30	63.40	---	---
5	---	---	---	---	---	---	---	---	---	---	63.00	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	63.70	---	---	---	---	---
8	---	62.74	---	---	63.05	63.25	---	---	---	---	62.98	---
9	---	---	---	---	---	---	---	---	63.20	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	62.68	---	---	---	---	---	---	---	63.36	---	---
13	---	---	---	62.73	---	---	---	---	---	---	---	62.90
14	---	---	---	---	---	63.20	---	---	---	---	62.95	---
15	---	---	62.57	---	63.08	---	63.85	---	---	---	62.89	---
16	---	---	---	---	---	---	---	63.60	63.14	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	62.65	---	---	---	---	63.80	---	---	---	---	---
19	---	---	---	---	---	---	---	---	63.20	---	---	---
20	---	---	---	---	63.08	---	---	---	---	---	---	---
21	---	---	---	---	---	63.23	---	---	---	63.26	---	---
22	---	---	62.59	62.90	---	---	63.80	---	---	---	---	---
23	---	---	62.58	---	63.10	---	---	63.57	---	---	---	---
24	---	62.55	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	63.00	---
27	---	---	---	---	---	---	---	---	---	---	---	62.75
28	---	---	---	---	63.20	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	62.75	---	62.64	---	---	63.45	---	---	63.32	---	62.90	---
31	---	---	---	---	---	---	---	63.38	---	---	---	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237800 LAKE DORA AT MOUNT DORA, FL

LOCATION.--Lat 28°47'46", long 81°38'39", in NE¼ sec.31, T.19 S., R.27 E., Lake County, Hydrologic Unit 03080102, on west shore of northeast bay of lake, at Mount Dora Marina at Mount Dora.

SURFACE AREA.--4,437 acres (6.93 mi²).

DRAINAGE AREA.--236 mi².

PERIOD OF RECORD.--November 1935 to June 1942 (monthly), July 1942 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. See WDR FL-80-1 for history of changes prior to Sept. 28, 1973.

REMARKS.--Lake is one of the Oklawaha River headwaters chain of lakes. Since 1956, lake levels have been partially controlled by lock and dam structure with gated spillway on Haines Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 65.20 ft, Apr. 5, 1960; minimum observed, 60.59 ft, Feb. 18, 19, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 65.7 ft was reached in September 1926, from information by two local residents.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 64.28 ft, Apr. 16; minimum observed, 62.22 ft, Sept. 2.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.84	62.60	62.63	62.84	62.94	63.36	64.10	---	62.60	62.54	62.34	62.24
2	62.82	62.60	62.64	62.78	62.92	63.36	64.08	---	62.58	62.54	---	62.22
3	62.80	62.58	62.64	62.74	62.90	63.34	64.14	---	62.56	62.58	---	62.28
4	62.82	62.58	62.61	62.78	62.90	63.32	64.20	---	62.54	62.60	---	62.32
5	62.82	62.58	62.60	62.78	63.02	63.30	64.22	---	62.54	62.58	---	62.34
6	62.80	62.58	62.58	62.76	63.00	63.26	64.22	63.20	62.54	62.56	---	62.36
7	62.78	62.58	62.54	62.76	63.04	63.24	64.24	63.18	62.52	62.54	---	62.36
8	62.76	62.56	62.54	62.76	63.08	63.30	64.26	63.10	62.50	62.50	---	62.34
9	62.74	62.56	62.54	62.76	63.12	63.34	64.26	63.04	62.48	62.50	---	62.34
10	62.72	62.56	62.54	62.76	63.16	63.40	64.24	63.04	62.44	62.50	---	62.34
11	62.74	62.54	62.63	62.76	63.14	63.40	64.24	62.98	62.42	62.50	62.34	62.34
12	62.72	62.54	62.64	62.78	63.14	63.34	64.26	62.94	62.40	62.48	62.38	62.34
13	62.70	62.54	62.64	62.78	63.18	63.30	64.26	62.90	62.42	62.48	62.40	62.46
14	62.68	62.52	62.60	62.76	63.16	63.28	64.24	62.90	62.44	62.46	62.40	62.50
15	62.66	62.50	62.60	62.72	63.18	63.26	64.22	62.88	62.42	62.44	62.40	62.48
16	62.64	62.50	62.60	62.74	63.20	63.22	64.28	62.86	62.42	62.42	62.42	62.46
17	62.62	62.50	62.60	62.74	63.24	63.18	64.26	62.86	62.40	62.38	62.42	62.44
18	62.60	62.50	62.60	62.76	63.22	63.14	64.22	62.84	62.38	62.38	62.40	62.44
19	62.58	62.52	62.60	62.78	63.20	63.14	64.20	62.84	62.40	62.36	62.40	62.44
20	62.56	62.58	62.60	62.76	63.20	63.12	64.20	62.84	62.44	62.36	62.42	62.42
21	62.54	62.58	62.58	62.84	63.20	63.14	64.18	62.82	62.42	62.34	62.42	62.42
22	62.54	62.58	62.56	62.90	63.24	63.12	64.14	62.80	62.38	62.34	62.44	62.42
23	62.54	62.58	62.54	63.00	63.26	63.08	64.12	62.80	62.36	62.34	62.42	62.40
24	62.52	62.56	62.66	62.94	63.28	63.06	64.12	62.76	62.36	62.34	62.38	62.38
25	62.52	62.56	62.66	62.96	63.28	63.04	64.04	62.74	62.36	62.32	62.34	62.36
26	62.50	62.56	62.66	63.00	63.26	63.06	64.00	62.72	62.38	62.40	62.32	62.34
27	62.52	62.58	62.64	62.98	63.26	63.24	---	62.70	62.44	62.38	62.30	62.30
28	62.50	62.56	62.66	62.96	63.28	63.30	---	62.68	62.48	62.38	62.28	62.30
29	62.52	62.58	62.66	62.94	---	63.40	---	62.66	62.50	62.38	62.28	62.30
30	62.54	62.61	62.64	62.94	---	63.76	---	62.62	62.50	62.34	62.26	62.34
31	62.52	---	62.62	62.96	---	63.96	---	62.60	---	62.34	62.26	---
MEAN	62.65	62.56	62.61	62.83	63.14	63.28	---	---	62.45	62.44	---	62.37
MAX	62.84	62.61	62.66	63.00	63.28	63.96	---	---	62.60	62.60	---	62.50
MIN	62.50	62.50	62.54	62.72	62.90	63.04	---	---	62.36	62.32	---	62.22

CAL YR 1986 MEAN 62.76 MAX 63.40 MIN 62.28

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02237900 LAKE EUSTIS AT EUSTIS, FL

LOCATION.--Lat 28°51'06", long 81°41'29", in SE¼ sec.10, T.19 S., R.26 E., Lake County, Hydrologic Unit 03080102, on northeast shore of lake, on private pier at Eustis.

SURFACE AREA.--7,806 acres (12.2 mi²).

DRAINAGE AREA.--646 mi².

PERIOD OF RECORD.--November 1935 to June 1942 (monthly), July 1942 to current year. July 1942 to June 1956, records for Dead River near Tavares. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-72-3: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. See WDR FL-80-1 for history of changes prior to Oct. 18, 1970.

REMARKS.--Lake is one of the Oklawaha River headwaters chain of lakes. Since 1956, lake levels have been partially controlled by lock and dam structure with gated spillway on Haines Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 64.84 ft, Apr. 28, 1960; minimum observed, 58.82 ft, Sept. 22, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 66.1 ft was reached in 1926, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 63.86 ft, Mar. 31; minimum observed, 62.30 ft, Aug. 29-31, Sept. 1.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.88	62.60	62.64	62.84	62.96	63.42	63.66	62.98	62.64	62.48	62.40	62.30
2	62.88	62.62	62.70	62.76	63.02	63.36	63.62	62.98	62.62	62.48	62.40	62.34
3	62.86	62.64	62.66	62.70	62.92	63.34	63.68	62.94	62.60	62.52	62.40	62.32
4	62.84	62.60	62.60	62.70	62.90	63.30	63.66	62.94	62.58	62.54	62.40	62.34
5	62.84	62.60	62.60	62.80	62.90	63.18	63.60	62.94	62.56	62.50	62.40	62.38
6	62.82	62.60	62.68	62.76	62.94	63.20	63.50	62.88	62.54	62.44	62.38	62.38
7	62.80	62.62	62.54	62.80	63.06	63.34	63.50	62.90	62.50	62.52	62.40	62.40
8	---	62.62	62.58	62.80	63.22	63.50	63.52	62.88	62.48	62.54	62.40	62.42
9	---	62.60	62.54	62.80	63.16	63.52	63.46	62.80	62.48	62.50	62.40	62.40
10	---	62.58	62.58	62.86	63.18	63.34	63.42	62.56	62.48	62.52	62.40	62.40
11	---	62.58	62.64	62.80	63.18	63.26	63.40	62.76	62.48	62.50	62.40	62.42
12	62.78	62.58	62.70	62.76	63.18	63.24	63.38	62.84	62.46	62.50	62.42	62.48
13	62.78	62.56	62.60	62.76	63.20	63.18	63.36	62.84	62.48	62.50	62.42	62.54
14	62.78	62.50	62.60	62.76	63.20	63.16	63.30	62.84	62.52	62.50	62.46	62.52
15	62.74	62.54	62.62	62.80	63.16	63.14	63.40	62.84	62.46	62.48	62.44	62.50
16	62.70	62.54	62.62	62.76	63.30	63.10	63.40	62.80	62.46	62.44	62.48	62.52
17	62.60	62.58	62.60	62.76	63.26	63.10	63.40	62.86	62.38	62.40	62.46	62.50
18	62.60	62.56	62.66	62.76	63.24	63.12	63.40	62.84	62.44	62.38	62.46	62.50
19	62.54	62.58	62.60	62.86	63.22	63.18	63.30	62.86	62.40	62.38	62.44	62.50
20	62.50	62.68	62.66	62.80	63.20	63.12	63.28	62.88	62.42	62.36	62.42	62.48
21	62.60	62.60	62.58	62.94	63.24	63.12	63.26	62.88	62.42	62.38	62.42	62.46
22	62.56	62.60	62.50	63.04	63.28	63.12	63.24	62.84	62.40	62.40	62.36	62.46
23	62.58	62.60	62.60	62.94	63.26	63.04	63.20	62.80	62.40	62.40	62.40	62.42
24	62.56	62.58	62.76	62.92	63.26	63.10	63.18	---	62.38	62.36	62.40	62.40
25	62.60	62.60	62.68	62.96	63.26	63.08	63.18	---	62.38	62.38	62.38	62.38
26	62.58	62.60	62.66	63.04	63.28	63.22	63.12	62.76	62.42	62.40	62.38	62.36
27	62.54	62.58	62.64	62.96	63.32	63.26	63.08	62.70	62.44	62.44	62.36	62.36
28	62.54	62.56	62.60	62.92	63.32	63.36	63.12	62.70	62.40	62.46	62.34	62.36
29	62.58	62.60	62.64	62.96	---	63.42	63.02	62.60	62.48	62.44	62.30	62.34
30	62.58	62.60	62.64	62.96	---	63.60	63.00	62.62	62.46	62.42	62.30	62.42
31	62.60	---	62.64	62.96	---	63.86	---	62.62	---	62.44	62.30	---
MEAN	---	62.59	62.62	62.85	63.16	63.27	63.35	---	62.47	62.45	62.40	62.42
MAX	---	62.68	62.76	63.04	63.32	63.86	63.68	---	62.64	62.54	62.48	62.54
MIN	---	62.50	62.50	62.70	62.90	63.04	63.00	---	62.38	62.36	62.30	62.30

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02238020 SILVER LAKE NEAR LEESBURG, FL

LOCATION.--Lat 28°50'26", long 81°48'38", in NE¼ sec.16, T.19 S., R.25 E., Lake County, Hydrologic Unit 03080102, on private pier, on west shore of lake, 3.5 mi northeast of Leesburg.

SURFACE AREA.--382 acres (0.60 mi²).

DRAINAGE AREA.--1.50 mi².

PERIOD OF RECORD.--April 1983 to current year (weekly), incomplete.

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

REMARKS.--Lake has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 68.10 ft, Mar. 5, 1984; minimum observed, 65.28 ft, June 10, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 66.50 ft, Mar. 31; minimum observed, 65.30 ft, Nov. 17.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	65.90	---	---	---
2	---	---	65.40	---	65.50	65.86	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	65.65	---
4	---	65.40	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	66.18	---	---	---	---
6	65.65	---	---	65.44	---	---	66.47	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	65.90	---	---
8	---	---	65.35	---	---	---	---	---	65.87	---	---	65.50
9	---	---	---	---	---	66.05	---	---	---	---	---	---
10	---	---	---	---	65.86	---	---	---	---	---	65.58	---
11	---	---	---	---	---	---	---	66.10	---	---	---	---
12	---	---	---	65.50	---	---	---	---	---	---	---	---
13	65.57	65.37	---	---	---	---	---	---	---	65.80	65.66	---
14	---	---	---	---	---	---	66.44	---	---	---	---	65.63
15	---	---	65.35	---	---	---	---	---	65.87	---	---	---
16	---	---	---	---	---	65.88	---	---	65.86	---	---	---
17	---	65.30	---	---	65.86	---	---	---	---	---	65.67	---
18	---	---	---	---	---	---	---	66.16	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	65.50	65.85	---	---	---	---	65.78	---	---
21	65.40	---	---	---	---	---	66.38	---	---	---	---	65.53
22	---	---	65.33	---	---	---	---	---	65.78	---	---	---
23	---	---	---	---	65.88	---	66.36	---	---	---	---	---
24	---	65.34	---	---	---	66.44	---	---	---	---	65.59	---
25	---	---	---	---	---	---	---	66.07	---	---	---	---
26	---	---	---	65.64	---	---	---	---	---	---	---	---
27	65.38	---	---	---	---	---	66.30	---	---	65.75	---	---
28	---	---	---	---	---	---	---	---	65.70	---	---	65.42
29	---	---	65.38	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	66.50	---	---	---	---	65.48	---

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02238180 HOLLY LAKE NEAR UMATILLA, FL

LOCATION.--Lat 28°56'11", long 81°43'04", in SW¼ sec.9, T.18 S., R.26 E., Lake County, Hydrologic Unit 03080102, on south shore of lake, at county boat ramp on State Highway 450, and 3.1 mi west of Umatilla.

SURFACE AREA.--96 acres (0.15 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), incomplete.

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

REMARKS.--At high stages Holly, Ella, and Yale Lakes are interconnected and some natural diversion occurs northward to Nicotoon Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.43 ft, July 31, 1984; minimum observed, 57.24 ft, Nov. 23, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 58.43 ft, July 5; minimum observed, 57.24 ft, Nov. 23.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	57.40	57.48	57.80	---	---	---	---	---	---
2	---	57.40	---	---	---	---	---	---	---	---	58.12	---
3	---	---	---	---	---	---	---	57.98	---	---	---	---
4	57.82	---	---	57.42	---	---	---	---	---	---	---	---
5	57.72	---	---	---	---	---	58.38	---	---	58.43	---	---
6	---	---	---	---	---	---	---	---	57.76	---	---	57.96
7	---	---	57.26	---	---	---	---	---	---	---	---	---
8	---	---	---	---	57.74	57.84	---	---	---	---	---	---
9	---	57.37	---	---	---	---	---	---	---	---	58.12	---
10	---	---	---	---	---	---	---	57.86	---	---	---	---
11	57.68	---	---	57.39	57.76	---	---	---	---	---	---	---
12	57.62	57.37	---	---	---	---	58.36	---	---	58.36	---	---
13	---	---	---	---	---	---	---	---	57.80	---	58.08	58.04
14	---	---	57.30	---	---	---	---	---	---	---	---	---
15	---	---	---	---	57.69	57.90	---	---	---	---	---	---
16	---	57.26	---	---	---	---	---	---	---	---	58.08	---
17	---	---	---	---	---	---	---	57.84	---	---	---	---
18	57.56	---	---	57.34	---	---	---	---	---	---	---	---
19	57.40	---	---	---	---	---	58.28	---	---	58.25	---	---
20	---	---	---	---	57.80	---	---	---	57.90	---	---	58.00
21	---	---	57.31	---	---	---	---	---	---	---	---	---
22	---	---	57.26	---	---	58.00	---	---	---	---	---	---
23	---	57.24	---	---	---	---	---	---	---	---	57.98	---
24	---	---	---	---	---	---	---	57.82	---	---	---	---
25	57.46	---	57.37	57.50	---	58.10	---	---	---	---	---	---
26	57.30	---	---	---	---	---	58.12	---	---	58.10	---	---
27	---	---	---	---	57.80	58.20	---	---	58.10	---	---	57.95
28	---	---	57.30	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	58.40	---	---	---	---	---	---
30	---	57.25	---	---	---	---	---	---	---	---	57.98	---
31	---	---	---	57.48	---	---	---	57.78	---	---	---	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238200 LAKE YALE AT GRAND ISLAND, FL

LOCATION.--Lat 28°52'52", long 81°42'21", in NW¼ sec.34, T.18 S., R.26 E., Lake County, Hydrologic Unit 03080102, at southeast end of lake, on east bank at end of stub canal in public park, 1 mi east of Grand Island, and 2.8 mi northwest of Eustis.

SURFACE AREA.--4,030 acres (6.30 mi²).

DRAINAGE AREA.--67.6 mi².

PERIOD OF RECORD.--September 1959 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-74-1: Surface area, drainage area.

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

REMARKS.--Water is diverted from the west side of the lake through Yale-Griffin Canal into Lake Griffin, one of the Oklawaha River headwaters chain of lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 61.29 ft, Oct. 12, 1960; minimum daily, 57.12 ft, Dec. 26, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.08	58.83	58.83	58.96	59.17	59.68	60.47	60.01	59.73	59.51	59.08	58.84
2	59.06	58.83	58.83	58.95	59.17	59.72	60.46	59.99	59.71	59.49	59.07	58.84
3	59.05	58.82	58.85	58.93	59.18	59.72	60.46	59.98	59.70	59.50	59.05	58.83
4	59.03	58.81	58.82	58.95	59.18	59.72	60.47	59.97	59.68	59.51	59.03	58.87
5	59.02	58.79	58.80	59.04	e59.28	59.70	60.42	59.95	59.67	59.50	59.02	58.90
6	59.00	58.79	58.78	59.00	59.39	59.68	60.40	59.94	59.69	59.48	59.00	58.89
7	58.98	58.79	58.76	58.99	59.42	59.75	60.38	59.94	59.66	59.47	59.06	58.88
8	58.96	58.78	58.75	58.99	59.52	59.85	60.38	59.92	59.63	59.45	59.04	58.87
9	58.95	58.78	58.75	59.00	59.52	59.85	60.36	59.90	59.61	59.44	59.04	58.85
10	58.94	58.77	58.76	59.00	59.49	59.85	60.34	59.88	59.59	59.42	59.02	58.84
11	58.95	58.76	58.81	59.04	59.49	59.83	60.32	59.86	59.58	59.41	59.02	58.84
12	58.93	58.76	58.82	59.00	59.49	59.82	60.31	59.88	59.56	59.42	59.07	58.85
13	58.93	58.77	58.84	58.97	59.49	59.81	60.30	59.89	59.57	59.42	59.06	58.92
14	58.92	58.75	58.81	58.97	59.49	59.79	60.29	59.88	59.59	59.40	59.04	58.92
15	58.92	58.72	58.80	58.97	59.48	59.78	60.29	59.94	59.58	59.37	59.04	58.91
16	58.89	58.69	58.80	58.97	59.55	59.77	60.28	60.01	59.56	59.35	59.05	58.90
17	58.85	58.69	58.80	58.98	59.57	59.76	60.26	60.00	59.54	59.33	59.04	58.89
18	58.81	58.69	58.80	58.98	59.58	59.76	60.24	59.99	59.53	59.31	59.02	58.87
19	58.78	58.71	58.79	59.00	59.57	59.79	60.22	59.97	59.54	59.29	59.02	58.86
20	58.75	58.73	58.79	59.01	59.57	59.79	60.20	59.97	59.59	59.28	59.01	58.86
21	58.72	58.73	58.79	59.08	59.59	59.78	60.19	59.96	59.57	59.26	58.99	58.85
22	58.70	58.70	58.78	59.18	59.60	59.77	60.18	59.94	59.55	59.25	59.00	58.83
23	58.68	58.68	58.78	59.18	59.64	59.75	60.16	59.93	59.54	59.24	58.99	58.81
24	58.67	58.68	58.87	59.15	59.62	59.73	60.15	59.91	59.53	59.22	58.97	58.80
25	58.66	58.67	58.87	59.16	59.62	59.73	60.14	59.89	59.51	59.20	58.95	58.77
26	58.65	58.67	58.86	59.22	59.62	59.83	60.11	59.86	59.48	59.18	58.94	58.74
27	58.66	58.67	58.86	59.20	59.62	59.96	60.08	59.84	59.49	59.17	58.92	58.72
28	58.67	58.67	58.85	59.17	59.61	60.05	60.07	59.82	59.50	59.15	58.90	58.70
29	58.68	58.67	58.84	59.17	---	60.12	60.04	59.79	59.49	59.13	58.88	58.68
30	58.71	58.75	58.84	59.18	---	60.31	60.02	59.77	59.50	59.10	58.86	58.75
31	58.73	---	58.86	59.20	---	60.50	---	59.75	---	59.09	58.85	---
MEAN	58.85	58.74	58.81	59.05	59.48	59.84	60.27	59.91	59.58	59.33	59.00	58.84
MAX	59.08	58.83	58.87	59.22	59.64	60.50	60.47	60.01	59.73	59.51	59.08	58.92
MIN	58.65	58.67	58.75	58.93	59.17	59.68	60.02	59.75	59.48	59.09	58.85	58.68

WTR YR 1987 MEAN 59.31 MAX 60.50 MIN 58.65

e Estimated

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02238300 LAKE GRIFFIN AT LEESBURG, FL

LOCATION.--Lat 28°51'48", long 81°51'31", in SE¼ sec.1, T.19 S., R.24 E., Lake County. Hydrologic Unit 03080102, on western portion of lake, on private boat pier at Twin Palms Marina, 3.7 mi north of Leesburg.

SURFACE AREA.--10,660 acres (16.7 mi²).

DRAINAGE AREA.--775 mi²

PERIOD OF RECORD.--May 1936 to September 1944 (monthly), October 1944 to October 1952 (weekly), November 1952 to May 1955 (twice weekly), June 1955 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-74-1: Drainage area, surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Since November 1978 at present site and datum. For history of changes prior to November 1978, see WDR FL-80-1.

REMARKS.--Lake is the most downstream of the Oklawaha River headwaters chain of lakes. Lake levels are partially controlled by earthen dam and concrete control with vertical lift gates on Oklawaha River at Moss Bluff.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 60.74 ft, Oct. 11,12, 1960; minimum observed, 52.14 ft, June 29, July 2, 1984, result of drawdown.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.84	58.60	58.62	58.90	59.24	59.26	59.64	58.62	58.60	58.38	58.50	58.46
2	58.82	58.60	58.64	58.90	59.28	59.24	59.60	58.62	58.50	58.40	58.50	58.46
3	58.80	58.58	58.64	58.90	59.30	59.24	59.56	58.62	58.54	58.42	58.50	58.44
4	58.80	58.56	58.66	58.90	59.32	59.24	59.50	58.62	58.50	58.44	58.50	58.38
5	58.78	58.56	58.68	58.90	59.36	59.22	59.44	58.62	58.48	58.44	58.48	58.34
6	58.76	58.56	58.68	58.90	59.40	59.22	59.38	58.70	58.50	58.44	58.48	58.30
7	58.74	58.56	58.66	58.88	59.42	59.32	59.24	58.70	58.48	58.44	58.48	58.30
8	58.74	58.56	58.66	58.88	59.46	59.34	59.18	58.70	58.48	58.44	58.48	58.30
9	58.72	58.56	58.64	58.88	59.50	59.32	59.08	58.70	58.48	58.44	58.48	58.30
10	58.70	58.54	58.64	58.88	59.48	59.30	59.00	58.70	58.42	58.44	58.50	58.29
11	58.70	58.52	58.66	58.86	59.40	59.28	58.22	58.70	58.42	58.46	58.50	58.29
12	58.68	58.48	58.66	58.86	59.30	59.26	58.42	58.70	58.42	58.46	58.50	58.30
13	58.68	58.48	58.68	58.86	59.28	59.24	58.50	58.74	58.50	58.46	58.50	58.39
14	58.66	58.48	58.68	58.88	59.20	59.20	58.58	58.74	58.50	58.48	58.52	58.40
15	58.66	58.48	58.66	58.88	59.22	59.18	58.60	58.74	58.48	58.48	58.52	58.40
16	58.64	58.50	58.66	58.90	59.24	59.16	58.68	58.74	58.50	58.48	58.52	58.39
17	58.62	58.50	58.64	58.90	59.26	59.12	58.70	58.78	58.48	58.50	58.52	58.39
18	58.60	58.52	58.64	58.90	59.28	59.10	58.70	58.80	58.46	58.50	58.51	58.38
19	58.58	58.52	58.66	58.90	59.30	59.10	58.68	58.82	58.40	58.50	58.50	58.38
20	58.56	58.58	58.68	58.90	59.30	59.08	58.68	58.84	58.40	58.50	58.49	58.38
21	58.54	58.58	58.68	59.00	59.32	59.08	58.66	58.84	58.38	58.50	58.50	58.38
22	58.52	58.56	58.68	59.10	59.32	59.08	58.66	58.82	58.34	58.48	58.51	58.37
23	58.50	58.56	58.70	59.16	59.32	59.10	58.64	58.80	58.30	58.48	58.51	58.37
24	58.48	58.56	58.72	59.16	59.30	59.10	58.64	58.80	58.30	58.50	58.50	58.36
25	58.46	58.56	58.72	59.18	59.30	59.10	58.64	58.82	58.28	58.50	58.49	58.35
26	58.46	58.54	58.74	59.20	59.28	59.14	58.64	58.82	58.24	58.44	58.48	58.36
27	58.50	58.54	58.74	59.20	59.28	59.24	58.62	58.74	58.24	58.44	58.48	58.34
28	58.54	58.56	58.74	59.20	59.26	59.30	58.62	58.64	58.28	58.50	58.48	58.33
29	58.58	58.58	58.74	59.20	---	59.36	58.62	58.64	58.34	58.50	58.49	58.32
30	58.60	58.60	58.72	59.20	---	59.40	58.62	58.66	58.38	58.48	58.49	58.30
31	58.60	---	58.90	59.20	---	59.68	---	58.62	---	58.48	58.47	---
MEAN	58.64	58.55	58.68	58.99	59.32	59.23	58.86	58.72	58.42	58.46	58.50	58.36
MAX	58.84	58.60	58.90	59.20	59.50	59.68	59.64	58.84	58.60	58.50	58.52	58.46
MIN	58.46	58.48	58.62	58.86	59.20	59.08	58.22	58.62	58.24	58.38	58.47	58.29

CAL YR 1986	MEAN 58.72	MAX 59.38	MIN 58.10
WTR YR 1987	MEAN 58.72	MAX 59.68	MIN 58.22

LOCATION.--Lat 29°02'23", long 81°55'44", in SE¼ sec.5, T.17 S., R.24 E., Marion County, Hydrologic Unit 03080102, on north shore of lake, on east side of pier, 100 ft east of Johnson's Beach Pavillion at Oklawaha.

DRAINAGE AREA.--53.8 mi².

REVISED RECORDS.--WDR FL-74-1: Surface area, drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Nov. 4, 1942, nonrecording gage at site 100 west at datum 56.58 ft higher. Nov. 4, 1942, to Mar. 22, 1956, water-stage recorder at datum 55.58 ft higher and Mar. 23, 1956, to Feb. 7, 1957, water-stage recorder at datum 54.00 ft higher, at sites within 100 ft.

REMARKS.--Lake level partly controlled by broad-crested weir in outlet canal to the Oklawaha River; elevation of fixed crest is 57.44 ft. Canal dug and control built in April 1938.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 59.6 ft, Jan. 1938; minimum daily, 53.46 ft, May 19, 1957.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55.82	55.44	55.52	55.54	55.57	55.94	56.50	56.17	56.03	55.92	55.85	56.10
2	55.80	55.44	55.52	55.51	55.58	55.97	56.48	56.16	56.02	55.92	55.86	56.09
3	55.79	55.43	55.52	55.48	55.56	55.96	56.48	56.14	56.01	55.94	55.85	56.08
4	55.78	55.42	55.49	55.52	55.55	55.95	56.46	56.13	55.99	55.99	55.85	56.11
5	55.76	55.41	55.47	55.53	55.59	55.93	56.44	56.15	55.99	56.00	55.86	56.12
6	55.74	55.42	55.44	55.52	55.76	55.91	56.42	56.16	55.99	56.01	55.85	56.13
7	55.72	55.41	55.43	55.52	55.75	56.01	56.41	56.15	55.96	56.01	55.84	56.11
8	55.72	55.41	55.43	55.52	55.76	56.08	56.40	56.15	55.93	56.03	55.82	56.10
9	55.69	55.40	55.43	55.53	55.74	56.08	56.38	56.13	55.92	56.01	55.80	56.09
10	55.70	55.39	55.43	55.52	55.73	56.06	56.38	56.13	55.90	56.01	55.82	56.10
11	55.70	55.39	55.49	55.51	55.72	56.05	56.37	56.12	55.88	56.00	55.91	56.08
12	55.69	55.38	55.49	55.49	55.72	56.03	56.37	56.13	55.89	55.99	56.06	56.09
13	55.68	55.37	55.47	55.48	55.71	56.01	56.36	56.13	55.94	55.96	56.04	56.11
14	55.66	55.34	55.45	55.47	55.70	56.01	56.36	56.18	55.93	55.94	56.03	56.14
15	55.64	55.32	55.44	55.47	55.70	56.00	56.37	56.21	55.91	55.93	56.02	56.13
16	55.62	55.32	55.43	55.47	55.75	55.99	56.36	56.19	55.90	55.92	56.02	56.12
17	55.58	55.31	55.44	55.47	55.76	55.99	56.34	56.18	55.89	55.89	56.01	56.10
18	55.53	55.31	55.43	55.47	55.76	55.99	56.32	56.17	55.87	55.87	56.02	56.09
19	55.49	55.33	55.43	55.49	55.74	56.02	56.32	56.18	55.86	55.87	56.00	56.09
20	55.47	55.42	55.43	55.48	55.73	56.01	56.31	56.19	55.85	55.90	56.02	56.08
21	55.45	55.41	55.41	55.53	55.77	56.01	56.31	56.18	55.83	55.93	56.16	56.07
22	55.42	55.40	55.39	55.58	55.82	55.99	56.30	56.18	55.81	55.93	56.15	56.10
23	55.41	55.39	55.43	55.58	55.84	55.98	56.30	56.17	55.80	55.91	56.14	56.15
24	55.40	55.38	55.51	55.56	55.83	55.98	56.30	56.17	55.80	55.90	56.13	56.13
25	55.39	55.38	55.50	55.59	55.84	55.98	56.27	56.16	55.79	55.90	56.11	56.12
26	55.39	55.37	55.48	55.62	55.83	56.02	56.25	56.14	55.79	55.95	56.09	56.09
27	55.42	55.37	55.47	55.60	55.84	56.11	56.23	56.12	55.85	55.93	56.08	56.07
28	55.41	55.36	55.46	55.58	55.84	56.20	56.22	56.10	55.92	55.92	56.07	56.06
29	55.41	55.39	55.46	55.57	---	56.29	56.20	56.08	55.92	55.90	56.06	56.05
30	55.42	55.50	55.44	55.59	---	56.44	56.18	56.06	55.93	55.88	56.05	56.12
31	55.42	---	55.48	55.58	---	56.52	---	56.04	---	55.87	56.03	

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238820 SMITH LAKE NEAR CANDLER, FL

LOCATION.--Lat 29°04'12", long 81°59'25", in NE¼ sec.27, T.16 S., R.23 E., Marion County, Hydrologic Unit 03080102, on north shore of lake, on north side of private pier, 1.1 mi west of Candler.

SURFACE AREA.--482 acres (0.75 mi²).

DRAINAGE AREA.--5.01 mi².

PERIOD OF RECORD.--July 1972 to current year.

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

REMARKS.--Lake is landlocked. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 57.82 ft, Feb. 14, 1984; minimum observed, 49.70 ft, Dec. 24, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			APR		
17...	1210	53.24	23...	0900	53.75
20...	0900	54.15	MAY		
NOV			04...	1000	53.60
21...	1000	54.00	06...	1520	53.58
DEC			JUN		
11...	1315	53.08	04...	1000	53.50
19...	0900	54.00	22...	1300	53.00
JAN			JUL		
24...	1030	54.08	14...	0900	53.16
FEB			AUG		
11...	1615	53.16	03...	1115	52.98
23...	0830	53.40	21...	1600	53.10
MAR			SEP		
20...	1100	53.50	23...	1200	52.00
30...	0845	53.82			

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02238830 BOWERS LAKE NEAR OKLAWAHA, FL

LOCATION.--Lat 29°02'22", long 81°57'24", in SE¼ sec.1, T.17 S., R.23 E., Marion County, Hydrologic Unit 03080102, on southwest shore of lake, at Lakefront Apartments, 1.6 mi west of Oklawaha.

SURFACE AREA.--633 acres (0.99 mi²).

DRAINAGE AREA.--8.48 mi².

PERIOD OF RECORD.--July 1972 to current year (monthly).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Dec. 12, 1981, at site 0.4 mi west at same datum.

REMARKS.--Lake is landlocked except at high stages when outflow is to the northeast to Lake Weir outlet, thence to Oklawaha River. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 58.52 ft, Sept. 1, 1983; minimum observed, 53.50 ft, Oct. 30, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			APR		
17...	1150	55.06	20...	0745	56.00
22...	0730	54.95	MAY		
NOV			06...	1450	55.98
21...	0730	55.00	22...	0735	55.95
DEC			JUN		
11...	1250	55.08	22...	1320	55.45
26...	0745	55.10	23...	0735	55.45
JAN			JUL		
23...	0910	55.25	23...	0750	55.60
FEB			AUG		
11...	1535	55.36	03...	1105	55.48
23...	0745	55.55	21...	0810	55.65
MAR			SEP		
22...	0745	55.60	21...	0805	55.63
30...	0855	56.01			

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240200 LAKE BRYANT NEAR SILVER SPRINGS, FL

LOCATION.--Lat 29°08'21", long 81°51'03", in SW¼ sec.31, T.15 S., R.25 E., Marion County, Hydrologic Unit 03080102, on southeast shore on private pier, 4.4 mi northeast of Moss Bluff Dam, and 13.5 mi southeast of Silver Springs.

SURFACE AREA.--1,261 acres (1.97 mi²). Does not include North Lake.

DRAINAGE AREA.--9.86 mi².

PERIOD OF RECORD.--April 1936 to April 1950, July 1972 to current year (monthly). Records of elevation prior to July 1972 are unpublished and available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. April 1936 to April 1950, nonrecording gage on northeast side of lake at datum, 53.36 ft higher.

REMARKS.--Lake is in a chain of lakes in the western part of the Ocala National Forest. Outflow is to the east to Halfmoon Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 54.8 ft, October 1945; minimum observed, 50.20 ft, Dec. 2, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			MAY		
17...	0835	51.88	06...	1025	52.30
DEC			JUN		
11...	1140	52.06	22...	1450	51.96
JAN			JUL		
31...	0900	52.00	03...	0900	52.10
FEB			31...	0900	51.90
11...	1505	52.32	AUG		
MAR			03...	0930	51.92
30...	1120	52.62	31...	1200	51.00
APR					
16...	1000	52.50			
28...	1330	52.10			

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240900 NEWNANS LAKE NEAR GAINESVILLE, FL

LOCATION.--Lat 29°39'04", long 82°14'22", in SE¼, sec.6, T.10 S., R.21 E., Alachua County, Hydrologic Unit 03080102, on west shore of lake, 5 mi east of Gainesville.

SURFACE AREA.--7,350 acres (11.5 mi²).

DRAINAGE AREA.--114 mi².

PERIOD OF RECORD.--April 1936 to October 1945 (monthly), incomplete; November 1945 to January 1946 and June 1946 to December 1952 (twice weekly), incomplete; July 1957 to September 1960; October 1960 to September 1962 (weekly), incomplete; October 1962 to July 1965 (fragmentary); August 1965 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-74-3: Drainage area. WDR FL-81-1: Surface area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Nov. 2, 1945, at approximately present site at datum 65.21 ft higher. Nov. 2, 1945, to Dec. 31, 1952, and July 15, 1957, to July 24, 1986, at several sites within 500 ft of present site at datum 63.33 ft higher.

REMARKS.--Outflow from lake is through Prairie Creek to Camps Canal and thence through River Styx to Orange Lake; some diversion of outflow to Paynes Prairie for irrigation. Since November 1966, lake level partially controlled by concrete dam in Prairie Creek at lake outlet; present control, completed in March 1976, has crest elevation at 66.8 ft with removable boards.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 71.21 ft, Mar. 12, 1948; minimum observed, 63.87 ft, May 19, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 68.87 ft, Mar. 10; minimum observed, 66.02 ft, Nov. 26.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	66.72	---	68.57	---	---	---	---	66.47	---
2	---	---	66.48	---	67.30	---	---	---	---	---	---	---
3	---	---	66.50	---	---	---	---	67.47	66.57	---	---	---
4	66.47	---	---	---	---	---	---	67.39	---	66.47	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	66.24	---
7	---	---	---	---	---	---	68.72	---	---	---	66.26	---
8	66.43	66.22	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	66.49	---	---	66.92	67.67	68.87	---	---	---	66.52	---	---
11	---	---	66.57	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	67.07	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	66.22	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	66.42	66.13	---	---	67.75	68.56	---	---	---	66.47	---	---
18	---	---	66.59	---	---	---	---	---	---	---	---	---
19	---	---	---	66.90	---	---	---	---	66.31	---	---	---
20	---	---	---	---	---	---	68.37	---	---	---	---	---
21	---	---	---	66.90	---	---	---	66.92	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	66.27	---	66.67	---	---	---	---	---	---	---	---	---
25	---	---	---	---	68.31	---	68.22	---	66.20	---	---	---
26	---	66.02	---	67.27	---	68.08	---	---	66.42	66.47	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	66.32	---	---	---	---	67.12	---	66.45	---	---	---
31	66.32	---	---	---	---	68.74	---	66.82	---	---	66.32	---

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02240958 LAKE KANAPAHA AT ARREDONDO, FL

LOCATION.--Lat 29°36'44", long 82°24'14", in NW¼ sec.22, T.10 S., R.19 E., Alachua County, Hydrologic Unit 03080102, on south shore of lake at Broken Arrow Bluff Mobile Homes Park, 0.6 mi northeast of Arredondo, and 5.4 mi southwest of Gainesville.

SURFACE AREA.--204 acres (0.32 mi²).

DRAINAGE AREA. -- 8.65 mi².

PERIOD OF RECORD.--November 1971 to current year (weekly), incomplete.

REVISED RECORDS.--WDR FL-73-3: Surface area.

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

REMARKS.--Outflow from lake is into Haile Sink.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 58.44 ft, Aug. 29, 1972; lake dry at gage Oct. 27 to Nov. 29, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 56.70 ft, Apr. 2; minimum observed, 51.70 ft, Oct. 3.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

[illegible]

LOCATION.--Lat 29°30'07", long 82°06'12", in SW¼ sec.27, T.11 S., R.22 E., Alachua County, Hydrologic Unit 03080102, on east shore of lake at Lochloosa.

DRAINAGE AREA.--88.0 mi².

PERIOD OF RECORD.--April and May 1936 (monthly), July 1942 to December 1952, April 1956 to September 1960, October 1960 to May 1961 (about twice weekly), July 1961 to March 1962 (weekly), April 1962 to July 1965 (fragmentary), August 1965 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 48.83 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to July 8, 1981, at several sites within 0.3 mi south at following datums: April 1936, to July 9, 1942, 6.55 ft higher; July 10, 1942, to Dec. 31, 1952, 7.00 ft higher; and Jan. 1, 1953, to July 7, 1981 at present datum.

REMARKS.--Outflow from lake is through Cross Creek to Orange Lake; some overflow occurs through Lochloosa Slough (station 02242500) to Orange Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.94 ft, Mar. 16, 1948; minimum observed, 53.88 ft, Aug. 18, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--An elevation of 62.0 ft was reached in October 1941, from floodmark.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 60.17 ft, Apr. 6; minimum observed, 57.13 ft, Nov. 26.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	57.58	---	---	---	---	---	---	---	---	---
3	---	---	---	57.73	---	---	---	---	---	---	---	---
4	57.37	---	---	---	---	---	---	---	---	---	---	---
5	---	---	57.53	---	---	---	---	---	---	---	58.00	---
6	57.33	---	---	---	---	---	60.17	---	---	---	---	---
7	---	57.23	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	59.21	---	---	---	---
9	---	---	---	---	---	59.33	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	57.53	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	58.33	---	---	---	---	---	---	---
13	---	---	57.63	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	57.83	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	59.19	---	---	---	---	---	---
20	---	---	---	57.88	---	---	---	---	---	---	---	---
21	57.33	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	58.03	---	---	---	---	---	---	---	---
25	57.25	---	---	---	58.83	---	---	---	58.43	---	---	---
26	---	57.13	---	---	---	---	---	---	---	---	---	---
27	---	---	57.69	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	58.09	---	---	---	---	---	---	---	---

ST. JOHNS RIVER
OKLAWAHA RIVER BASIN

02242450 ORANGE LAKE AT ORANGE LAKE, FL

LOCATION.--Lat 29°25'37", long 82°12'26", in SE¼, sec.21, T. 12 S., R.21 E., Alachua County, Hydrologic Unit 03080102, on south shore of southwest bay of lake, at public boat landing in town of Orange Lake.

SURFACE AREA.--13,160 acres (20.6 mi²).

DRAINAGE AREA.--1,012 mi², includes drainage area of Paynes Prairie, a diked sinkhole area of 650 mi², approximately, which is noncontributing except by pumpage.

PERIOD OF RECORD.--May 1933 to March 1934 and November 1935 to June 1942 (monthly), July 1942 to current year. July 1942 to May 1955, records for Orange Lake Outlet near Citra. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

REVISED RECORDS.--WDR FL-74-1: Surface area. WDR FL-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 2, 1942, nonrecording gage at approximately present site at datum 56.24 ft higher. July 2, 1942, to June 27, 1943, nonrecording gage at lake outlet at datum 55.41 ft higher. June 28, 1943, to Mar. 28, 1947, nonrecording gage and Mar. 28, 1947, to May 31, 1955, water-stage recorder, at lake outlet at datum 53.41 ft higher. July 8, 1955, to Sept. 30, 1957, nonrecording gages at several sites between Boardman and present site at various datums.

REMARKS.--Since April 1963, outlet controlled by concrete dam 160 ft long; elevation of crest is 58.0 ft with notch in center at elevation 55.5 ft. Outflow from lake is through Orange Creek to Oklawaha River. Elevation at gage subject to fluctuations caused by wind action.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.95 ft, Mar. 19, 1948 (near Boardman); minimum observed, 50.38 ft, Aug. 11, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 60.08 ft, Apr. 4-6; minimum daily, 57.04 ft, Nov. 26,27.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.37	57.23	57.41	57.66	58.00	58.85	60.00	59.39	58.85	58.44	58.02	57.61
2	57.37	57.23	57.43	57.66	57.95	58.91	60.05	59.35	58.82	58.43	58.00	57.63
3	57.37	57.22	57.44	57.68	58.01	58.94	60.07	59.33	58.79	58.44	57.98	57.63
4	57.37	57.20	57.45	57.71	58.03	58.96	60.08	59.30	58.76	58.44	57.96	57.68
5	57.37	57.19	57.45	57.78	58.15	58.99	60.08	59.29	58.75	58.42	57.94	57.66
6	57.32	57.18	57.45	57.77	58.24	59.02	60.08	59.27	58.76	58.41	57.93	57.64
7	57.24	57.17	57.42	57.75	58.26	59.09	60.07	59.22	58.74	58.40	57.91	57.62
8	57.24	57.16	57.42	57.76	58.25	59.09	60.04	59.20	58.69	58.45	57.89	57.61
9	57.31	57.15	57.41	57.77	58.28	59.10	60.02	59.24	58.65	58.43	57.87	57.59
10	57.36	57.14	57.41	57.75	58.28	59.15	59.99	59.21	58.62	58.43	57.85	57.57
11	57.36	57.13	57.48	57.76	58.28	59.19	59.97	59.19	58.60	58.40	57.86	57.56
12	57.36	57.13	57.53	57.75	58.28	59.18	59.95	59.19	58.57	58.37	57.91	57.57
13	57.39	57.21	57.59	57.76	58.30	59.18	59.93	59.17	58.56	58.34	57.90	57.60
14	57.43	57.22	57.59	57.76	58.31	59.16	59.91	59.17	58.57	58.32	57.89	57.59
15	57.43	57.16	57.57	57.76	58.33	59.15	59.89	59.17	58.54	58.30	57.90	57.58
16	57.43	57.14	57.57	57.78	58.34	59.14	59.87	59.15	58.52	58.29	57.89	57.56
17	---	57.12	57.57	57.80	58.40	59.16	59.85	59.12	58.50	58.29	57.88	57.55
18	---	57.11	57.55	57.78	58.42	59.14	59.84	59.11	58.49	58.28	57.86	57.52
19	---	57.12	57.57	57.78	58.45	59.12	59.82	59.17	58.49	58.26	57.85	57.51
20	57.28	57.09	57.56	57.81	58.46	59.13	59.80	59.16	58.46	58.24	57.83	57.51
21	---	57.10	57.57	57.87	58.54	59.10	59.77	59.14	58.44	58.25	57.85	57.52
22	---	57.09	57.59	57.89	58.60	59.10	59.74	59.16	58.42	58.23	57.84	57.50
23	---	57.08	57.59	57.91	58.67	59.11	59.70	59.13	58.40	58.20	57.80	57.49
24	---	57.07	57.59	57.93	58.72	59.08	59.65	59.10	58.40	58.19	57.77	57.47
25	---	57.06	57.60	57.94	58.77	59.05	59.62	59.08	58.38	58.16	57.75	57.44
26	---	57.04	57.62	57.94	58.80	59.05	59.61	59.04	58.35	58.13	57.72	57.43
27	57.21	57.04	57.62	57.95	58.81	59.13	59.57	59.01	58.37	58.11	57.70	57.41
28	---	57.06	57.62	57.96	58.81	59.52	59.49	58.99	58.41	58.08	57.69	57.40
29	---	57.18	57.60	57.98	---	59.63	59.47	58.96	58.40	58.05	57.66	57.37
30	---	57.34	57.59	57.94	---	59.79	59.43	58.92	58.42	58.03	57.64	57.37
31	57.23	---	57.64	57.98	---	59.92	---	58.88	---	58.03	57.62	---
MEAN	---	57.15	57.53	57.82	58.38	59.17	59.85	59.16	58.56	58.29	57.84	57.54
MAX	---	57.34	57.64	57.98	58.81	59.92	60.08	59.39	58.85	58.45	58.02	57.68
MIN	---	57.04	57.41	57.66	57.95	58.85	59.43	58.88	58.35	58.03	57.62	57.37

ST. JOHNS RIVER

OKLAWAHA RIVER BASIN

02243958 LAKE OKLAWAHA NEAR ORANGE SPRINGS, FL

LOCATION.--Lat 29°30'30", long 81°48'15", in NW¼ sec.28, T.11 S., R.25 E., Putnam County, Hydrologic Unit 030810102, at upstream side of control structure of Rodman Dam on Oklawaha River, 8.4 mi east of Orange Springs.

SURFACE AREA.--10,800 acres (16.9 mi²), at elevation 20.0 ft above NGVD, from data provided by U.S. Army Corps of Engineers.

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. Records for Oklawaha River above Rodman Dam, near Orange Springs (station 02243959). Prior to October 1969, published as Rodman Reservoir near Orange Springs.

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

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

REMARKS.--Lake is formed by earthfill dam with concrete control structure. Dam was completed and storage began on Sept. 30, 1968. Capacity, 120,000 acre-ft between elevations 6.0 ft, invert of gate sills, and 23.2 ft, standard project flood; no dead storage below elevation 6.0 ft. Lake is part of the Cross-Florida Barge Canal and is used for recreation purposes. Figures given herein represent total contents.

COOPERATION.--Preliminary capacity table provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 85,000 acre-ft, Feb. 4, 1970, elevation, 20.70 ft; minimum since July 1969, 15,000 acre-ft, Sept. 5, Nov. 10, 1972; minimum elevation, 12.57 ft, Nov. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 64,600 acre-ft, Mar. 29, elevation, 19.05 ft; minimum, 51,500 acre-ft, May 24, elevation, 17.83 ft.

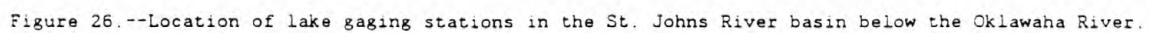
Preliminary capacity table
(elevation, in feet NGVD, and contents, in acre-feet)

10	5,000	14	22,000	18	53,000	22	102,000
11	9,000	15	28,000	19	64,000	23	117,000
12	13,000	16	35,000	20	76,000		
13	17,000	17	44,000	21	88,000		

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.02	18.69	18.46	18.26	17.97	18.72	18.35	17.95	17.88	18.15	17.98	18.25
2	18.09	18.64	18.52	18.38	17.95	18.76	18.00	17.97	17.93	18.21	18.00	18.34
3	18.15	18.59	18.55	18.36	17.98	18.68	18.62	17.95	17.97	18.25	18.02	18.20
4	18.20	18.54	18.58	18.34	18.32	18.91	18.40	17.98	18.00	18.14	18.07	18.21
5	18.24	18.50	18.54	18.38	18.32	18.85	18.05	18.03	18.02	18.08	18.10	18.23
6	18.29	18.45	18.40	18.38	18.20	18.72	17.97	18.09	18.00	18.03	18.11	18.23
7	18.33	18.40	18.32	18.38	18.18	18.53	18.42	18.12	17.98	18.02	18.09	18.24
8	18.39	18.35	18.19	18.49	18.17	18.54	18.52	18.12	17.98	18.01	18.04	18.27
9	18.46	18.32	18.13	18.42	18.14	18.53	18.28	18.07	17.97	18.01	18.01	18.31
10	18.52	18.28	18.11	18.33	18.08	18.51	18.20	18.04	17.97	18.03	18.04	18.34
11	18.56	18.27	18.08	18.32	18.18	18.50	18.22	18.03	17.94	18.03	18.13	18.38
12	18.60	18.25	18.16	18.32	18.14	18.50	18.21	18.04	17.95	18.04	18.20	18.42
13	18.64	18.24	18.24	18.33	18.05	18.45	18.18	18.04	17.96	18.07	18.22	18.48
14	18.70	18.19	18.26	18.33	17.99	18.42	18.18	18.05	17.96	18.07	18.22	18.43
15	18.75	18.19	18.28	18.33	17.93	18.36	18.21	18.14	17.98	18.07	18.09	18.34
16	18.77	18.18	18.31	18.31	18.10	18.25	18.16	18.18	18.04	18.03	18.00	18.29
17	18.77	18.16	18.26	18.23	18.14	18.18	18.05	18.14	18.08	17.97	17.96	18.24
18	18.77	18.17	18.20	18.23	18.10	18.13	18.02	18.02	18.11	17.97	17.96	18.22
19	18.77	18.13	18.14	18.25	18.02	18.03	18.01	18.11	18.14	17.96	17.97	18.17
20	18.78	18.13	18.14	18.16	17.95	18.18	18.03	18.15	18.18	18.00	17.97	18.11
21	18.78	18.14	18.16	18.15	18.03	18.27	18.07	18.05	18.21	18.09	17.93	18.07
22	18.76	18.15	18.12	18.30	18.22	18.22	18.08	17.96	18.19	18.17	17.92	18.02
23	18.76	18.17	18.12	18.22	18.36	18.17	18.08	17.87	18.16	18.23	17.96	17.99
24	18.75	18.18	18.28	18.16	18.18	18.56	18.09	17.83	18.12	18.23	18.00	17.98
25	18.75	18.19	18.32	18.20	18.07	18.98	18.02	17.86	18.10	18.27	18.03	17.98
26	18.76	18.22	18.36	18.07	18.19	18.92	17.97	17.94	18.08	18.27	18.07	17.97
27	18.77	18.25	18.32	18.06	18.36	18.71	17.97	17.98	18.07	18.17	18.11	17.95
28	18.73	18.25	18.32	18.13	18.49	18.47	18.03	18.09	18.02	18.08	18.14	17.97
29	18.72	18.27	18.30	18.11	---	19.05	17.94	18.01	18.06	17.98	18.15	17.99
30	18.77	18.41	18.30	18.02	---	18.93	17.89	17.96	18.12	17.97	18.15	18.07
31	18.74	---	18.28	18.02	---	18.71	---	17.92	---	17.97	18.18	---
MEAN	18.58	18.30	18.28	18.26	18.14	18.54	18.14	18.02	18.04	18.08	18.06	18.19
MAX	18.78	18.69	18.58	18.49	18.49	19.05	18.62	18.18	18.21	18.27	18.22	18.48
MIN	18.02	18.13	18.08	18.02	17.93	18.03	17.89	17.83	17.88	17.96	17.92	17.95

CAL YR 1986 MEAN 16.58 MAX 18.78 MIN 12.73
WTR YR 1987 MEAN 18.22 MAX 19.05 MIN 17.83



ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244600 SAND HILL LAKE NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°51'01", long 82°01'10", in NE¼ sec.32, T.7 S., R.23 E., Clay County, Hydrologic Unit 03080103, on west shore of lake, at end of graded road, 1.3 mi east of Keystone Airport, and 3.5 mi north of Keystone Heights.

SURFACE AREA.--1,250 acres (1.95 mi²).

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--July 1957 to July 1959 (twice weekly), August 1959 to September 1960 (weekly), October 1960 to September 1965 (fragmentary), October 1965 to February 1976 (weekly), March 1976 to current year (monthly). Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 126.02 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD.

REMARKS.--Lake is one of the Etonia Creek headwaters chain of lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 132.73 ft, Sept. 22, 1964; minimum observed, 130.74 ft, May 26, 1968.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			APR		
03...	1000	131.58	01...	1500	132.70
14...	1420	131.70	MAY		
NOV			06...	1000	132.20
01...	0900	131.52	08...	0920	132.17
DEC			JUN		
05...	1020	131.61	02...	1030	132.04
08...	0900	131.56	JUL		
JAN			01...	0900	131.96
02...	0900	131.80	AUG		
FEB			03...	0830	131.88
05...	1040	132.12	SEP		
06...	1030	132.14	03...	1300	132.10
MAR					
02...	1030	132.50			
13...	0900	132.49			

02244650 MAGNOLIA LAKE NEAR KEYSTONE HEIGHTS, FL

DRAINAGE AREA.--14.4 mi².

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 125.62 ft. Mar. 28; minimum observed, 124.11 ft. Nov. 22.

[illegible]

02244800 LAKE GENEVA AT KEYSTONE HEIGHTS, FL

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 99.93 ft, Apr. 1; minimum observed, 98.57 ft, Sept. 30.

[illegible]

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244850 PEBBLE LAKE NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°49'31", Long 81°57'10", in SE¼ sec.1, T.8 S., R.23 E., Clay County, Hydrologic Unit 03080103, on east shore of lake in Gold Head Branch State Park, 5.5 mi northeast of Keystone Heights.

SURFACE AREA.--9.5 acres (0.01 mi²).

DRAINAGE AREA.--0.19 mi².

PERIOD OF RECORD.--July 1945 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 101.16 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD.

REMARKS.--Lake has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 116.36 ft, July 11, 1948, may have been higher in October 1948; minimum observed, 84.24 ft, Apr. 28, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 96.62 ft, June 23,24,30, July 7; minimum observed, 90.84 ft, Dec. 31.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	95.88
2	---	---	91.28	---	---	---	---	---	96.22	---	---	---
3	---	---	---	---	90.88	91.68	---	---	---	---	---	---
4	---	91.68	---	---	---	---	---	---	---	---	96.18	---
5	---	---	91.22	---	90.87	---	---	---	---	---	---	---
6	---	---	---	91.14	---	---	---	---	---	---	---	---
7	92.28	---	---	---	---	---	93.68	---	---	96.62	96.10	---
8	---	---	---	---	---	---	---	95.23	---	---	---	95.88
9	---	---	91.12	---	---	---	---	---	96.40	---	---	---
10	---	---	---	---	91.06	92.02	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	95.42	---	---	---	---
13	---	---	---	91.06	---	92.08	---	---	---	---	96.28	---
14	92.35	91.42	---	---	---	---	94.06	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	96.60	---	95.72
16	---	---	91.12	---	---	---	---	---	96.40	---	---	---
17	---	---	---	---	---	92.18	---	---	---	---	---	---
18	---	91.28	---	---	91.04	---	---	---	---	---	96.32	---
19	---	---	---	---	---	---	---	95.92	---	---	---	---
20	---	---	---	90.96	---	---	---	---	---	---	---	---
21	92.10	---	---	---	---	---	---	---	---	96.52	---	---
22	---	---	---	---	---	---	---	---	---	---	---	95.50
23	---	---	90.96	---	---	---	---	---	96.62	---	---	---
24	---	---	---	---	91.38	92.50	---	---	96.62	---	---	---
25	---	91.10	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	96.08	---
27	---	---	---	90.98	---	---	---	96.12	---	---	---	---
28	---	---	---	---	---	---	---	---	---	96.40	---	---
29	---	---	---	---	---	---	---	---	---	---	---	95.24
30	91.84	---	---	---	---	---	---	---	96.62	---	---	---
31	---	---	90.84	---	---	93.28	---	---	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244900 LAKE JOHNSON (LITTLE LAKE) NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°49'31", long 81°57'07", in SE¼ sec.1, T.8 S., R.23 E., Clay County, Hydrologic Unit 03080103, on north shore of little lake on northwest side of Lake Johnson in Gold Head Branch State Park, 5.5 mi northeast of Keystone Heights.

SURFACE AREA.--34.6 acres (0.05 mi²), little lake area. Combined areas of little lake and big lake are 475 acres, (0.74 mi²).

DRAINAGE AREA.--6.37 mi², combined areas.

PERIOD OF RECORD.--July 1945 to current year (weekly), incomplete. Records of elevations prior to Oct. 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 89.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Jan. 4, 1963 to Dec. 1977 at site 200 ft south at same datum. Prior to Jan. 4, 1963, at same site at datum 5.61 ft higher. Since Feb. 7, 1959, auxiliary non-recording gage in big lake east of earthen dam.

REMARKS.--Gold Head Branch flows into little lake; little lake was first separated from big lake below an elevation of about 95 ft by a shallow channel and earthen dam, which was constructed June 30, 1957; the channel was deepened and a control with removable boards was constructed during August 1968. On January 17, 1969, the dam was found partially washed out and a new dam was constructed in April 1969; the top of the new dam is at an elevation of about 96 ft. Lake Johnson has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, about 105 ft in October 1948, from information by local resident; minimum observed, 90.87 ft, Aug. 12, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 95.53 ft, Oct. 7; minimum observed, 95.15 ft, Feb. 3, 10.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	95.29
2	---	---	95.39	---	---	---	---	---	95.31	---	---	---
3	---	---	---	---	95.15	95.23	---	---	---	---	---	---
4	---	95.37	---	---	---	---	---	---	---	---	95.31	---
5	---	---	95.31	---	95.16	---	---	95.27	---	---	---	---
6	---	---	---	95.31	---	---	---	---	---	---	---	---
7	95.53	---	---	---	---	---	95.27	---	---	95.35	95.31	---
8	---	---	---	---	---	---	---	95.29	---	---	---	95.39
9	---	---	95.29	---	---	---	---	---	95.31	---	---	---
10	---	---	---	---	95.15	95.25	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	95.31	---	---	---	---
13	---	---	---	95.19	---	95.21	---	---	---	---	95.39	---
14	95.40	95.31	---	---	---	---	95.27	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	95.37	---	95.35
16	---	---	95.29	---	---	---	---	---	95.33	---	---	---
17	---	---	---	---	---	95.21	---	---	---	---	---	---
18	---	95.32	---	---	95.19	---	---	---	---	---	95.39	---
19	---	---	---	---	---	---	---	95.41	---	---	---	---
20	---	---	---	95.19	---	---	---	---	---	---	---	---
21	95.35	---	---	---	---	---	95.27	---	---	95.37	---	---
22	---	---	---	---	---	---	---	---	---	---	---	95.33
23	---	---	95.25	---	---	---	---	---	95.37	---	---	---
24	---	---	---	---	95.25	95.23	---	---	95.37	---	---	---
25	---	95.31	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	95.31	---
27	---	---	---	95.19	---	---	---	95.33	---	---	---	---
28	---	---	---	---	---	---	95.27	---	---	95.39	---	---
29	---	---	---	---	---	---	---	---	---	---	---	95.31
30	95.41	---	---	---	---	---	---	---	95.37	---	---	---
31	---	---	95.19	---	---	95.39	---	---	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244905 LAKE JOHNSON (BIG LAKE) NEAR KEYSTONE HEIGHTS, FL

LOCATION.--Lat 29°49'26", long 81°56'42", in SW¼ sec.6, T.8 S., R.24 E., Clay County, Hydrologic Unit 03080103, on northwest shore of big lake in Gold Head Branch State Park, 5.8 mi northeast of Keystone Heights.

SURFACE AREA.--441 acres (0.69 mi²), big lake area. Combined areas of big lake and little lake are 475 acres (0.74 mi²).

DRAINAGE AREA.--6.37 mi², combined areas.

PERIOD OF RECORD.--February 1959 to June 1960 (fragmentary), January 1963 to current year (weekly), incomplete. Records of elevations prior to January 1963 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 89.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to Jan. 7, 1963, at same site at datum 2.40 ft lower.

REMARKS.--Gold Head Branch flows into little lake; little lake was first separated from big lake below an elevation of about 95 ft by a shallow channel and earthen dam, which was constructed June 30, 1957; the channel was deepened and a control with removable boards was constructed during August 1968. On January 17, 1969, the dam was found partially washed out and a new dam was constructed in April 1969; the top of the new dam is at an elevation of about 96 ft. Lake Johnson has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 98.30 ft, Mar. 4, 1966; minimum observed, 87.48 ft, Nov. 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 90.99 ft, Mar. 31; minimum observed, 89.53 ft, Nov. 25.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	90.21
2	---	---	89.81	---	---	---	---	---	90.59	---	---	---
3	---	---	---	---	90.19	90.79	---	---	---	---	---	---
4	---	89.81	---	---	---	---	---	---	---	---	90.23	---
5	---	---	89.79	---	90.19	---	---	90.53	---	---	---	---
6	---	---	---	90.17	---	---	---	---	---	---	---	---
7	90.19	---	---	---	---	---	90.87	---	---	90.57	90.15	---
8	---	---	---	---	---	---	---	90.49	---	---	---	90.23
9	---	---	89.77	---	---	---	---	---	90.59	---	---	---
10	---	---	---	---	90.37	90.87	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	90.53	---	---	---	---
13	---	---	---	90.13	---	90.76	---	---	---	---	90.47	---
14	90.10	89.65	---	---	---	---	90.69	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	90.55	---	90.13
16	---	---	89.89	---	---	---	---	---	90.51	---	---	---
17	---	---	---	---	---	90.69	---	---	---	---	---	---
18	---	89.59	---	---	90.39	---	---	---	---	---	90.57	---
19	---	---	---	---	---	---	---	90.77	---	---	---	---
20	---	---	---	90.15	---	---	---	---	---	---	---	---
21	89.89	---	---	---	---	---	90.69	---	---	90.53	---	---
22	---	---	---	---	---	---	---	---	---	---	---	89.97
23	---	---	89.79	---	---	---	---	---	90.63	---	---	---
24	---	---	---	---	90.69	90.75	---	---	90.63	---	---	---
25	---	89.53	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	90.39	---
27	---	---	---	90.27	---	---	---	90.65	---	---	---	---
28	---	---	---	---	---	---	90.59	---	---	90.41	---	---
29	---	---	---	---	---	---	---	---	---	---	---	89.79
30	89.85	---	---	---	---	---	---	---	90.59	---	---	---
31	---	---	89.83	---	---	90.99	---	---	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02244950 LAKE GRANDIN NEAR INTERLACHEN, FL

LOCATION.--Lat 29°40'16", long 81°52'55", in NE¼ sec.34, T.9 S., R.24 E., Putnam County, Hydrologic Unit 03080103, on south shore of lake, on private pier, 2.8 mi north of Interlachen.

SURFACE AREA.--354 acres (0.55 mi²).

DRAINAGE AREA.--3.71 mi².

PERIOD OF RECORD.--July 1957 to September 1960 (incomplete), October 1960 to current year (fragmentary). Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 73.69 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD.

REMARKS.--Lake outlet is through a swampy area and canal northward to Etonia Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 83.33 ft, on or about Sept. 13, 1964, from floodmark; minimum observed, 79.81 ft, about July 31, 1961.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			MAY		
14...	1100	81.18	08...	1420	81.40
DEC			JUN		
05...	1250	81.15	24...	0930	81.12
FEB			AUG		
05...	1255	81.37	07...	1430	81.09
MAR					
13...	1305	81.76			

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245010 GEORGES LAKE NEAR FLORAHOME, FL

LOCATION.--Lat 29°47'24", long 81°51'34", in NW¼ sec.24, T.8 S., R.24 E., Putnam County, Hydrologic Unit 03080103, on west side of lake, on south side of stub canal, at Lakeside Hills Fish Camp, 4.3 mi northeast of Florahome.

SURFACE AREA.--812 acres (1.27 mi²).

DRAINAGE AREA.--5.33 mi².

PERIOD OF RECORD.--December 1982 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is 85.51 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD.

REMARKS.--Lake is headwaters of Falling Branch.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 99.05 ft, Mar. 31, 1987; minimum observed, 96.95 ft, July 9, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 99.05 ft, Mar. 31; minimum observed, 97.26 ft, Sept. 29.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	97.47
2	---	---	97.79	---	---	---	---	---	97.81	---	---	---
3	---	---	---	---	98.21	98.75	---	---	---	---	---	---
4	---	97.53	---	---	---	---	---	---	---	---	97.31	---
5	---	---	97.78	---	98.27	---	---	98.19	---	---	---	---
6	---	---	---	97.81	---	---	---	---	---	---	---	---
7	97.87	---	---	---	---	---	98.87	---	---	97.53	97.29	---
8	---	---	---	---	---	---	---	98.21	---	---	---	97.43
9	---	---	---	---	---	---	---	---	97.77	---	---	---
10	---	---	97.87	---	98.37	98.87	---	---	---	---	---	---
11	---	97.51	---	---	---	---	---	---	---	---	97.41	---
12	---	---	---	---	---	---	---	98.16	---	---	---	---
13	---	---	---	98.01	---	98.80	---	---	---	---	---	---
14	97.85	---	---	---	---	---	98.67	---	---	97.51	---	---
15	---	---	---	---	---	---	---	---	---	---	---	97.41
16	---	---	97.89	---	---	---	---	---	97.67	---	---	---
17	---	---	---	---	98.41	98.71	---	---	---	---	---	---
18	---	97.49	---	---	---	---	---	---	---	---	97.69	---
19	---	---	---	---	---	---	---	98.13	---	---	---	---
20	---	---	---	98.23	---	---	---	---	---	---	---	---
21	97.83	---	---	---	---	---	98.59	---	---	97.39	---	---
22	---	---	---	---	---	---	---	---	---	---	---	97.27
23	---	---	97.87	---	---	---	---	---	97.61	---	---	---
24	---	---	---	---	98.71	98.73	---	---	97.61	---	---	---
25	---	97.47	---	---	---	---	---	---	---	---	97.49	---
26	---	---	---	---	---	---	---	98.01	---	---	---	---
27	---	---	---	98.21	---	---	---	---	---	---	---	---
28	97.61	---	---	---	---	---	98.31	---	---	97.37	---	---
29	---	---	---	---	---	---	---	---	---	---	---	97.26
30	---	---	97.87	---	---	---	---	---	97.59	---	---	---
31	---	---	---	---	---	99.05	---	---	---	---	---	---

ST. JOHNS RIVER

ST. JOHNS RIVER BASIN BELOW OKLAWAHA RIVER

02245700 KINGSLEY LAKE AT CAMP BLANDING, FL

LOCATION.--Lat 29°58'28", long 81°59'22", in SE¼ sec.15, T.6 S., R.23 E., Clay County, Hydrologic Unit 03080103, on northeast shore of lake, on public pier, at Camp Blanding.

SURFACE AREA.--1,627 acres (2.54 mi²).

DRAINAGE AREA.--6.84 mi².

PERIOD OF RECORD.--June 1945 to March 1946, October 1946 (monthly), March 1947 to current year (twice weekly), incomplete. Records of elevations prior to October 1960 are unpublished and are available in files of the Jacksonville Field Headquarters.

GAGE.--Nonrecording gage. Datum of gage is 173.22 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark); gage readings have been reduced to elevations above NGVD. Prior to Aug. 3, 1961, gage located at site approximately 1,000 ft southeast of present location at same datum.

REMARKS.--Outlet of lake has a fixed concrete (broken) weir with average crest elevation of about 176 ft; flow is into North Fork Black Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 177.82 ft, Oct. 21, 1950, Sept. 12, 1964; minimum observed, 174.34 ft, Apr. 23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 177.14 ft, Mar. 31; minimum observed, 175.96 ft, Nov. 25, 29.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	176.08	---	---	---	---	---	---	---	---	176.24	176.42
2	---	---	175.98	---	---	---	---	176.42	176.46	---	---	---
3	---	---	---	176.22	176.40	176.96	---	---	---	176.24	---	---
4	176.22	176.06	---	---	---	---	177.12	---	---	---	176.20	---
5	---	---	176.09	---	176.41	---	---	176.36	---	---	---	176.38
6	---	---	175.98	176.24	---	---	---	---	176.42	---	---	---
7	176.26	---	---	---	176.56	176.92	176.94	---	---	176.50	176.17	---
8	---	176.04	---	---	---	---	---	176.32	---	---	176.16	176.36
9	---	---	176.12	---	---	---	---	176.32	176.34	---	---	---
10	---	---	---	176.22	176.54	176.98	---	---	---	---	---	---
11	176.34	176.02	---	---	---	---	176.86	---	---	176.60	176.20	---
12	---	---	---	---	---	---	---	176.42	---	---	---	176.32
13	---	---	176.26	176.22	---	176.93	---	---	176.28	---	---	---
14	176.28	---	---	---	176.50	176.94	176.78	---	---	176.52	176.32	---
15	---	176.00	---	---	---	---	---	---	---	---	---	176.30
16	---	---	176.18	---	---	---	---	176.50	176.20	---	---	---
17	---	---	---	176.24	176.52	176.88	---	---	---	---	---	---
18	176.20	175.98	---	---	---	---	176.72	---	---	176.46	176.68	---
19	---	---	---	---	---	---	---	176.60	---	---	---	176.26
20	---	---	176.14	176.28	---	---	---	---	176.16	---	---	---
21	176.08	---	---	---	176.50	176.82	176.64	---	---	176.40	---	---
22	---	175.98	---	---	---	---	---	---	---	---	176.64	176.20
23	---	---	176.14	---	---	---	---	176.68	176.14	---	---	---
24	---	---	---	176.42	176.90	176.80	---	---	176.11	---	---	---
25	176.02	175.96	---	---	---	---	176.56	---	---	176.34	176.54	---
26	---	---	---	---	---	---	---	176.58	---	---	---	176.10
27	---	---	176.12	176.42	---	---	---	---	176.14	---	---	---
28	176.00	---	---	---	176.86	176.86	176.48	---	---	176.30	---	---
29	---	175.96	---	---	---	---	---	---	---	---	176.48	---
30	---	---	---	---	---	---	---	176.52	176.26	---	---	176.02
31	---	---	176.12	176.40	---	177.14	---	---	---	---	---	---

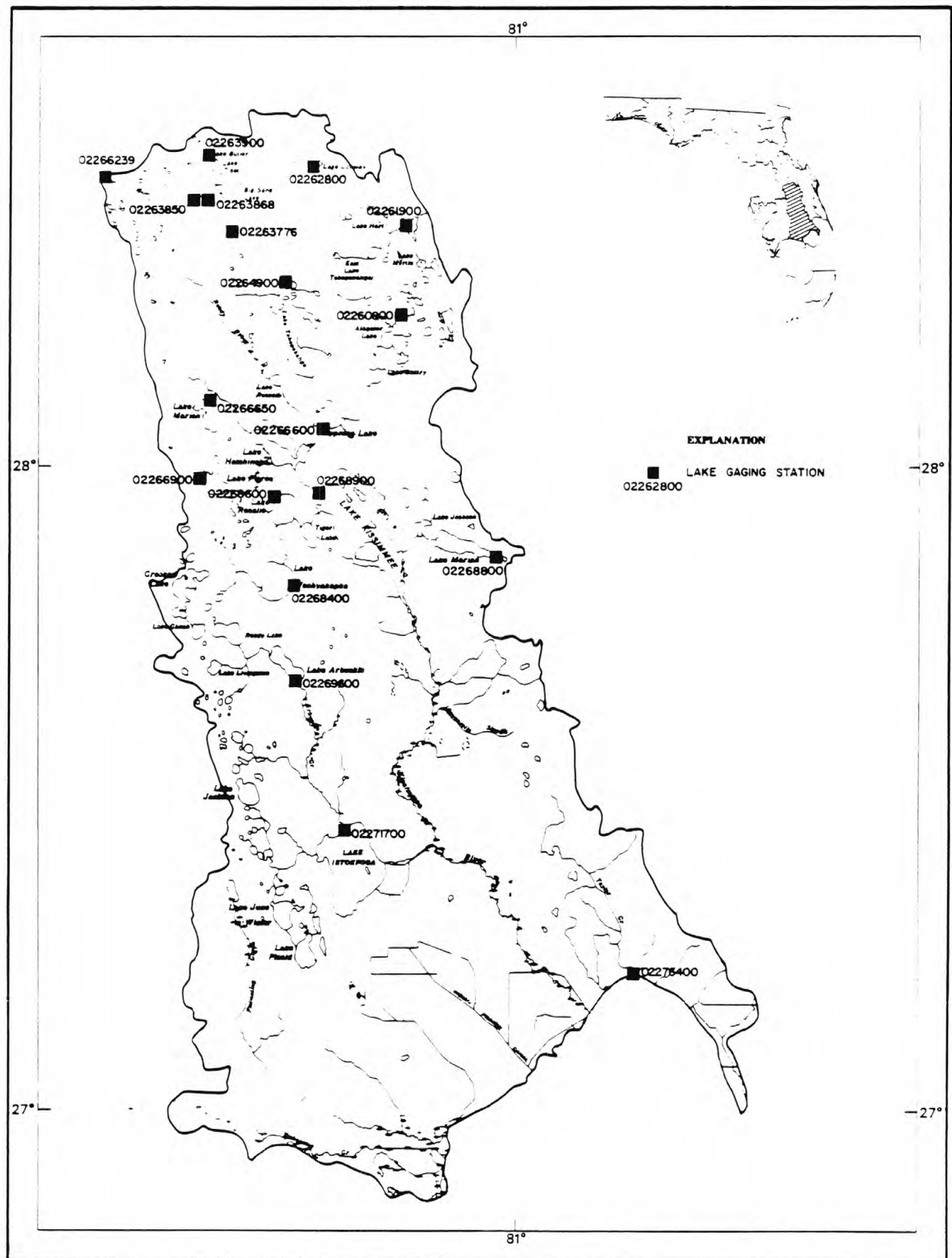


Figure 27.--Location of lake gaging stations in the Kissimmee River basin, the Taylor Creek basin and inflow to Lake Okeechobee from the north, and Fisheating Creek basin and inflow to Lake Okeechobee from the northwest.

02260800 ALLIGATOR LAKE NEAR ASHTON, FL

SURFACE AREA.--3,401 acres (5.31 mi²).

DRAINAGE AREA.--26.6 mi².

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Feb. 19, 1975, at several sites within about 700 ft of present site at datum 60.74 ft higher. Feb. 19, 1975 to Apr. 24, 1986, at several sites on the north side at present datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 66.81 ft, Sept. 25, 1960; minimum observed, 59.52 ft, June 10.11, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 64.40 ft, Mar. 31; minimum observed, 61.74 ft, June 25, 26.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63.53	63.81	63.78	64.04	64.09	64.00	64.30	62.95	62.09	61.84	62.48	62.26
2	63.54	63.84	63.76	64.06	64.07	64.00	64.21	62.94	62.09	61.86	62.47	62.30
3	63.53	63.86	63.77	64.08	64.06	64.00	64.20	62.88	62.09	61.88	62.48	62.33
4	63.53	63.89	63.74	64.12	64.06	64.00	64.06	62.87	62.08	61.92	62.48	62.38
5	63.54	63.86	63.72	64.10	63.98	64.00	64.07	62.86	62.04	62.06	62.48	62.48
6	63.54	63.86	63.70	64.10	63.96	64.00	63.70	62.78	62.00	62.08	62.48	62.46
7	63.62	63.86	63.69	64.10	63.96	64.00	63.48	62.78	61.98	62.07	62.48	62.48
8	63.61	63.84	63.67	64.10	64.02	64.00	63.40	62.78	61.98	62.06	62.48	62.50
9	63.67	63.86	63.68	64.10	64.02	64.00	63.30	62.70	61.97	62.06	62.46	62.52
10	63.67	63.84	63.67	64.10	63.98	64.00	63.26	62.68	61.94	62.04	62.46	62.52
11	63.69	63.84	63.70	64.09	63.96	64.00	63.19	62.68	61.92	62.01	62.46	62.68
12	63.70	63.84	63.70	64.09	63.96	64.00	63.26	62.68	61.90	62.00	62.44	62.78
13	63.71	63.84	63.69	64.09	63.96	64.08	63.18	62.66	61.90	62.00	62.42	62.96
14	63.70	63.84	63.68	64.08	63.96	64.07	63.18	62.66	61.88	62.00	62.44	63.11
15	63.76	63.83	63.68	64.08	63.96	63.97	63.19	62.66	61.86	62.10	62.42	63.16
16	63.80	63.82	63.68	64.08	63.96	63.97	63.19	62.66	61.82	62.11	62.42	63.20
17	63.81	63.82	63.70	64.08	63.97	63.92	63.20	62.64	61.82	62.12	62.42	63.26
18	63.80	63.82	63.68	64.08	63.98	63.92	63.20	62.60	61.78	62.18	62.42	63.30
19	63.79	63.82	63.68	64.10	63.99	63.89	63.20	62.58	61.79	62.20	62.42	63.31
20	63.79	63.82	63.67	64.10	63.99	63.86	63.20	62.58	61.82	62.28	62.38	63.32
21	63.78	63.80	63.67	64.10	63.99	63.96	63.20	62.58	61.78	62.32	62.34	63.34
22	63.76	63.79	63.68	64.09	64.00	63.96	63.20	62.58	61.77	62.36	62.32	63.36
23	63.74	63.76	63.69	64.09	64.00	63.90	63.20	62.57	61.76	62.34	62.31	63.38
24	63.73	63.78	63.90	64.08	64.00	63.90	63.19	62.48	61.76	62.34	62.31	63.40
25	63.72	63.78	63.94	64.09	64.00	63.90	63.16	62.46	61.74	62.38	62.28	63.41
26	63.71	63.80	63.98	64.09	64.00	64.00	63.10	62.40	61.74	62.42	62.24	63.40
27	63.74	63.79	63.98	64.09	64.00	64.00	63.06	62.39	61.78	62.40	62.24	63.39
28	63.76	63.77	63.99	64.09	64.00	64.00	63.06	62.39	61.78	62.42	62.22	63.40
29	63.79	63.78	64.00	64.09	---	64.24	63.00	62.20	61.82	62.46	62.20	63.40
30	63.81	63.78	63.90	64.09	---	64.30	62.99	62.18	61.82	62.47	62.22	63.41
31	63.81	---	63.89	64.08	---	64.40	---	62.09	---	62.47	62.24	---
MEAN	63.70	63.82	63.76	64.09	64.00	64.01	63.37	62.61	61.88	62.17	62.38	62.97
MAX	63.81	63.89	64.00	64.12	64.09	64.40	64.30	62.95	62.09	62.47	62.48	63.41
MIN	63.53	63.76	63.67	64.04	63.96	63.86	62.99	62.09	61.74	61.84	62.20	62.26
CAL YR 1986	MEAN	63.41	MAX	64.16	MIN	61.98						
WTR YR 1987	MEAN	63.23	MAX	64.40	MIN	61.74						

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02261900 LAKE MARY JANE NEAR NARCOOSSEE, FL

LOCATION.--Lat 28°22'46", long 81°11'15", in SW¼ 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 current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 26, 1973, water-stage recorder 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, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.88	60.24	60.08	60.76	60.58	60.81	61.53	59.70	59.35	59.28	59.87	59.55
2	59.87	60.24	60.08	60.81	60.59	60.82	61.46	59.70	59.34	59.27	59.86	59.53
3	59.87	60.24	60.07	60.84	60.59	60.82	61.35	59.70	59.33	59.28	59.84	59.52
4	59.86	60.23	60.04	60.95	60.59	60.81	61.20	59.70	59.31	59.32	59.83	59.61
5	59.85	60.23	60.02	61.05	60.59	60.80	61.03	59.70	59.29	59.32	59.82	59.69
6	59.88	60.23	60.01	61.01	60.60	60.80	60.85	59.71	59.28	59.32	59.81	59.74
7	60.37	60.22	60.00	60.97	60.61	60.88	60.67	59.73	59.26	59.32	59.79	59.75
8	60.55	60.21	60.00	60.94	60.63	60.95	60.60	59.72	59.24	59.31	59.78	59.76
9	60.61	60.21	60.00	60.89	60.61	60.96	60.57	59.70	59.22	59.31	59.76	59.77
10	60.62	60.20	59.99	60.85	60.60	60.92	60.53	59.75	59.20	59.30	59.75	59.81
11	60.57	60.19	60.01	60.81	60.59	60.88	60.48	59.80	59.19	59.28	59.76	59.81
12	60.50	60.19	60.02	60.74	60.59	60.84	60.43	59.78	59.20	59.27	59.75	59.87
13	60.43	60.19	60.01	60.72	60.59	60.81	60.37	59.75	59.28	59.29	59.74	60.00
14	60.36	60.17	60.00	60.74	60.58	60.81	60.37	59.71	59.26	59.32	59.74	60.07
15	60.30	60.16	59.99	60.76	60.58	60.82	60.40	59.67	59.25	59.37	59.75	60.05
16	60.28	60.15	59.98	60.78	60.62	60.82	60.40	59.62	59.23	59.41	59.74	60.02
17	60.26	60.14	59.98	60.80	60.64	60.82	60.34	59.58	59.22	59.49	59.73	59.96
18	60.24	60.14	59.97	60.83	60.65	60.83	60.28	59.54	59.19	59.70	59.71	59.89
19	60.23	60.14	59.96	60.85	60.65	60.84	60.20	59.54	59.17	59.77	59.70	59.88
20	60.21	60.14	59.96	60.86	60.65	60.81	60.12	59.52	59.17	59.90	59.68	59.93
21	60.20	60.13	59.95	60.85	60.69	60.77	60.08	59.49	59.19	60.01	59.67	59.92
22	60.18	60.11	59.94	60.84	60.74	60.74	60.04	59.48	59.17	60.09	59.66	59.93
23	60.18	60.10	59.99	60.73	60.76	60.69	60.00	59.48	59.16	60.08	59.65	59.96
24	60.17	60.10	60.25	60.64	60.75	60.65	59.95	59.46	59.14	60.04	59.63	59.97
25	60.17	60.09	60.35	60.59	60.77	60.61	59.88	59.46	59.15	60.00	59.61	59.97
26	60.17	60.09	60.42	60.56	60.79	60.65	59.81	59.44	59.14	59.95	59.59	59.97
27	60.20	60.08	60.48	60.55	60.79	60.83	59.74	59.43	59.15	59.90	59.58	59.97
28	60.20	60.08	60.53	60.55	60.80	60.86	59.71	59.41	59.18	59.89	59.57	59.97
29	60.20	60.07	60.57	60.56	---	61.02	59.69	59.40	59.26	59.89	59.55	59.97
30	60.21	60.08	60.59	60.58	---	61.31	59.69	59.38	59.29	59.88	59.54	59.99
31	60.21	---	60.63	60.58	---	61.57	---	59.37	---	59.87	59.54	---
MEAN	60.22	60.16	60.12	60.77	60.65	60.86	60.39	59.59	59.23	59.59	59.71	59.86
MAX	60.62	60.24	60.63	61.05	60.80	61.57	61.53	59.80	59.35	60.09	59.87	60.07
MIN	59.85	60.07	59.94	60.55	60.58	60.61	59.69	59.37	59.14	59.27	59.54	59.52

WTR YR 1987 MEAN 60.09 MAX 61.57 MIN 59.14

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02262800 LAKE CONWAY AT PINE CASTLE, FL

LOCATION.--Lat 28°27'55", long 81°21'21", in SW¼ sec.19, T.23 S., R.30 E., Orange County, Hydrologic Unit 03090101, near west-central part of lake on north side of peninsula, at Pine Castle.

SURFACE AREA.--1,079 acres (1.69 mi²).

DRAINAGE AREA.--12.7 mi².

PERIOD OF RECORD.--March 1952 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Aug. 25, 1952, at Nela Isle Bridge, 0.2 mi southwest at datum 69.00 ft higher. Aug. 25, 1952, to Sept. 20, 1973, nonrecording gage at site 150 ft east at datum 69.00 ft higher. Sept. 21, 1973, to Sept. 6, 1974, nonrecording gage at site 150 ft east at present datum.

REMARKS.--Lake elevation is controlled by several drainage wells and a concrete and timber control at outlet. Outflow is to Lake Warren, thence through canal to Boggy Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 89.10 ft, Mar. 25-29,31, 1960; minimum observed, 82.44 ft, Oct. 23,24, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85.08	85.06	85.09	85.06	84.96	85.05	86.10	86.03	85.64	85.65	85.84	85.73
2	85.07	85.16	85.09	85.06	84.96	85.12	86.13	86.01	85.61	85.65	85.83	85.71
3	85.06	85.16	85.08	85.05	84.95	85.11	86.16	86.00	85.60	85.70	85.85	85.76
4	85.04	85.15	85.06	85.05	84.95	85.10	86.17	85.99	85.59	85.76	85.83	85.72
5	85.03	85.15	85.04	85.10	84.95	85.09	86.17	85.98	85.58	85.76	85.88	85.94
6	85.01	85.15	85.02	85.08	84.95	85.08	86.17	85.96	85.56	85.74	85.87	86.04
7	85.05	85.16	85.00	85.09	84.96	85.10	86.17	85.96	85.55	85.74	85.86	86.06
8	85.05	85.16	84.99	85.09	85.07	85.21	86.18	85.95	85.54	85.79	85.85	86.04
9	85.04	85.15	84.98	85.08	85.05	85.21	86.18	85.93	85.51	85.78	85.85	86.02
10	85.21	85.15	84.98	85.08	85.04	85.20	86.18	85.95	85.49	85.76	85.83	86.08
11	85.22	85.13	84.98	85.10	85.02	85.19	86.18	85.97	85.46	85.74	85.83	86.08
12	85.21	85.13	84.98	85.09	85.02	85.18	86.18	85.96	85.44	85.72	85.83	86.14
13	85.21	85.13	84.96	85.07	85.00	85.17	86.18	85.96	85.42	85.70	85.89	86.19
14	85.20	85.11	84.95	85.05	84.99	85.14	86.18	85.94	85.40	85.72	85.88	86.19
15	85.19	85.10	84.94	85.05	84.98	85.14	86.19	85.93	85.38	85.70	85.88	86.19
16	85.17	85.09	84.94	85.04	84.97	85.13	86.21	85.92	85.36	85.69	85.87	86.18
17	85.14	85.08	84.94	85.04	85.04	85.13	86.20	85.91	85.34	85.71	85.86	86.17
18	85.11	85.07	84.93	85.05	85.04	85.13	86.19	85.89	85.32	85.79	85.84	86.16
19	85.09	85.13	84.92	85.05	85.03	85.16	86.19	85.88	85.30	85.81	85.82	86.15
20	85.06	85.13	84.90	85.06	85.02	85.16	86.18	85.88	85.28	85.87	85.82	86.19
21	85.03	85.12	84.88	85.04	85.02	85.15	86.17	85.87	85.26	85.89	85.86	86.20
22	85.00	85.11	84.87	85.05	85.05	85.15	86.16	85.86	85.24	85.90	85.86	86.21
23	84.98	85.10	84.89	85.06	85.07	85.14	86.15	85.84	85.22	85.89	85.84	86.20
24	84.97	85.09	85.01	85.05	85.06	85.13	86.15	85.82	85.20	85.88	85.84	86.20
25	84.96	85.09	85.01	85.05	85.07	85.12	86.14	85.80	85.18	85.86	85.82	86.18
26	84.94	85.08	85.01	85.04	85.06	85.12	86.12	85.78	85.16	85.85	85.80	86.16
27	84.94	85.08	84.99	85.02	85.06	85.47	86.10	85.76	85.23	85.83	85.78	86.14
28	84.97	85.07	84.97	85.00	85.06	85.57	86.08	85.73	85.22	85.81	85.76	86.13
29	84.97	85.06	84.95	84.99	---	85.68	86.06	85.71	85.30	85.84	85.74	86.11
30	84.98	85.06	84.95	84.98	---	85.82	86.04	85.69	85.64	85.83	85.75	86.09
31	84.97	---	84.94	84.96	---	86.10	---	85.66	---	85.86	85.73	---
MEAN	85.06	85.11	84.98	85.05	85.01	85.23	86.16	85.89	85.40	85.78	85.83	86.08
MAX	85.22	85.16	85.09	85.10	85.07	86.10	86.21	86.03	85.64	85.90	85.89	86.21
MIN	84.94	85.06	84.87	84.96	84.95	85.05	86.04	85.66	85.16	85.65	85.73	85.71

CAL YR 1986 MEAN 84.84 MAX 85.22 MIN 83.98
WTR YR 1987 MEAN 85.47 MAX 86.21 MIN 84.87

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02263776 LAKE BRYAN NEAR VINELAND, FL

LOCATION.--Lat 28°21'46", long 81°29'57", in SE¼ sec.27, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on west shore of lake, 1.1 mi south of intersection of Interstate Highway 4 and State Highway 535, and 2.2 mi south of Vineland.

SURFACE AREA.--210 acres (0.33 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 National Geodetic Vertical Datum of 1929 (Orange County bench mark).

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 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
NOV			MAY		
20...	1120	98.56	04...	1215	99.24
JAN			JUL		
22...	1100	98.66	06...	1320	98.86
MAR			AUG		
06...	1230	98.52	25...	1108	99.11

LOCATION.--Lat 28°24'48", long 81°33'28", in NW¼ sec.7, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on right bank at upstream wingwall of control structure 105A in lateral 105, 200 ft south of natural lake shore line, and 3.5 mi northwest of Vineland.

DRAINAGE AREA, --14.8 mi².

PERIOD OF RECORD.--February 1967 to September 1969, October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Walt Disney World bench mark). Prior to Feb. 7, 1969, on north shore of lake at datum 90.00 ft higher.

REMARKS.--Outflow from lake is through L-105 to Bonnet Creek since fall of 1968. In the fall of 1968, structure 105A was completed and became the control outlet of the lake. Draining of Bay Lake through S-105A began on Dec. 20, 1968. The headwater elevation at S-105A represented the lake level until Aug. 25, 1969, when a dike was constructed 200 ft upstream from the control structure. The lake elevation was then independent of the headwater elevation at S-105A. The dike was removed in August 1970 as the lake refilled. Since August 1970, lake elevation regulated by pumpage from ground water.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 95.07 ft, Aug. 18, 1967; minimum, 92.55 ft, May 24, 1968, except when lake was drained in 1970.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94.37	94.30	94.24	94.26	94.19	94.27	94.68	94.19	94.08	93.88	94.38	94.12
2	94.36	94.35	94.25	94.24	94.19	94.29	94.55	94.18	94.06	93.88	94.37	94.11
3	94.35	94.33	94.25	94.23	94.18	94.27	94.52	94.16	94.05	93.94	94.36	94.15
4	94.34	94.32	94.23	94.26	94.18	94.26	94.51	94.16	94.03	94.14	94.35	94.34
5	94.33	94.31	94.21	94.28	94.17	94.25	94.47	94.20	94.02	94.14	94.33	94.40
6	94.31	94.31	94.19	94.30	94.19	94.23	94.45	94.28	94.00	94.13	94.32	94.40
7	94.30	94.31	94.19	94.31	94.20	94.39	94.44	94.27	93.97	94.12	94.31	94.39
8	94.30	94.30	94.19	94.31	94.27	94.52	94.43	94.26	93.94	94.11	94.29	94.38
9	94.31	94.30	94.19	94.30	94.25	94.52	94.41	94.25	93.92	94.10	94.28	94.37
10	94.59	94.29	94.19	94.30	94.23	94.51	94.40	94.26	93.91	94.09	94.31	94.39
11	94.57	94.28	94.20	94.30	94.22	94.49	94.40	94.26	93.90	94.08	94.32	94.38
12	94.56	94.28	94.21	94.28	94.21	94.47	94.39	94.26	93.89	94.06	94.34	94.39
13	94.54	94.28	94.19	94.26	94.20	94.45	94.38	94.25	93.88	94.04	94.32	94.41
14	94.52	94.25	94.17	94.25	94.19	94.43	94.38	94.27	93.89	94.03	94.32	94.40
15	94.51	94.24	94.17	94.25	94.18	94.42	94.39	94.33	93.87	94.00	94.32	94.39
16	94.48	94.24	94.17	94.24	94.20	94.41	94.39	94.32	93.85	94.05	94.30	94.38
17	94.44	94.23	94.16	94.25	94.20	94.41	94.38	94.30	93.83	94.19	94.29	94.37
18	94.40	94.23	94.16	94.25	94.21	94.40	94.35	94.28	93.82	94.21	94.29	94.39
19	94.37	94.23	94.16	94.26	94.22	94.44	94.34	94.29	93.84	94.24	94.28	94.37
20	94.34	94.24	94.15	94.26	94.21	94.43	94.33	94.32	93.84	94.32	94.27	94.36
21	94.31	94.23	94.13	94.28	94.22	94.43	94.32	94.31	93.82	94.32	94.27	94.36
22	94.29	94.22	94.12	94.32	94.23	94.42	94.31	94.29	93.79	94.31	94.26	94.34
23	94.28	94.21	94.13	94.30	94.24	94.41	94.30	94.27	93.80	94.30	94.26	94.33
24	94.27	94.20	94.18	94.27	94.24	94.40	94.30	94.25	93.78	94.29	94.24	94.32
25	94.26	94.20	94.18	94.27	94.24	94.39	94.28	94.23	93.77	94.29	94.23	94.29
26	94.25	94.20	94.17	94.27	94.24	94.51	94.26	94.21	93.76	94.29	94.21	94.27
27	94.29	94.19	94.17	94.25	94.24	94.63	94.24	94.19	93.81	94.32	94.20	94.25
28	94.30	94.19	94.16	94.23	94.24	94.64	94.23	94.17	93.81	94.31	94.18	94.23
29	94.29	94.18	94.15	94.23	---	94.76	94.22	94.14	93.85	94.31	94.17	94.22
30	94.28	94.22	94.15	94.22	---	94.85	94.20	94.12	93.88	94.30	94.15	94.22
31	94.28	---	94.17	94.21	---	94.87	---	94.10	---	94.34	94.13	

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02263868 SOUTH LAKE NEAR VINELAND, FL

LOCATION.--Lat 28°24'45", long 81°32'17", in SW¼ sec.8, T.24 S., R.28 E., Orange County, Hydrologic Unit 03090101, on right bank at upstream wingwall of control structure 15 in Canal No. 1, 300 ft south of natural lake shoreline, 1,600 ft west of State Highway 535, and 2.4 mi northwest of Vineland.

SURFACE AREA.--128 acres (0.20 mi²).

DRAINAGE AREA.--4.0 mi², approximately.

PERIOD OF RECORD.--April 1969 to current year. June 1972 to September 1982 records of discharge also published as South Lake Outlet at S-15, near Vineland (station 02263869).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Walt Disney World bench mark).

REMARKS.--Since January 1969, lake controlled by structure 15. Outflow is to Bonnet Creek through Canal No. 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 94.50 ft, Apr. 6, 1987; minimum daily, 90.62 ft, July 16, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93.61	93.55	93.61	93.50	93.49	93.52	94.48	94.11	93.64	93.42	93.48	93.06
2	93.60	93.71	93.64	93.49	93.48	93.52	94.48	94.06	93.61	93.38	93.45	93.02
3	93.58	93.76	93.63	93.49	93.51	93.52	94.43	93.85	93.58	93.42	93.44	93.03
4	93.56	93.77	93.61	93.49	93.50	93.54	94.41	93.84	93.57	93.55	93.42	93.31
5	93.55	93.77	93.60	93.53	93.46	93.56	94.42	93.86	93.53	93.57	93.40	93.42
6	93.52	93.74	93.58	93.52	93.46	93.47	94.50	93.98	93.56	93.58	93.38	93.46
7	93.52	93.74	93.56	93.50	93.48	93.60	94.44	93.98	93.51	93.48	93.40	93.50
8	93.52	93.75	93.56	93.51	93.56	93.69	94.42	93.95	93.49	93.49	93.38	93.46
9	93.51	93.72	93.54	93.52	93.50	93.72	94.37	93.90	93.46	93.48	93.30	93.42
10	93.69	93.73	93.54	93.49	93.50	93.73	94.38	93.88	93.43	93.49	93.27	93.50
11	93.71	93.71	93.54	93.53	93.52	93.77	94.31	93.87	93.44	93.48	93.24	93.47
12	93.71	93.70	93.55	93.52	93.50	93.78	94.30	93.87	93.38	93.47	93.21	93.44
13	93.69	93.71	93.54	93.47	93.54	93.76	94.32	93.87	93.36	93.45	93.19	93.46
14	93.68	93.69	93.53	93.48	93.58	93.71	94.24	93.92	93.36	93.40	93.20	93.46
15	93.66	93.67	93.50	93.45	93.53	93.72	94.21	93.99	93.35	93.34	93.19	93.46
16	93.65	93.67	93.51	93.51	93.57	93.73	94.39	93.96	93.32	93.33	93.16	93.48
17	93.61	93.64	93.49	93.48	93.56	93.70	94.39	93.94	93.29	93.41	93.16	93.43
18	93.58	93.65	93.48	93.46	93.53	93.66	94.18	93.91	93.29	93.43	93.18	93.40
19	93.56	93.63	93.49	93.44	93.49	93.69	94.12	93.88	93.30	93.44	93.16	93.39
20	93.53	93.64	93.46	93.44	93.48	93.69	94.11	93.89	93.27	93.48	93.16	93.41
21	93.51	93.63	93.46	93.45	93.49	93.68	94.09	93.93	93.29	93.49	93.16	93.43
22	93.48	93.61	93.45	93.47	93.47	93.64	94.11	93.91	93.29	93.50	93.16	93.43
23	93.47	93.61	93.44	93.47	93.44	93.62	94.06	93.87	93.33	93.48	93.20	93.41
24	93.46	93.60	93.46	93.47	93.45	93.60	94.03	93.80	93.30	93.44	93.19	93.37
25	93.44	93.61	93.46	93.45	93.44	93.59	94.01	93.76	93.25	93.42	93.20	93.34
26	93.45	93.61	93.47	93.44	93.46	93.72	94.05	93.74	93.22	93.44	93.16	93.34
27	93.51	93.61	93.44	93.44	93.45	93.94	94.00	93.75	93.41	93.48	93.09	93.32
28	93.52	93.58	93.44	93.45	93.50	93.96	93.97	93.72	93.40	93.45	93.06	93.31
29	93.51	93.59	93.42	93.45	---	94.13	93.91	93.69	93.40	93.44	93.05	93.29
30	93.50	93.60	93.41	93.44	---	94.34	94.03	93.67	93.46	93.47	93.04	93.31
31	93.50	---	93.44	93.42	---	94.49	---	93.66	---	93.47	93.07	---
MEAN	93.56	93.67	93.51	93.48	93.50	93.74	94.24	93.87	93.40	93.46	93.23	93.37
MAX	93.71	93.77	93.64	93.53	93.58	94.49	94.50	94.11	93.64	93.58	93.48	93.50
MIN	93.44	93.55	93.41	93.42	93.44	93.47	93.91	93.66	93.22	93.33	93.04	93.02

CAL YR 1986 MEAN 93.53 MAX 93.99 MIN 92.60

WTR YR 1987 MEAN 93.58 MAX 94.50 MIN 93.02

LOCATION.--Lat 28°29'26", long 81°32'04", in NW¼ sec.17, T.23 S., R.28 E., Orange County, Hydrologic Unit 03090101, on east shore of lake at Windermere.

DRAINAGE AREA.--14.5 mi².

PERIOD OF RECORD.--January 1933 to October 1941 (weekly), incomplete, November 1941 to July 1976; August 1976 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is 90.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to Nov. 27, 1941, nonrecording gage at site 500 ft south at datum 10.17 ft higher. Nov. 27, 1941 to Mar. 9, 1942, nonrecording gage at site of old hotel pier about 0.4 mi northwest at datum 6.40 ft higher. Mar. 9, 1942 to Dec. 7, 1978, nonrecording gage at present site at datum 6.40 ft higher.

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, 100.10 ft, Mar. 30, Apr. 10, but water level was observed to be over staff gage on Apr. 18; minimum observed, 99.16 ft, Sept. 3.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

[illegible]

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02264900 LAKE TOHOPEKALIGA AT KISSIMMEE, FL

LOCATION.--Lat 28°17'20", long 81°24'20", in NW¼ sec.27, T.25 S., R.29 E., Osceola County, Hydrologic Unit 03090101, at north end of lake, on end of public pier at Kissimmee.

SURFACE AREA.--18,790 acres (29.4 mi²).

DRAINAGE AREA.--620 mi², approximately.

PERIOD OF RECORD.--January 1942 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to June 15, 1950, at site 9 mi south on west shore of lake at datum 50.36 ft higher.

REMARKS.--Lake is one of the Kissimmee River headwaters chain of lakes. Since 1963, 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, 59.40 ft, Sept. 25, 1960; minimum daily, 48.37 ft, Apr. 22, 1979.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.91	54.14	54.33	53.01	50.45	48.71	50.61	49.53	48.68	48.99	50.00	50.27
2	53.90	54.16	54.35	52.80	50.51	48.79	50.96	49.41	48.72	49.01	50.00	50.25
3	53.90	54.17	54.30	52.66	50.32	48.72	51.25	49.32	48.74	49.08	50.00	50.24
4	53.90	54.17	54.26	52.62	50.22	48.67	51.17	49.15	48.74	49.15	49.99	50.37
5	53.88	54.20	54.22	52.30	50.19	48.61	51.34	49.03	48.75	49.20	49.99	50.49
6	53.87	54.21	54.24	52.37	50.12	48.60	51.39	48.89	48.73	49.25	50.00	50.50
7	53.87	54.22	54.29	52.36	50.10	48.94	51.43	48.79	48.72	49.31	50.00	50.52
8	53.90	54.22	54.32	52.28	50.01	48.99	51.36	48.79	48.65	49.31	50.03	50.55
9	53.90	54.22	54.33	52.21	49.88	49.02	51.32	48.70	48.68	49.36	50.02	50.59
10	53.88	54.23	54.27	52.18	49.72	48.92	51.29	48.74	48.69	49.36	50.02	50.64
11	53.91	54.22	54.24	51.95	49.61	48.83	51.24	48.83	48.69	49.37	50.04	50.66
12	53.92	54.24	54.17	51.89	49.58	48.80	51.20	48.85	48.75	49.38	50.12	50.76
13	53.95	54.19	53.99	51.81	49.51	48.79	51.16	48.81	48.73	49.39	50.09	50.84
14	53.95	54.17	53.96	51.76	49.45	48.78	51.09	48.87	48.72	49.35	50.13	50.87
15	53.93	54.19	53.90	51.71	49.36	48.79	51.03	48.86	48.67	49.40	50.20	50.92
16	53.88	54.23	53.82	51.64	49.37	48.79	50.91	48.87	48.72	49.46	50.22	50.93
17	53.86	54.23	53.77	51.55	49.38	48.70	50.78	48.90	48.71	49.47	50.24	50.96
18	53.84	54.24	53.71	51.50	49.35	48.70	50.72	48.93	48.69	49.52	50.22	50.96
19	53.82	54.23	53.64	51.47	49.32	48.75	50.59	48.91	48.72	49.57	50.20	50.97
20	53.82	54.26	53.58	51.33	49.23	48.70	50.52	48.89	48.72	49.63	50.18	50.97
21	53.84	54.22	53.46	51.22	49.13	48.69	50.44	48.88	48.71	49.63	50.19	50.98
22	53.82	54.22	53.40	51.25	49.09	48.65	50.34	48.79	48.70	49.65	50.17	50.98
23	53.87	54.23	53.44	51.02	49.09	48.61	50.28	48.71	48.70	49.71	50.20	51.02
24	53.88	54.25	53.56	51.01	48.97	48.61	50.17	48.66	48.70	49.74	50.22	51.03
25	53.89	54.28	53.48	51.08	48.96	48.67	50.08	48.64	48.70	49.76	50.21	51.05
26	53.88	54.30	53.39	50.90	48.86	48.68	49.98	48.61	48.68	49.78	50.21	51.05
27	53.94	54.28	53.32	50.75	48.86	49.01	49.85	48.57	48.70	49.78	50.23	51.06
28	53.94	54.27	53.21	50.75	48.78	49.04	49.79	48.59	48.75	49.77	50.28	51.04
29	53.99	54.29	53.16	50.69	---	49.42	49.74	48.62	48.84	49.79	50.27	51.05
30	54.10	54.33	53.08	50.65	---	49.80	49.65	48.67	49.04	49.79	50.30	51.10
31	54.13	---	53.04	50.45	---	50.17	---	48.69	---	49.76	50.28	---
MEAN	53.91	54.23	53.81	51.65	49.55	48.87	50.72	48.85	48.72	49.47	50.14	50.79
MAX	54.13	54.33	54.35	53.01	50.51	50.17	51.43	49.53	49.04	49.79	50.30	51.10
MIN	53.82	54.14	53.04	50.45	48.78	48.60	49.65	48.57	48.65	48.99	49.99	50.24

CAL YR 1986 MEAN 53.76 MAX 55.32 MIN 51.91
WTR YR 1987 MEAN 50.90 MAX 54.35 MIN 48.57

02266239 TROUT LAKE NEAR CLERMONT, FL

SURFACE AREA.--163 acres (0.25 mi²).

DRAINAGE AREA.--1.31 mi².

PERIOD OF RECORD.--March 1970 to current year (weekly), incomplete.

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

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

REMARKS.--Lake is landlocked except at extremely high stages.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 96.90 ft, Apr. 1, 8, 1970; minimum observed, 85.98 ft, Dec. 19, 26, 1981.

[illegible]

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266600 CYPRESS LAKE NEAR ST. CLOUD, FL

LOCATION.--Lat 28°04'29", long 81°18'07", in SW¼ sec.2, T.28 S., R.30 E., Osceola County, Hydrologic Unit 03090101, on east shore of lake, near mouth of Canoe Creek, and about 12 mi south of St. Cloud.

SURFACE AREA.--4,085 acres (6.38 mi²).

DRAINAGE AREA.--1,162 mi², combined drainage area of Cypress Lake and Lake Hatchineha.

PERIOD OF RECORD.--January 1942 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Dec. 13, 1973, at site 2.3 mi southwest at datum 48.78 ft higher and Dec. 13, 1973 to June 21, 1979, at site 2.3 mi southwest at present datum.

REMARKS.--Lake is one of the Kissimmee River headwaters chain of lakes. Stage is affected by operation of control structures upstream and downstream. Flow into Short Canal begins at about elevation 53.2 ft. Overflow over the south shore begins at a slightly higher stage.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 57.18 ft, Sept. 26, 1960; minimum daily, 47.60 ft, June 4, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 52.63 ft, Jan. 1, 1987; minimum daily, 48.13 ft, June 25, 1987.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.55	51.57	51.56	52.63	50.59	48.80	---	49.03	48.28	48.31	48.48	48.57
2	51.55	51.55	51.58	52.62	50.57	48.69	---	48.94	48.27	48.37	48.49	48.59
3	51.57	51.57	51.52	52.58	50.46	48.61	---	48.85	48.27	48.39	48.50	48.63
4	51.57	51.58	51.45	52.62	50.37	48.50	---	48.79	48.29	48.42	48.50	48.86
5	51.57	51.59	51.42	52.63	50.28	48.41	---	48.75	48.27	48.38	48.50	49.11
6	51.56	51.59	51.40	52.45	50.24	48.65	---	48.71	48.19	48.37	48.47	49.11
7	51.55	51.60	51.44	52.43	50.16	48.94	---	48.64	48.14	48.37	48.48	49.14
8	51.56	51.58	51.49	52.39	---	49.03	---	48.61	48.16	48.37	48.46	49.17
9	51.55	51.59	51.53	52.33	---	49.02	---	48.55	48.19	48.37	48.43	49.19
10	51.54	51.57	51.58	52.29	---	48.85	50.59	48.48	48.21	48.35	48.44	49.33
11	51.52	51.57	51.66	52.24	---	48.79	50.55	48.43	48.23	48.34	48.47	49.33
12	51.51	51.61	51.69	52.09	49.84	48.72	50.49	48.46	48.24	48.35	48.55	49.37
13	51.53	51.58	51.61	51.99	49.64	48.61	50.41	48.48	48.25	48.37	48.57	49.48
14	51.54	51.48	51.63	51.90	49.56	48.57	50.28	48.48	48.25	48.38	48.59	49.52
15	51.51	51.53	51.67	51.83	49.64	48.54	50.25	48.52	48.21	48.42	48.62	49.56
16	51.49	51.57	51.66	51.76	49.53	48.50	50.23	48.57	48.22	48.42	48.63	49.58
17	51.44	51.59	51.65	51.68	49.44	48.45	50.15	48.59	48.19	48.37	48.63	49.59
18	51.41	51.59	51.69	51.62	49.36	48.58	50.06	48.61	48.17	48.35	48.63	49.60
19	51.37	51.57	51.68	51.62	49.27	48.53	49.92	48.65	48.18	48.35	48.63	49.60
20	51.38	51.59	51.74	51.52	49.20	48.50	49.82	48.67	48.19	48.39	48.61	49.60
21	51.39	51.54	51.69	51.42	49.21	48.50	49.75	48.66	48.17	48.42	48.59	49.58
22	51.38	51.53	51.68	51.43	49.17	48.44	49.68	48.63	48.17	48.46	48.56	49.65
23	51.41	51.53	51.80	51.29	49.01	48.42	49.60	48.56	48.20	48.47	48.55	49.72
24	51.42	51.55	52.12	51.20	48.96	48.47	49.57	48.50	48.14	48.46	48.57	49.73
25	51.45	51.55	52.07	51.21	48.89	48.52	49.51	48.43	48.13	48.47	48.56	49.74
26	51.44	51.57	52.06	51.22	48.86	---	49.39	48.35	48.16	48.47	48.55	49.74
27	51.49	51.53	52.09	51.05	48.79	---	49.29	48.30	48.25	48.46	48.57	49.75
28	51.45	51.53	52.10	50.94	48.85	---	49.26	48.26	48.25	48.44	48.57	49.74
29	51.49	51.53	52.14	50.85	---	---	49.20	48.26	48.29	48.44	48.55	49.74
30	51.52	51.55	52.19	50.80	---	---	49.10	48.25	48.36	48.47	48.56	49.81
31	51.55	---	52.28	50.73	---	---	---	48.26	---	48.50	48.56	---
MEAN	51.49	51.56	51.74	51.79	---	---	---	48.56	48.22	48.40	48.54	49.40
MAX	51.57	51.61	52.28	52.63	---	---	---	49.03	48.36	48.50	48.63	49.81
MIN	51.37	51.48	51.40	50.73	---	---	---	48.25	48.13	48.31	48.43	48.57

02266650 LAKE MARION NEAR HAINES CITY, FL

SURFACE AREA -- 2.968 acres (4.64 mi²).

DRAINAGE AREA.--35.7 mi².

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District bench mark). July 21, 1959, to Sept. 8, 1963, at site 500 ft north and Sept. 9, 1963, to Jan. 29, 1974, at present site, at datum 63.22 ft higher.

REMARKS.--Lake is in the headwaters of Kissimmee River. Outflow from lake is through Lake Marion Creek to Lake Hatchineha.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 67.52 ft, Sept. 12,15, 1960; minimum observed, 54.86 ft. June 1, 1967.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.30	66.10	65.98	66.28	66.12	66.08	66.76	66.18	65.86	65.98	65.92	66.30
2	66.28	66.10	65.98	66.28	66.12	66.08	66.76	66.16	65.84	65.98	65.96	66.28
3	66.26	66.10	65.96	66.28	66.12	66.08	66.76	66.14	65.82	66.02	65.96	66.26
4	66.24	66.10	65.96	66.34	66.10	66.06	66.76	66.12	65.80	66.05	66.06	66.38
5	66.22	66.08	65.94	66.34	66.10	66.06	66.76	66.10	65.80	66.08	66.06	66.46
6	66.20	66.08	65.92	66.34	66.10	66.06	66.74	66.10	65.78	66.08	66.06	66.46
7	66.18	66.08	65.92	66.32	66.08	66.14	66.72	66.10	65.76	66.06	66.04	66.46
8	66.16	66.08	65.92	66.32	66.10	66.14	66.68	66.12	65.74	66.04	66.02	66.44
9	66.14	66.08	65.92	66.32	66.10	66.14	66.66	66.14	65.72	66.02	66.00	66.42
10	66.18	66.06	65.94	66.30	66.08	66.12	66.64	66.20	65.70	66.00	66.02	66.42
11	66.18	66.06	65.98	66.30	66.08	66.12	66.60	66.20	65.68	65.98	66.30	66.40
12	66.16	66.04	65.98	66.28	66.08	66.10	66.56	66.22	65.66	65.96	66.44	66.38
13	66.14	66.04	65.96	66.28	66.06	66.10	66.54	66.22	65.64	65.94	66.52	66.46
14	66.12	66.02	65.96	66.28	66.06	66.08	66.52	66.20	65.64	65.92	66.56	66.46
15	66.12	66.02	65.94	66.26	66.06	66.08	66.50	66.18	65.62	65.96	66.56	66.44
16	66.10	66.00	65.92	66.26	66.08	66.08	66.48	66.16	65.60	65.96	66.56	66.42
17	66.08	66.00	65.94	66.24	66.08	66.06	66.46	66.14	65.58	65.94	66.54	66.42
18	66.06	66.00	65.92	66.24	66.06	66.06	66.44	66.12	65.56	65.94	66.54	66.40
19	66.04	65.98	65.92	66.22	66.06	66.10	66.44	66.10	65.56	65.94	66.62	66.38
20	66.04	65.98	65.92	66.22	66.06	66.10	66.42	66.08	65.70	65.90	66.62	66.38
21	66.02	65.98	65.90	66.20	66.06	66.10	66.40	66.06	65.70	65.90	66.60	66.36
22	66.00	65.98	65.90	66.22	66.06	66.08	66.38	66.04	65.68	65.90	66.58	66.34
23	65.98	65.96	65.94	66.24	66.06	66.08	66.36	66.02	65.76	65.88	66.54	66.32
24	65.96	65.96	66.12	66.24	66.06	66.06	66.34	66.00	65.76	65.88	66.52	66.30
25	65.94	65.96	66.12	66.26	66.06	66.06	66.32	65.98	65.74	65.92	66.50	66.26
26	65.94	65.94	66.10	66.24	66.04	66.16	66.30	65.96	65.80	65.92	66.46	66.24
27	66.08	65.94	66.10	66.22	66.04	66.20	66.26	65.94	65.86	65.90	66.42	66.22
28	66.08	65.94	66.10	66.20	66.04	66.20	66.24	65.92	65.88	65.90	66.40	66.20
29	66.08	65.92	66.08	66.18	---	66.46	66.22	65.90	65.92	65.88	66.38	66.18
30	66.08	65.96	66.08	66.16	---	66.64	66.20	65.88	65.96	65.88	66.34	66.22
31	66.10	---	66.12	66.12	---	66.76	---	65.86	---	65.86	66.32	

CAL YR 1986	MEAN 66.00	MAX 66.62	MIN 65.20
WTR YR 1987	MEAN 66.13	MAX 66.76	MIN 65.56

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02266900 LAKE PIERCE NEAR WAVERLY, FL

LOCATION.--Lat 27°58'37", long 81°32'33", in NW¼ sec.8, T.29 S., R.28 E., Polk County, Hydrologic Unit 03090101, on west shore of lake, at public boat landing, 4.5 mi east of Waverly, and 5.5 mi northeast of town of Lake Wales.

SURFACE AREA.--3,736 acres (5.84 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). Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (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. 21, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 78.91 ft Sept. 17,18, 1960; minimum observed, 75.23 ft, May 24, 1985.

ELEVATION, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
NOV			MAY		
17...	0744	76.90	06...	1430	76.65
18...	1345	76.86	JUL		
JAN			10...	1409	76.62
14...	0810	76.94	AUG		
MAR			27...	1020	76.66
11...	1540	76.71			

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02268400 LAKE WEOHYAKAPKA AT INDIAN LAKE ESTATES, FL

LOCATION.--Lat 27°48'50", long 81°23'16", in NE¼ sec.2, T.31 S., R.29 E., Polk County, Hydrologic Unit 03090101, on east shore of lake, on end of public pier at Indian Lake Estates, and 8.5 mi east of Babson Park.

SURFACE AREA.--7,555 acres (11.8 mi²).

DRAINAGE AREA.--93.5 mi².

PERIOD OF RECORD.--February 1958 to September 1960 (weekly to monthly), October 1960 to September 1961 (fragmentary), October 1961 to current year (weekly). Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (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, 61.82 ft, Sept. 23; minimum observed, 60.72 ft, June 30.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	61.50	---	---	---	---	61.04	---	---	---	60.84	---	---
4	---	---	---	---	61.30	---	---	61.18	60.92	---	---	---
5	---	---	61.18	---	---	---	---	---	---	---	61.04	---
6	---	---	---	61.40	---	---	---	---	---	---	---	---
7	---	61.38	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	61.40	---	---	---	---	---	---	---	---	---	---	61.70
10	---	---	---	---	---	61.10	---	---	---	60.90	---	---
11	---	---	---	---	---	---	---	---	---	---	61.28	---
12	---	---	---	61.40	61.20	---	---	---	60.88	---	---	---
13	---	61.30	61.10	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	61.34	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	61.10	61.16	---	60.98	60.84	---	---	61.80
19	---	---	61.00	---	---	---	---	---	---	61.00	---	---
20	---	---	---	---	---	---	---	---	---	---	61.42	---
21	---	61.24	---	61.36	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	61.82
24	---	---	---	---	---	61.14	---	---	---	61.04	---	---
25	61.30	---	---	---	---	---	---	---	60.84	---	61.70	---
26	---	---	---	---	61.04	---	---	61.00	---	---	---	---
27	---	61.18	---	---	---	---	---	---	---	---	---	---
28	---	---	---	61.30	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	60.72	---	---	61.80
31	61.40	---	---	---	---	61.80	---	---	---	61.04	---	---

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02268600 LAKE ROSALIE NEAR LAKE WALES, FL

LOCATION.--Lat 27°56'23", long 81°25'14", in SE¼ sec.21, T.29 S., R.29 E., Polk County, Hydrologic Unit 03090101, on west side of lake, in boat basin at Monroe's 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), incomplete, May 1967 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (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, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.94	53.62	53.40	53.70	53.78	53.61	54.48	54.00	53.60	53.28	53.06	53.45
2	53.93	53.62	53.39	53.73	53.77	53.62	54.50	53.97	53.59	53.26	53.06	53.45
3	53.91	53.61	53.37	53.75	53.77	53.61	54.50	53.94	53.54	53.29	53.06	53.44
4	53.90	53.60	53.35	53.76	53.77	53.60	54.50	53.91	53.52	53.39	53.03	53.45
5	53.88	53.58	53.32	53.85	53.76	53.58	54.49	54.02	53.50	53.38	53.00	53.64
6	53.87	53.59	53.29	53.87	53.76	53.58	54.48	54.02	53.48	53.36	52.98	53.64
7	53.86	53.57	53.29	53.89	53.77	53.72	54.46	54.00	53.44	53.34	52.96	53.65
8	53.85	53.57	53.28	53.89	53.77	53.70	54.46	54.08	53.40	53.32	52.95	53.67
9	53.83	53.57	53.27	53.91	53.76	53.69	54.44	54.06	53.38	53.28	52.95	53.70
10	53.82	53.56	53.26	53.92	53.74	53.67	54.43	54.09	53.37	53.26	52.94	53.72
11	53.81	53.55	53.28	53.90	53.73	53.65	54.43	54.07	53.35	53.26	53.12	53.74
12	53.80	53.58	53.28	53.88	53.72	53.63	54.41	54.07	53.32	53.20	53.27	53.77
13	53.77	53.57	53.26	53.88	53.71	53.60	54.39	54.06	53.30	53.18	53.46	53.80
14	53.75	53.55	53.25	53.88	53.68	53.58	54.39	54.04	53.27	53.17	53.56	53.82
15	53.72	53.53	53.23	53.88	53.68	53.58	54.38	54.03	53.25	53.16	53.61	53.83
16	53.68	53.53	53.22	53.88	53.70	53.58	54.35	54.01	53.23	53.16	53.62	53.83
17	53.66	53.52	53.22	53.88	53.70	53.57	54.33	53.99	53.22	53.16	53.62	53.82
18	53.64	53.52	53.20	53.89	53.70	53.56	54.30	53.99	53.22	53.15	53.62	53.81
19	53.62	53.50	53.20	53.89	53.68	53.58	54.28	53.98	53.20	53.15	53.62	53.81
20	53.61	53.48	53.19	53.88	53.66	53.58	54.26	53.95	53.18	53.15	53.61	53.80
21	53.57	53.46	53.18	53.88	53.64	53.58	54.25	53.93	53.18	53.14	53.60	53.80
22	53.54	53.44	53.18	53.86	53.65	53.57	54.23	53.91	53.18	53.14	53.58	53.82
23	53.53	53.43	53.17	53.86	53.64	53.57	54.20	53.89	53.16	53.14	53.56	53.84
24	53.53	53.42	53.56	53.86	53.64	53.56	54.18	53.84	53.13	53.14	53.54	53.84
25	53.51	53.42	53.60	53.86	53.64	53.55	54.16	53.80	53.11	53.12	53.53	53.82
26	53.50	53.42	53.61	53.85	53.63	53.54	54.14	53.77	53.09	53.12	53.52	53.80
27	53.49	53.41	53.61	53.83	53.62	53.70	54.10	53.74	53.10	53.10	53.51	53.80
28	53.56	53.40	53.61	53.83	53.61	53.78	54.07	53.71	53.10	53.12	53.49	53.78
29	53.55	53.40	53.61	53.83	---	53.78	54.04	53.69	53.10	53.12	53.47	53.76
30	53.62	53.40	53.60	53.82	---	54.26	54.02	53.65	53.26	53.14	53.46	53.76
31	53.61	---	53.60	53.80	---	54.42	---	53.62	---	53.10	53.45	---
MEAN	53.71	53.51	53.35	53.85	53.70	53.66	54.32	53.93	53.29	53.20	53.35	53.73
MAX	53.94	53.62	53.61	53.92	53.78	54.42	54.50	54.09	53.60	53.39	53.62	53.84
MIN	53.49	53.40	53.17	53.70	53.61	53.54	54.02	53.62	53.09	53.10	52.94	53.44

CAL YR 1986 MEAN 52.88 MAX 54.00 MIN 51.59
WTR YR 1987 MEAN 53.63 MAX 54.50 MIN 52.94

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02268800 LAKE MARIAN NEAR KENANSVILLE, FL

LOCATION.--Lat 27°52'22", long 81°03'08", in NE¼ sec.18, T.30 S., R.33 E., Osceola County, Hydrologic Unit 03090101, on northeast shore of lake in canal at county boat ramp, 4.5 mi west of Kenansville.

SURFACE AREA.--5,727 acres (8.95 mi²).

DRAINAGE AREA.--49.6 mi².

PERIOD OF RECORD.--February 1958 to current year (weekly), incomplete. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District bench mark). Prior to Nov. 16, 1972, at present site and other nearby sites at datum 57.02 ft higher. Nov. 16, 1972, to Oct. 28, 1980, at site 0.6 mi southeast at present datum.

REMARKS.--Lake is in the headwaters of the Kissimmee River. Outflow is through a canal to Lake Jackson, thence through Jackson Canal to Lake Kissimmee. During high water there is flow through Fodderstack Slough to Jackson Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 61.63 ft, Sept. 27, 1960; minimum observed, 55.36 ft, June 7, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 58.54 ft, Apr. 3; minimum observed, 56.98 ft, Aug. 28.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	58.12	---	---	---	---
2	---	---	---	58.08	---	---	---	---	---	---	---	---
3	58.28	---	---	---	---	---	58.54	---	---	57.30	---	---
4	---	---	---	---	---	---	---	---	---	---	---	57.46
5	---	---	58.06	58.17	---	---	---	57.88	57.58	---	---	---
6	---	---	---	---	57.84	57.64	---	---	---	---	---	---
7	---	58.26	---	---	---	---	---	---	---	---	57.28	---
8	---	---	---	---	---	57.84	---	57.78	---	---	---	---
9	---	---	---	58.10	---	---	---	---	---	---	---	---
10	58.20	---	---	---	---	---	58.48	---	---	57.26	---	---
11	---	---	---	---	---	---	---	---	---	---	---	57.62
12	---	---	57.94	---	---	---	---	---	57.42	---	---	---
13	---	---	---	---	57.78	57.62	---	---	---	---	---	---
14	---	58.20	---	---	---	---	---	---	---	---	57.26	---
15	---	---	---	---	---	---	---	58.00	---	---	---	---
16	---	---	---	58.02	---	---	---	---	---	---	---	---
17	58.02	---	---	---	---	---	58.40	---	---	57.30	---	---
18	---	---	---	---	---	---	---	---	---	---	---	57.80
19	---	---	57.88	---	---	---	---	---	57.32	---	---	---
20	---	---	---	---	57.74	57.58	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	57.10	---
22	---	---	---	---	---	---	---	57.92	---	---	---	---
23	---	---	---	57.96	---	---	---	---	57.24	---	---	---
24	57.90	58.14	---	---	---	---	58.28	---	---	57.36	57.10	---
25	---	---	---	---	---	---	---	---	---	---	---	57.98
26	---	---	58.02	---	---	---	---	---	57.28	---	---	---
27	---	---	---	---	57.68	57.70	---	---	---	---	---	---
28	---	58.10	---	---	---	---	---	---	---	---	56.98	---
29	---	---	---	---	---	---	---	57.74	---	---	---	---
30	---	---	---	57.88	---	---	---	---	---	---	---	57.92
31	58.02	---	---	---	---	---	---	---	---	57.30	---	---

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02268900 LAKE KISSIMMEE 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 65, 0.1 mi downstream from bridge on State Highway 60, and 25 mi southeast of town of Lake Wales.

SURFACE AREA.--34,760 acres (54.3 mi²).

DRAINAGE AREA.--1,607 mi² at State Highway 60, includes areas drained by Lake Weohyakapka and Lake Marian.

PERIOD OF RECORD.--August 1929 to current year. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office. Prior to March 1942, records for Kissimmee River at outlet of Lake Kissimmee. Since June 11, 1965, records for Kissimmee River at S-65, near Lake Wales (station 02268903).

REVISED RECORDS.--WRD FL 1970: Drainage area. WDR FL-81-2: Surface area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by South Florida Water Management District). Prior to Mar. 16, 1942, nonrecording gage at bridge on State Highway 60 at datum 1.25 ft lower. Mar. 16, 1942, to May 11, 1950, water-stage recorder on southwest shore of lake, and May 11, 1950, to June 10, 1965, water-stage recorder near northwest end of lake, at datum 46.94 ft higher.

REMARKS.--Lake is located between the upper and lower reaches of the Kissimmee River and is the most downstream of the river headwater chain of lakes. Since July 1964 lake elevation partially regulated by operation of structure 65 at lake outlet and by storage releases at several control structures in the river basin upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 56.64 ft, Oct. 12,13, 1953; minimum daily, 42.87 ft, May 25, 1977.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.49	51.55	51.51	52.39	49.89	48.15	47.94	47.91	48.23	48.23	48.38	48.48
2	51.51	51.61	51.51	52.39	49.72	48.20	47.48	47.96	48.21	48.19	48.37	48.49
3	51.53	51.59	51.56	52.16	49.69	48.07	47.35	47.96	48.20	48.22	48.38	48.54
4	51.52	51.58	51.58	52.13	49.63	48.06	47.78	48.00	48.19	48.28	48.39	48.76
5	51.52	51.56	51.61	52.31	49.46	48.07	47.90	48.02	48.17	48.30	48.39	48.99
6	51.53	51.55	51.57	52.02	49.45	47.97	47.35	48.04	48.21	48.28	48.37	49.04
7	51.51	51.53	51.50	51.85	49.37	48.10	47.02	47.98	48.18	48.28	48.36	49.08
8	51.46	51.53	51.46	51.77	49.49	48.24	47.05	47.96	48.16	48.28	48.37	49.11
9	51.44	51.53	51.44	51.68	49.37	48.26	46.99	47.95	48.14	48.27	48.41	49.11
10	51.47	51.53	51.45	51.56	49.20	48.24	47.14	47.91	48.15	48.25	48.45	49.15
11	51.49	51.53	51.48	51.63	49.06	48.14	47.89	48.03	48.12	48.25	48.48	49.17
12	51.49	51.55	51.54	51.54	49.00	48.11	47.99	48.17	48.11	48.24	48.45	49.22
13	51.45	51.60	51.70	51.37	48.91	48.11	47.38	48.22	48.09	48.28	48.52	49.35
14	51.47	51.60	51.62	51.25	48.82	48.02	47.03	48.22	48.08	48.31	48.56	49.41
15	51.49	51.61	51.56	51.13	48.70	47.98	47.04	48.27	48.09	48.31	48.54	49.43
16	51.59	51.55	51.49	51.05	48.55	48.00	47.02	48.30	48.09	48.31	48.52	49.46
17	51.57	51.53	51.56	51.16	48.41	47.99	47.34	48.28	48.10	48.15	48.51	49.47
18	51.54	51.54	51.61	51.21	48.08	47.98	47.99	48.24	48.09	48.22	48.53	49.51
19	51.51	51.55	51.65	51.16	48.09	48.16	47.99	48.21	48.07	48.24	48.53	49.55
20	51.50	51.54	51.68	50.59	48.11	48.23	47.47	48.20	48.07	48.37	48.54	49.54
21	51.48	51.56	51.75	49.51	48.13	48.20	47.31	48.18	48.06	48.41	48.51	49.56
22	51.47	51.53	51.75	49.20	48.12	48.18	47.93	48.14	48.05	48.43	48.54	49.62
23	51.40	51.49	51.65	51.21	48.18	48.16	47.25	48.11	48.07	48.42	48.53	49.73
24	51.37	51.47	51.89	50.95	48.04	48.01	47.28	48.13	48.08	48.39	48.51	49.74
25	51.35	51.47	51.99	50.54	48.06	48.06	48.00	48.21	48.05	48.37	48.50	49.73
26	51.36	51.46	52.07	50.52	48.07	48.14	48.00	48.23	48.05	48.35	48.48	49.70
27	51.48	51.49	52.10	50.48	48.11	48.20	47.42	48.24	48.09	48.36	48.50	49.69
28	51.52	51.49	52.17	50.26	48.08	48.24	47.00	48.27	48.13	48.37	48.48	49.70
29	51.50	51.48	52.20	50.16	---	48.20	46.98	48.26	48.21	48.35	48.50	49.70
30	51.54	51.50	52.19	50.06	---	48.15	47.39	48.27	48.25	48.36	48.47	49.71
31	51.53	---	52.19	50.04	---	48.16	---	48.23	---	48.39	48.48	---
MEAN	51.49	51.54	51.71	51.14	48.78	48.12	47.46	48.13	48.13	48.31	48.47	49.32
MAX	51.59	51.61	52.20	52.39	49.89	48.26	48.00	48.30	48.25	48.43	48.56	49.74
MIN	51.35	51.46	51.44	49.20	48.04	47.97	46.98	47.91	48.05	48.15	48.36	48.48

CAL YR 1986 MEAN 50.94 MAX 52.60 MIN 49.00
WTR YR 1987 MEAN 49.39 MAX 52.39 MIN 46.98

SOUTH FLORIDA

KISSIMMEE RIVER BASIN

02269600 LAKE ARBUCKLE NEAR AVON PARK, FL

LOCATION.--Lat 27°39'55", long 81°22'38", in SW¼ sec. 25, T.32 S., R.29 E., Polk County, Hydrologic Unit 03090101, on U.S. Air Force recreation pier on south shore of lake, 9.6 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. Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. 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, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.09	53.67	53.24	53.32	53.57	53.47	54.21	53.72	53.30	53.19	53.21	53.35
2	54.09	53.67	53.23	53.34	53.55	53.49	54.27	53.68	53.27	53.19	53.30	53.37
3	54.11	53.66	53.22	53.34	53.57	53.48	54.31	53.64	53.24	53.19	53.39	53.40
4	54.09	53.65	53.20	53.40	53.56	53.49	54.36	53.63	53.22	53.19	53.47	53.57
5	54.07	53.63	53.20	53.55	53.54	53.46	54.33	53.62	53.20	53.18	53.57	53.68
6	54.05	53.61	53.17	53.54	53.55	53.43	54.31	53.61	53.19	53.15	53.62	53.75
7	54.03	53.60	53.14	53.55	53.55	53.52	54.30	53.58	53.16	53.13	53.63	53.78
8	54.00	53.59	53.12	53.58	53.60	53.60	54.30	53.63	53.12	53.11	53.63	53.79
9	53.97	53.58	53.11	53.59	53.55	53.62	54.28	53.60	53.12	53.09	53.62	53.79
10	53.96	53.56	53.10	53.60	53.51	53.63	54.26	53.56	53.14	53.07	53.60	53.81
11	53.94	53.54	53.10	53.66	53.49	53.60	54.23	53.56	53.12	53.04	53.59	53.83
12	53.92	53.52	53.10	53.62	53.49	53.59	54.21	53.57	53.09	53.07	53.60	53.83
13	53.89	53.53	53.11	53.59	53.47	53.59	54.19	53.55	53.06	53.20	53.71	53.83
14	53.87	53.52	53.06	53.58	53.46	53.55	54.17	53.59	53.07	53.19	53.71	53.83
15	53.86	53.50	53.05	53.58	53.43	53.53	54.18	53.67	53.04	53.17	53.70	53.81
16	53.87	53.47	53.04	53.59	53.44	53.53	54.16	53.69	53.02	53.16	53.68	53.80
17	53.83	53.45	53.02	53.60	53.46	53.51	54.14	53.67	53.00	53.17	53.67	53.79
18	53.79	53.44	53.01	53.60	53.46	53.47	54.10	53.66	52.98	53.27	53.65	53.83
19	53.76	53.43	53.00	53.60	53.46	53.53	54.07	53.67	52.96	53.28	53.62	53.83
20	53.72	53.41	53.00	53.61	53.45	53.52	54.04	53.65	52.93	53.30	53.60	53.80
21	53.70	53.40	52.99	53.61	53.45	53.51	54.02	53.63	52.90	53.33	53.57	53.78
22	53.67	53.36	52.96	53.63	53.48	53.49	54.00	53.60	52.88	53.33	53.55	53.75
23	53.63	53.34	52.92	53.66	53.51	53.47	53.97	53.56	52.87	53.32	53.51	53.74
24	53.61	53.32	53.08	53.59	53.48	53.43	53.96	53.53	52.84	53.30	53.48	53.72
25	53.59	53.31	53.12	53.59	53.49	53.43	53.93	53.51	52.81	53.28	53.45	53.69
26	53.57	53.30	53.13	53.65	53.48	53.46	53.89	53.48	52.82	53.25	53.43	53.66
27	53.62	53.29	53.15	53.64	53.48	53.58	53.85	53.45	53.01	53.23	53.44	53.63
28	53.63	53.27	53.17	53.60	53.46	53.62	53.81	53.41	53.03	53.21	53.43	53.61
29	53.62	53.26	53.17	53.59	---	53.70	53.78	53.39	53.07	53.20	53.41	53.59
30	53.63	53.25	53.16	53.59	---	53.87	53.75	53.36	53.14	53.21	53.39	53.59
31	53.64	---	53.18	53.60	---	54.15	---	53.33	---	53.19	53.36	---
MEAN	53.83	53.47	53.10	53.57	53.50	53.56	54.11	53.57	53.05	53.20	53.54	53.71
MAX	54.11	53.67	53.24	53.66	53.60	54.15	54.36	53.72	53.30	53.33	53.71	53.83
MIN	53.57	53.25	52.92	53.32	53.43	53.43	53.75	53.33	52.81	53.04	53.21	53.35

CAL YR 1986 MEAN 53.08 MAX 54.45 MIN 51.67

WTR YR 1987 MEAN 53.52 MAX 54.36 MIN 52.81

SOUTH FLORIDA
KISSIMMEE RIVER BASIN

02271700 LAKE ISTOKPOGA NEAR DE SOTO CITY, FL

LOCATION.--Lat 27°19'55", long 81°15'05", in sec.19 or 20, T.36 S., R.31 E., Highlands County, Hydrologic Unit 03090101, 33 ft from right bank, 350 ft upstream from control structure 68 at Lake Istokpoga, 7.5 mi northeast of town of Lake Placid, and 12.2 mi southeast of De Soto City.

SURFACE AREA.--27,500 acres (43.0 mi²).

DRAINAGE AREA.--607 mi².

PERIOD OF RECORD.--August 1936 to current year. Since July 7, 1965, records for Canal 41A at S-68 at Lake Istokpoga, near Lake Placid (station 02273200). Records of elevations prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (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 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 present site at datum 30.00 ft higher.

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, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.16	39.01	38.68	38.85	38.95	38.73	38.92	38.10	37.52	37.23	37.41	37.24
2	39.16	39.03	38.67	38.83	38.92	38.79	38.79	38.06	37.51	37.22	37.41	37.37
3	39.15	39.03	38.69	38.81	38.94	38.80	38.78	38.03	37.47	37.25	37.42	37.45
4	39.14	39.01	38.68	38.82	38.93	38.82	38.87	38.03	37.47	37.24	37.43	37.57
5	39.14	39.00	38.68	39.01	38.90	38.82	38.78	38.01	37.42	37.20	37.47	37.62
6	39.15	39.00	38.66	38.92	38.92	38.76	38.72	37.99	37.43	37.20	37.46	37.66
7	39.13	39.00	38.61	38.90	38.93	38.82	38.70	37.96	37.40	37.20	37.45	37.70
8	39.09	39.00	38.58	38.91	39.00	38.89	38.71	38.05	37.39	37.20	37.46	37.79
9	39.08	38.99	38.56	38.91	38.94	38.91	38.68	38.05	37.36	37.22	37.47	37.81
10	39.11	38.97	38.56	38.92	38.89	38.94	38.63	37.97	37.36	37.26	37.47	37.86
11	39.10	38.97	38.55	39.02	38.86	38.90	38.59	37.98	37.35	37.25	37.51	37.91
12	39.09	38.97	38.56	38.97	38.86	38.91	38.57	38.02	37.35	37.24	37.47	37.95
13	39.07	39.00	38.62	38.94	38.84	38.92	38.54	38.03	37.33	37.26	37.51	38.01
14	39.07	39.00	38.54	38.92	38.83	38.87	38.50	38.01	37.35	37.26	37.53	38.10
15	39.06	39.00	38.52	38.93	38.79	38.82	38.58	37.99	37.33	37.26	37.51	38.13
16	39.10	38.97	38.52	38.94	38.78	38.83	38.57	37.97	37.34	37.27	37.48	38.15
17	39.08	38.96	38.52	38.95	38.83	38.81	38.55	37.93	37.33	37.27	37.48	38.17
18	39.05	38.95	38.51	38.96	38.84	38.75	38.50	37.87	37.31	37.28	37.48	38.20
19	39.03	38.95	38.51	38.96	38.85	38.81	38.45	37.83	37.29	37.31	37.48	38.22
20	39.00	38.92	38.52	38.97	38.81	38.83	38.41	37.78	37.26	37.33	37.45	38.23
21	38.98	38.90	38.54	38.98	38.81	38.81	38.38	37.75	37.25	37.33	37.42	38.24
22	38.96	38.84	38.51	39.03	38.78	38.80	38.34	37.71	37.21	37.34	37.41	38.24
23	38.92	38.79	38.43	39.07	38.82	38.78	38.30	37.69	37.20	37.32	37.39	38.28
24	38.91	38.75	38.56	38.98	38.77	38.73	38.30	37.68	37.20	37.31	37.36	38.26
25	38.91	38.73	38.60	38.98	38.77	38.73	38.29	37.66	37.15	37.32	37.34	38.28
26	38.91	38.71	38.62	39.07	38.74	38.80	38.27	37.65	37.15	37.31	37.32	38.27
27	38.94	38.71	38.65	39.07	38.75	38.89	38.23	37.63	37.18	37.30	37.31	38.28
28	38.95	38.69	38.69	38.99	38.71	38.92	38.18	37.63	37.22	37.31	37.32	38.29
29	38.93	38.69	38.68	38.97	---	38.95	38.15	37.60	37.22	37.31	37.31	38.31
30	38.95	38.68	38.67	38.97	---	38.96	38.13	37.60	37.25	37.31	37.28	38.33
31	38.97	---	38.67	39.01	---	39.05	---	37.55	---	37.35	37.27	---
MEAN	39.04	38.91	38.59	38.95	38.85	38.84	38.51	37.86	37.32	37.27	37.42	38.00
MAX	39.16	39.03	38.69	39.07	39.00	39.05	38.92	38.10	37.52	37.35	37.53	38.33
MIN	38.91	38.68	38.43	38.81	38.71	38.73	38.13	37.55	37.15	37.20	37.27	37.24

CAL YR 1986 MEAN 38.71 MAX 39.63 MIN 37.37
WTR YR 1987 MEAN 38.29 MAX 39.16 MIN 37.15

SOUTH FLORIDA
LAKE OKEECHOBEE

02276400 LAKE OKEECHOBEE, FL

LOCATION.--Center of lake, lat 26°57', long 80°50', in southern Florida, Hydrologic Unit 03090201.

SURFACE AREA.--436,000 acres (681 mi²) at elevation 14 ft above National Geodetic Vertical Datum, from data provided by U.S. Army Corps of Engineers.

DRAINAGE AREA.--About 5,650 mi².

PERIOD OF RECORD.--October 1931 to current year. Records of elevations prior to October 1960 available as follows: from 1912 to 1914 in reports or files of U.S. Army Corps of Engineers, 1915 to September 1931 in reports or files of Everglades Drainage District, and October 1931 to 1960 in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WRD FL 1969: Surface area. WDR FL-77-1: capacity table.

GAGE.--Three water-stage recorders at Hurricane Gate No. 2, Hurricane Gate No. 6 and Port Mayaca. Datum of gages is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1941, nonrecording gage at St. Lucie Canal. Oct. 1, 1941, to Dec. 31, 1950, seven nonrecording gages at various locations on rim of lake. Prior to Oct. 1, 1933, at datum 1.01 ft lower. Oct. 1, 1933, to Sept. 30, 1946, at datum 1.44 ft lower.

REMARKS.--Lake is diked to form a reservoir and is regulated by control structure gates at several outlets. It is used for navigation, municipal water supply, irrigation, and flood control. Total usable capacity is 2,860,000 acre-ft between elevations 10.5 and 17.5 ft.

COOPERATION.--Records of elevations and capacity table furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 18.77 ft, Nov. 2, 1947; minimum daily, 9.79 ft, July 30, 31, Aug. 1, 1981.

Capacity table, water year 1986-87 (elevation, in feet, and capacity, in acre-feet)

10.0	2,040,000	15.0	3,950,000
11.0	2,370,000	16.0	4,380,000
12.0	2,720,000	17.0	4,830,000
13.0	3,110,000	18.0	5,290,000
14.0	3,530,000		

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.05	15.05	14.83	14.85	15.12	15.36	15.69	15.27	14.66	14.12	13.97	13.54
2	15.04	15.04	14.79	14.78	15.15	15.32	15.70	15.22	14.65	14.13	13.99	13.52
3	15.04	15.04	14.75	14.76	15.17	15.33	15.69	15.18	14.64	14.14	14.00	13.51
4	15.04	15.03	14.72	14.94	15.20	15.34	15.68	15.14	14.61	14.13	14.02	13.52
5	15.03	15.02	14.69	15.00	15.22	15.29	15.66	15.11	14.57	14.12	14.03	13.53
6	15.03	15.02	14.68	14.80	15.24	15.29	15.64	15.08	14.53	14.11	14.03	13.54
7	15.02	15.01	14.68	14.92	15.27	15.37	15.63	15.07	14.49	14.09	14.02	13.55
8	15.01	15.01	14.68	14.99	15.29	15.39	15.62	15.07	14.45	14.08	13.98	13.58
9	15.00	15.00	14.69	14.97	15.31	15.38	15.62	15.07	14.42	14.06	13.94	13.59
10	14.99	14.99	14.70	15.01	15.33	15.39	15.62	15.07	14.40	14.05	13.91	13.56
11	14.99	14.97	14.70	15.03	15.34	15.46	15.61	15.07	14.38	14.05	13.89	13.52
12	14.98	14.96	14.69	15.04	15.36	15.56	15.61	15.07	14.36	14.04	13.89	13.53
13	14.98	14.94	14.68	15.04	15.37	15.53	15.61	15.06	14.35	14.03	13.89	13.55
14	14.98	14.93	14.66	15.04	15.38	15.45	15.62	15.06	14.33	14.03	13.89	13.55
15	14.98	14.92	14.64	15.06	15.39	15.43	15.63	15.05	14.32	14.03	13.88	13.54
16	14.97	14.92	14.62	15.07	15.39	15.44	15.64	15.05	14.31	14.02	13.86	13.53
17	14.96	14.92	14.60	15.06	15.40	15.43	15.65	15.04	14.30	14.00	13.84	13.52
18	14.94	14.93	14.59	15.08	15.40	15.40	15.64	15.04	14.29	13.97	13.81	13.51
19	14.93	14.93	14.58	15.10	15.40	15.38	15.62	15.04	14.26	13.96	13.78	13.50
20	14.91	14.93	14.58	15.09	15.40	15.39	15.59	15.03	14.23	13.97	13.75	13.49
21	14.90	14.92	14.57	15.10	15.39	15.41	15.56	15.01	14.20	13.98	13.72	13.49
22	14.89	14.90	14.57	15.26	15.39	15.40	15.53	14.98	14.18	13.98	13.69	13.50
23	14.88	14.88	14.57	15.20	15.38	15.36	15.50	14.95	14.16	13.97	13.67	13.52
24	14.89	14.86	14.56	15.09	15.38	15.34	15.46	14.91	14.15	13.95	13.65	13.55
25	14.89	14.84	14.56	15.16	15.37	15.40	15.41	14.88	14.14	13.95	13.63	13.58
26	14.91	14.83	14.56	15.23	15.36	15.50	15.37	14.84	14.12	13.95	13.61	13.58
27	14.92	14.82	14.57	15.19	15.35	15.59	15.32	14.81	14.11	13.93	13.59	13.59
28	14.95	14.81	14.57	15.13	15.34	15.62	15.30	14.78	14.11	13.91	13.57	13.61
29	14.97	14.80	14.58	15.14	---	15.61	15.28	14.75	14.11	13.90	13.55	13.65
30	15.00	14.80	14.59	15.16	---	15.61	15.27	14.72	14.11	13.91	13.53	13.70
31	15.02	---	14.60	15.16	---	15.63	---	14.70	---	13.92	13.51	---
MEAN	14.97	14.93	14.64	15.05	15.32	15.43	15.56	15.00	14.33	14.02	13.81	13.55
MAX	15.05	15.05	14.83	15.26	15.40	15.63	15.70	15.27	14.66	14.14	14.03	13.70
MIN	14.88	14.80	14.56	14.76	15.12	15.29	15.27	14.70	14.11	13.90	13.51	13.49

CAL YR 1986 MEAN 14.22 MAX 15.13 MIN 12.50
WTR YR 1987 MEAN 14.71 MAX 15.70 MIN 13.49

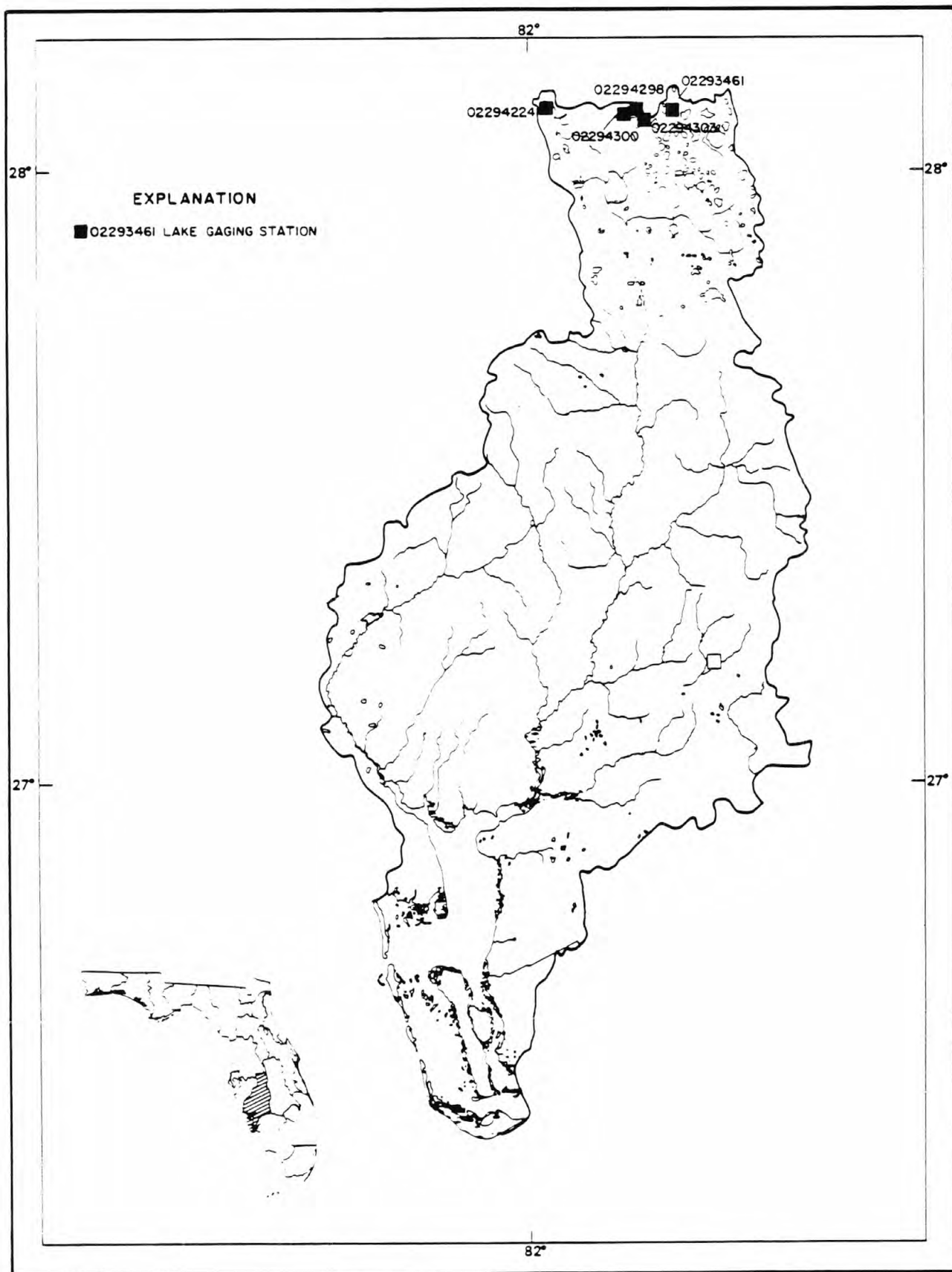


Figure 28.--Location of lake gaging stations in the Peace and Myakka River basins, Charlotte Harbor and coastal area.

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

PEACE RIVER BASIN

02293461 LAKE ALFRED AT LAKE ALFRED, FL

LOCATION.--Lat 28°05'41", long 81°44'06", in NW¼ sec.32, T.27 S., R.26 E., Polk County, Hydrologic Unit 03100101, on east shore of lake in town of Lake Alfred.

SURFACE AREA.--736 acres (1.15 mi²).

DRAINAGE AREA.--2.93 mi².

PERIOD OF RECORD.--March 1961 to September 1962; September 1969 to August 1975 (twice weekly); September 1975 to September 1983 (weekly), incomplete; October 1983 to September 1984 (fragmentary); October 1984 to October 1985 (twice weekly), incomplete; November 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 120.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to Feb. 24, 1981, at several sites and datums within 0.2 mi. Feb. 24, 1981 to Nov. 29, 1985 nonrecording gage at same site and datum.

REMARKS.--Lake is one of a group of lakes in the southern part of an extensive area of swampy flatlands and sandy ridges at a relatively high elevation, called the Green Swamp. Streams that flow into five major drainage systems originate in or near the Green Swamp area.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 132.08 ft, Mar. 30, Apr. 2-4, 1961; minimum observed, 122.40 ft, May 24, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 126.55 ft, Mar. 31, Apr. 1; minimum observed, 125.54 ft, June 26.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126.11	126.01	125.89	125.95	125.90	125.93	126.55	126.28	125.92	125.66	125.94	---
2	126.09	126.00	125.90	125.95	125.91	125.96	126.54	126.26	125.90	125.64	125.93	---
3	126.07	125.99	125.91	125.93	125.90	125.95	126.54	126.24	125.88	125.69	125.90	---
4	126.06	125.99	125.89	125.92	125.90	125.94	126.54	126.22	125.86	125.92	125.91	---
5	126.05	125.99	125.87	125.99	125.90	125.92	126.50	126.21	125.80	126.10	125.90	---
6	126.03	125.98	125.85	125.97	125.90	125.91	126.50	126.22	125.80	126.00	125.89	126.20
7	126.14	125.98	125.84	125.97	125.92	125.92	126.50	126.20	125.80	126.00	125.93	126.20
8	126.14	125.97	125.84	125.97	125.94	125.99	126.50	126.19	125.78	126.12	125.91	126.20
9	126.13	125.96	125.83	125.97	125.91	125.99	126.49	126.17	125.75	126.09	125.96	126.19
10	126.17	125.95	125.83	125.97	125.91	125.98	126.48	126.16	125.74	126.09	125.95	126.18
11	126.16	125.94	125.84	125.97	125.90	125.96	126.48	126.17	125.72	126.07	125.93	126.17
12	126.15	125.94	125.85	125.94	125.90	125.95	126.47	126.16	125.70	126.07	126.01	126.22
13	126.14	125.92	125.85	125.93	125.88	125.93	126.47	126.15	125.69	126.04	126.07	126.36
14	126.13	125.91	125.83	125.93	125.88	125.91	126.46	126.14	125.67	126.00	126.08	126.38
15	126.11	125.90	125.82	125.93	125.88	125.90	126.51	126.20	125.65	126.04	126.09	126.37
16	126.08	125.89	125.82	125.93	125.87	125.89	126.51	126.19	125.63	126.04	126.08	126.36
17	126.06	125.88	125.81	125.93	125.91	125.89	126.50	126.17	125.62	126.00	126.08	126.35
18	126.03	125.89	125.81	125.95	125.91	125.88	126.48	126.15	125.70	126.00	126.07	126.34
19	126.01	125.89	125.81	125.94	125.94	125.93	126.47	126.14	125.69	126.00	126.05	126.32
20	125.99	125.89	125.80	125.96	125.92	125.93	126.46	126.14	125.66	126.00	126.04	126.32
21	125.98	125.87	125.80	125.95	125.93	125.92	126.45	126.13	125.64	126.00	126.04	126.31
22	125.96	125.86	125.78	125.94	125.96	125.91	126.45	126.11	125.62	126.06	126.01	126.31
23	125.95	125.84	125.77	125.99	125.98	125.90	126.44	126.09	125.60	126.04	126.04	126.35
24	125.94	125.80	125.86	125.96	125.96	125.89	126.43	126.08	125.58	126.03	---	126.35
25	125.94	125.83	125.87	125.95	125.94	125.88	126.41	126.07	125.56	126.01	---	126.33
26	125.94	125.80	125.87	125.99	125.95	125.88	126.38	126.05	125.54	125.99	---	126.31
27	125.99	125.81	125.86	125.95	125.95	126.04	126.36	126.03	125.57	126.00	---	126.30
28	125.99	125.81	125.85	125.94	125.95	126.10	126.34	126.00	125.57	125.99	---	126.28
29	126.01	125.80	125.84	125.93	---	126.11	126.30	125.98	125.56	125.98	---	126.27
30	126.01	125.87	125.83	125.93	---	126.31	126.30	125.96	125.63	125.97	---	126.26
31	126.01	---	125.82	125.93	---	126.55	---	125.94	---	125.95	---	---
MEAN	126.05	125.91	125.84	125.95	125.92	125.97	126.46	126.14	125.69	125.99	---	---
MAX	126.17	126.01	125.91	125.99	125.98	126.55	126.55	126.28	125.92	126.12	---	---
MIN	125.94	125.80	125.77	125.92	125.87	125.88	126.30	125.94	125.54	125.64	---	---

PEACE, WITHLACOOCHIE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

PEACE RIVER BASIN

02294224 LAKE GIBSON NEAR LAKELAND, FL

LOCATION.--Lat 28°06'40", long 81°57'18", in NW¼ sec.30, T.27 S., R.24 E., Polk County, Hydrologic Unit 03100101, on northeast shore of lake, on private pier, and 4.6 mi north of Lakeland.

SURFACE AREA.--477 acres (0.75 mi²).

DRAINAGE AREA.--4.31 mi² .

PERIOD OF RECORD.--July 1954 to November 1959 (fragmentary); October 1969 to current year (incomplete). Records of elevations prior to October 1969 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is 135.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to October 1969, reference point at site on south shore of lake at datum 11.4 ft higher (by altimeter); October 1969 to March 1975, at present site at datum 0.93 ft higher.

REMARKS.--Lake level is controlled by stoplogs and gate in culverts at outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 145.1 ft, Oct. 8, 1957; minimum observed, 140.40 ft, June 6-8, 12, 1985.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142.67	142.84	142.69	142.74	142.90	143.01	143.56	142.42	142.49	142.39	142.43	142.36
2	142.66	142.86	142.68	142.75	142.90	143.09	143.45	142.41	142.46	142.38	142.45	142.34
3	142.64	142.85	142.67	142.75	142.89	143.07	143.33	142.39	142.46	142.50	142.43	142.32
4	142.62	142.84	142.67	142.76	142.89	143.04	143.25	142.38	142.45	142.49	142.42	142.34
5	142.61	142.83	142.66	142.82	142.89	142.99	143.17	142.37	142.45	142.51	142.45	142.35
6	142.60	142.82	142.66	142.82	142.89	142.94	143.10	142.39	142.44	142.49	142.44	142.35
7	142.70	142.81	142.64	142.81	142.90	143.04	143.03	142.39	142.43	142.48	142.49	142.33
8	142.76	142.81	142.61	142.86	142.90	143.02	143.00	142.38	142.42	142.48	142.48	142.38
9	142.75	142.80	142.59	142.86	142.89	143.00	142.96	142.38	142.40	142.46	142.46	142.36
10	142.74	142.81	142.58	142.86	142.89	142.98	142.92	142.36	142.38	142.44	142.44	142.34
11	142.84	142.81	142.57	142.85	142.88	142.96	142.88	142.34	142.37	142.44	142.42	142.32
12	142.84	142.80	142.58	142.84	142.88	142.92	142.84	142.72	142.35	142.40	142.68	142.38
13	142.83	142.80	142.59	142.84	142.88	142.90	142.80	142.71	142.34	142.38	142.70	142.48
14	142.86	142.79	142.58	142.83	142.88	142.88	142.76	142.71	142.32	142.36	142.71	142.47
15	142.90	142.79	142.58	142.83	142.87	142.86	142.73	143.60	142.31	142.38	142.74	142.45
16	142.89	142.78	142.57	142.83	142.87	142.84	142.70	143.58	142.30	142.38	142.72	142.47
17	142.87	142.77	142.57	142.82	142.92	142.83	142.68	143.50	142.29	142.43	142.69	142.47
18	142.85	142.76	142.56	142.82	142.94	142.89	142.66	143.40	142.28	142.57	142.67	142.46
19	142.83	142.76	142.56	142.82	142.94	142.88	142.64	143.31	142.26	142.57	142.64	142.46
20	142.81	142.75	142.56	142.88	142.94	142.87	142.62	143.18	142.33	142.59	142.62	142.45
21	142.79	142.75	142.55	142.91	142.98	142.86	142.60	143.08	142.32	142.58	142.60	142.44
22	142.78	142.74	142.55	142.91	142.98	142.86	142.58	142.98	142.30	142.59	142.58	142.44
23	142.76	142.73	142.54	142.91	142.98	142.84	142.57	142.91	142.28	142.60	142.55	142.46
24	142.75	142.72	142.63	142.92	143.00	142.82	142.55	142.84	142.27	142.59	142.52	142.45
25	142.75	142.70	142.64	142.91	143.02	142.80	142.54	142.76	142.27	142.57	142.50	142.43
26	142.76	142.69	142.64	142.90	143.02	142.79	142.51	142.68	142.25	142.55	142.48	142.41
27	142.78	142.69	142.64	142.90	143.01	142.95	142.48	142.63	142.24	142.53	142.46	142.39
28	142.79	142.69	142.62	142.89	143.01	143.04	142.46	142.60	142.28	142.52	142.44	142.38
29	142.81	142.67	142.61	142.89	---	143.10	142.45	142.56	142.26	142.49	142.42	142.36
30	142.80	142.69	142.60	142.89	---	143.38	142.44	142.54	142.40	142.47	142.40	142.35
31	142.80	---	142.58	142.89	---	143.48	---	142.51	---	142.45	142.38	---
MEAN	142.77	142.77	142.61	142.85	142.93	142.97	142.81	142.74	142.35	142.49	142.53	142.40
MAX	142.90	142.86	142.69	142.92	143.02	143.48	143.56	143.60	142.49	142.60	142.74	142.48
MIN	142.60	142.67	142.54	142.74	142.87	142.79	142.44	142.34	142.24	142.36	142.38	142.32
CAL YR 1986	MEAN 142.56		MAX 143.02		MIN 141.57							
WTR YR 1987	MEAN 142.68		MAX 143.60		MIN 142.24							

02294298 LAKE ARIETTA NEAR AUBURNDALE, FL

SURFACE AREA.--764 acres (1.19 mi²).

DRAINAGE AREA.--3.70 mi².

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. 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, 143.34 ft, Mar. 31, Apr. 1,2,3, 1983; minimum observed, 136.50 ft, May 25, 1977.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139.86	139.62	139.40	139.30	139.26	139.26	139.84	139.58	139.56	139.50	139.34	139.36
2	139.84	139.62	139.42	139.34	139.26	139.30	139.90	139.56	139.56	139.48	139.32	139.34
3	139.82	139.60	139.42	139.34	139.26	139.30	139.90	139.54	139.56	139.54	139.36	139.32
4	139.80	139.58	139.40	139.34	139.24	139.30	139.90	139.52	139.54	139.62	139.36	139.46
5	139.80	139.58	139.38	139.36	139.24	139.28	139.88	139.50	139.52	139.64	139.40	139.54
6	139.78	139.58	139.36	139.36	139.24	139.28	139.86	139.54	139.50	139.62	139.38	139.54
7	139.76	139.58	139.34	139.34	139.24	139.28	139.84	139.54	139.50	139.60	139.40	139.52
8	139.84	139.58	139.32	139.34	139.22	139.30	139.82	139.56	139.48	139.60	139.38	139.50
9	139.84	139.56	139.30	139.34	139.22	139.30	139.80	139.56	139.46	139.58	139.36	139.48
10	139.82	139.56	139.30	139.32	139.20	139.30	139.80	139.54	139.44	139.58	139.34	139.48
11	139.86	139.56	139.34	139.30	139.20	139.28	139.80	139.52	139.42	139.56	139.32	139.48
12	139.86	139.56	139.34	139.28	139.20	139.28	139.78	139.54	139.40	139.56	139.40	139.54
13	139.84	139.54	139.36	139.28	139.18	139.26	139.78	139.54	139.56	139.54	139.50	139.58
14	139.82	139.54	139.34	139.30	139.18	139.26	139.78	139.54	139.54	139.52	139.50	139.58
15	139.84	139.52	139.32	139.30	139.18	139.24	139.76	139.78	139.52	139.50	139.54	139.58
16	139.82	139.50	139.32	139.30	139.18	139.22	139.76	139.78	139.52	139.48	139.56	139.56
17	139.80	139.48	139.32	139.30	139.22	139.20	139.76	139.76	139.52	139.46	139.56	139.54
18	139.78	139.46	139.30	139.30	139.22	139.20	139.74	139.76	139.50	139.46	139.54	139.54
19	139.76	139.50	139.30	139.30	139.22	139.24	139.74	139.76	139.48	139.44	139.52	139.52
20	139.74	139.48	139.30	139.32	139.22	139.24	139.74	139.78	139.48	139.48	139.50	139.50
21	139.70	139.48	139.28	139.32	139.24	139.24	139.72	139.76	139.48	139.48	139.48	139.50
22	139.66	139.46	139.26	139.32	139.26	139.22	139.72	139.74	139.46	139.48	139.46	139.50
23	139.62	139.46	139.26	139.32	139.26	139.22	139.72	139.72	139.46	139.46	139.48	139.54
24	139.60	139.44	139.30	139.30	139.26	139.20	139.70	139.70	139.46	139.46	139.46	139.54
25	139.58	139.42	139.32	139.30	139.26	139.20	139.70	139.68	139.44	139.44	139.44	139.52
26	139.56	139.42	139.32	139.30	139.28	139.20	139.68	139.68	139.42	139.42	139.42	139.50
27	139.56	139.40	139.30	139.30	139.28	139.34	139.66	139.66	139.40	139.40	139.40	139.48
28	139.60	139.40	139.30	139.28	139.28	139.40	139.64	139.64	139.40	139.4		

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

PEACE RIVER BASIN

02294300 LAKE WHISTLER NEAR AUBURNDALE, FL

LOCATION.--Lat 28°05'18", long 81°48'54", in SE¼ sec.33, T.27 S., R.25 E., Polk County, Hydrologic Unit 03100101, on west shore of lake, on private pier, 2.2 mi northwest of Auburndale.

SURFACE AREA.--78.0 acres (0.12 mi²).

DRAINAGE AREA.--4.33 mi².

PERIOD OF RECORD.--August 1970 to current year (incomplete).

REVISED RECORDS.--WDR FL-80-3: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. 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, 137.34 ft, Mar. 31; minimum observed, 136.58 ft, June 12, Aug 11.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136.90	136.82	136.66	136.74	136.69	136.74	137.28	136.76	136.70	136.82	136.69	136.67
2	136.88	136.82	136.68	136.72	136.68	136.75	137.24	136.74	136.69	136.86	136.68	136.66
3	136.87	136.80	136.68	136.70	136.68	136.74	137.22	136.72	136.68	136.88	136.68	136.64
4	136.86	136.80	136.66	136.70	136.68	---	137.18	136.70	136.66	136.90	136.67	---
5	136.85	136.80	136.65	136.74	136.68	---	137.16	136.70	136.66	136.94	136.66	136.82
6	136.84	136.80	136.64	136.74	136.68	---	137.12	136.70	136.64	136.92	136.65	136.82
7	136.82	136.79	136.63	136.74	136.70	136.78	137.10	136.70	136.63	136.90	136.66	136.82
8	136.92	136.78	136.62	136.74	136.71	136.78	137.09	136.70	136.62	136.89	136.65	136.82
9	136.90	136.78	136.61	136.74	136.70	136.78	137.08	136.69	136.60	136.88	136.64	136.81
10	136.90	136.78	136.60	136.74	136.68	136.78	137.06	136.68	136.60	136.86	136.62	136.80
11	136.88	136.76	136.66	136.74	136.66	136.76	137.04	136.70	136.59	136.84	136.58	136.80
12	---	136.76	136.66	136.74	136.66	136.74	137.02	136.73	136.58	136.82	136.72	136.88
13	---	136.76	136.64	136.73	136.66	136.73	137.00	136.72	136.84	136.80	136.80	136.90
14	---	136.74	136.64	136.72	136.65	136.72	137.00	136.72	136.82	136.78	136.80	136.91
15	---	136.72	136.64	136.70	136.64	136.70	136.99	136.94	136.80	136.77	136.84	136.91
16	---	136.70	136.64	136.70	136.64	136.70	136.98	136.94	136.80	136.78	136.84	136.90
17	---	136.70	136.62	136.71	136.68	136.69	136.98	136.92	136.79	136.76	136.84	136.88
18	---	136.68	136.62	136.71	136.70	136.68	136.96	136.90	136.78	136.74	136.82	136.87
19	136.82	136.70	136.60	136.70	136.70	136.74	136.94	136.96	136.77	136.74	136.80	136.86
20	136.80	136.68	136.60	136.74	136.70	136.73	136.93	136.94	136.76	136.80	136.80	136.85
21	136.80	136.68	136.60	136.74	136.70	136.72	136.92	136.92	136.74	136.80	136.78	136.84
22	136.80	136.68	136.60	136.78	136.74	136.71	136.90	136.90	136.72	136.79	136.77	136.84
23	136.78	136.68	136.60	136.77	136.74	136.70	136.89	136.88	136.70	136.78	136.76	136.90
24	136.78	136.67	136.64	136.76	136.73	136.69	136.88	136.86	136.68	136.77	136.75	136.88
25	136.78	136.67	136.66	136.74	136.74	136.68	136.86	136.84	136.68	136.76	136.74	136.86
26	136.76	136.66	136.65	136.74	136.74	136.70	136.84	136.82	136.66	136.74	136.73	136.86
27	136.76	136.66	136.64	136.74	136.73	136.86	136.82	136.80	136.68	136.74	136.72	136.82
28	136.82	136.65	136.62	136.73	136.73	136.90	136.80	136.78	136.70	136.74	136.70	136.80
29	136.81	136.65	136.61	136.72	---	137.00	136.78	136.76	136.70	136.72	136.68	136.80
30	136.82	136.65	136.61	136.71	---	137.26	136.77	136.74	136.74	136.70	136.70	136.80
31	136.82	---	136.60	136.70	---	137.34	---	136.72	---	136.69	136.68	---
MEAN	---	136.73	136.63	136.73	136.69	---	136.99	136.79	136.70	136.80	136.72	---
MAX	---	136.82	136.68	136.78	136.74	---	137.28	136.96	136.84	136.94	136.84	---
MIN	---	136.65	136.60	136.70	136.64	---	136.77	136.68	136.58	136.69	136.58	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

PEACE RIVER BASIN

02294303 ARIANA LAKE AT AUBURNDALE, FL

LOCATION.--Lat 28°05'16", long 81°47'41", in SE¼ sec.34, T.27 S., R.25 E., Polk County, Hydrologic Unit 03100101, on north shore of lake, 1,650 ft west of State Highway 559, and 1.7 mi north of Auburndale.

SURFACE AREA.--1,019 acres (1.59 mi²).

DRAINAGE AREA.--7.86 mi².

PERIOD OF RECORD.--June 1945 to January 1948 (weekly), incomplete; February 1958 to February 1960 (fragmentary); November 1971 to current year (twice weekly), incomplete. Records of elevations prior to November 1971 are unpublished and available in files of the Orlando Subdistrict Office.

REVISED RECORDS.--WDR FL-80-3: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above National Geodetic Vertical Datum of 1929 (levels by Southwest Florida Water Management District); gage readings have been reduced to elevations above NGVD. Prior to Mar. 18, 1975, at site 1,000 ft east at datum 31.90 ft higher.

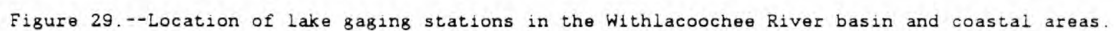
REMARKS.--Lake is in Saddle Creek Branch area of Peace River headwaters.

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, 134.60 ft, Mar. 30; minimum observed, 133.70 ft, Dec. 22, Feb. 13.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134.04	---	133.86	---	---	---	---	134.26	134.10	---	---	---
2	---	---	---	133.80	133.72	133.80	---	---	---	---	---	---
3	134.00	133.96	---	---	---	---	---	---	---	134.16	---	---
4	---	---	---	---	---	---	134.40	134.10	---	---	134.04	134.20
5	---	---	133.80	133.82	---	---	---	---	134.00	---	---	---
6	133.98	---	---	---	133.72	133.80	134.36	---	---	134.26	---	---
7	---	133.94	---	---	---	---	---	---	---	---	134.02	134.26
8	---	---	133.78	---	---	---	---	134.10	133.98	---	---	---
9	---	---	---	133.80	133.76	133.80	---	---	---	134.23	---	---
10	134.10	133.92	---	---	---	---	134.36	---	---	134.24	133.98	---
11	---	---	---	---	---	---	---	134.12	---	---	---	---
12	---	---	133.80	133.80	---	---	---	---	133.90	---	---	134.30
13	134.10	---	---	---	133.70	133.82	134.36	---	---	134.16	---	---
14	---	133.80	---	---	---	---	---	---	---	---	134.20	134.36
15	---	---	133.82	---	---	---	---	134.30	134.08	---	---	---
16	---	---	---	133.80	133.78	133.76	---	---	---	---	---	---
17	134.00	133.80	---	---	---	---	134.30	---	---	134.16	134.24	---
18	---	---	---	---	---	---	---	134.30	---	---	---	134.34
19	---	133.82	133.78	133.78	---	---	---	---	134.08	---	---	---
20	133.96	---	---	---	133.76	133.78	134.32	---	---	134.18	---	---
21	---	133.82	---	---	---	---	---	---	---	---	134.16	134.26
22	---	---	133.70	---	---	---	---	134.24	134.00	---	---	---
23	---	---	---	133.90	133.80	133.74	---	---	---	---	---	---
24	133.90	133.80	---	---	---	---	134.30	---	---	134.14	134.16	---
25	---	---	---	---	---	---	---	134.20	---	---	---	134.24
26	---	---	133.80	133.90	---	---	---	---	133.98	---	---	---
27	133.96	---	---	---	133.76	133.80	134.28	---	---	134.12	---	---
28	---	133.78	---	---	---	---	---	---	---	---	134.10	134.26
29	---	---	133.76	---	---	---	---	134.14	134.06	---	---	---
30	---	---	---	133.82	---	134.60	---	---	---	---	---	---
31	133.94	---	---	---	---	---	---	---	---	134.06	134.08	---



PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

COASTAL AREA FROM TAMPA BAY TO WITHLACOCHEE RIVER

02310219 NEFF LAKE SINK NEAR BROOKSVILLE, FL

LOCATION.--Lat 28°28'44", long 82°19'14", in SE¼ sec.17, T.23 S., R.20 E., Hernando County, Hydrologic Unit 03100207, in diked sinkhole area, at fish camp on east shore of lake, 6.3 mi southeast of Brooksville, and 9.0 mi east of Masaryktown.

DRAINAGE AREA.--5.08 mi².

PERIOD OF RECORD.--June 1971 to December 1974 (twice weekly), incomplete, January 1975 to current year (fragmentary). Records equivalent to Neff Lake since January 1965, except during extreme low water when dike separates sink from lake.

GAGE.--Nonrecording gage. Datum of gage is 88.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to Jan. 29, 1985 at datum 2.00 ft higher.

REMARKS.--Sink is isolated from Neff Lake by an earthen dike below elevation of 86.6 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 104.11 ft, Mar. 22, 1984; sink dry for many days in 1969, 1972-74.

ELEVATION, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			MAY		
02...	1315	98.56	11...	0720	99.28
NOV			JUL		
25...	0905	97.50	17...	0740	98.73
JAN			AUG		
16...	0745	97.06	28...	0730	97.95
MAR					
25...	0730	97.23			

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

COASTAL AREA FROM TAMPA BAY TO WITHLACOCHEE RIVER

02310220 NEFF LAKE NEAR BROOKSVILLE, FL

LOCATION.--Lat 28°28'44", long 82°19'14", in SE¼ sec.17, T.23 S., R.20 E., Hernando County, Hydrologic Unit 03100207, on east shore of lake, 6.3 mi southeast of Brooksville, and 9.0 mi east of Masaryktown.

SURFACE AREA.--224 acres (0.35 mi²).

DRAINAGE AREA.--5.08 mi².

PERIOD OF RECORD.--January 1965 to March 1968 (twice weekly), incomplete, April 1968 to January 1970 (fragmentary), February 1970 to December 1974 (twice weekly), incomplete, January 1975 to current year (fragmentary). Records equivalent to Neff Lake Sink since January 1965, except during extreme low water.

GAGE.--Nonrecording gage. Datum of gage is 88.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. Prior to Jan. 29, 1985 at site 300 ft northwest at datum 2.00 ft higher.

REMARKS.--Lake is interconnected with Mountain Lake during extreme high-water periods. Some outflow through sinkhole on east shore of lake; lake is isolated from sink by an earthen dike below elevation of 86.6 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 104.11 ft, Mar. 22, 1984; lake dry for most of period May 1968 to September 1969.

ELEVATION, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
OCT			MAY		
02...	1315	98.56	11...	0720	99.28
NOV			JUL		
25...	0905	97.50	17...	0740	98.73
JAN			AUG		
16...	0745	97.06	28...	0730	97.95
MAR					
25...	0730	97.23			

02310760 LAKE JULIANA NEAR POLK CITY, FL

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 130.59 ft. May 16; minimum observed, 129.73 ft. Dec. 21.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130.26	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	130.31	---	---	---	---
3	---	129.97	---	---	---	---	---	---	---	---	---	---
4	130.21	---	---	129.84	---	---	---	---	---	130.15	---	---
5	---	---	---	---	---	---	130.54	130.30	130.29	---	---	130.39
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	129.76	---	129.82	129.90	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	130.27	---	130.19	130.21	---
10	---	129.96	---	129.82	---	---	---	---	---	---	---	---
11	130.20	---	---	---	---	---	130.57	---	---	130.15	---	---
12	---	---	---	129.86	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	130.44
14	---	---	129.85	---	129.75	129.83	---	---	130.22	---	---	---
15	---	129.87	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	129.81	---	130.59	---	---	130.39	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	129.83	---	---	---	---	---	130.09	---	---
19	130.06	129.90	---	---	---	---	130.56	---	---	---	---	130.37
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	129.73	---	---	129.82	---	---	---	---	---	---
22	---	129.85	---	---	129.83	---	---	---	---	---	130.35	---
23	---	---	---	---	---	---	---	130.56	130.06	130.15	---	---
24	---	---	---	---	---	---	---	---	---	---	130.32	---
25	---	---	---	129.82	---	---	130.47	---	---	---	---	---
26	129.95	---	---	---	---	---	---	---	---	---	---	130.33
27	---	---	---	---	129.86	---	---	---	---	---	---	---
28	---	---	---	---	---	130.05	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	130.25	---
30	---	129.77	---	---	---	---	---	130.39	130.05	---	---	---
31	---	---	---	129.77	---	---	---	---	---	---	---	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02310850 LAKE HELENE NEAR POLK CITY, FL

LOCATION.--Lat 28°10'25", long 81°48'21", in SW¼ sec.34, T.26 S., R.25 E., Polk County, Hydrologic Unit 03100208, on 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), at elevation 140.6 ft above NGVD.

DRAINAGE AREA.--0.42 mi².

PERIOD OF RECORD.--March 1961 to April 1965; May 1965 to current year (twice weekly), incomplete.

REVISED RECORDS.--WRD FL 1962: Surface area.

GAGE.--Nonrecording gage. Datum of gage is 100.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. 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, 145.86 ft, Apr. 5, 9, 1984; minimum observed, 138.54 ft, May 11, 1968.

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, 142.95 ft, May 20; minimum observed, 141.80 ft, Mar. 25.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142.56	---	142.16	---	---	---	142.54	---	142.80	---	---	---
2	---	---	---	142.08	141.95	141.94	---	142.40	---	142.72	---	142.75
3	142.55	142.32	142.16	---	---	---	142.56	---	142.78	---	---	---
4	---	---	---	---	141.92	141.90	---	142.37	---	---	142.70	---
5	---	142.30	142.08	---	---	---	---	---	142.74	---	---	---
6	142.51	---	---	---	141.90	141.89	142.58	142.44	---	142.78	142.74	---
7	---	142.28	---	142.10	---	---	---	---	---	---	---	---
8	142.53	---	142.06	---	---	---	142.58	142.42	142.70	142.80	142.70	---
9	---	---	---	142.08	141.92	141.96	---	---	---	142.79	---	---
10	142.52	---	142.06	---	---	---	142.57	---	142.68	142.78	142.76	142.80
11	---	---	---	---	141.88	---	---	142.38	---	---	---	---
12	---	142.24	---	142.06	---	---	---	---	142.66	---	---	142.80
13	142.52	---	---	142.04	141.87	141.88	142.58	142.42	---	142.76	142.80	---
14	---	---	---	---	---	---	---	---	---	---	142.80	142.88
15	142.52	142.20	142.08	142.02	---	---	142.59	142.92	142.86	142.72	---	---
16	---	---	---	---	141.90	141.86	---	---	---	---	---	142.84
17	142.48	142.18	142.06	---	---	---	142.55	---	---	142.68	142.76	---
18	---	---	---	---	141.92	---	---	---	142.80	---	---	142.82
19	---	142.20	142.06	---	---	141.88	---	---	142.80	---	---	---
20	142.38	---	---	142.02	141.92	---	142.56	142.95	---	142.72	---	---
21	---	142.18	---	---	---	141.86	---	---	---	---	142.92	142.78
22	---	---	---	142.06	---	---	142.54	142.94	142.75	142.76	---	---
23	---	---	---	---	141.92	141.82	---	---	---	---	---	142.76
24	142.32	142.14	---	---	---	---	142.50	---	142.70	142.74	142.88	---
25	---	---	142.02	---	---	141.80	---	142.90	---	---	---	142.72
26	---	142.10	---	142.00	141.90	---	---	---	---	---	142.85	---
27	---	---	142.02	---	141.89	141.96	142.46	142.88	142.69	142.70	---	---
28	---	142.08	---	---	---	---	---	---	---	---	---	142.66
29	142.34	---	141.98	141.98	---	---	142.42	142.84	142.68	142.67	---	---
30	---	---	---	141.97	---	---	142.34	---	---	---	---	142.74
31	142.34	---	---	---	---	---	---	---	---	142.64	142.78	---

02310950 LAKE DEESON NEAR LAKELAND, FL

SURFACE AREA.--116 acres (0.18 mi²).

DRAINAGE AREA, --0.96 mi².

GAGE.--Water-stage recorder. Datum of gage is 118.21 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations above NGVD. 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 135.49 ft, Sept. 28, 1954; minimum daily, 119.81 ft, May 24, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 125.36 ft, May 21; minimum daily, 123.89 ft, Feb. 15.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124.68	124.48	124.18	124.13	124.00	123.97	124.74	124.55	125.21	125.19	125.04	125.09
2	124.66	124.47	124.18	124.12	124.00	123.99	124.75	124.53	125.20	125.20	125.07	125.10
3	124.64	124.46	124.16	124.11	123.99	123.98	124.75	124.51	125.18	125.21	125.07	125.09
4	124.62	124.45	124.14	124.13	123.98	123.97	124.76	124.49	125.19	125.22	125.09	125.12
5	124.60	124.45	124.11	124.15	123.98	123.95	---	124.49	125.17	125.21	125.12	125.13
6	124.58	124.44	124.09	124.14	123.98	123.93	---	124.49	125.15	125.20	125.11	125.13
7	124.62	124.42	124.07	124.14	123.98	124.02	---	124.48	125.14	125.19	125.15	125.12
8	124.65	124.41	124.07	124.14	123.98	124.06	---	124.47	125.11	125.18	125.14	125.11
9	124.63	124.40	124.06	124.14	123.96	124.06	---	124.44	125.09	125.16	125.12	125.09
10	124.63	124.39	124.06	124.13	123.94	124.04	---	124.42	125.07	125.14	125.10	125.08
11	124.65	124.38	124.06	124.13	123.93	124.02	---	124.47	125.05	125.13	125.14	125.07
12	124.64	124.37	124.07	124.11	123.92	124.01	---	124.86	125.03	125.11	125.29	125.10
13	124.63	124.36	124.07	124.09	123.91	124.00	---	124.87	125.07	125.08	125.32	125.16
14	124.68	124.33	124.05	124.09	123.90	123.98	---	124.96	125.05	125.06	125.34	125.17
15	124.67	124.31	124.04	124.08	123.89	123.97	124.77	125.30	125.03	125.04	125.35	125.15
16	124.65	124.29	124.03	124.08	123.90	123.96	124.78	125.33	125.02	125.06	125.35	125.15
17	124.62	124.28	124.02	124.08	123.91	123.96	124.76	125.34	125.00	125.15	125.34	125.13
18	124.59	124.28	124.01	124.08	123.92	123.94	124.75	125.33	124.98	125.15	125.33	125.11
19	124.56	124.28	124.00	124.08	123.92	124.00	124.74	125.34	124.96	125.15	125.32	125.09
20	124.53	124.28	123.99	124.07	123.91	124.00	124.73	125.35	125.00	125.16	125.31	125.07
21	124.51	124.26	123.98	124.08	123.91	123.99	124.72	125.36	124.99	125.18	125.30	125.06
22	124.50	124.24	123.96	124.11	123.93	123.98	124.71	125.35	124.96	125.18	125.28	125.06
23	124.48	124.23	123.96	124.10	123.97	123.96	124.70	125.35	124.94	125.17	125.26	125.05
24	124.47	124.21	124.03	124.08	123.95	123.94	124.69	125.34	124.92	125.15	125.23	125.03
25	124.45	124.20	124.03	124.08	123.95	123.93	124.67	125.32	124.90	125.14	125.21	125.02
26	124.45	124.19	124.02	124.08	123.95	123.99	124.65	125.31	124.87	125.12	125.20	125.00
27	124.48	124.18	124.01	124.06	123.94	124.12	124.63	125.29	124.86	125.11	125.18	124.98
28	124.49	124.17	124.00	124.04	123.94	124.16	124.61	125.28	124.86	125.09	125.16	124.96
29	124.49	124.16	123.99	124.03	---	124.32	124.59	125.26	124.91	125.07	125.15	124.94
30	124.49	124.17	123.97	124.03	---	124.54	124.57	125.24	125.18	125.05	125.13	124.99
31	124.49	---	124.02	124.02	---	124.74	---	125.22	---	125.03	125.11	---
MEAN	124.58	124.32	124.05	124.09	123.94	124.05	---	124.98	125.04	125.14	125.20	125.08
MAX	124.68	124.48	124.18	124.15	124.00	124.74	---	125.36	125.21	125.22	125.35	125.17
MIN	124.45	124.16	123.96	124.02	123.89	123.93	---	124.42	124.86	125.03	125.04	124.94
CAL YR 1986	MEAN 124.43	MAX 125.15	MIN 123.08									

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02311600 CLEAR LAKE AT SAN ANTONIO, FL

LOCATION.--Lat 28°20'20", long 82°16'02", in SW¼ sec.1, T.25 S., R.20 E., Pasco County, Hydrologic Unit 03100208, on southwest shore of lake, on public pier, 0.5 mi northeast of San Antonio, and 5.0 mi west of Dade City.

SURFACE AREA.--158 acres (0.25 mi²).

DRAINAGE AREA.--0.92 mi².

PERIOD OF RECORD.--January 1965 to September 1966 (twice-weekly), incomplete, October 1966 to current year (weekly), incomplete.

GAGE.--Nonrecording gage. Datum of gage is 97.00 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark); gage readings have been reduced to elevations above NGVD. 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, 127.86 ft, Apr. 4, 1987; minimum observed, 123.52 ft, May 6, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 127.86 ft, Apr. 4; minimum observed, 126.18 ft, Dec. 26.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126.81	---	---	---	---	---	---	127.26	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	126.22	---	---	---	---	---	---	---	---
4	126.76	---	---	---	---	---	127.86	---	---	127.22	---	---
5	---	---	126.30	---	---	---	---	127.24	---	---	---	127.24
6	---	---	---	---	---	126.70	---	---	---	---	---	---
7	---	126.48	---	---	126.48	---	---	---	127.26	---	---	---
8	---	---	---	---	---	---	---	127.24	---	---	---	---
9	---	---	---	---	---	---	---	---	---	127.20	127.46	---
10	126.68	---	---	126.28	---	---	---	---	---	127.16	---	---
11	---	---	---	---	---	---	127.58	---	---	---	---	---
12	---	---	126.28	126.28	---	---	---	---	---	---	---	127.20
13	---	---	---	---	---	126.80	---	---	127.16	---	---	---
14	---	126.36	---	---	126.46	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	127.64	---
16	---	---	---	126.24	---	---	---	127.65	---	---	---	---
17	126.56	---	---	---	---	---	---	---	---	127.26	---	---
18	---	---	---	---	---	---	127.56	---	---	---	---	---
19	---	126.38	126.20	---	---	---	---	---	127.08	---	---	127.16
20	---	---	---	---	---	126.90	---	---	---	---	---	---
21	---	126.34	---	---	126.62	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	127.44	---
23	---	---	---	126.50	---	---	---	127.56	---	---	---	---
24	126.46	---	---	---	---	---	---	---	---	127.56	127.36	---
25	---	---	---	---	---	---	---	---	---	---	---	127.04
26	---	---	126.18	---	---	---	127.30	---	127.00	---	---	---
27	---	---	---	---	126.68	127.46	---	---	---	---	---	---
28	---	126.26	---	---	---	---	---	---	---	---	127.24	---
29	---	---	---	---	---	---	---	127.40	---	---	---	---
30	---	---	---	126.46	---	---	---	---	---	---	---	---
31	126.48	---	---	---	---	---	---	---	---	127.42	---	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312688 LAKE DEATON NEAR WILDWOOD, FL

LOCATION.--Lat 28°49'42", long 81°58'51", in NW¼ sec.23, T.19 S., R.23 E., Sumter County, Hydrologic Unit 03100208, on south side of lake on private pier, 0.3 mi northwest of junction of State Highways 44 and 44A, and 4.3 mi southeast of Wildwood.

SURFACE AREA.--782 acres (1.2 mi²).

DRAINAGE AREA.--12.4 mi².

PERIOD OF RECORD.--April 1978 to current year (weekly), incomplete.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (National Oceanic and Atmospheric Administration bench mark).

REMARKS.--There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 65.28 ft, June 1, July 6, Aug. 3, 1984; minimum observed, 60.90 ft, Dec. 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 64.38 ft, Apr. 3; minimum observed, 62.82 ft, Dec. 26, Jan. 2.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	64.04	64.07	---	---	---
2	---	---	---	62.82	---	---	---	---	---	---	---	---
3	63.18	---	62.94	---	---	---	64.38	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	63.28
5	---	---	62.92	---	---	---	---	---	64.00	---	---	---
6	---	---	---	---	63.30	63.55	---	---	---	---	---	---
7	---	62.98	---	---	---	---	---	---	---	---	63.53	---
8	---	---	---	---	---	---	---	64.32	---	---	---	---
9	---	---	---	63.00	63.29	---	64.26	---	---	---	---	---
10	63.14	---	---	---	63.29	---	64.30	---	---	63.80	---	---
11	---	---	---	---	---	---	---	---	---	---	---	63.36
12	---	---	62.88	---	---	---	---	---	63.90	---	---	---
13	---	---	---	---	63.30	63.70	---	---	---	---	---	---
14	---	62.97	---	---	---	---	---	---	---	---	63.58	---
15	63.12	---	---	---	---	---	---	64.32	---	---	---	---
16	---	---	---	63.00	---	---	---	---	---	---	---	---
17	63.12	---	---	---	---	---	64.28	---	---	63.76	---	---
18	---	---	---	---	---	---	---	---	---	---	---	63.50
19	---	---	62.86	---	---	---	---	---	63.86	---	---	---
20	---	---	---	---	63.40	63.70	---	---	---	---	---	---
21	---	62.90	---	---	---	---	---	---	---	---	63.50	---
22	---	---	---	---	---	---	---	64.28	---	---	---	63.43
23	---	---	---	63.20	---	---	---	---	---	---	---	---
24	62.98	---	---	---	---	---	64.19	---	---	63.75	---	---
25	---	---	---	---	---	---	---	---	---	---	---	63.42
26	---	---	62.82	---	---	---	---	---	63.78	---	---	---
27	---	---	---	---	63.45	63.80	---	---	---	---	---	---
28	---	62.88	---	---	---	---	---	---	---	---	63.36	---
29	---	---	---	---	---	---	---	64.10	---	---	---	---
30	---	---	---	63.20	---	---	---	---	---	---	---	---
31	63.00	---	---	---	---	---	---	---	---	63.60	---	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312691 LAKE OKAHUMPKA NEAR WILDWOOD, FL

LOCATION.--Lat 28°49'45", long 82°00'06", in SW¼ sec.15, T.19 S., R.23 E., Sumter County, Hydrologic Unit 03100208, on northeast side of lake on public pier, 1.5 mi west of junction of State Highways 44 and 44A, and 3.2 mi southeast of Wildwood.

SURFACE AREA.--973 acres (1.5 mi²).

DRAINAGE AREA.--49 mi², approximately, of which 5 mi² probably is noncontributing.

PERIOD OF RECORD.--April 1978 to current year (weekly).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Southwest Florida Water Management District bench mark).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 59.00 ft, July 10, 1982; minimum observed, 55.28 ft, July 10, Dec. 11, 18, 26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 58.42 ft, Apr. 9; minimum observed, 56.16 ft, Nov. 14, 21, 28.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56.36	---	---	---	---	---	---	57.30	57.10	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	56.34	---	56.22	---	---	---	---	---	---	56.60	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	56.32	---	56.18	---	---	---	---	---	57.05	---	---	---
6	56.30	---	---	---	---	---	---	---	---	---	---	---
7	---	56.18	---	---	---	---	---	---	---	---	56.40	---
8	---	---	---	---	---	---	---	57.20	---	---	---	---
9	---	---	---	---	---	---	58.42	---	---	---	---	---
10	56.34	---	---	---	56.76	---	---	---	---	56.65	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	56.18	---	---	---	---	---	56.85	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	56.16	---	---	---	---	---	---	---	---	56.50	---
15	56.20	---	---	---	---	---	---	57.65	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	56.60	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	56.18	---	---	---	---	---	56.70	---	---	---
20	---	---	---	---	---	---	57.84	---	---	---	---	---
21	---	56.16	---	---	---	---	---	---	---	---	56.40	---
22	---	---	---	---	---	---	---	57.45	---	---	---	56.30
23	---	---	---	---	---	---	---	---	---	---	---	---
24	56.34	---	---	---	---	---	---	---	---	56.60	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	56.20	---	---	---	---	---	56.60	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	56.16	---	---	---	---	---	---	---	---	56.25	---
29	---	---	---	---	---	---	---	57.15	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	56.32	---	---	---	---	---	---	---	---	56.50	---	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312694 LADY LAKE NEAR LADY LAKE, FL

LOCATION.--Lat 28°54'50", long 81°53'43", in NE¼ sec.22, T.18 S., R.24 E., Lake County, Hydrologic Unit 03100208, on south shore of lake, 1.5 mi east of town of Lady Lake.

SURFACE AREA.--190 acres (0.30 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is landlocked. There is some pumpage from lake for irrigation purposes.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 66.60 ft, Apr. 16, 1984; minimum observed, 60.70 ft, Apr. 15, 1976.

ELEVATION, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV- ATION ABOVE NGVD (FEET)
DEC 23...	0850	61.12	APR 29...	1143	62.07
FEB 19...	1345	61.83	JUNE 15...	1300	61.74
			AUG 13...	0955	61.63

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312696 LAKE MIONA NEAR OXFORD, FL

LOCATION.--Lat 28°54'21", long 82°00'19", in SE¼ sec.21, T.18 S., R.23 E., Sumter County, Hydrologic Unit 03100208, on north side of lake on private pier, 2.5 mi southeast of Oxford, and 3.7 mi northeast of Wildwood.

SURFACE AREA.--800 acres (1.2 mi²), includes Black Lake but excludes Cherry Lake.

DRAINAGE AREA.--38 mi², approximately, of which 10 mi² probably is noncontributing.

PERIOD OF RECORD.--April 1978 to current year (weekly), incomplete.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 56.60 ft, Oct. 1, 1982; minimum observed, 49.74 ft, May 4, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 52.52 ft, Apr. 5; minimum observed, 51.09 ft, Sept. 27.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	51.95	---	---	51.66	---	---	---	---	52.02	---	51.60	---
3	51.94	---	51.67	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	52.10	---	---	---	---
5	---	---	51.64	---	---	---	52.52	---	---	51.72	---	---
6	---	---	---	---	---	51.94	---	---	---	---	---	51.22
7	---	51.60	---	---	51.90	---	---	---	51.98	---	---	---
8	---	---	---	---	---	---	---	---	---	---	51.50	---
9	---	---	---	---	---	---	52.48	---	---	---	---	---
10	51.84	---	---	---	51.90	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	51.64	---	---
12	---	---	51.60	---	---	---	---	52.29	---	---	---	---
13	---	---	---	---	51.88	52.10	52.46	---	---	---	51.60	51.23
14	---	---	---	---	---	---	---	---	51.82	---	---	---
15	---	51.50	---	---	---	---	---	---	---	---	---	---
16	---	---	---	51.70	---	---	---	---	---	---	51.48	---
17	51.74	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	52.25	---	---	---	---
19	---	---	51.54	---	---	---	52.38	---	---	51.62	---	---
20	---	---	---	---	---	52.06	---	---	---	---	---	51.16
21	---	51.62	---	---	---	---	---	---	51.67	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	51.14
23	---	---	---	---	51.92	---	---	---	---	---	51.34	---
24	51.62	---	---	51.76	---	---	---	52.25	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	51.58	---	---
27	---	---	51.58	---	---	52.16	---	---	---	---	---	51.09
28	---	---	---	---	51.90	---	52.20	---	51.77	---	---	---
29	---	51.58	---	---	---	---	---	---	---	---	---	---
30	---	---	---	51.80	---	---	---	---	---	---	51.24	---
31	51.66	---	---	---	---	---	---	52.04	---	51.61	---	---

PEACE, WITHLACOOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOOCHEE RIVER BASIN

02312698 LAKE PANASOFFKEE NEAR LAKE PANASOFFKEE, FL

LOCATION.--Lat 28°49'01", long 82°08'40", in SE¼ sec.19, T.19 S., R.22 E., Sumter County, Hydrologic Unit 03100208, on west shore of lake, 0.8 mi north of outlet, 4.6 mi west of Coleman, and 5.1 mi northwest of town of Lake Panasoffkee.

SURFACE AREA.--4,821 acres (7.53 mi²).

DRAINAGE AREA.--420 mi², approximately.

PERIOD OF RECORD.--April 1955 to November 1962 (about weekly), December 1962 to current year. Records of elevations prior to October 1962 are unpublished and available in files of the Orlando Subdistrict Office. 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 National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Dec. 18, 1962, nonrecording gage and Dec. 18, 1962, to Oct. 7, 1975, water-stage recorder at sites within 0.8 mi south at same datum.

REMARKS.--Outflow from lake is through Outlet River to Withlacoochee River; lake level affected at times by the stage of Withlacoochee River. Prior to 1962, lake level partially controlled during low water by small rock dams and at times during 1962 to 1964 by a temporary sheet piling dam in Outlet River.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 44.28 ft, Apr. 5, 1960; minimum daily, 37.65 ft, May 12, 1962.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40.07	40.08	40.02	39.96	40.00	40.12	41.26	41.31	40.00	40.19	40.03	40.05
2	40.08	40.06	40.03	39.96	39.99	40.17	41.31	41.27	39.96	40.19	40.03	40.05
3	40.08	40.05	40.02	39.97	39.98	40.19	41.35	41.22	39.92	40.19	40.02	40.06
4	40.09	40.04	40.00	40.02	39.97	40.19	41.36	41.14	39.89	40.25	40.02	40.11
5	40.09	40.03	39.98	39.99	39.98	40.18	41.42	41.06	39.87	40.26	40.02	40.21
6	40.09	40.01	39.97	40.02	40.06	40.16	41.49	41.00	39.94	40.26	40.00	40.23
7	40.10	40.01	39.97	40.02	40.07	40.34	41.56	40.93	39.95	40.26	39.98	40.23
8	40.10	39.99	39.98	40.01	40.07	40.43	41.64	40.87	39.95	40.25	39.96	40.24
9	40.10	39.97	39.98	40.00	40.06	40.45	41.76	40.97	39.94	40.23	39.94	40.23
10	40.11	39.96	39.97	39.99	40.07	40.46	41.88	40.94	39.94	40.20	39.94	40.24
11	40.11	39.94	39.97	39.94	40.07	40.48	42.00	40.93	39.93	40.17	40.11	40.30
12	40.11	39.92	39.97	39.93	40.05	40.48	42.11	40.91	39.92	40.14	40.21	40.34
13	40.10	39.90	39.96	39.93	40.04	40.47	42.21	40.87	39.91	40.13	40.21	40.45
14	40.10	39.87	39.96	39.93	40.03	40.48	42.29	40.81	39.92	40.10	40.26	40.44
15	40.10	39.86	39.95	39.92	40.03	40.47	42.35	40.76	39.91	40.10	40.27	40.42
16	40.08	39.85	39.94	39.90	40.05	40.46	42.40	40.69	39.90	40.11	40.27	40.39
17	40.06	39.84	39.93	39.89	40.07	40.47	42.43	40.63	39.89	40.11	40.26	40.36
18	40.05	39.83	39.92	39.89	40.06	40.46	42.44	40.61	39.89	40.11	40.24	40.32
19	40.02	39.85	39.92	39.87	40.05	40.46	42.45	40.57	39.93	40.11	40.22	40.29
20	40.01	39.94	39.90	39.86	40.03	40.45	42.45	40.53	39.92	40.10	40.19	40.26
21	39.99	39.94	39.88	39.92	40.03	40.43	42.43	40.49	39.92	40.08	40.17	40.22
22	39.97	39.94	39.87	39.95	40.06	40.42	42.40	40.47	39.90	40.06	40.17	40.24
23	39.96	39.93	39.90	39.96	40.05	40.42	42.37	40.43	39.89	40.05	40.14	40.30
24	39.96	39.93	39.93	39.99	40.06	40.42	42.32	40.37	39.90	40.03	40.12	40.27
25	39.94	39.92	39.93	40.02	40.06	40.38	42.27	40.32	39.90	40.01	40.10	40.24
26	39.93	39.92	39.92	40.01	40.05	40.45	41.90	40.27	39.91	39.98	40.07	40.20
27	39.95	39.90	39.90	40.01	40.05	40.55	41.64	40.22	39.97	39.96	40.04	40.16
28	39.94	39.90	39.89	40.02	40.05	40.61	41.56	40.18	40.04	39.94	40.02	40.14
29	39.94	39.92	39.87	40.03	---	40.79	41.48	40.13	40.05	39.92	40.00	40.11
30	39.97	39.99	39.86	40.02	---	41.00	41.40	40.09	40.10	39.91	39.98	40.16
31	39.98	---	39.92	39.99	---	41.15	---	40.05	---	39.98	39.96	---
MEAN	40.04	39.94	39.94	39.97	40.04	40.45	41.93	40.68	39.94	40.11	40.10	40.24
MAX	40.11	40.08	40.03	40.03	40.07	41.15	42.45	41.31	40.10	40.26	40.27	40.45
MIN	39.93	39.83	39.86	39.86	39.97	40.12	41.26	40.05	39.87	39.91	39.94	40.05

CAL YR 1986 MEAN 39.40 MAX 40.11 MIN 38.60
WTR YR 1987 MEAN 40.28 MAX 42.45 MIN 39.83

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312794 LITTLE LAKE AT FLORAL CITY, FL

LOCATION.--Lat 28°44'51", long 82°17'17", in NE¼ sec.15, T.20 S., R.20 E., Citrus County, Hydrologic Unit 03100208, on north shore of lake, on private pier, 0.6 mi east of Floral City.

SURFACE AREA.--57.6 acres (0.09 mi²).

DRAINAGE AREA.--1.40 mi².

PERIOD OF RECORD.--September 1975 to current year (twice weekly), incomplete.

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

REMARKS.--Outflow from lake is through a canal to Lake Tsala Apopka. Lake level is controlled by culvert with removable boards at State Highway 48; flow is occasionally reversed.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 42.24 ft, Sept. 26, 1985; minimum observed, 35.04 ft, Nov. 13, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 40.92 ft, Oct. 14; minimum observed, 39.00 ft, Sept. 25, 29.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	39.82	---	40.36	---	---	---	39.18
2	---	---	40.22	40.40	---	---	---	---	40.01	---	---	---
3	40.50	---	---	---	39.85	39.80	40.37	---	---	---	---	---
4	---	40.43	---	---	---	---	---	---	---	39.76	39.68	39.19
5	---	---	40.16	---	---	---	---	40.35	39.90	---	---	---
6	---	---	---	40.02	39.94	---	40.40	---	---	---	---	---
7	40.40	40.37	---	---	---	39.96	---	---	---	---	39.64	---
8	40.52	---	---	---	---	---	40.42	40.32	---	39.88	---	39.17
9	40.58	---	40.09	39.98	---	---	---	---	39.87	---	---	---
10	40.75	40.30	---	---	39.89	39.85	---	---	---	39.84	---	---
11	---	---	---	---	---	---	40.44	40.47	---	---	39.52	39.21
12	---	---	40.10	---	---	---	---	---	39.78	---	---	---
13	---	---	---	39.90	39.82	---	---	---	---	---	---	---
14	40.92	40.26	---	---	---	39.81	40.40	---	---	39.82	39.50	---
15	---	---	---	---	---	---	---	40.42	---	---	---	39.20
16	---	---	39.98	39.87	---	---	---	---	39.72	---	---	---
17	40.82	---	---	---	39.80	39.80	40.45	---	---	39.86	---	---
18	---	40.24	---	---	---	---	---	---	---	---	39.57	39.10
19	---	---	39.92	---	---	---	---	40.37	39.70	---	---	---
20	---	---	---	39.85	39.78	39.77	---	---	---	---	---	---
21	40.68	40.26	---	---	---	---	40.45	---	---	39.78	39.49	---
22	---	---	---	---	---	---	---	40.29	---	---	---	39.07
23	---	---	39.88	39.92	---	---	---	---	---	---	---	---
24	40.58	---	---	---	39.80	39.71	---	---	39.55	39.72	---	---
25	---	40.20	---	---	---	---	40.44	---	---	---	39.38	39.00
26	---	---	39.90	---	---	---	---	40.19	39.48	---	---	---
27	---	---	---	39.92	39.76	39.90	---	---	---	---	---	---
28	40.50	40.10	---	---	---	---	40.40	---	---	39.62	39.27	39.02
29	---	---	---	---	---	---	---	40.10	---	39.58	---	39.00
30	---	---	39.90	39.89	---	---	---	---	39.60	---	---	---
31	40.50	---	---	---	---	40.40	---	---	---	39.60	---	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312800 TSALA APOPKA LAKE AT FLORAL CITY, FL

LOCATION.--Lat 28°45'03", long 82°16'49", in NW¼ sec.14, T.20 S., R.20 E., Citrus County, Hydrologic Unit 03100208, at extreme south end of lake, 50 ft northwest of bridge on Duval Road at entrance to The Canal, and 1.0 mi east of Floral City.

SURFACE AREA.--About 19,000 acres (30 mi²).

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1957 to April 1958 (weekly), incomplete, August 1958 to September 1975, October 1975 (weekly), November 1975 to current year (thrice weekly), incomplete. Records prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Apr. 20, 1971, near present site at same datum.

REMARKS.--Tsala Apopka Lake borders along the west bank of the Withlacoochee River and consists of many lakes and sloughs, some connected and some not.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 44.22 ft, Mar. 29, 1960; minimum observed, 35.24 ft, June 20, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 42.46 ft, Apr. 6; minimum observed, 40.44 ft, July 31, Aug. 10.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.58	---	40.80	---	---	---	41.90	42.26	41.20	40.62	---	---
2	---	---	---	40.76	40.78	40.88	---	---	41.14	---	---	40.58
3	41.56	40.90	40.82	---	---	---	42.06	---	41.09	40.58	40.56	---
4	---	---	---	---	40.78	40.88	---	42.22	---	---	---	40.60
5	---	40.86	40.80	40.80	---	---	---	---	41.00	---	40.56	---
6	41.50	---	---	---	40.88	40.92	42.46	42.16	---	40.78	---	---
7	---	40.86	---	40.78	---	---	---	---	---	---	40.52	40.62
8	41.48	---	40.78	---	---	---	42.38	42.02	40.98	40.68	---	---
9	---	---	40.73	40.78	40.84	41.08	---	---	---	---	---	40.62
10	41.40	40.82	40.70	---	---	---	42.30	---	40.90	40.64	40.44	---
11	---	---	---	---	40.80	41.08	---	41.86	---	---	---	40.64
12	---	40.80	40.70	40.76	---	---	---	---	40.84	---	40.50	---
13	41.36	---	---	---	40.78	41.08	42.28	41.92	---	40.60	---	---
14	---	40.78	---	40.76	---	---	---	---	---	---	40.48	40.80
15	41.30	---	40.68	---	---	---	42.30	41.80	40.82	40.62	---	---
16	---	---	---	40.70	40.80	41.08	---	---	---	---	---	40.78
17	41.24	40.74	40.68	---	---	---	42.34	---	40.78	40.60	40.56	---
18	---	---	---	---	40.80	41.12	---	41.64	---	---	---	40.78
19	---	40.70	40.66	40.68	40.78	---	---	---	40.70	---	40.56	---
20	41.10	---	---	---	40.78	41.16	42.38	41.58	---	40.62	---	---
21	---	40.78	---	40.72	---	---	---	---	---	---	40.54	40.80
22	41.08	---	40.60	---	---	---	42.36	41.48	40.60	40.58	---	---
23	---	---	---	40.76	40.82	41.14	---	---	---	---	---	40.82
24	41.00	40.76	40.70	---	---	---	42.30	---	40.78	40.54	40.54	---
25	---	---	---	---	40.82	41.20	---	41.46	---	---	---	40.82
26	---	40.70	40.68	40.80	---	---	---	---	40.58	---	40.54	---
27	40.96	---	---	---	40.82	41.36	42.28	41.40	---	40.54	---	---
28	---	40.74	---	40.80	---	---	---	---	---	---	40.52	40.84
29	40.92	---	40.66	---	---	---	42.26	41.30	40.60	40.46	---	---
30	---	---	---	40.78	---	41.66	---	---	---	---	---	40.90
31	40.92	---	40.66	---	---	---	---	---	---	40.44	40.50	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312900 TSALA APOPKA LAKE AT INVERNESS, FL

LOCATION.--Lat 28°50'39", long 82°19'21", in SE¼ sec. 8, T.19 S., R.20 E., Citrus County, Hydrologic Unit 03100208, on southwest bank of narrows in west-central section of lake, near southwest end of bridge on State Highway 470, and 0.8 mi northeast of Inverness.

SURFACE AREA.--About 19,000 acres (30 mi²).

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July to December 1957 (weekly), incomplete, August 1958 to September 1975, October 1975 (weekly), November 1975 to current year (thrice weekly), incomplete. Records prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1958, at site about 1 mi west on south shore of cove at same datum.

REMARKS.--Tsala Apopka Lake borders along the west bank of the Withlacoochee River and consists of many lakes and sloughs, some connected and some not.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 42.94 ft, Apr. 4,5, 1960; minimum observed, 32.30 ft, July 10, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 40.76 ft, Apr. 1; minimum observed, 38.90 ft, Sept. 28,30.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.38	---	39.56	---	---	---	40.76	40.40	39.90	39.82	---	---
2	---	---	---	39.56	39.88	40.20	---	---	---	---	---	39.36
3	39.46	39.60	39.66	---	---	---	40.66	---	39.90	39.82	39.50	---
4	---	---	---	---	39.88	40.18	---	40.40	---	---	---	39.28
5	---	39.60	39.64	39.50	---	---	---	---	39.90	---	39.52	---
6	39.46	---	---	---	39.90	40.10	40.58	40.40	---	39.80	---	---
7	---	39.60	---	39.50	---	---	---	---	---	---	39.50	39.28
8	39.46	---	39.60	---	---	---	40.56	40.40	39.90	39.70	---	---
9	---	---	---	39.70	39.88	40.36	---	---	---	---	---	39.26
10	39.50	39.56	39.60	---	---	---	40.56	---	39.86	39.70	39.46	---
11	---	---	---	---	40.00	40.30	---	40.38	---	---	---	39.24
12	---	39.54	39.58	39.70	---	---	---	---	39.84	---	39.46	---
13	39.56	---	---	---	40.02	40.30	40.54	40.42	---	39.60	---	---
14	---	39.54	---	39.70	---	---	---	---	---	---	39.46	39.24
15	39.60	---	39.56	---	---	---	40.54	40.46	39.84	39.64	---	---
16	---	---	---	39.70	40.02	40.26	---	---	---	---	---	39.26
17	39.60	39.50	39.56	---	40.06	---	40.50	---	39.84	39.62	39.50	---
18	---	---	---	---	40.08	40.26	40.56	40.44	---	---	---	39.24
19	---	39.50	39.56	39.68	---	---	---	---	39.84	---	39.48	---
20	39.58	---	---	---	40.06	40.26	40.48	40.44	---	39.60	---	---
21	---	39.50	---	39.68	---	---	---	---	---	---	39.46	39.22
22	39.56	---	39.56	---	---	---	40.48	40.38	39.82	39.60	---	---
23	---	---	---	39.80	40.10	40.24	---	---	---	---	---	39.22
24	39.56	39.48	39.54	---	---	---	40.48	---	39.82	39.54	39.40	---
25	---	---	---	---	40.10	40.24	---	40.38	---	---	---	39.10
26	---	39.48	39.54	39.90	---	---	---	---	39.70	---	39.38	---
27	39.56	---	---	---	40.10	40.24	40.44	40.20	---	39.42	---	---
28	---	39.48	---	39.90	---	---	---	---	---	---	39.36	38.90
29	39.56	---	39.54	---	---	---	40.42	40.10	39.80	39.36	---	---
30	---	---	---	39.90	---	40.40	---	---	---	---	---	38.90
31	39.56	---	39.56	---	---	---	---	---	---	39.38	39.36	---

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02312950 TSALA APOPKA LAKE AT HERNANDO, FL

LOCATION.--Lat 28°54'08", long 82°22'30", in SE¼ sec.23, T.18 S., R.19 E., Citrus County, Hydrologic Unit 03100208, on southwest shore of west bay near northwest end of lake, on public pier at Hernando.

SURFACE AREA.--About 19,000 acres (30 mi²).

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1936 to April 1950 (monthly), incomplete, July 1957 to July 1958 (weekly), incomplete, August 1958 to current year. Records prior to October 1960 are unpublished and available in files of the Orlando Subdistrict Office.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 19, 1957, at datum 36.60 ft higher and July 19, 1957, to Jan. 12, 1971, at three different sites in the immediate vicinity, at present datum.

REMARKS.--Tsala Apopka Lake borders along the west bank of the Withlacoochee River and consists of many lakes and sloughs, some connected and some not.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 41.74 ft, Apr. 6, 1960; minimum observed, 30.92 ft, July 19, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 38.94 ft, Mar. 31, Apr. 1; minimum observed, 37.56 ft, Nov. 26.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
INSTANT VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.18	37.82	37.80	37.74	37.76	38.06	38.94	38.70	38.56	38.32	38.26	38.10
2	38.18	37.82	37.82	37.72	37.76	38.04	38.80	38.68	38.52	38.32	38.32	38.08
3	38.16	37.80	37.84	37.70	37.74	38.04	38.70	38.68	38.48	38.36	38.40	38.08
4	38.14	37.80	37.82	37.74	37.74	38.04	38.62	38.66	38.42	38.40	38.40	38.08
5	38.10	37.78	37.80	37.78	37.80	38.04	38.58	38.66	38.50	38.42	38.42	38.08
6	38.08	37.76	37.78	37.80	37.88	38.02	38.54	38.68	38.56	38.46	38.40	38.06
7	38.08	37.76	37.76	37.78	37.88	38.04	38.50	38.68	38.56	38.46	38.38	38.04
8	38.06	37.74	37.74	37.76	37.88	38.24	38.58	38.66	38.56	38.46	38.36	38.02
9	38.04	37.72	37.72	37.74	37.90	38.24	38.66	38.66	38.52	38.48	38.34	38.00
10	38.08	37.72	37.70	37.72	37.88	38.28	38.68	38.66	38.48	38.50	38.30	37.98
11	38.10	37.70	37.70	37.72	37.88	38.28	38.70	38.68	38.46	38.48	38.36	37.96
12	38.08	37.70	37.70	37.70	37.86	38.26	38.66	38.70	38.44	38.46	38.36	38.02
13	38.06	37.68	37.72	37.70	37.84	38.28	38.60	38.74	38.42	38.44	38.38	38.06
14	38.04	37.66	37.70	37.70	37.84	38.28	38.60	38.74	38.40	38.42	38.38	38.04
15	38.02	37.66	37.70	37.70	37.82	38.28	38.62	38.76	38.40	38.40	38.36	38.04
16	38.00	37.64	37.68	37.70	37.80	38.28	38.64	38.78	38.38	38.44	38.38	38.02
17	37.98	37.64	37.66	37.70	37.88	38.28	38.68	38.78	38.36	38.42	38.40	38.00
18	37.96	37.64	37.66	37.68	37.86	38.26	38.70	38.76	38.34	38.40	38.38	37.98
19	37.94	37.64	37.66	37.68	37.86	38.30	38.70	38.74	38.32	38.40	38.38	37.94
20	37.94	37.62	37.66	37.68	37.86	38.30	38.72	38.78	38.30	38.40	38.36	37.92
21	37.90	37.60	37.64	37.70	37.92	38.30	38.72	38.78	38.28	38.48	38.32	37.92
22	37.90	37.60	37.64	37.78	37.96	38.30	38.74	38.78	38.26	38.50	38.30	37.90
23	37.90	37.58	37.62	37.76	37.96	38.28	38.74	38.76	38.26	---	38.28	37.90
24	37.88	37.58	37.70	37.76	37.96	38.28	38.76	38.72	38.26	---	38.26	37.92
25	37.86	37.58	37.70	37.78	37.96	38.28	38.74	38.68	38.24	---	38.24	37.90
26	37.84	37.56	37.68	37.80	37.94	38.30	38.74	38.66	38.22	---	38.22	37.88
27	37.82	37.58	37.68	37.80	37.92	38.46	38.74	38.62	38.26	---	38.20	37.86
28	37.80	37.62	37.68	37.80	37.90	38.58	38.74	38.60	38.28	---	38.18	37.84
29	37.80	37.64	37.66	37.78	---	38.80	38.74	38.60	38.30	38.25	38.34	37.82
30	37.84	37.72	37.66	37.78	---	38.82	38.72	38.58	38.30	38.26	38.24	37.80
31	37.84	---	37.66	37.76	---	38.94	---	38.58	---	38.24	38.14	---
MEAN	37.99	37.68	37.71	37.74	37.87	38.30	38.69	38.69	38.39	---	38.32	37.97
MAX	38.18	37.82	37.84	37.80	37.96	38.94	38.94	38.78	38.56	---	38.42	38.10
MIN	37.80	37.56	37.62	37.68	37.74	38.02	38.50	38.58	38.22	---	38.14	37.80

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

02313229 LAKE ROUSSEAU NEAR DUNNELLON, FL

LOCATION.--Lat 29°00'35", long 82°37'01", in SW¼ sec.8, T.17 S., R.17 E., Levy County, Hydrologic Unit 03100208, at west end of lake, at upstream side of control structure of Inglis Dam on Withlacoochee River, 9.8 mi west of Dunnellon.

SURFACE AREA.--4,163 acres (6.50 mi²).

DRAINAGE AREA.--2,020 mi², approximately.

PERIOD OF RECORD.--June 1964 to current year. Records for Withlacoochee River at Inglis Dam, near Dunnellon (station 02313230).

REVISED RECORDS.--WDR FL-72-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 20, 1971, at site in forebay of power house of the old Inglis Dam at same datum. July 20, 1971, to Aug. 23, 1972, at site in private boat basin on south shore of lake at same datum.

REMARKS.--Lake is formed by earthen dam and concrete control structure consisting of two spillway bays with vertical lift gates. Lake was created to produce electric power but is now used for recreation only. Since December 1969, outflow from lake through Inglis Dam (station 02313230), Cross-Florida Barge Canal (station 02313237), and Withlacoochee River Bypass Channel (station 02313250).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 28.18 ft, June 19, 1982; minimum daily, 21.70 ft, Oct. 11, 1972.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.55	27.51	27.63	27.72	27.54	27.72	27.53	26.43	27.62	27.23	27.45	27.54
2	27.52	27.46	27.46	27.74	27.48	27.68	27.39	26.50	27.61	27.47	27.47	27.47
3	27.45	27.46	27.31	27.74	27.50	27.60	27.29	26.53	27.57	27.45	27.56	27.45
4	27.46	27.49	27.15	27.70	27.50	27.51	27.22	26.60	27.56	27.43	27.53	27.43
5	27.49	27.51	27.09	27.70	27.57	27.45	27.20	27.12	27.58	27.51	27.47	27.46
6	27.53	27.52	27.25	27.65	27.65	27.46	27.20	27.46	27.51	27.47	27.40	27.52
7	27.64	27.50	27.43	27.61	27.68	27.64	27.20	27.40	27.36	27.43	27.32	27.58
8	27.67	27.52	27.54	27.53	27.63	27.80	27.16	27.19	27.30	27.37	27.36	27.63
9	27.65	27.52	27.58	27.43	27.58	27.79	27.14	27.17	27.30	27.35	27.43	27.58
10	27.63	27.53	27.60	27.41	27.53	27.70	27.15	27.27	27.29	27.41	27.52	27.47
11	27.57	27.53	27.61	27.45	27.44	27.50	27.20	27.42	27.38	27.50	27.61	27.39
12	27.48	27.55	27.74	27.48	27.34	27.27	27.28	27.54	27.47	27.57	27.64	27.50
13	27.38	27.57	27.68	27.51	27.28	27.21	27.29	27.60	27.54	27.59	27.65	27.58
14	27.28	27.59	27.45	27.53	27.28	27.25	27.25	27.56	27.57	27.59	27.59	27.58
15	27.21	27.56	27.35	27.54	27.30	27.38	26.93	27.44	27.57	27.62	27.57	27.60
16	27.19	27.54	27.32	27.57	27.26	27.49	26.28	27.38	27.54	27.57	27.47	27.61
17	27.17	27.53	27.29	27.61	27.30	27.60	25.86	27.30	27.50	27.42	27.43	27.57
18	27.17	27.53	27.29	27.57	27.31	27.67	25.67	27.35	27.47	27.35	27.39	27.50
19	27.25	27.55	27.39	27.53	27.34	27.69	25.73	27.47	27.42	27.40	27.34	27.51
20	27.31	27.55	27.46	27.53	27.39	27.56	26.08	27.54	27.40	27.51	27.29	27.52
21	27.37	27.52	27.54	27.55	27.53	27.43	25.73	27.62	27.44	27.69	27.33	27.54
22	27.44	27.52	27.61	27.54	27.70	27.41	25.66	27.57	27.47	27.62	27.49	27.54
23	27.47	27.53	27.64	27.53	27.79	27.52	25.79	27.49	27.50	27.58	27.44	27.56
24	27.48	27.53	27.69	27.57	27.77	27.58	25.86	27.41	27.52	27.46	27.38	27.55
25	27.51	27.53	27.75	27.59	27.66	27.61	25.90	27.40	27.53	27.36	27.39	27.49
26	27.54	27.53	27.82	27.60	27.56	27.68	25.95	27.37	27.52	27.40	27.44	27.50
27	27.54	27.54	27.85	27.60	27.59	27.69	25.97	27.33	27.73	27.47	27.46	27.48
28	27.54	27.56	27.81	27.60	27.66	27.77	26.02	27.33	27.55	27.53	27.48	27.48
29	27.54	27.63	27.74	27.61	---	27.59	26.12	27.44	27.37	27.54	27.53	27.49
30	27.58	27.73	27.70	27.53	---	27.52	26.30	27.55	27.29	27.53	27.57	27.69
31	27.56	---	27.70	27.54	---	27.55	---	27.62	---	27.49	27.59	---
MEAN	27.46	27.54	27.53	27.57	27.51	27.56	26.58	27.30	27.48	27.48	27.47	27.53
MAX	27.67	27.73	27.85	27.74	27.79	27.80	27.53	27.62	27.73	27.69	27.65	27.69
MIN	27.17	27.46	27.09	27.41	27.26	27.21	25.66	26.43	27.29	27.23	27.29	27.39

CAL YR 1986 MEAN 27.51 MAX 28.00 MIN 26.73

WTR YR 1987 MEAN 27.42 MAX 27.85 MIN 25.66

PEACE, WITHLACOCHEE, HILLSBOROUGH RIVERS AND WESTERN COASTAL AREA

WITHLACOCHEE RIVER BASIN

284753082070401 LAKE PANASOFFKEE NEAR COLEMAN LANDING

WATER-QUALITY RECORDS

LOCATION.--Lat 28°47'53", long 82°07'04", in NE¼ sec.33, T.19 S., R.22 E., Sumter County, Hydrologic Unit 03100208, samples collected from boat, 0.6 mi southwest of Coleman Landing, 2.5 mi west of town of Coleman.

SURFACE AREA.--4,821 acres.

DRAINAGE AREA.--420 mi², approximately.

PERIOD OF RECORD.--Water years 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 03...	0950	238	8.5	25.0	9.9	<0.010	0.020	0.030	0.72	0.020	0.010	11
JUL 22...	0915	282	7.6	28.0	9.1	<0.010	0.020	0.040	0.49	0.010	0.010	6.0
DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)			
JUN 03...	0950	50	33	4.8	4.9	0.20	86	15	7.9			
JUL 22...	0915	30	42	5.0	4.6	0.50	108	18	8.2			
DATE		FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)		
JUN 03...	0.20	4.0	139	270	11	20	<1	1	1			
JUL 22...	0.20	9.8	171	300	6.0	70	<1	<1	2			
DATE		IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)		
JUN 03...	10	<10	<5	<5	<10	<10	<0.10	4	<10			
JUL 22...	30	10	<5	<5	<10	<10	<0.10	<1	<10			

INDEX TO INTRODUCTORY TEXT

Page	Page
Access to WATSTORE data.....	16
Accuracy of the records.....	12
Acknowledgment.....	iii
Acre-foot, definition of.....	17
Algae, definition of.....	17
Ash mass, definition of.....	17
Aquifer, definition of.....	17
Arrangement of records.....	12
Artesian, definition of.....	17
Bacteria, definition of.....	17
Bed load, definition of.....	19
Bed load discharge, definition of.....	19
Bed material, definition of.....	17
Biochemical oxygen demand, definition of.....	17
Biomass, definition of.....	17
Bottom material, definition of.....	17
Cells/volume, definition of.....	17
Cfs-day, definition of.....	17
CFSM, definition of.....	17
Chemical oxygen demand, definition of.....	17
Chlorophyll, definition of.....	17
Classification of records.....	12
Color unit, definition of.....	18
Contents, definition of.....	18
Control, definition of.....	18
Control structure, definition of.....	18
Cooperation.....	1
Cubic foot per second, definition of.....	18
Data collection and computation	
Stage and water discharge.....	10
Ground-water levels.....	14
Ground-water quality.....	15
Data presentation	
Stage and water discharge.....	12
Surface-water quality.....	13
Ground-water levels.....	15
Ground-water quality.....	15
Definition of terms.....	17
Discharge, definition of.....	18
Dissolved, definition of.....	18
Dissolved solids concentration, definition of.....	18
Downstream order system.....	9
Drainage area, definition of.....	18
Drainage basin, definition of.....	18
Dry mass, definition of.....	17
Explanation of the records.....	9
Fecal coliform bacteria, definition of.....	17
Fecal streptococcal bacteria, definition of.....	17
Gage height, definition of.....	18
Gaging station, definition of.....	18
Ground-water levels, records of.....	14
Ground-water quality, records of.....	15
Hardness of water, definition of.....	18
Hydrologic Bench-Mark Network, explanation of.....	8
Hydrologic conditions, summary of.....	2
Hydrologic unit, definition of.....	18
Identifying estimated daily discharge.....	12
Instantaneous discharge, definition of.....	18
Introduction.....	1
Laboratory measurements.....	13
Land-surface datum, definition of.....	18
Latitude-longitude system.....	9
Mean concentration, definition of.....	19
Mean discharge, definition of.....	18
Measuring point, definition of.....	18
Micrograms per gram ($\mu\text{g/g}$), definition of.....	18
Micrograms per liter ($\mu\text{g/L}$), definition of.....	18
Milligrams per liter (mg/L), definition of.....	18
National Geodetic Vertical Datum of 1929, definition of.....	18
National Stream Quality Accounting Network, explanation of.....	8
Networks and programs, special.....	8
Onsite measurement and sample collection.....	13
Organic mass, definition of.....	17
Organism, definition of.....	19
count/area, definition of.....	19
count/volume, definition of.....	19
count, total, definition of.....	19
Other records available	12
Parameter code, definition of.....	19
Partial-record station, definition of.....	19
Partical size, definition of.....	19
Partical size classification, definition of.....	19
Percent composition, definition of.....	19
Pesticides, definition of.....	19
Picocurie, definition of.....	19
Preface.....	iii
Publications on techniques of water-resources investigations.....	22
Records, explanation of the.....	9
stage and water discharge.....	10
surface-water quality.....	12
ground-water levels.....	14
ground-water quality.....	15
other available.....	12
References, selected.....	24
Recoverable from bottom material, definition of.....	19
Remark codes.....	14
Return period, definition of.....	19
Runoff in inches, definition of.....	19
Sediment (surface-water quality).....	13
Sediment, definition of.....	19
Selected references.....	24
Sodium-adsorption-ratio, definition of.....	20
Solute, definition of.....	20
Special networks and programs.....	8
Specific conductance, definition of.....	20
Stage and water discharge, records of.....	10
Stage discharge relation, definition of.....	20
Station identification numbers.....	9
Streamflow, definition of.....	20
Summary of hydrologic conditions.....	2
Surface area, definition of.....	20
Surface-water quality, records of.....	12
Surficial bed material, definition of.....	20
Suspended, definition of.....	20
recoverable, definition of.....	20
total, definition of.....	20
Suspended sediment, definition of.....	19
concentration, definition of.....	19
discharge, definition of.....	20
load, definition of.....	20

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

INDEX TO INTRODUCTORY TEXT--Continued

	Page		Page
Taxonomy, definition of.....	20		
Temperature, water.....	13		
Terms, definition of.....	17	Water-resources investigations,	
Thermograph, definition of.....	20	publications on techniques of.....	22
Time-weighted average, definition of.....	21	Water temperature.....	13
Tons per acre-foot, definition of.....	21	Water year,	
Tons per day, definition of.....	21	definition of.....	21
Total, definition of.....	21	WATSTORE data, access to.....	16
Coliform bacteria, definition of.....	17	Weighted average,	
Discharge, definition of.....	21	definition of.....	21
Organism count, definition of.....	19	Well descriptions and	
Recoverable, definition of.....	21	ground-water data.....	26
Sediment discharge, definition of.....	20	Wet mass, definition of.....	17
Sediment load, definition of.....	20	WDR, definition of.....	21
Tritium network.....	8	WSP, definition of.....	21

INDEX TO SURFACE-WATER SITES

Station name	Page	Station name	Page
Alfred, Lake, at Lake Alfred.....	389	Gee Creek near Longwood.....	70
Alligator Lake near Ashton.....	369	Geneva, Lake, near Keystone Heights.....	361
Alligator Creek at Callahan.....	36	George, Lake, near Salt Springs.....	326
Apopka-Beauclair Canal below dam near Astatula.....	106	Georges Lake near Florahome.....	366
Apopka-Beauclair Canal near Astatula.....	102	Gibson, Lake, near Lakeland.....	390
Apopka, Lake, at Winter Garden.....	337	Grandin, Lake, near Interlachen.....	365
Apshawa, Lake, near Minneola.....	332	Green Swamp Run near Eva.....	84
Arbuckle Creek near De Soto City.....	216	Griffin, Lake, at Leesburg.....	346
Arbuckle, Lake, near Avon Park.....	385		
Ariana Lake, at Auburndale.....	393	Haile Sink near Arredondo.....	126
Arietta, Lake, near Auburndale.....	391	Haines Creek at Lisbon.....	108
		below Burrell Dam at Lisbon.....	110
Bay Lake near Vineland.....	373	Harney Pond Canal at S-71, near Lakeport.....	181
Bayroot Slough Headwaters near Bay Lake.....	250	Harris, Lake, at Leesburg.....	335
Big Creek near Clermont.....	85	Helene, Lake, near Polk City.....	398
Big Davis Creek at Bayard.....	150	Hogtown Creek near Arredondo.....	125
Big Gant Canal at Structure S-11, near Webster.....	253	Holly Lake near Umatilla.....	344
at Structure WC-2, at Rerdell.....	254	Howell Creek near Slavia.....	68
below Structure WC-2, at Rerdell.....	255		
Black Creek near Doctors Inlet.....	148	Indian Prairie Canal at S-72, near Okeechobee.....	183
Black Lake Outlet at S-101A at Buena Vista.....	190	Indian River at Wabasso.....	168
Black Water Creek near Cassia.....	74	Intracoastal Waterway near Cedar Point.....	43
Blue Springs near Orange City.....	75	Istokpoga, Lake, near De Soto City.....	386
Boggy Creek near Taft.....	185		
Bonnet Creek near Vineland.....	191	Jane Green Creek near Deer Park.....	53
Bowers Lake near Oklawaha.....	349	Jessup, Lake, near Sanford.....	319
Brooklyn Lake at Keystone Heights.....	360	Johns Lake at Oakland.....	336
Bryan, Lake, near Vineland.....	372	Johnson, Lake, (big lake) near Keystone Heights.....	364
Bryant, Lake, near Silver Springs.....	350	Johnson, Lake, (little lake) near Keystone Heights.....	363
Butler, Lake, at Windermere.....	375	Juliana, Lake, near Polk City.....	397
		Jumper Creek near Bushnell.....	268
Camps Canal near Rochelle.....	127	Sumterville.....	267
Canal 41A at S-68 at Lake Istokpoga near Lake Placid.....	222	Wahoo.....	270
Canal 41A at S-84 near Okeechobee.....	223		
Catfish Creek near Lake Wales.....	213	Kanapaha, Lake, at Arredondo.....	352
Catherine, Lake, at Groveland.....	401	Kerr, Lake, near Eureka.....	325
Cedar Swamp Creek at Jacksonville.....	155	Kingsley Lake at Camp Blanding.....	367
Charm, Lake at Oviedo.....	318	Kissimmee, Lake, near Lake Wales.....	384
Cherry Lake near Groveland.....	333	Kissimmee River at S-65, near Lake Wales.....	214
Church Lake near Groveland.....	334	at S-65E, near Okeechobee.....	217
Chitty Chatty Creek near Wildwood.....	273	below S-65, near Lake Wales.....	215
Clear Lake at San Antonio.....	400	below S-65E near Okeechobee.....	221
Conway, Lake, at Pine Castle.....	371		
Cow Log Branch at Yeehaw Junction.....	52	Lady Lake near Lady Lake.....	404
Crabgrass Creek near Holopaw.....	52	Lateral 405 below S-405 near Vineland.....	198
Cross-Florida Barge Canal at Buckman Lock near Palatka.....	136	Leslie-Heifner Canal near Floral City.....	280
Inglis Lock, near Inglis.....	298	Little Creek near Clermont.....	89
Cypress Creek at Vineland.....	187	Little Econlockhatchee River near Union Park.....	62
Cypress Lake near St. Cloud.....	378	Little Jones Creek at mouth.....	306
		Little Haw Creek near Seville.....	138
Dade City Canal near Dade City.....	246	Little Lake at Floral City.....	407
Davenport Creek near Loughman.....	206	Little Wekiva River near Altamonte Springs.....	71
Deaton, Lake, near Wildwood.....	402	Little Withlacoochee River at Rerdell.....	256
Deep Creek Diversion Canal near Osteen.....	67	near Tarrytown.....	251
near Barberville.....	82	Lochloosa Lake at Lochloosa.....	353
near Osteen.....	66	Lochloosa Slough near Lochloosa.....	130
near Hastings.....	144	Louisa, Lake, near Clermont.....	330
Deeson, Lake, near Lakeland.....	399	Lowrey, Lake, near Haines City.....	328
Diego Plains Swamp Drain at Mickler Landing.....	157		
Dora Canal at Tavares.....	107	Magnolia Lake near Keystone Heights.....	359
Dora, Lake, at Mount Dora.....	340	Main Canal at Vero Beach.....	171
Dorr, Lake, near Altoona.....	322	Marian, Lake, near Kenansville.....	383
Dunns Creek near Satsuma.....	139	Marion, Lake near Haines City.....	379
		Mary Jane, Lake, near Marcoossee.....	370
Econlockhatchee River at Magnolia Ranch near Bithlo.....	60	Middle Haw Creek near Korona.....	137
near Chuluota.....	63	Middle Prong St. Marys River at Taylor.....	28
Econlockhatchee River Tributary near Bithlo.....	61	Mills Creek near Italia.....	34
Etonia Creek at Bardin.....	142	Minnehaha, Lake, at Clermont.....	331
Eustis, Lake, at Eustis.....	342	Miona, Lake, near Oxford.....	405
		Monroe, Lake, near Sanford.....	320
Fisheating Creek at Palmdale.....	176	Moultrie Creek, at State Highway 207, near St. Augustine.....	158
Fort Drum Creek at Sunshine State Parkway near Fort Drum.....	50	Mount Plymouth Lake at Mount Plymouth.....	323
Fox Branch near Socrum.....	230		
Francis, Lake, near Plymouth.....	338		

WATER RESOURCES DATA - FLORIDA, 1987
Volume 1A: Northeast Florida

INDEX TO SURFACE-WATER SITES--Continued

Station name	Page	Station name	Page
Nassau River near Tisonia.....	39	South Canal near Vero Beach.....	174
NNeff Lake Sink near Brooksville.....	395	South Fork Black Creek near Penney Farms....	145
Neff Lake near Brooksville.....	396	South Lake near Vineland.....	374
Nellie, Lake, near Clermont.....	329	Spruce creek near Samsula.....	161
Newmans Lake near Gainesville.....	351	St. Johns Headwaters near Vero Beach.....	51
North Canal near Vero Beach.....	170	St. Johns River	
North Fork Black Creek at Middleburg.....	147	above Lake Harney, near Geneva.....	64
North Fork Black Creek near Middleburg.....	146	at Jacksonville.....	152
North Prong St. Marys River at Moniac, GA....	27	near Christmas.....	58
		near Cocoa.....	57
Ocklawaha, Lake, near Orange Springs.....	355	near De Land.....	76
Odom, Lake, near De Leon Springs.....	324	near Melbourne.....	54
Okahumpka, Lake, near Wildwood.....	403	St. Marys River near Gross.....	31
Okeechobee, Lake.....	387	St. Marys River near Macclenny.....	29
Oklawaha River			
above Moss Bluff Dam at Moss Bluff.....	111	Taylor Creek above S-1, near Okeechobee....	227
at Rodman Dam near Orange Springs.....	133	Taylor Creek near Basinger.....	225
at Eureka.....	122	The Canal (Orange State Canal) near	
at Moss Bluff.....	112	Floral City.....	281
near Conner.....	116	Thomas Creek near Crawford.....	38
Orange Creek at Orange Springs.....	131	Tiger Bay Canal near Daytona Beach.....	159
Orange Lake at Orange Lake.....	354	Tohopekaliga, Lake, at Kissimmee.....	376
Orange Lake Outlet near Citra.....	129	Tomoka River near Holly Hill.....	160
Orange State Canal (The Canal), near		Tracy Canal near Paisley.....	73
Floral City.....	281	Trout Lake near Clermont.....	377
Ortega River at Jacksonville.....	151	Tsala Apopka Lake at	
Outlet River at Panachoochee Retreats.....	274	Floral City.....	408
		Hernando.....	410
Pablo Creek at Jacksonville.....	154	Inverness.....	409
Palatlakaha River at		Tsala Apopka outfall canal	
Cherry Lake Outlet near Groveland.....	90	at S-353, near Hernando.....	282
Structure M-1 near Okahumpka.....	100	below S-353, near Hernando.....	284
Structure M-4 near Okahumpka.....	98	Turkey Creek at Palm Bay.....	166
Structure M-5 near Okahumpka.....	96		
Structure M-6 near Mascotte.....	94	Umatilla, Lake, at Umatilla.....	341
Palatlakaha River below spillway			
at Cherry Lake Outlet near Groveland.....	91	Washington, Lake, near Eau Gallie.....	315
near Mascotte.....	93	Weir, Lake at Oklawaha.....	347
Palatlakaha River below Structure		Wekiva, Lake, near Maitland.....	321
M-4 near Okahumpka.....	99	Wekiva River near Sanford.....	72
M-5 near Okahumpka.....	97	Weohyakapka, Lake, at Indian Lake Estates...	381
M-6 near Mascotte.....	95	West Crooked Lake near Eustis.....	339
Palatlakaha River near Mascotte.....	92	Whistler, Lake, near Auburndale.....	392
Panasoffkee, Lake, near Coleman Landing.....	412	Whittenhorse Creek near Vineland.....	195
Panasoffkee, Lake, near Lake Panasoffkee....	406	Williamson Ditch at S-7, near Okeechobee....	228
Pebble Lake near Keystone Heights.....	362	Winnemissett, Lake, near De Land.....	317
Pierce, Lake, near Waverly.....	380	Winona, Lake, near De Land.....	357
Poinsett, Lake, near Cocoa.....	316	Withlacoochee-Hillsborough overflow	
Prairie Creek near Gainesville.....	123	near Richmond.....	239
		Withlacoochee River	
Rainbow Springs near Dunnellon.....	291	above Wysong Dam, at Carlson.....	276
Reedy Creek at State Highway 531 near		at Crackertown.....	300
Poinsianna.....	212	at Croom.....	259
Reedy Creek near Loughman.....	209	at Dunnellon.....	293
Reedy Creek near Vineland.....	200	at Inglis Dam, near Dunnellon.....	296
Rice Creek near Springside.....	140	at Trilby.....	247
Rosalie, Lake, at Lake Wales.....	382	at Wysong Dam, at Carlson.....	277
Rousseau, Lake, near Dunnellon.....	411	below Inglis Dam, near Dunnellon.....	297
		bypass channel, near Inglis.....	299
Sand Hill Lake near Keystone Heights.....	358	near Cumpressco.....	237
Shady Brook near Sumterville.....	271	near Floral City.....	263
Shingle Creek at Airport, near Kissimmee....	186	near Dade City.....	241
Shingle Creek at Campbell.....	194	near Eva.....	233
Silver Lake near Leesburg.....	343	near Holder.....	285
Silver Springs near Ocala.....	114	Wolf Creek near Deer Park.....	56
Simms Creek near Bardin.....	143		
Smith Lake near Candler.....	348	Yale, Lake, at Grand Island.....	345
Soldier Creek near Longwood.....	69		

1986																																	
OCTOBER							NOVEMBER							DECEMBER																			
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S													
			1	2	3	4							1		1	2	3	4	5	6													
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13													
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20													
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27													
26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31																
							30																										
1987																																	
JANUARY							FEBRUARY							MARCH																			
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S													
				1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7													
4	5	6	7	8	9	10	8	9	10	11	12	13	14	8	9	10	11	12	13	14													
11	12	13	14	15	16	17	15	16	17	18	19	20	21	15	16	17	18	19	20	21													
18	19	20	21	22	23	24	22	23	24	25	26	27	28	22	23	24	25	26	27	28													
25	26	27	28	29	30	31								29	30	31																	
APRIL							MAY							JUNE																			
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S													

USGS LIBRARY - RESTON



3 1818 00415621 0

U.S. DEPARTMENT OF THE INTERIOR
INT 413

U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
227 North Bronough Steet, Suite 3015
Tallahassee, FL 32301



OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
SPECIAL 4TH CLASS BOOK RATE

